Ryerson University Digital Commons @ Ryerson

Theses and dissertations

1-1-2009

"I don't have a creative bone in my body" : awakening creativity in educators

Patricia Gora Ryerson University

Follow this and additional works at: http://digitalcommons.ryerson.ca/dissertations



Part of the Pre-Elementary, Early Childhood, Kindergarten Teacher Education Commons

Recommended Citation

Gora, Patricia, ""I don't have a creative bone in my body": awakening creativity in educators" (2009). Theses and dissertations. Paper 566.

This Major Research Paper is brought to you for free and open access by Digital Commons @ Ryerson. It has been accepted for inclusion in Theses and dissertations by an authorized administrator of Digital Commons @ Ryerson. For more information, please contact bcameron@ryerson.ca.

"I DON'T HAVE A CREATIVE BONE IN MY BODY": AWAKENING CREATIVITY IN EDUCATORS

by

Patricia Gora B.A., Ryerson University, 2007 Dip., George Brown College, 2005

A Major Research Paper

presented to Ryerson University

in partial fulfillment of the requirements for the degree of

Master of Arts

In the program of

Early Childhood Studies

Toronto, Ontario, Canada, 2009

© Patricia Gora 2009

PROPERTY OF RYERSON UNIVERSITY LIBRARY I hereby declare that I am the sole author of this major research paper.

I authorize Ryerson University to lend this paper to other institutions or individuals for the purpose of scholarly research.

Signature

I further authorize Ryerson University to reproduce this paper by photocopying or by other means, in total or in part, at the request of other institutions or individuals for the purpose of scholarly research.

\$ignature

"I DON'T HAVE A CREATIVE BONE IN MY BODY": AWAKENING CREATIVITY IN EDUCATORS

© Patricia Gora 2009

Master of Arts
Early Childhood Studies
Ryerson University

ABSTRACT

Creativity is regarded as the solution to the problems of the twenty-first century. Without developing creative attitudes and skills, educators and children risk hindering their creative interests and limiting the number of ways there is to learn and respond to the world. This qualitative study aimed to address the symbiotic relationship between creativity and learning and how creativity is conceptualized and encouraged by educators. Using an unstructured openended interview, six educators actively involved in the field of Early Childhood Studies shared their thoughts, insights and expertise. The findings indicated that before educators can encourage creativity in their students they must initially identify creativity within themselves. By broadening personal definitions of creativity, educators can begin to recognize how encouraging and teaching for creativity allows children to define their own proximities of learning and imagine the impossible as possible.

Key Words: Creativity, Creative Development, Creative Expression, Creating, Imagination, Higher Order Thinking, Exploration, Intrinsic Motivation, Early Childhood Teacher Education. The Major Research Paper (MRP) proved to incessantly challenge my research and organizational skills and demand stern discipline and sustained dedication throughout the entire process. However, the MRP process also proved to be exciting, fun and incredibly engaging.

I would like to thank Dr. Marni Binder, my Supervisor for her tireless support and guidance. Dr. Binder proved to be a source of endless encouragement while steering me through the trials of writing the MRP and the nerves and self-doubt that inevitably accompany such a process. Thank you for all the time and energy you spent reading my drafts and for all of your feedback. Without your optimism and patience I could not have finished this MRP.

I would like to especially thank Dr. Angela Valeo my Second reader. I am grateful for all the direction, technical support and especially, the encouragement you provided me with. Thank you! I would also like to thank Dr. Judith K. Bernhard for chairing my defence and for all of her insightful suggestions and comments.

Finally, I would also like to thank my participants for taking the time to provide their expertise, insights, and recommendations and for making this study possible. A final thank you to my friends, who helped me stay focused and motivated with their constant encouragement.

DEDICATIONS

Mama & Tata

Without my wonderful parents this Major Research Paper would have never happened. I would like to extend my love and gratitude to my parents whose support, faith, love and sacrifices helped me reach the end of this challenging journey.

Drodzy Rodzice! Dziękuje za trud i wysiłek włożony w mojim wychowaniu i za cierpliwość i dobre serce. Ta praca diplomowa oznacza początkiem nowej drogi. Chciałam wyrazić to z całego serca:

DZIĘKUJE!!!

Anna & Mike

I would also like dedicate this Major Research Paper to my sister and brother-in-law. They have supported, encouraged and helped me stay focused and motivated prior and during the MRP process. Anna, you have always believed in me, thank you for everything!

Baby E

My dedication and appreciation further goes out to my 6-month-old nephew Ethan, who reminds me on a daily basis what it means to be creative.

TABLE OF CONTENTS

Author's Declaration	ii
Abstract	iii
Acknowledgements	
Dedication	v
Table of Contents	vi
List of Tables & Appendices	vii
CHAPTER I: Introduction	
Overview of the Issues	1
Significance of the Study	2
Definitions of Terms	5
CHAPTER II: Review of the Literature	
Introduction	6
Creativity and Education	
Creativity and Learning	9
Teacher Attitudes towards Creativity	12
Pre-service Teachers' Perceptions of Creativity	14
Developing Creativity	15
Research Questions	17
CHAPTER III: Methodology	
Research Design	19
Protection of Human Participants	20
Ensuring Confidentiality	20
Recruitment	21

Participant Demographics	22
Rob Adams	22
Chris Daniels	22
Marc Gibson	22
James Manning	23
Christine Durn	23
Matt Dowling	23
Participant Characteristics (Chart 1)	24
Data Collection	
Unstructured Interview	26
Data Analysis	26
Open Coding	27
Axial Coding	28
Selective Coding	28
Authenticity and Trustworthiness	29
Voice of the Researcher	
CHAPTER IV: Findings	
Broadening Personal Definitions of Creativity	33
The Integration of Creativity as Part of Daily Life	
Characterizing Creativity	
The Need for Creative Discourses	
Thinking the Impossible As Being Possible	
Creating Opportunities and Experimentation	
Educators can Discover and Teach Creativity	*
The Creative Environment.	
Hitting a Learning Curve on the Road to Creativity	42
Identifying Creativity in Educators	44
Reflecting on Experiences with Creativity	46

Balancing Curriculums with Creativity
Preparing Educators for the Field
Societal values50
Wisdom follows Experience51
Graduation is only the Beginning51
CHAPTER V: Discussion and Recommendations
Discussion of Findings54
Encouraging Creativity in Children55
The Core Phenomena: Identifying Creativity in Educators55
Figure 1 Paradigm Model of How Educators Can Encourage Creativity in Children56
Causal Conditions that Influence the Core Phenomena57
Strategies Taken in Response to the Core Phenomena
Factors that Influence the Strategies61
Contextual conditions
Intervening Conditions61
Consequences of the Strategies
Limitations to the Study65
Direction for Further Research
Recommendations for Practice
APPENDICES
Appendix A: Consent Agreement
Appendix B: Unstructured Interview: Educators in the field of ECE
D-forman and the state of the s

