

The New ICE-Age: Frozen and Thawing Perceptions of Imagination

Blaine E. Hatt
Nipissing University

Abstract

The article examines the importance of imagination in adult–child relationships in 21st-century experiential learning, where ICE is an acronym for Imagination Creativity Education. It explores, through hermeneutic phenomenology, the impact of imagination in the life-experiences of three school-aged children through the wonder of toying, through shining new light on the autism spectrum, and through the debilitating effect of unbridled imagination. Life-experience is recognized as a foundational principle of imagination, and imagination is recognized as the catalyst for creative inquiry. The article discusses the vocative voice in children that calls out in its vulnerability to educators to act with appropriate, intentional, and responsible pedagogical relationality. The article concludes by highlighting the impact that imagination potentially holds for the future of education.

Keywords: imagination, hermeneutic phenomenology, ICE (Imagination Creativity Education), creativity, life-experience(s), vocative voice, the pathic

Résumé

L'article examine l'importance de l'imagination dans des profils d'enfant dans l'apprentissage du xxie siècle où ICE est un acronyme pour l'imagination la créativité l'éducation. Il explore par le biais de phénoméologie herméneutique l'impact de l'imagination dans la vie-expérience de trois enfants d'âge scolaire qui vivent le me demande de bricolage ; le brillant d'une lumière nouvelle sur l'autisme ; et, l'effet dévastateur de l'imagination débridée. L'expérience de vie est reconnu comme un principe fondamental de l'imagination et l'imagination est reconnu comme le catalyseur de creative inquiry. L'article traite de la voix chez les enfants que vocatif appelle dans sa vulnérabilité aux éducateurs d'agir avec préméditation, et approprié, responsable relations pédagogiques. L'article conclut en soulignant l'impact que l'imagination est potentiellement pour l'avenir de l'éducation.

Mots-clés : l'imagination, le biais de phénoméologie herméneutique, la créativité de l'Imagination de l'éducation, la créativité, la vie-expérience(s), voix, le vocatif pathic

Imagine a glacier covering what we now call North America. Imagine its inexorable move from west to east until it finally slides into the Atlantic Ocean. Imagine the weight, the force, as it grinds its way, inch by inch, while carving valleys, rounding mountains, sculpting caverns, creating canyons, and depositing rocky, inaccessible terrain, gravel, sand, and fertile soil. Imagine the power and majesty as new rivers are formed, new valleys emerge, lakes are tamed, minerals and ore formed, seas enlarged.

Just as the ice ages of history shaped the geophysical landscape of what we now call North America, a new ICE-Age is emerging that will inevitably shape the educational landscape of our schools, colleges, and universities for decades to come. ICE is an acronym for Imagination Creativity Education, an orientation to learning and teaching based on the principles of imagination as posited by Hume (in Streminger, 1980) and by Vygotsky (2004). In its approach, ICE combines the Hume principles of concrete, aesthetic, and artistic and the Vygotsky principles of experience, emotions, and reality to form correlative principles of concrete/experience, aesthetic/emotion(s), and artistic/reality. As such, ICE is constant in its regard of wonder and curiosity within the learner and subscribes to Freire's philosophy of liberating praxis and the centrality of the "critical quest" and "the dialogic relationship" (Freire, 1997, p. 99) between the interrogative and the responsive. ICE is catalyst in authentic, deeply meaningful, and enactive learning for student(s) and teacher: individually, in partnership, and collectively. To borrow from Eisner's (2002) artistic vision of education, Imagination Creativity Education (ICE) promotes a

culture of schooling in which more importance is placed on exploration than on discovery, more value is assigned to surprise than to control, more attention is devoted to what is distinctive than what is standard, more interest is related to what is metaphorical than to what is literal. It is an education culture that has a greater focus on becoming than on being, places more value on imagination than on the factual, assigns greater priority to valuing than to measuring, and regards the quality of the journey as more educationally significant than the speed at which the destination is reached. (n.p.)

The dialogic relationship in ICE is social in nature and is characterized by a genuine unrest for authentic epistemological curiosity that "presupposes maturity, a spirit of adventure, confidence in questioning, and seriousness in providing answers" (Freire,

1997, p. 99). Surrendering to the critical quest involves rigour of practice that “allows for a greater or lesser *precision* in the knowledge produced or found through [an] epistemological quest” (p. 99). In the ideation of ICE, imagination ignites curiosity and inventiveness and activates the powerful process of creativity that engenders images of the possible and that leads to innovative action in the life-world of 21st-century education.

The 21st century has thrown off the shackles of the industrial revolution and has emerged in its poststructuralist state carrying the ensign of the information revolution. Ideas are the stock and trade, the new currency, indeed the commerce, of this new revolutionary market. But where, one might ask, do ideas come from? Do they spring ready-made from the mind? Are they inspired by the heart? Are they the result of tactile and visceral manipulation? No doubt, they are a subtle admixture of mind, body, and spirit. But I propose that instead of searching for the origin of ideas, we cast our view on the essence of ideas. Imagination is the a priori factor that gives license to creativity as an a posteriori factor. Imagination as evidenced in the following account enables us to construct a vivid mental image; an idea germinated from a concrete experience of reality that passes through the domain of aesthetic emotions and culminates in an artistic reality that forever alters the original reality.

Imagine entering a grocery store just before closing at 6:00 p.m. on a Saturday evening. Immediately you see a woman in an animated conversation with three men who have surrounded her, two of them are security guards. As you are drawn into this little tableau, you see the woman crying uncontrollably and hear her sobbingly plead: “Please don’t do that, don’t send me back to prison, I just got out!” As you leave the store having purchased your few grocery items, you see a police cruiser parked in front of the entrance to the store but no policeman, no security guards, and no woman are in sight. What do you imagine occurred in this scene? Do you imagine the factors, the circumstances; the course of events that might have resulted in the woman being detained? Do you ideate her suffering, her sorrow, and her depth of despair? Do you envision the long arm of the law reaching out and administering appropriate justice? Or, do you imagine nothing at all preferring instead to shut out any thoughts or impressions that the scene might engender in you? After all, out of sight, out of mind!

The kernel of imagination is vision, or as Twain (1889) expressed it: “You can’t depend upon your eyes when your imagination is out of focus.” Let’s apply our eyes and IN-sight or vision to the scene described above. Can you see the woman? What does she

look like? How is she dressed? How old is she? Is she holding anything in her hands? Is she carrying a backpack, a shopping bag, or a purse? What emotions do her eyes convey? Is she frightened, angry, defeated? What other emotions does her body convey? Can you see the men? What do they look like? How are they dressed? Do they have uniforms or shoulder patches to distinguish them as “security”? Is there any irony in this word? How are the men built? Are they big and burly, medium-height and medium-build, or small and sinewy? What is the tone and tenor of their speech to the woman? Are they all speaking at once or is one the lead spokesman? What is their posture toward her? What is their proximity to her and to each other? Are they completely surrounding her? Is she trapped? What is her crime? Have you asked yourself, why am I a witness to this scene? What am I supposed to do: investigate, intervene, or ignore?

Vision—the ability to see or perceive the seen and the unseen or the imperceptible is at the core of all human success. Gavin, a nine-year old swimmer, who is swimming in a class of athletes three years his senior, states that when he is swimming countless practice laps: “I imagine I am winning the Olympics.” Gabriel, a 12-year old in Grade 6 competes with cross-country runners in Grades 7 and 8 and often wins. The secret to his success: “I imagine I’m running with my mom and dad in a half-marathon, I have her endurance and his speed.”

Jill is a five-year old performer, born on Shirley Temple’s birthday and in the minds of many the spitting image of Miss Temple. She is alone onstage during the final dance recital of the year. She is performing, appropriately, a Shirley Temple musical number. She dances and sings with graceful ease and genuine expression beyond her years. Her performance is the buzz of the evening. When asked by her granddad whether she was frightened being on the “whole” stage in front of all those people, she assuredly replied, “No, Granddad, everyone was watching ME!” Imagine where that confidence, efficacy, and self-esteem will take her if it is sustained throughout her life.

First Nations’ people looked to the land, saw its nurturing properties and called it Mother Earth; looked to the sun and its radiant power and honoured it through dance; looked to the moon, the stars, the tides, the seasons, and the weather and understood the rhythms of life and living; and, looked to and felt the ancestral spirit of the winds and understood the mystery of being.

These brief vignettes and the account of the woman in the grocery store reinforce the ability of vision/imagination to be influenced by, and in turn to influence, concrete

experience, aesthetic emotions, and artistic reality. The ability to imagine, more than any other single characteristic, is what sets us apart from the rest of creation and benefits us, as participants, by enriching our active learning and appreciation of the dialogic. It is important that parents, educators, and people in a position to shape existing views of change, creativity, and innovation engage in their own critical quest of ICE. In so doing, the power of imagination will be given a higher priority in the learning process and in the liberating praxis of education. Imagine the weight, the force, the strength, the power and the sculpting influence of Imagination Creativity Education (ICE) on the hearts, in the heads, and through the hands of learners and facilitators as we progress in the 21st century.

Methodology

The plethora of questions raised in the mind of an observer witnessing the scenario of the woman in the grocery store emphasizes the power of the imagination to conceive possibilities and potentialities that in reality do not exist. But, the imagination can bring to the mind, the emotions, and the psychic a reality that does exist. The remainder of this article concerns itself with the narrative account of imagination as it is experienced by three children: Paxton, Chance, and Sariah. The research question that focuses this inquiry is: What is it to experience imagination in childhood? The question is phenomenological in nature and is primarily interested in experience. van Manen (2014) stated: “Phenomenology is the way of access to...the ordinary experience that we live in and through for most, if not all, of our day-to-day existence” (p. 28). In each narrative account, the imaginative experience is the point of interest and the focus of interpretive meaning-making.

It was Heidegger (1962) who, along with Gadamer (1998) and Ricoeur (1975), pioneered the notion of hermeneutic phenomenology. They believed, as have others who followed them (Annells, 1996; van Manen, 1997), that while it is important to give an account of the experience as a phenomenon, it is just as important, if not necessary, to bring understanding and disclosure to the phenomenon through language. Gadamer (1998) affirmed: “Language is the universal medium in which understanding occurs. Understanding occurs in interpreting” (p. 389). The language of meaning-making in hermeneutic phenomenology requires a perspective that is open to interpretation; to an awareness of

the unexpected as the phenomenon is examined and understood. Questions will inevitably arise concerning the meaning of the experience as it is lived-in and as it is lived-through (van Manen, 2014) but it is language, as inadequate as it may be, that conveys our attunement to the interpretive analysis and makes possible our understanding of the lived experience.