CHAPTER I

Introduction

Overview of the Issues

It is from the certitude of this moment that the relationship between creativity and human development will be defined for generations to come. As we gradually acclimatize ourselves to globalization, balance our economies and begin to make a sincere effort to solve human and environmental challenges that our global society faces, what forces will shape our future? Mihaly Csikszentmihalyi (1996), the author of *Creativity*, believes that "for better or for worse, our future is now closely tied to human creativity" (p. 6). Creativity is regarded as our most precious resource and as the catalyst that will solve our falling economies and sustain our natural environments (Edwards, 2008; Friedman, 2005; Martin & Florida, 2009; Mau, 2004; Pink, 2005). However, if we are depending on creativity to steer us through the twenty-first century, who will lead this new age of creative thinkers and problem solvers and where will they come from? According to Martin and Florida's (2009) report *Ontario in the Creative Age*, "we have no way of knowing who the next creative geniuses will be or where they will come from...[although] our society continues to encourage the creative talents of a minority, it neglects the creative capacities of many more" (Martin & Florida, 2009, p. 5).

The intent of this study was based on the need for educators to consider how teaching for creativity allows children to define their own proximities of learning and imagine the impossible as possible. The purpose of this qualitative study was to address the symbiotic relationship between creativity and learning and how creativity is perceived, fostered, and responded to by educators. This study has been conducted to offer theory and insight in regards to creative

development, contribute to the overall body of literature on creativity and to illustrate the findings as a visual model for educators to apply in practice.

Significance of the Study

The need for fostering more creative individuals is beginning to be more widely recognized (Csikszentmihalyi, 1996; Einstein as cited in Dineen & Niu, 2008; Edwards, 2008; Florida, 2005; Friedman, 2007, 2005; Martin & Florida, 2009; Mau, 2004; Pink, 2005; Vygotsky as cited in Lindqvist, 2003, 2004; Niu & Sternberg, 2003; Simonton, as cited in Kaufman & Sternberg, 2006). However, what does creativity look like and how can it be nurtured? Is the creative process more important than the product? And if creativity is in such high demand, does that imply that we have driven it underground? Kaufman & Sternberg (2006) state that "what is most notable about creativity research around the world is how little of it there is" (p. 2). In fact, research on creativity was not even fundamentally recognized in North America until 1950 when J. P. Guildford addressed the American Psychological Association in his "groundbreaking call for a focus on research in creativity" (Kaufman & Sternberg, 2006, p. 13).

Creativity research on children is especially limited and inconsistent. Csikszentmihalyi (1996) reasons that children cannot be wholly creative because creativity involves understanding already mastered knowledge in a new way. Feldman (as cited in Sternberg, 2006), however, warns that researchers take the critical role of teachers for granted when predicting success in later creative work because creativity cannot be developed alone. Yet in contrast, Csikszentmihalyi (1996) reports that schools have had very little effect on creative persons and that the majority of creative persons in his sample could not even recall an influential teacher.

Regrettably, creativity is not always accepted because most individuals cannot see past the status quo (Csikszentmihalyi, 1999, 1996; Sternberg, 2006). In fact, one of the few common threads of creative research states that "creativity is not as highly rewarded in practice as it is supposed to be in theory" (Kaufman & Sternberg, 2006, p. 2). Therefore, despite that "creativity is in large part a decision that anyone can make...few people actually do...because they find the costs to be too high" (Sternberg, 2006, p. 97). Given that, creativity is increasingly becoming more highly valued in society, it is important to explore why it is not more readily accepted, recognized and rewarded.

The literature reviewed exemplifies the current need for further research, theories, assessment and programs for the development of creativity. On account of the limited research on creativity, particularly in the early years, it is important to explore what creativity looks like in early years settings. Early years settings refer to any place or program that young children take part in educational programming and activities. This study hopes to contribute to the already existing body of knowledge on creativity and in turn, be applied in practice by educators to foster creativity in children.

The study is also significant because according to Vygotsky (1978), "for human beings to ascend to the heights of cognition that are typical of the human species alone, then a mediator (or social agent) is necessary to assist the child in creating his/her own world in the form characteristic of the culture in which he/she lives" (as cited in Fielding, 1997, p. 48). Therefore, a society that nurtures imagination and creative expression can also presume that creative individuals will influence societies (Simonton, as cited in Kaufman & Sternberg, 2006).

This study is personally significant because as an Early Childhood Educator, I strive to encourage children to create and be creators. I plan and implement creative experiences for

children based on my personal conception of creativity. From a young age, I would spend a 26 minute portion of my Saturday afternoon sitting in front of the television watching *The Joy of Painting*, hypnotized by Bob Ross' voice, the television painting instructor. As he talked his way through paintings, descriptively characterizing strokes and paint effects, rhythmically dap-dap-dappling fall colours onto sycamore trees, I absorbed my earliest aesthetic integration. Now that I am older, I wonder what effects it had on my own personal conception of creativity. Using a combination of words, sounds, and images, Ross had inadvertently taught me how to paint and encouraged me to be a creator. It was evident that I emulated Ross' painting style when my art teachers and classmates commented that my paintings brought to mind, "...you know, that guy on TV with the afro." As a result, this very early experience of linking words with images in an encouraging creative practice shaped my concept of creativity to include aesthetic awareness and the confidence to explore new ways of creating.

Definition of Terms

Creativity

Based on the work of Beghetto (2009), Csikszentmihalyi (1996), Fielding (1997), Lindqvist (2003) and Sternberg (2006), creativity is defined as a cognitive and social process that involves questioning and generating new ideas, concepts and/or the ability to create connections between already existing ideas or concepts. Although originality and novelty are often ascribed to these new concepts and connections, they are not an essential component of creativity. Creativity is not limited to the arts and applies to other domains such as mathematics, science and technology. Creativity is often associated with higher thinking, however, it is not limited to individuals that have been deemed gifted or score highly on intelligence tests. Although it is a trait one is born with, creativity, however, cannot be developed alone.

Creative Development

Early Childhood Educator (ECE)

Creative development refers to the creative process that enables individuals to expand their thinking and communicating (Cropley & Cropley, 2008). This process involves skills and knowledge which children acquire to assist them in developing their ideas and beliefs through multiple modes of learning and text. Multiple modes of text include but are not limited to drawing, painting, model-making, movement, role play, music, poetry, dance, drama, and writing. These multiple modes of creating and designing texts fuse children's critical interpretations and perceptions of their worlds outside of the classroom (Millard, 2006).

An Early Childhood Educator is a teacher who works with young children, zero to eight years of age, in an early years setting.