The narrative account of the lived experience of each child (Paxton, Chance, and Sariah) reveals his or her ways of being, thinking, and acting in a world of imagination. Hermeneutic phenomenology, when applied to each narrative account, provides a powerful and provocative evocation of shared pathic responses (van Manen, 2014; Hatt, 2009). Such responses help us to make sense of events and relationships within ourselves and within others. In each child's lived experience with imagination, we encounter ourselves in dialogue (Freire, 1997) and experience the phenomenon of imagination in different ways. We recognize that we, as human beings, are in relationship with Paxton, Chance, and Sariah. We are involved in their experience with imagination. Each experience evokes within us pathic responses and becomes our experience while we strive to remain open to the possibilities of interpretation as the process of our meaning-making unfolds.

In this article, the imaginative experience of each child begins with a narrative account of the experience, followed by what Freire (1997) referred to as "dialogic relationship" (p. 99), in which the communication and intercommunication within each narrative account is critically interpreted through language in an effort to uncover the meaning of what it is, for each of these children, to experience imagination. The discussion section of the article focuses on the foundational principle of imagination and the article concludes with a summary of the interpretations of the life-experience accounts of imagination with Paxton, Chance, and Sariah and provides evidence of the catalytic force of imagination and its centric role in a new educational ICE-Age.

Paxton: Imagination and the Wonder of Toying

Rogers (1959) posited that a dominant characteristic of the creative mind is its ability to visualize alternatives to what exists or toy with the curious mystery of elements and concepts. Young children are effortlessly imaginative and gifted at toying with objects, ideas, or personalities. There are no censors for them, no constraints; they simply toy with

possibilities or potentialities. While imitation may well occupy an enormous place and space in children's play, it is not merely a mimicking, parroting, or echoing of the life-world of others, although speech, behaviour, and mannerisms of others often provide the experiential pattern and fodder for the child's imagination. The creative power and genius of the child's imagination is that the elements of his or her previous life-experience(s) are never reproduced in play in the exact or in the original way they occurred in reality. They are always presented as an imaginative and creative reworking of impressions that were modelled in the life-world and environs of others.

Paxton is seven years old going on seventy. On a recent morning walk to daycare with his granddad, he was extolling the qualities of the stuffed dog that he was carrying. Granddad had taken note that Paxton frequently talked to his dog: "Snowball, are you okay, boy?" "Do you want to go to the theatre with me this morning?" "Do you want me to pet you?"

"When you talk to your dog does he ever answer back?" asked Granddad.

Paxton explained, "When you call his name, he barks. But if you call him by another name, he doesn't bark. For example, his littermate is a girl and her name is Cookie but if you call him by her girl name, he doesn't respond." He continued, "But you know what, Granddad? Actually, the thing I like most about him is that he loves to snuggle, snooze, and snore."

"Really?" replied Granddad, "that's very interesting. Do you know that when you put those four words together, Snowball, snuggle, snooze, and snore, you've made a very interesting repetition of the 'sn' sound at the beginning of words? That's called alliteration. Can you think of any others that we could add?"

Together, they toyed with combinations that were unique and entertaining and sometimes just plain silly; such as: "snarling Snowball," "snoringly snoozes," "snorty snores," and "snotty snuggles," which was thought to be "gross" and "yucky." One of the interesting features of this exchange was that Granddad, in this spontaneous, offbeat exchange with his grandson, Paxton, was entering into and relearning the joyful engagement of imaginative toying.

Granddad was mindful of Paxton's voice as a child and his enthusiasm for imaginative play that first invoked, and then evoked, in him a desire to conjoin in the toying. But Paxton's narrative as it appears in this writing is not a study of childhood imagination. As adults, we must always be cautious of presuming to know too much about

children's experiences of imagination. Therefore, this article presents an adult perspective about those things that can be said of Paxton's childhood imaginative experience with his granddad, rather than suppose or impose an adult perspective on his experience(s) with imagination.

The immediate effect of Paxton's imagination is that he constructs a new reality through play and introduces that into the now-altered reality of the life-world that he shares with his granddad. Marra (1990) suggests that reality is a "toy" for the creative mind to be played with. Such ability, within the child's imagination, to toy with the elements of life and living results in something new, something that is unique to the child and is not merely a reproduction of what the child intuited, observed, felt, or experienced in his or her life-world. The power of the imagination, which is the basis of creative endeavours, is the ability to employ curiosity, life-experience, and uniqueness in combining imaginative elements that bring into existence a concept or a construction that did not exist before, or to imaginatively alter and augment the elements of something that already exists.

Such combinatory processes allow for surprises, for the unexpected, and for discoveries in children and individuals who have and hold a sense of toying or playing (Hockney, 1993, p. 133). Without a sense of toying or playing, Paxton and his granddad would not have been deeply engaged in their collaborative creative activity. Through imaginative play they were convoking, producing their own reality; the grandson was learning from the grandfather but so too the grandfather was learning from the grandson. Such is the compelling nature of imagination; such is the inspiring of the vocative voice (van Manen, 2014) in imagination creativity education.

Imagination invokes or invites the child within each of us to come out and actively participate in the simple, awe-inspiring, exhilaration of toying or playing. As we accept the invitation, the resulting experiences awaken us to the evocation of wonder and curiosity. We instinctually know that from the moment of birth, our bodies delighted in exploring and discovering the life-world that surrounded us. We were a central and integral part of that life-world, but we did not communicate in adult ways. We did not write about it, we did not talk about it, but our facial expressions, our increasing ability to observe and to focus on objects and beings, combined with our body language, spoke volumes about our instinct for learning, and evoked within the adults of our world the intrigue and the curiosity of imagination (Johnson, 1987, pp. 137–138, 174–175; Barclay, 2012). Their

imaginations were fired as they pondered the wonder of our being and contemplated what would s/he tell me/us if only s/he could speak the words. Such life-experiences are really invitations to playful learning opportunities (Piaget, 1970, pp. 155–157). We, child and adult, are stretched and extended into a space and place where imagination can flourish.

Cariane, a high school student, recently expressed it this way:

Imagination is yourself; it's your mind, your personality. Imagination is letting your mind wander by itself while allowing it to give you new ideas. You use your imagination all the time. You use it to write, to dream, and even to answer a question. When you look at the clouds and wonder what they look like, you're using your imagination. Nobody sees the same things you do. (Personal communication, September 9, 2016)

Imagination evokes within each of us the capacity to create, expose, design, or plan the limitless possibilities that attend the impossible.

As we grew and matured in childhood through the rich experiential learning of play and inquiry, our imagination continued to evoke originalities within each of us and within those who were attuned to us. We were empowered and empowering by the capacity to think, to discover, to dream, to visualize (Piaget, 1970, pp. 161–167). We responded to the primal call of invocation; we answered the clarion call of evocation and, together, with the caring adults in our life-world, our siblings, and/or our peers, we achieved an imaginative convocation such as Paxton and his granddad achieved. They were in community with one another; such is the power of imagination. Life-experiences, curiosity, the willingness to explore, to discover, to take risks—these all contributed to a collaborative inquiry between child and adult that enabled them, as co-learners, to unlock the power of possibility which enhanced their learning.

In citing the works of Comber (2013), Hannay, Wideman and Seller (2010), and Timperley and Lee (2008), the Ontario Ministry of Education (2014) reinforced the assertion that collaborative inquiry (CI) is “an effective means to both professional learning and enhanced student learning” (para. 2) and “...as a journey, an invitation to explore professional wonderings and questions” (para. 4). While it might be argued that Granddad is not a professional educator, he and Paxton are equally engaged in a collaborative inquiry. They, granddad and grandson, came to discover collaboratively that, as Einstein said, “Logic will get you from A to Z. Imagination will get you everywhere” (cited in

Sreechinth, n.d.). Together, they evidence a realization that collaborative inquiry can be attained through the wonder of toying, which embraces a “stance of openness to learning” (Ministry of Education, 2014, para. 3).

Chance: Imagination and the Autism Spectrum

Chauncey, commonly known as Chance, has a fascination with the *Titanic*. He has researched all aspects of it, including but not limited to the dimensions, tonnage, draw capacity and speed; the number and nationalities of passengers and crew aboard; the estimated size of the iceberg that the *Titanic* struck and the resulting damage to the ship that caused it to sink; the sequence of events within the 160-minute time frame from impact to sinking; the order of procedures for evacuation; the number of lifeboats; the number of life buoys and life jackets; the number of passengers lost at sea; the number of survivors (children, women, and men); and the social activities aboard the *Titanic* even as it was sinking. For example, the orchestra played “Nearer My God to Thee” as the *Titanic* sunk (“The Ocean Grave of the Titanic,” 1912).

Chance’s teacher is very much aware of his keen interest in the *Titanic* and enlists his support in the preparation of in-class activities to commemorate recent centennial celebrations of the ship. She is also aware that Chance loves to be in front of or behind a video camera. Together, and with the encouragement of his parents, Chance created several films using iMovie that depict various aspects of the *Titanic* story. Two that were of particular interest and engagement for his classmates were: *Models of Toys aboard the Titanic* and *Titanic Children’s Wardrobe*. With the able assistance of the high school technology and social science teachers, Chance’s classmates were involved in workshops designing and making period toys and turn-of-the-20th-century children’s clothing and apparel. The culminating activity was a show-and-tell for parents and invited guests who were asked to compare and contrast toys, clothing, and accessories of the 20th and 21st centuries. Grounding the show-and-tell were Chance’s films that carefully documented, from start to finish, the toy-making and clothing-making processes of the early 20th century. With family gathered around, his teacher awarded Chance a certificate that recognized him as a “*Respected Memory Keeper of The Titanic.*”

As his educator, Chance's teacher recognized early the common characteristics of autism spectrum disorder that Chance exhibits. It was very apparent that Chance had problems communicating one-on-one and was lacking in social interaction skills. He could not initiate or sustain conversations with his teacher or his classmates and, as a result, lacked the ability to establish friendships. Chance seems oblivious to these social challenges, and often acts as if his classmates or teacher don't exist. He also has a strong dependency on classroom routine, and any disruption from the regular pattern of classroom activity results in distress, anxiety, and often anger.

Despite what might be perceived as negatives, his teacher looked for the positive and found it in Chance's ability to persevere on certain topics (Beghetto, 2009; Beghetto & Kaufman, 2010). One topic is the *Titanic*, and another is his fascination with being in front of or behind the camera, making movies. She created opportunities to harness his intrigues and to transform his stereotypical and repetitive approach to learning into imaginative, creative, and enactive learning activities. She recognized that Chance's imagination was activated by an accumulation of experiences with the *Titanic* and as his experiences with that topic became deeper and richer and more personal to him, so too did the imaginative expression of his learning become richer and deeper and more personal.