CHAPTER II

Review of the Literature

Introduction

Richard Florida, author of *The Rise of the Creative Class* (2002), is credited for suggesting that creativity will fuel the economic and cultural growth of the twenty-first century. By positioning the idea of society's "Creative Age" along with his plea for more creativity, on the *New York Times* bestseller list, Florida (2002) harmonized, what now appears to be the universal consensus that creativity will save us from ourselves (Csikszentmihalyi, 1996; Edwards, 2008; Einstein as cited in Dineen & Niu, 2008; Friedman, 2005; Mau, 2004; Pink, 2005; Vygotsky as cited in Lindqvist, 2003, 2004; Niu & Sternberg, 2003; Simonton, as cited in Kaufman & Sternberg, 2006; Vygotsky, 2004).

Following Florida, Daniel Pink (2005) author of *A Whole New Mind*, suggests that we have graduated from the Information Age into the Conceptual Age. He describes this point in history as a time where we will no longer be able to rely solely on technology to advance our society into the future (Pink, 2005). In order to progress, we will have to evolve into a "society of creators and empathizers, pattern recognizers and meaning makers" (Pink, 2005, p. 50). The Conceptual Age will, in part, reflect our "capacity to synthesize rather than analyze; to see relationships between seemingly unrelated fields; to detect broad patterns rather than deliver specific answers; and to invent something new by combining elements nobody else thought to pair" (Pink, 2005, p. 126).

Joining Florida and Pink in the ranks of the creative class is designer and author Bruce Mau. Mau (2004) explores how we will shape our future through design. In response to the challenges of the twenty-first century Mau, asks, "now that we can do anything, what will we

do?" (2004, p. 15). He examines how we have moved beyond creating designs of individual products and are obligated to focus on the (re)design of our economies. Like Mau, Pink (2005), also recognizes that the design of economies and "the wealth of nations and the well-being of individuals now depends on having artists in the room" (p. 69).

Finally, leading the rendering design of nations is Thomas Friedman's (2005) forward thinking novel, *The World is Flat*. Friedman introduces us to "The New Age of Creativity" and warns that we risk "hitting a ceiling on innovation" if we fail to promote imagination, innovation, and creativity (Freidman, 2007). In a recent article for *The New York Times*, Friedman (2007) cites Albert Einstein as one of the most innovative and creative thinkers of our time, who in turn, described imagination as "more important than knowledge, for knowledge is limited whereas imagination embraces the entire world, stimulating progress, giving birth to evolution" (Einstein as cited in Dineen & Niu, 2008, p. 42). Similarly, theorist Lev Vygotsky (1971) claimed that imagination develops creativity and creativity, in turn, "is essential to the existence of humanity and society" (Lindqvist, 2003, p. 249). It is undeniable that there are many challenges and changes ahead. However, if the fate of our civilization depends on how we respond to these challenges, are we threatening our future by limiting creativity?

According to Martin and Florida (2009) in order for future generations to thrive in this ongoing global transformation, we must recognize and harness our creative potential. Vygotsky (1978) recognized that culturally relevant and sought after values are transmitted through our sociocultural practices. Therefore, we may begin to examine our creative potential by reflecting on *our* creative culture. How do we value creativity? And how is this reflected in our society? Martin and Florida (2009), report that creativity lacks the appeal and merit in our society to qualify as a culturally valued competency. They propose several recommendations for Ontario's

Creative Age agenda such as strengthening creativity skills through our education system. Specifically, Martin and Florida (2009) propose investing in early childhood education emphasizing that "the kinds of attitudes and skills developed in early childhood education are truly lifelong skills that are critical for successfully competing in the creative age" (p. 25).

The present review explores current literature concerning how creativity is developed and how educators perceive, identify and teach for creativity. The objective of this review is to understand how children develop creativity and how creativity is perceived, responded to and evaluated by educators. This literature review identified the following themes: the relationship between creativity and education, creativity and learning, teacher attitudes towards creativity, pre-service teacher perceptions of creativity and implications on teacher training and techniques for developing creativity.

Creativity and Education

Creativity is regarded as the solution to the challenges of the twenty-first century (Csikszentmihalyi, 1996; Einstein as cited in Dineen & Niu, 2008; Florida, 2005; Friedman, 2007, 2005; Mau, 2004; Pink, 2005; Vygotsky as cited in Lindqvist, 2003; Martin & Florida, 2009; Niu & Sternberg, 2003; Simonton, as cited in Kaufman & Sternberg, 2006). In *Artscience: Creativity in the Post Google Generation*, Edwards (2008) writes: "We value creators in business, culture, education, and society, but somehow we struggle to create institutional environments to welcome them" (p. 13). Respectively, in his article, *Help us creativity researchers, you're our only hope*, Makel (2008), raises the concern that "we have deemed creative development and performance extremely important in the professional world of adults, but appear to minimize it in children" (p. 38). If the fate of our future is tied with creativity, why do we neglect children's creative potentials?

Freire (1987) believed that a critical pedagogy is required to stimulate creativity "not only at the level of students' of individuality, but also as the level of their individuality as a social context" (Freire & Macedo, 1987, p. 57). However, he also lamented that schools are guilty of repressing the development of creativity. J. P. Guilford (1950), (as cited in Fasko, 2000-2001) initially questioned why schools were failing to encourage more creativity and highlighted that research consistently failed to make the connection between education and creativity.

According to Beghetto (2009), "creativity researchers have, for decades, noted the potential for the schooling experience to have a depressing, if not outright debilitating, effect on student creativity" (p. 2). This calls into question the conventional concept of school and the learning environment and what Freire (1970) refers to as the banking model of education. When we consider how abundant and readily available information is nowadays, the issue of accessing information is obsolete (Makel, 2008, Pink, 2005). Therefore, schools can no longer limit learning to preselected information transferred from textbooks, sieved through teachers and 'banked' in children (Freire, 1970; Makel, 2008, Pink, 2005). Instead, schools will have to serve some other kind of function (Freire, 1987, 1970; Makel, 2008). Kelly & Leggo (2008) declare that "the predominant educational culture of standardization and convention must give way to a more balanced educational landscape that accommodates and embraces an educational culture of creativity" (p. 7). Therefore, how can we teach beyond standardized curriculums to prepare children for the challenges of the twenty-first century? In order for learning to surpass textbooks and ministry policies, a holistic world view to education must be applied (Antone, 2003).

Creativity and Learning

According to Cropley and Cropley (2008), when compared to conventional classroom learning the favourable effects of creativity-oriented teaching have been documented for years.

Creativity has been credited for fostering children's positive attitudes and self-image and improving motivation, curiosity, concentration and achievement (Cropley & Cropley, 2008; Torrance as cited in Fasko, 2000-2001). Encouraging creativity "enables children to capitalize on their strengths and to correct or compensate for their weaknesses, and it allows children to encode material in a variety of interesting ways" (Sternberg, 2006, p. 94). Educators therefore, must strive to create learning environments that encourage children to be inquisitive and critical of their surroundings (Kelly & Leggo, 2008).