The characteristics of Chance's autism spectrum disorder are akin to him constantly being presented with a difficult problem to solve without the critical or creative skills or ability to enable him to find a solution. Such relentless focus is directed outward and "inhibits the sort of creative connections that lead to breakthroughs" (Lehrer, 2012, p. 33). By pedagogically redirecting Chance's perseveration, his teacher creates within him a relaxed state of mind that is inwardly focused and absolutely essential for the imaginative and creative connection of remote associations. Hence, for Chance, his perseverance allows him the opportunity to develop and demonstrate, through his iMovie work, creative insights into children's toys and children's apparel that were present during the sailing of the *Titanic*.

The vocative voice (evocation, invocation, convocation; van Manen, 2014, pp. 249, 260, 267, respectively) is fully active in Chance's classroom and in the pedagogical relationship his teacher is seeking to establish and maintain with him. As a pedagogue, she is clearly concerned with the phenomenon of what it is for Chance to experience the *Titanic*. Her intentional focus is on his lived experiences with the *Titanic* and how she, as an adult, can honour and validate that in her pedagogical relationship with him, as a child.

She recognizes that Chance's vulnerability has a call upon her and she responds appropriately and responsibly; not in a theoretical, conceptual, or psychological way, but in a sentient, visceral, non-cognitive (pathic) way that encourages Chance to know, to be, and to become.

She invokes or invites Chance to participate in a supportive, imaginative learning environment by modelling and establishing a routine of rules and procedures that creates a safe classroom climate that welcomes new ideas, the sharing of new discoveries, and the generating of new learning through multiple literacies. Through careful design, she evokes the possibility and potentiality latent within Chance. Starko (2005) confirms the necessity of having

a classroom in which students are valued just because they are there, a room which all students, no matter what their current situation or behavior, are seen as having potential...the child can feel accepted if he or she is treated with respect and dignity. (p. 359)

Chance's teacher affirms his individual worth through respect, dignity, and inclusion. In so doing, she evokes or draws forth the imaginative and the creative within him and connects his perseverance with specific foci to the current topic of the centennial celebration of the maiden, yet tragic, voyage of the *Titanic*.

She extends his critical inquiry into the *Titanic* into creative modalities of expression that have richly contributed to the collaborative inquiry, learning, and teaching of all associated with the classroom: students, teacher, and parents. She, through convocation, attends the pathic (van Manen, 2014; Hatt, 2009) and opens within herself the capacity and the willingness to accommodate Chance, not as the "other" but as self. She convokes with him into a community of learnership where his imagination and creativity have immeasurably contributed to the shared responsibility of teaching and learning possessed by her, Chance, and each member of the community.

She partners with him in his imaginative experience as an individual learner and as a collaborative learner, and praises what is most strong about his work and his imaginative response to the critical quest of commemorating the centennial of the *Titanic*. Finally, she supports Chance's imaginative learning with additional content and context for further imaginative activity. In short, she employs the auspices of heart (pedagogical love, a deep sense of calling, and soulful connection) (Hatt, 2005, 2009) as enactive teaching

strategies that enable Chance and his classmates to move and support imagination creativity education on a day-to-day, hour-by-hour basis.

Sariah: The Consequences of Unbridled Imagination

Sariah Mountain was captivated by the stories told in her family of the Holocaust. She spent hours painstakingly reading her deceased great-grandmother's diaries. She did so, at first, because she bore her great-grandmother's name, but as time passed and she became more and more acquainted with her great-grandmother and her traumatic life-experiences, she developed a real need to connect with her and to know her intimately. However, such intimate knowledge had a devastating side effect. Sariah's imagination began to "run wild," as her great-grandmother's descriptions of ghettos, killing centres, gassing facilities, death marches, and displaced persons' camps became more and more vivid. Increasingly, it was not Sariah's great-grandmother who was living the experiences but it was Sariah herself. She, in her nightmares, was the near-victim compelled to witness the degradation, dehumanization, and eventual annihilation of Jewish children, women, and men as the full impact of the "Final Solution" came into force in Germany and the countries it occupied.

Increasingly, Sariah experienced long nights with little sleep that resulted in intense headaches and gripping pains in her stomach or lower abdomen. Her mother, believing that at age 10 Sariah was experiencing early signs of puberty, booked an appointment and examination with her family physician and gynecologist. Neither examination confirmed her belief. As the headaches, stomach, and abdominal pains continued and increased in frequency and intensity, there were several days when Sariah didn't feel well enough or strong enough to go to school. But, Sariah was a habitual overachiever, and extremely devoted to her teacher and the fun-filled events of each lesson, so daily absences only served to increase her anxiety. She started taking mid-day naps, but while her body slept and felt more rested, her mind never seemed to rest and she would at times wake from sleep in a cold sweat and an extremely agitated state of mind. On one occasion, her mother witnessed her frightened awakening. She gently pressed Sariah for an explanation but none was given.

Sariah's mother sought the assistance of Sariah's teacher, who had built a strong relationship with daughter and mother. They conferenced and shared what they knew, what they had separately observed, and what they each now hypothesized about Sariah. Both agreed that she had an extremely well-developed visual sense (Alter, 2011), that she was a highly imaginative child. They eventually came to the conclusion that her imagination, once ignited by her intense desire to connect with her great-grandmother and fuelled each day by her deep and prolonged entry into her great-grandmother's diaries, had led her down a path toward anxiety and intense distress. Rather than deny Sariah access to the diaries, they decided to meet with her and encourage her to tell them what she was discovering and feeling as a result of her readings. As they did so, Sariah, at first unwilling to share either thoughts or feelings, surprisingly and tearfully blurted out, "I dream the most terrible things!"

Mother and teacher took turns consoling her and encouraging her to share her experiences in reading her great-grandmother's diaries. In vivid and highly visual detail, Sariah recounted the world that her great-grandmother had been thrust into as a child and wasn't able to escape until her liberation at the same age that Sariah was now. She explained in detail the scenes of horror, torture, starvation, and murder that her great-grandmother witnessed daily at Auschwitz. Why her great-grandmother had survived such atrocities was a great mystery to Sariah. But in her dreams, she lived—in vivid and visceral detail—the near-death experiences that her great-grandmother had escaped.

This was the clue that mother and teacher were waiting to discover. Together, they helped Sariah to realize that her great-grandmother had survived, that she had married, that she had had a happy and close-knit family, and without her survival and willingness to live life to its fullest potential for her, her husband, and her children, Sariah would not have been born her great-granddaughter. Sariah was the offspring of a woman with a strong and lasting heritage that she preserved in her diaries in order that Sariah, in particular, might come to know and to celebrate her triumph over the impossible. In a world where her great-grandmother's only option appeared to be death and dying, she chose, instead, life and living, and that was the legacy that she was passing on through her diaries to her namesake.

It took a little while for a new reality to settle in on Sariah, but she was eventually able to turn her imagination around, to get control of it, and focus it on the pleasure and joy her great-grandmother's survival had given her rather than on the pain and sorrow

(Chang, Hsu, & Chen, 2013). To celebrate her new awakening, Sariah began her own diary as legacy to commemorate her great-grandmother's triumph in life and living. In her writing, Sariah directed her imagination to create a life-world that foregrounded the survival accomplishments of many members of her family, including herself.

Three Life-Experiences and the Foundational Principle of Imagination

We can discern a cyclical pattern to the creative operation of imagination (Vygotsky, 2004, p. 20) in Paxton's, Chance's, and Sariah's imaginative experiences. Each, as an act of imagination, has its own structured narrative that begins with identifying the needs, drives, or desires that catalyze the imagination. In Paxton's case, it began with his desire to connect with his stuffed dog, Snowball. In Chance's case, it began with his desire to connect to the *Titanic* and the tragic events of its sinking. In Sariah's case, it began with her need to connect with her great-grandmother in a personal way. Such desires activated a neural stimulation in the head (Rosenbluth, 2010, paras. 1, 11–13) and a visceral stimulation in the body (Critchley & Harrison, 2013, pp. 624–625) that combined to provide the raw material of experience, the precious ore for the imagination to mine. As Vygotsky (2004) states: "The brain is...the organ that combines and creatively reworks elements of past experience and uses them to generate new propositions and new behavior" (p. 9).

Experience is the foundational principle of imagination. Something in Paxton's experiences with dogs drew him to Snowball. Something in Chance's experiences drew him to the *Titanic*. Something in the experiences of family and family relationships drew Sariah to her great-grandmother through her diaries. While it is interesting to note that the *Titanic* and the Holocaust were reverberatingly historic and tragic events, experiences, such as those as evidenced by Paxton, are not usually dramatic or catastrophic. Nevertheless, experience in whatever modality it may present itself is ground level in all operations of the imagination and is the basis of all creative activity. When learners are empowered to examine feelings, attitudes, beliefs, and convictions about what, how, when, where, and why they are learning, their learning becomes enactive, they become engaged, invested in their learning experience, and they achieve what might be understood as a deep level of learning or what Entwistle (1994) describes as "pedagogical fertility."

Paxton's, Chance's, and Sariah's experiences with imagination reinforce and solidify the knowledge that the most powerful influence on student achievement, engagement, and the attainment of pedagogical fertility is the dialogic teacher–student relationship. Such relationship is antithetical to the ideological and political pressure that exists to reshape education in the image of corporatization, whose quantifiable outcomes, standardized testing, and accountability measures are deemed to be appropriate determiners of learner achievement.

Experience leads on to experience, whether acquired personally, collectively, or vicariously from one or others. The more experiences a student has, the wider and deeper the experiential base will be, and the greater the creative operation of imagination will be (Vygotsky, 2004, p. 15). This is one of the central roles that we have as educators; namely, to enrich and extend the life-experiences of the students who have been entrusted to our care and keeping. While we rightly extol the imaginative and creative genius of Einstein, Tolstoy, Edison, Angelo, Mozart, and others, we too often mistakenly believe that such imagination and creativity is absent in the life and living of ordinary people. In reality, imagination and creativity are present whenever an individual imagines, combines, alters, invents, or creates something new, whether as a material object that is introduced into the social environment of others, or as an emotive construct that resides only within the individual who imagined it.

As the student combines experience, interests, and the expressed elements of need, drive, and desire, imagination begins to take on a material form. We see that evidenced in Paxton's compassionate connection with Snowball; in Chance's fascination with all things *Titanic*; and in Sariah's visualizations of her great-grandmother's Holocaust experiences. The material form becomes more defined as intellectual factors, emotional factors, environmental factors, historic, traditional, cultural, and technical factors are added. This combinatory process is subjected to experiment, practice, and exercise until the material form becomes crystallized (Vygotsky, 2004; Gupta, 2009), as in the case of Paxton's "sn" words, Chance's films, and Sariah's dreams/nightmares.