According to Mindham (2005), one of ways of doing this is considering that children are not in need of education. Instead, children need an emphasis placed on the skills that they excel in such as imagination (Mindham, 2005). Vygotsky (1971) held imagination responsible for achieving a higher level of thinking and success claiming imagination as "the basis for every creative action: "It manifests itself in all…aspects of our cultural life, making artistic, scientific and technical creativity possible" (Vygotsky as cited in Lindqvist, 2003, p. 249). Binder (2008), states that these imaginative processes allow for "multiple forms of expression to unfold when the window is opened for imaginative and creative work, strengthening the contextual richness and the understanding of their socio-cultural landscapes" (p. 120).

However, before educators can support children's imaginative processes, they must honour, respect, and encourage creative expressions; considering that children interpret their sociocultural environment through relationships formed between emotions, thoughts, and imagination. According to Freire (1987), children achieve a level of higher thinking and success, when they learn to liberally express their thoughts, observations, and questions (Freire & Macedo, 1987). Makel (2008) for instance states that, "in the classroom context, teachers helping students develop the ability to self-evaluate their ideas' usefulness is an important step in helping

students transition from novelty to creativity" (p. 39). Beghetto (2009) also reports that when teachers encourage children to explore their unexpected ideas, children learn to re-evaluate the curriculum and determine if their idea is relevant to the subject matter or if a new idea should be applied. Vygotsky (1971) describes this as the "creative conscious process" because imagination, which is "both emotional and intellectual", develops creativity (as cited in Lundqvist, 2003, p. 249). Subsequently, when Guildford (1950), (as cited in Fasko, 2000-2001) described creativity as "an instance of learning" he alluded to the combination of knowledge and imagination that precedes creativity. However Guildford (1950), (as cited in Fasko, 2000-2001) also warned that that creative activity only exists in comprehensive and insightful learning theories (p. 94). Therefore, if creativity is dependent on learning, what is the significance of the teacher-learner relationship?

Upon examining the childhoods of influential creative persons, Csikszentmihalyi (1996) suggested that they were all driven by an intense interest that was encouraged by the support and admiration of significant adults in their lives. The significant relationship, which Csikszentmihalyi (1996) refers to corresponds with the teacher-learner relationship. According to Jeffrey and Craft (2004) the quintessence of this relationship is made up of *creative teaching* and *creative learning*. Creative teaching is described as using "imaginative approaches to make learning more interesting and effective" and creative learning is described as

...encouraging young people to believe in their creative identity, identifying young people's creative abilities and fostering creativity by ...recognizing and becoming more knowledgeable about the creative processes that help foster creativity development and providing opportunities to be creative (Jeffrey & Craft, 2004, pp. 80-81).

This symbiotic relationship translates to a learner inclusive pedagogy. Meaning that the "learner and teacher engage in a more collaborative approach to teaching and learning [and] where the learner is encouraged to engage in identifying and exploring knowledge" (Jeffrey & Craft, 2004, p. 84). However how does this translate in the early years and learning for very young children? One way which early childhood educators and children engage in a creative teaching and learning is when children share, interact, and engage themselves through play (Weininger, 1979). According to Weininger (1979) children come to understand and recreate their world through play which makes play a vital role in the "whole education process" (p. 10). When educators allow children to *choose* their own form of play, children explore their own imaginative thoughts and expand their creativity because the learning environment subsequently encourages them to "perform a task which requires ingenuity in formulating an answer that is not readily suggested by the materials themselves or by another person" (Weininger, 1979, p. 33). Creativity, however, is not only shaped by an individual's environment, it is also judged and evaluated by an individual's environment (Csikszentmihalyi, 1999). Sternberg (2006) suggests that "if the creativity of an individual is always judged in a context, then it will help to understand how the

Teacher Attitudes towards Creativity

context interacts with how people are judged" (p. 95).

Makel (2008) emphasizes that creativity is neither expected nor measured by most curriculums and schools. If curriculums do not specify creative development and if schools fail to reward teachers for teaching creativity, then can we rely on educators to foster creativity in the classroom? Dawson, D'Andrea, Affinito, & Westby (1999), report that educators acknowledge the importance of creativity however research shows that children with creative traits (impulsive, nonconformist, and progressive) are disliked by educators. In fact, "research has indicated that

teachers prefer traits that seem to run counter to creativity, such as conformity and unquestioning acceptance of authority" (Westby & Dawson, 1995, p. 1). In her study, *Teachers' biases toward creative children*, Scott (1999) found that teachers rated creative students as more disruptive because creative students tend to ask more questions. According to Beghetto (2009) evidence shows that one of the reasons why teachers tend to dismiss students' unexpected questions is due to their own lack of knowledge in the subject matter, and in turn, teachers feel uncomfortable exploring questions outside of the curriculum. Scott (1999) further stresses that the results of her study correlate with those of Oral and Guncer (1993), Russ (1993), Wallach and Kogan (1965), and Westby and Dawson (1995), all of which reported similar negative attitudes of teachers towards creative children. Interestingly, Cropley and Cropley (2008) mention that when teachers actually do teach for creativity they in turn increase their own motivation.

Given that, children's creative and imaginative development relies on their social and cultural reality (Vygotsky as cited in Fielding, 1997); educators should offer encouragement and enthusiasm when children ask questions and explore new ways of approaching a problem and applying ideas and materials in non-traditional fashions. Beghetto (2009) contends that "perceived teacher support, in the form of listening to students' ideas, has been found to be a key factor related to students' creative self-efficacy" (p. 4). If educators embraced their roles as facilitators in the learning process, instead of instructors, they could in turn, provide greater opportunities for children to generate new and creative ideas and solutions. However, if educators claim that creativity is important but disapprove of their students' creative behaviour how can we interpret these findings?

Pre-service Teachers' Perceptions of Creativity

Scott (1999) compared teachers' attitudes with pre-service teachers' attitudes of creativity and found that the latter viewed creativity very differently and were more inclined to support creative development in their students. If pre-service teachers are more inclined to support creativity during their training, why does this not translate and extend into classroom practices? Scott (1999) claims that pre-service teachers were more inclined to support creativity because when students attend post-secondary education they experience a daily environment that is much more open to self-discovery whereas schools and classroom emphasize structure and uniformity. Davis (1991) states that "it is ...important to help students metacognitively understand the topic of creativity [and] in turn, this increased understanding of creativity would increase creativity consciousness, demystify creativity, and increase creative ideas and products" (as cited in Fasko, 2000-2001, p. 318). Regrettably, Fasko (2000-2001) and Makel (2008) believe that teachers do not support creative development in practice because they fail to receive sufficient training in how to teach creativity. Beghetto (2009) therefore advises that teacher education programs should serve as catalysts to disseminate the various appropriate ways that teachers can encourage and respond to creativity.

Developing Creativity

According to Vygotsky (2004) creativity ripens with age because our imaginations develop as a result of rich experiences and environments. Children therefore are far less imaginative than adults given that their daily experiences are more limited (Vygotsky, 2004). However, children's imaginations *appear* to be more developed and inventive because children ultimately have less control and more faith in their imagination between what is real versus what is made up (Vygotsky, 2004). Educators consequently perceive children's immature

imaginations to be bigger and more developed and as a result requiring less consideration. This is exemplified in children who eventually lose interest in drawing once they reach school-age; unless they have been encouraged by external agents (Vygotsky, 2004). A child's interest in drawing usually wanes at this time because children become more critical of their work and their previously satisfying childish schemas (imaginative ideas) lose appeal (Vygotsky, 2004).

Given that imagination and in turn, creativity is a construct of lived rich experiences, fostering children's creativity is relative to their experiences supplied by adults. "The implication of this for education is that, if we want to build a relatively strong foundation for a child's creativity, what we must do is broaden the experiences we provide him with" (Vygotsky, 2004, p. 15). Therefore, through child-directed and supportive teaching methods, educators can facilitate and encourage children's learning to reflect personally meaningful creative expression and understanding. Children should be encouraged to explore their environments, imagine new ways of thinking and accept uncertainty and the possibility of failure. However, when educators rely solely on direct instruction and inculcate how children should learn, behave and essentially think, this "can only breed conformity, the reproduction of knowledge and images in art and a lack of independence" (Fielding, 1997, p. 32).

Vygotsky (1978), (as cited in Fielding, 1997) believed that children's imaginations and creativity develop separately, and at a faster pace, than their intellectual development. However, he claimed that in adolescence, "intellectual development catches up and the two mental functions intersect. This then sets the stage for a qualitative boost in both cognitive abilities" (Vygotsky as cited Fielding, 1997, p. 28). In view of this, educators should develop optimal teaching techniques and methods, promoting creative analytical skills that lead to imaginative and innovative ideas and solutions.

However, if prior educational experiences and current educational environments are responsible for reducing levels of creativity, how can educators stir children's imagination? Cropley and Cropley (2008) believe that many teachers strive to teach for creativity but paradoxes of creativity visible in research make it difficult for teacher's to foster creativity in their students. Examples of some paradoxes of creativity include claims that creativity can and cannot be taught, divergent versus convergent thinking models, and that creativity involves defying the crowd and requires acceptance by the crowd (Cropley & Cropley, 2008).

A framework created by the Qualifications and Curriculum Authority (2005) in England, characterized creativity in education as: "posing questions, making connections, being imaginative, exploring options [and] engaging in a critical reflection/evaluation" (Cremin, Burnard, & Craft, 2006, p. 109). The framework also listed pedagogical approaches designed to help teachers promote creativity including: "establishing criteria for success, capitalizing on the unexpected without losing sight of the original objective, asking open questions, encouraging openness to ideas and critical reflection [and] regularly reviewing work in progress" (Cremin et al., 2006, p. 109). In their study titled, Pedagogy and possibility thinking in the early years, Cremin et al. (2006) explored the nature of creativity and how it is promoted in classrooms. At the centre of their findings, was the empirically validated notion of possibility thinking as the core indicator of creative learning. Possibility thinking is described as: "posing questions, play, immersion and making connections, being imaginative, innovation, risk taking [and] self determination" (Cremin et al., 2006, p. 110). However, for teachers to foster possibility thinking with children, Cremin et al. (2006) concluded that teachers should employ the following pedagogical practices: standing back (from direct instruction), profiling learner agency (teaching from the learner's point of view), and creating adequate time and spaces for children to take part

in learning. In addition, Sternberg (2006), claims that educators can help their student's develop creativity by simply asking them to be more creative. However, keeping in mind that if children sense that their teacher does not value creativity or that creativity is likely to be punished rather than rewarded, this will deter children from taking creative action (Fasko, 2000-2001; Sternberg, 2006).

Although there are many suggestions in the literature on how to develop creativity, they vary greatly from study to study and need to be updated since the majority of these studies were conducted between 25 and 45 years ago (Fasko, 2000-2001). According to Jeffrey and Craft (2003) "more recently, the research has focused on the effects of creative teaching on learners...the creativity they bring to the learning context and the creativity they are encouraged to develop by being part of a creative teaching context" (p. 78). However, Vygotsky (2004) advised that "the best stimulus of creativity in children is to organize their life and environment so that it leads to the need and ability to create" (p. 66).

The literature reinforces the need to re-examine how creativity is conceptualized and how teacher practices translate to creative teaching for learners. In view of the literature, teaching practices appear to not only influence teacher and learner perceptions of creativity but they also determine how creativity is recognized and assessed. Therefore, this study will build upon what is already known about how educators perceive creativity by focusing my inquiry on educators' perceptions of creativity in the early years and more importantly, how creativity is encouraged.

Research Questions

This qualitative study addresses the following research question: How do early childhood educators define, perceive, encourage, respond to and evaluate creativity? This central research question was explored and refined with the following sub-questions:

- a) What does creativity look like in classrooms?
- b) Is the creative process more important than the product?
- c) How can teacher educators promote creative learning and teach for creativity?

CHAPTER III

Methodology

Research Design

A qualitative approach was applied to address the research question given that the primary data reflected the intimate and firsthand knowledge and experiences of the participants (Creswell, 2003). By focusing on questioning the process of creative development; common experiences of participants were explored to gain a deeper understanding of the central phenomenon (Creswell, 2003). The primary intent of the qualitative approach was to understand the participants' experiences and develop a theory and visual model to illustrate how creative development can be encouraged and promoted in the early years. Hence, this research design. "offers a macro picture of educational situations rather than a detailed microanalysis" (Creswell, 2008, p. 448).

Due to the limited amount of research on creativity in the early years and because the process of creative development was studied, grounded theory was used to explore the perspectives of a group of educators who are actively involved in the field of Early Childhood Studies. Grounded theory is a qualitative procedure that is used to develop theories that are "grounded" based on primary data, that includes personal beliefs and firsthand experiences, collected from participants (Creswell, 2005). To develop a theory that explains how creativity is represented in early years settings and how it is encouraged and perceived by educators, primary interview data was collected from the participants. Themes were developed, extracted and connected from the data and a theory was formed to explain how creativity can be encouraged in children (Creswell, 2005). In all steps of the research process non-discriminatory language was used and the research was reported fully and honestly (Creswell, 2003).