Imagination is the basis of human creative activity; it is germane in every component of meaningful life and living. Everything in the human life-world, as distinct from the world of nature, is the product of imagination or creations based on imagination (Vygotsky, 2004, p. 8). The "natural" raw material for imagination is the life-experiences and the emotions of reality. From the raw material, the elements necessary for creativity

are processed through the cognitive, effective, or gnostic modes of rational thought. Next, a complex reworking and refinement of those elements occurs within the non-cognitive, affective, or pathic domain of emotive sensations and feeling. Elements are then forged into a new creative construct that is then presented to reality for acceptance, refinement, or rejection. Classically, the creative operation of imagination is like the interrelation of yin-yang, where each entity inherently exists within the sphere of intellectual, emotional, and environmental factors necessary for completion of the other.

Summary

In education, in each lesson plan, imagination is an integral element. If imagination were limited to a reproduction of the old, we would forever be oriented to the past. We would only be able to move through the present and toward the future to the extent that we were capable of reproducing the past. Einstein once said, “We can’t solve problems by using the same kind of thinking we used when we created them” (cited in Covey, 1998, p. 42). Fortunately, humanity is not designed or destined to experience the present through the rearview mirror of past life-experiences. What is always required is new thinking, but before we innovate, we need to create; before we create, we need to imagine.

Imagination is the hope of present and future generations and is the precise human activity that enables us to be future-oriented. Imagination allows us to fully accommodate the present while planning and preparing for the possibilities and potentialities of an unknown tomorrow. Everything the imagination brings into existence is grounded in reality and drawn from individual previous experience. Experience is the raw material from which the products of imagination are constructed (Gupta, 2009). In the context of schooling, the depth and richness of the imaginative act depends on the scope and the variety of the student’s life-experiences. As educators, it is our task to prepare our students for an uncertain future by equipping them with an understanding of imagination, not as entertainment or amusement, but as a function essential to life and living.

If we want to scaffold a student’s imaginative ability, we must broaden his or her life-experiences during the educational process. This can be done either through direct involvement of the student as self in acquiring experience or through the vicarious involvement of the student in the experience(s) of others or another. In the latter case, the student

can imagine what he or she has never seen, heard, felt, or conceptualized, as evidenced in the action, the narration, or personal description of another. While the foundational principle of imagination is personal, unmediated life-experience, a correlative principle is that vicarious life-experience is itself based on imagination. The richness and depth of the creative activity of the imagination is dependent on the reciprocity and mutuality of direct and indirect life-experience.

Additionally, imagination is grounded in rational thought and emotive expression. Emotions greatly aid in the ability to select impressions, thoughts, and images that align with the mood of the student in the actual moment of the experience. As witnessed in Sariah's deep connection with her great-grandmother, images of her imagination served as an internalizing expression of her feelings. To a lesser extent, we see this phenomenon being worked out in Paxton's connection with Snowball, and to an even lesser extent, in Chance's connection with the *Titanic*. Just as experience influences imagination and imagination, in turn, influences experience, so too does emotion influence imagination and imagination, in turn, influences emotion. For example, the fiery passion and fate of the star-crossed lovers in Shakespeare's *Romeo and Juliet* combined with their joy and sorrow move us to emotional heights and depths depending upon the ebb and flow of character, plot, and circumstance, even though we know the play is the product of imagination. Rationally, we know they are not real people, we know they do not exist in the real world, and we know they are not involved in a real tragedy; but emotionally, we "know" they are the romantic essence of every one of us who, as audience, has actively participated in their love-drama.

Finally, imagination, once it becomes reality, is oftentimes more real than reality itself. Imagination, when produced, becomes object, and thus occupies time, place, and space in our life-world. In the classroom, it is a pedagogical instrument that enables teachers and students alike to make something beautiful, to objectify and make express interior sensations, to intuit juxtapositions of features that are distant from each other, and, to find joy in the discovery of newness (Aljughaiman & Mowrer-Reynolds, 2005).

Pablo Picasso stated, "Every child is an artist. The problem is how to remain an artist once we grow up" (Quote Investigator, n.d.). We might well respond to this paradox by suggesting that the "how" is imagination. It is imagination that allows us to access the vast reservoir of untapped creativity that resides within each of us, as learners, students, and teachers. As Paxton and his granddad discovered, play imaginatively for enjoyment;

play imaginatively to make sounds, even silly ones; play imaginatively to make melody; play imaginatively to make meaning; play imaginatively to laugh and be happy; and, most important and sustaining of all, play imaginatively to connect self and to connect self and another. In these frozen and thawing perceptions of imagination, we step into a new ICE-Age in education.

References

- Aljughaiman, A., & Mowrer-Reynolds, E. (2005). Teachers' conceptions of creativity and creative students. *Journal of Creative Behavior, 39*(1), 17–34.
- Alter, R. (2011). *Anxiety and the gift of imagination*. Thornhill, ON: Alter Psychology Professional Corporation.
- Annells, M. (1996). Hermeneutic phenomenology: Philosophical perspectives and current use in nursing research. *Journal of Advanced Nursing, 23*, 705–713.
- Barclay, M. (2012). *The interpretation of infant communication* [Kindle ebook version]. Amazon Digital Services LLC: BookBaby.
- Beghetto, R. A. (2009). In search of the unexpected: Finding curiosity in the micromoments of the classroom. *Psychology of Aesthetics Creativity and the Arts, 3*, 2–5. doi: 10.1037/a0014831
- Beghetto, R. A., & Kaufman, J. C. (2010). Broadening conceptions of creativity in the classroom. In R. A. Beghetto & J. C. Kaufman (Eds.), *Nurturing creativity in the classroom* (pp. 197–205). New York, NY: Cambridge University Press.
- Chang, C-P., Hsu, C-T., & Chen, I-J. (2013). The relationship between the playfulness climate in the classroom and student creativity. *Quality & Quantity, 47*(3), 1493–1510. doi: 10.1007/s11135-011-9603-1
- Comber, B. (2013). Teachers as researchers: A 'fair dinkum' learning legacy. *English in Australia, 48*(3), 54–61.
- Covey, S. R. (1988). *The seven habits of effective people: Powerful lessons in personal change*. New York, NY: Simon & Schuster.
- Critchley, H. D., & Harrison, N. A. (2013). Visceral influences on brain and behavior. *Neuron, 77*, 624–638.
- de Sousa Fleith, D. (2000). Teacher and student perceptions of creativity in the classroom environment. *Roepers Review, 22*(3), 148–154.
- Dubin, E., & Prins, E. (2011). Blueprinting a Freirean pedagogy of imagination: Hope, untested feasibility, and the dialogic person. *Journal of Adult and Continuing Education, 17*(1), 23–39.

- Eisner, E. (2002). What can education learn from the arts about the practice of education. *The Encyclopedia of Information Education*. Retrieved from: www.infed.org/biblio/eisner_arts_and_the_practice_of_education.htm
- Entwistle, N. J. (1994). Generative concepts and pedagogical fertility: Communicating research findings on student learning. *European Association of Research on Learning and Instruction (EARLI) News*, June, 9–15.
- Freire, P. (1997). *Pedagogy of the heart*. New York, NY: Continuum.
- Gadamer, H.-G. (1998). *Truth and method* (2nd ed.). New York, NY: Continuum.
- Gupta, A. (2009). Vygotskian perspectives on using dramatic play to enhance children's development and balance creativity with structure in the early childhood classroom. *Early Childhood Development & Care*, 179(8), 1041–1054. doi: 10.1080/03004438701731654
- Hannay, L., Wideman, R., & Seller, W. (2010). *Professional learning to reshape teaching*. Toronto, ON: Elementary Teachers' Federation of Ontario.
- Hatt, B. E. (2005). Pedagogical love in the transactional curriculum. *Journal of Curriculum Studies*, 37(6), 671–688.
- Hatt, B. E. (2009). *Heart in teaching: Attending the pathic*. Köhn, Germany: Lambert Academic Publishing.
- Heidegger, M. (1962). *Being and time*. New York, NY: Harper.
- Hockney, D. (1993). *The way I see it*. New York, NY: Thames and Hudson.
- Johnson, M. (1987). *The body in the mind: The bodily basis of meaning, imagination, and reason*. Chicago, IL: University of Chicago Press.
- Lehrer, J. (2012). *Imagine: How creativity works*. Toronto, ON: Allen Lane.
- Marra, J. L. (1990). *Advertising creativity: Techniques for generating ideas*. Upper Saddle River, NJ: Prentice Hall College Division.
- Ontario Ministry of Education. (2014). Collaborative inquiry in Ontario: What we have learned and where we are now. *Capacity Building Series*, Special Edition #39. Retrieved from: http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/CBS_CollaborativeInquiry.pdf

- O'Toole, G. (2015, February 12). You can't depend on your eyes when your imagination is out of focus [Blog post]. Retrieved from <https://quoteinvestigator.com/2015/02/12/eyes-imagine/>
- Quote Investigator. (n.d.) Every child is an artist. <https://quoteinvestigator.com/2015/03/07/child-art/>
- Ricoeur, P. (1975). Phenomenology and hermeneutics. Symposium papers to be read at the meeting of the Western Division of the American Philosophical Association in Chicago, Illinois. *Noûs*, 9(1), 85–102. Retrieved from: <http://www.jstor.org/stable/2214343>
- Rogers, C. R. (1959). Toward a theory of creativity. In H. H. Anderson (Ed.), *Creativity and its cultivation* (pp. 75–79). New York, NY: Harper & Row.
- Rosenbluth, T. (2013, October 15). Where do our thoughts originate? *Israel National News*. Retrieved from: www.israelnationalnews.com.
- Sreechinth, C. (2016). *Einstein wisdom: Quotes from an extraordinary brain*. N.p: CreateSpace.
- Streminger, G. (1980). Hume's theory of imagination. *Hume Studies*, 6(2), 91–118.
- The ocean grave of the Titanic. *The Daily Graphic* [London] *Special Titanic in Memoriam Number April 20, 1912*. Retrieved from the Nova Scotia Archives: <https://novascotia.ca/archives/titanic/news.asp?Search=Graphic>
- Piaget, J. (1970). *Science of education and the psychology of the child*. New York, NY: Grossman Press.
- Starko, A. J. (2005). *Creativity in the classroom: Schools of delight*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Timperley, H., & Lee, A. (2008). Reframing teacher professional learning: An alternative policy approach to strengthening valued outcomes for diverse learners. *Review of Research in Education*, 32(1), 328–369.
- van Manen, M. (1997). *Researching lived experience: Human science for an action sensitive pedagogy*. London, ON: Althouse Press.
- van Manen, M. (2014). *Phenomenology of practice: Meaning-giving methods in phenomenological research and writing*. Walnut Creek, CA: Left Coast Press.

Vygotsky, L. S. (2004). Imagination and creativity in childhood. *Journal of Russian and East European Psychology*, 42(1), 7–97.