Protection of Human Participants

To minimize potential threats and ensure that the design and administration of the study was of minimal risk for participants the research plans were submitted and reviewed by the Research Ethics Board (REB) of Ryerson University. The REB further protected human participants by ensuring that consent agreements and data collection procedures respected their rights and privacy (please see Appendix A for the Consent Agreement). Ethical problems involving subject identification, recruitment and data collection were not anticipated given that upon signing the consent agreement participants were also informed that if they felt any discomfort or chose to end the interview they could withdraw from the study at anytime. In addition, an explanation of the research and use of results along with the applicable risks and benefits of the study were included in the consent agreement (Creswell, 2003). The risks and inconveniences associated with the research were assessed and considered to be reasonable in relation to the anticipated benefits to the participants and in relation to the knowledge that may reasonably be expected to result from this research.

Ensuring Confidentiality

The following provisions were made to maintain confidentiality and anonymity of participants and the data. Pseudonyms were assigned to participants throughout the data collection, analysis and reporting (Creswell, 2003). The data and information was only exchanged between the principal investigator and faculty supervisor ensuring that it would be kept secure and confidential.

Recruitment

In line with grounded theory, to ensure thoughtful primary data, educators actively involved in the field of Early Childhood Studies were recruited based on previous work experience. Initially, the researcher anticipated recruiting all six participants from the list of presenters from Ryerson's 2009: "Beyond the Brown Crayon: Diversity and the Creative Arts Symposium". However, only four participants were recruited from the symposium's list of presenters. To ensure voluntary participation, participants were not approached or recruited during the symposium. The remaining two participants were identified based on their experience and involvement in Early Childhood Studies. All participants were contacted though email and personal conversation. A letter of explanation of the social significance of the study and consent agreement was sent to the participants. All participants were recruited using the following script:

Hello, my name is Patricia Gora. I am a graduate student at Ryerson University. I would like to invite you to participate in my research study. This study is a requirement for a Masters degree in Early Childhood Studies and the authenticity of my credentials and this study can be validated by Dr. Marni Binder at Ryerson University. If you choose to voluntarily participate, I am asking you to participate in a 60-minute audio recorded interview that will include open-ended questions regarding your experiences and knowledge with children and creativity. This interview will be confidential and anonymous. If possible, I would like to meet with you prior to the interview to provide the consent agreement and answer any questions you may have about the study. Interviews may be arranged at a time, and location that is convenient, private and comfortable for you. However, if you do not have a preference, I may arrange for an interview location.

If the prospective participants declined the invitation the following statement was given:

Thank you for your time and listening to my proposed study.

If the potential participant, accepted the invitation to partake in the study the following was said:

Thank you for agreeing to participate. I would like to arrange a meeting prior to the interview to allow for some time to go over the consent agreement and answer any questions you may have concerning the interview and study. Please notify me of a potential location where we can meet that is convenient and comfortable for you. If you do not have a preference I may arrange for an interview location.

Participant Demographics

Educators actively involved in Early Childhood Studies and Education were chosen for the study given their firsthand experience in the field, educational backgrounds and knowledge on creative development. Please refer to Chart 1 which summarizes the characteristics of the participants.

Participant one: Rob Adams* (pseudonym) is a teacher, performer, writer and musician. After a 20 year career in music and theatre, Rob began work as a sessional instructor with a university in Toronto, Ontario and teaches arts-based education. His Master's work focused on arts education pedagogy and its value to community. Rob's current position is as a doctoral student towards a PHD in education.

Participant two: Chris Daniels* (pseudonym) is an assistant professor at a university located in Toronto, Ontario where he teaches science and technology for children. Chris' research interests include sociable media, learning in the margins, virtual learning environments, blogs, wikis and any tools that help put people in touch with people. He is a high functioning autistic, which informs how he makes sense of the world. His work looks for creativity in the unexpected margins of inquiry into lived experience, and the novel ways in which people may co-construct knowledge in all aspects of social engagement.

Participant three: Marc Gibson* (pseudonym) is an instructor of Early Childhood Education at a college and university in Toronto, Ontario. His professional interests include: diversity, human rights and anti-bias environments. Marc's creative projects include his role as a youth outreach director for a hip hop troupe known for social justice initiatives. Utilizing dance, creative movement and over 10 years of experience in the fitness industry he facilitates a dance-based community outreach programs for children and youth.

Participant four: James Manning* (pseudonym) has worked in the field of Early Childhood Education for over 35 years. Throughout his career he has focused on including the creative arts in his practice and research. As an academic he has developed courses and graduate certificates in music and drama. He has worked both nationally and internationally in arts education. As well as developing partnerships with arts institutions in Canada, he was the team leader for an international project which developed arts-based teacher education. He is currently working on a team studying the impact of social drama and music workshops on people experiencing social isolation.

Participant five: Christine Durn* (pseudonym) is an Early Childhood Educator that danced in her backyard as a child and has vivid memories of a local artist facilitating a story creation with paintings for local children. As a teacher, she has always encouraged children to explore and experiment with art mediums, storytelling, science and theatre. She recently co-led a workshop for a symposium at a university in Toronto, Ontario exploring visual arts in the outdoors.

Participant six: Matt Dowling* (pseudonym) is an Early Childhood Educator with a strong background and involvement in the arts. He graduated from the Drawing & Painting program at the Ontario College of Art & Design and received the prestigious OCAD medal, which is awarded to the top student in each area of study. His artwork has been shown in galleries in Toronto and Vancouver. Matt is a musician with much experience as a drummer, i.e. in a marching band, punk band, etc. He currently writes songs and plays guitar in a local indierock band. Matt has helped plan episodes, and plays the role of a teacher, on a popular children's series (currently airing on several provincial networks). The second season of this show is set to begin airing in November.

Participant's Name	Occupation	Professional and creative interests	Number of years of experience
Rob Adams	Teacher, performer, writer & musician	Arts-based education and its value to community	20 years in music & theatre
Chris Daniels	Assistant professor at a university	Science & technology for children, sociable media, learning in the margins, virtual learning environments, blogs & wikis	N/A
Marc Gibson	Instructor of Early Childhood Education at the college and university level	Diversity, human rights & anti bias environments, dance-based community outreach programs	Over 10 years in the fitness industry
James Manning	Educator & Academic	Developing arts-based courses, international arts-based education, social drama and music workshops	Over 35 years in ECE
Christine Durn	Early Childhood Educator	Encouraging children to explore their environments and curriculums	N/A
Matt Dowling	Artist, musician & Early Childhood Educator	Drawing, painting, playing the guitar, writing music, developing children's television programming	N/A

Data Collection

The primary method of data collection was purposeful sampling with the intention of creating a theory characterizing how creativity is developed in the early years. Grounded theory requires theoretical sampling to ensure that data collection will yield rich text useful in generating a theory (Creswell, 2008). Sampling therefore was intentional and participants were chosen based on their expertise and active involvement in the field of Early Childhood Studies. The researcher made use of this approach by interviewing the participants using open-ended

questions to best "capture the experiences of the participants in their own words" (Creswell, 2005. p. 405). Educators active in the field of Early Childhood Studies were considered good candidates for interviews because they have firsthand experience and knowledge regarding the phenomenon being studied. Although the participants are actively involved in the study of Early Childhood, they notably are less central than parents, who are more significant and have greater influence over their children's lives and potentially their creative development.

The primary tool used for data collection was an unstructured interview (please see Appendix B for a sample of the Unstructured Interview for educators actively involved in the field of Early Childhood Studies). Each interview consisted of a single 60 minute session and was conducted in a location that was chosen by the participant or arranged by the researcher at the request of the participant. If participants requested the investigator to choose a location, interviews were held in private interview rooms available at Ryerson University. Each interview room was scouted and reserved prior to the interview. Interviews were recorded using a tape recording device and later transcribed for data analysis. Participants' privacy was protected and confidentiality was ensured to increase the 'trustworthiness' of data collection. In addition, participants were informed before the interview commenced that if they felt any discomfort or chose to end the interview they could do so at any point throughout the process. Throughout the study, memos were created about the data to record recordings, musings, and reflections. The researcher kept track of information by mapping themes and categories, going over old ground, reconsidering previous thought processes, and locating "missing" threads of information (Birks, Chapman, & Francis, 2008).

Unstructured Interview

The primary research tool used for this study was an unstructured interview guided by a prepared interview protocol. According to Creswell (2008) interviews allow participants to express their detailed personal information regarding phenomenon's that cannot be directly observed. The interviews were one-on-one and consisted of open-ended questions so that participants could best describe their experiences and how they came to understand their beliefs and opinions. Interviews began by asking participants how they defined creativity, their view of creativity in early years settings and how they believed creativity could be encouraged by ECEs. Other questions emerged from the participants responses and related to their previous educational and work experiences in the field of Early Childhood Studies. Individuals were also asked to describe how they believed teaching for creativity could be encouraged in pre-service ECEs because the literature suggested that pre-service teachers are being taught in a creative environment and favour creative learning yet once they enter the field, creative learning and teaching is challenging to implement (Scott, 1999). Each interview was audio recorded and transcribed verbatim to ensure an accurate record of the conversation (Creswell, 2008). The participants were offered a copy of their transcribed interviews and invited to verify the data.

Data Analysis

During the data analysis stage of the study, the researcher followed the systematic process of grounded theory and used open coding, axial coding, and selective coding to analyze the data (Creswell, 2005). The researcher ensured that the analysis was 'trustworthy' by creating memos about memos during the open coding process to indicate the sources which supported the development of the initial categories and sub-categories (Creswell, 2005). Even though initial and sub-categories categories were documented to identify where they evolved from, the

researcher risked committing the data analysis to premature categories in the open coding phase of the systematic design. However, this part of the process assisted in self-corrections. For example, "based on analyzing one set of data, the researcher obtains direction from the analysis for the next set of data" (Creswell, 2005, p. 396). Strategies used to interpret the data included writing memos to assist in articulating, exploring, contemplating and challenging interpretations when examining the data (Birks et al., 2008). Memos were used to analyze the data, such as interviews and memos which were interpreted, coded and categorized into themes.

Open Coding

Open coding was the first phase of data analysis in the systematic design of grounded theory. The researcher reflected on all the collected data (including interviews and memos) and segmented them into categories which were grouped based on similar properties of each category (Creswell, 2005). The major features of the open coding phase were the following six categories: (1) broadening personal definitions of creativity, (2) thinking the impossible as being possible, (3) educators can discover and teach creativity, (4) identifying creativity in educators, (5) balancing creativity in education, and (6) wisdom follows experience. To further ground the data during the open coding phase, the dimensions of properties were examined and examples were viewed and located on a continuum (Creswell, 2005). Before developing a theory, the researcher created categories between common threads and rethreaded them to "stay close to the data at all times in the analysis" (Creswell, 2005, p. 396). This form of constant data comparison ensured that the categories were "grounded" in the data (Creswell, 2008).

Axial coding

Axial coding was the second phase of data analysis in the systematic design of grounded theory. The researcher selected one category from the open coding phase, "identifying creativity in educators" and identified that category as the core phenomena (Creswell, 2005). In a diagram called a coding paradigm, the researcher represented the interrelationships of the causal conditions to the core phenomena. Finally, a grounded theory was developed during the selective coding phase and refined and integrated by examining how "certain factors influence the phenomenon leading to the use of specific strategies with certain outcomes" (Creswell, 2005, p. 398). The researcher acknowledges that although the systematic design is very prescriptive and detailed to ensure reliable data analysis, it is not a very creative method of generating a theory regarding creative development. However, the systematic design produces a visual presentation of the data and therefore could be applied as a guide for ECEs to use in the field.

Selective coding

Selective coding was the final phase of data analysis in the systematic design of grounded theory. Based on the interrelationships of the categories (developed during the axial coding phase) the researcher generated a theory from the interrelationship of the categories in the axial coding model (Creswell, 2005). The researcher refined the theory by explaining how causal, contextual and intervening factors affect the phenomena while defining how the strategies may be applied to achieve the desired consequences (Creswell, 2005).

Authenticity and Trustworthiness

Credibility (internal validity) was maintained by inviting participants to participate in member checking within the first 3 weeks following their interview (Creswell, 2003). This ensured verification of the data. Transferability (external validity) was maintained through discriminate sampling and through triangulation of the data during the open coding and axial coding stages of analysis to compare accuracy (Creswell, 2003). In addition, detailed accounts of experiences and how individuals came to realize and interpret their experiences were documented in the data collection process and used to make judgements about the transferability of findings. Dependability (reliability) was preserved by using two external auditors (the research supervisor and the second reader) to review and assess the study (Creswell, 2003). The research supervisor audited the literature review, methodology, research findings, and discussion throughout the length of the study and the second reader reviewed the study in its completed entirety. Finally, the researcher maintained confirm-ability (objectivity) by stating past experiences and personal views. Despite the researcher's personal views, it is apparent that the researcher's bias did not excessively affect the data analysis process given that participant responses spanned beyond the researcher's personal insights and views of the phenomena in question.

Voice of the Researcher

As an Early Childhood Educator teaching in an international school in Suzhou, China, I often questioned if I was imposing my own cultural perceptions of creativity on my students. I found myself, (a Canadian woman) working in a relatively small city (by China's standards) immersed in a collectivist culture, where shared attitudes, beliefs,

norms and definitions were highly valued. I quickly realized that I was juggling my
Western values, which included independence, and freely and openly expressing personal
thoughts and opinions with respect for Eastern values. However, I occasionally felt a
detachment with Eastern values because I worked in an international school in an
international (gated) community amongst other ex-pats. Despite feeling detached at
times, I simultaneously felt submerged in the culture. Interestingly, I realized that this
schism reflected China's wider societal values as a growing superpower swathed in
authoritative values. If China censored expression in order to uphold social and cultural
values, how could it simultaneously promote imagination, innovation, and creativity?

While teaching the first grade, I observed that children who engaged in self-exploratory activities tended to exhibit higher levels of creativity; compared to students taught in the traditional Chinese, teacher-directed model of education. Consequently, I advocated changing the school's art program from a highly structured, product-based curriculum to an open-ended and aesthetically responsive curriculum. Given that my concept of creativity evolved from my personal experiences, background and knowledge; I asked myself if I had imposed my own perception of creativity on my students?

My teaching responsibilities were shared with a local Chinese teacher.

Throughout the majority of the curriculum, the local teacher widely used direct instruction to teach our students. This was especially evident in the art education portion of the program. Children were often instructed how to draw, what to draw, and which colours and materials they were permitted to use. This strong emphasis on the finished product often produced beautiful artwork that consequently lacked any personal meaning or creativity. Conversely, when the art education portion of the program was delegated to

me, I encouraged self-directed exploratory, activities, often initiated by the children's interests. The children were supported to experiment with new ideas, and skills in order for them to develop their creative and artistic expression beyond their current developmental level. Although the art that the children created under the local teacher's direction was often very aesthetically pleasing and uniform, it lacked depth. The absence of aesthetic beauty in the artwork created under my guidance was made up for in the children's meaningful and highly creative personal expressions. For instance, I would often ask children to describe their artwork and they would always reveal more about the piece that was visible to the eye. Their creative expressions conveyed ideas, stories, and beliefs that could not have been achieved through a traditional Eastern model of education.

Gardner (1989), (as cited in Fielding, 1997) described China's teacher-directed curriculum as a means of ensuring that children learn and perform in one correct way.

This type of child rearing and teaching methodology discourages children from exploratory activities and instead instructs them on how they should learn and perform.

As a result, "children develop a passive acceptance of knowledge, a tendency to view things uncritically and to avoid exploration" (Fielding, 1997, p. 31). Given that a supportive environment is important for fostering creativity and children's performance is affected by teachers' attitudes towards them, I questioned whether children choose to suppress creative tendencies to appease their teachers? Through these experiences, I came to believe how critical it is for early childhood educators to have the opportunity and means of studying how their own conceptions of creativity can be later translated into

classroom practice. Most important was how teaching for creativity can define children's learning and education.

CHAPTER IV

Findings

Broadening Personal Definitions of Creativity

The first finding, "broadening personal definitions of creativity" referred to the need for educators to expand their definitions of creativity beyond originality, the arts and well known creative contributions; when educators limited their definitions of creativity they risked neglecting the everyday creative acts present in children's daily lives. Within this category several other themes emerged.

The Integration of the Creativity as Part of Daily Life

James, an educator with over 35 years of experience in Early Childhood Studies has always tried to weave creativity into his teaching and research because to him creativity cannot be severed from his daily life. He stated,

James: I think of it in terms of problem solving. So whether it is what am I going to have for dinner or how am I going to take this photograph or whatever it is, it's that questioning that is an important part of being creative.

He believed that creativity is living and that, "just going through life is creative". Children go through life being creative as well.

James' beliefs were also echoed by Rob and Chris. Rob has always been interested in arts-based education and its value to community. He recalled his dad telling him how all over the world, the bow and arrow were invented almost at the same time. Therefore, the invention of the bow and arrow may have appeared as innovative and original but in actuality many individuals were all thinking the same thing. So when educators observed children drawing a depiction of themselves with their mother for the first time, or kicking off a new dance move, Rob would remind educators that even

though the child did not create something wholly new and original it was still an original expression for that child and needed to be acknowledged and valued. He further noted:

Rob: So I'm not sure how original any of us ever are...[but] when a child makes a song for the first time, even though it's the same song that thousands of kids have made for the first time, it is still original for them. There is something about that impulse, that discovery process that is just as valid as if it were the first human being ever doing it.

Therefore, although a child's new song or picture may not be original to their teacher, or even amongst other children in the classroom, it is a valid form of creative expression for that child and should be recognized for its originality.

Before working as an instructor in higher education, Rob experienced a 20 year career in music and theatre. He had taught a lot of music education and acknowledged that our notions of music are almost entirely influenced by Western musical traditions. As a result, he felt that individuals consequently limited their musical vocabularies. He clarified,

Rob: In other parts of the world people create sounds that are entirely different, so when you say to a child oh, that's good singing, oh that's bad singing. How do we make those judgments and how are we imposing them on the child? It may be that their "bad" singing is just a singing that we don't understand. We are not as alone as we think we are. I think there is not as much individuality as we think there is.

Therefore people around the world may have more similarities than differences. Rob said that he thought creativity defined us as a species and that there was something universal that came through in creative expressions. Chris, an assistant professor, said that he was always looking for creativity in the unexpected margins of inquiry into lived experience. However he recognized that:

Chris: When something's creative, it tends to be something that is only slightly new. If it's really creative, you are probably going to get locked up for it or people won't understand how to interpret it. But if it's just something that's just a

couple degrees away from expectations but doesn't meet those expectations people see it as a creative way of looking at things.

Even though, it often appears that creativity is coupled with originality, originality however is not always valued. For example, Christine remembered watching a group of very young children have the opportunity to engage in freestyle dance. She noticed that the smaller children moved their bodies freely, completely uninhibited. The older children however, appeared to be much more conscious of what other people were seeing. Christine questioned if the children decided to judge their peers by their own accord, or if they mimicked behaviour modeled by a teacher. This raises the question of when is originality considered creative? And how original is original?

Recognition of personally original expressions is one way for educators to begin to broaden previous definitions of creativity. Once educators accept that creative expression is evident in multiple forms, educators may than begin to view creativity beyond the arts.

Matt, who is an artist himself, advised educators not to limit their definitions of creativity to the "great halls of fine arts". In addition, James believed that the arts and creativity had been placed on a pedestal by society which had contributed to defining creativity in narrow regards. He commented:

James: It saddens me that a lot of the formal creativity in the world is seen as something that is not accessible for everyone...it costs so much to go to the opera or the gallery but also a part of it is not just the cost but it's also the attitude. If people don't see themselves as creative then they are not as likely to want to partake in some of those activities.

Even though artistic creative expression may not be accessible, many other forms of creativity are available and easily accessed. For example, Marc recalled a friend of his who he described as "a computer person" deciding to take cooking classes: "there's a

reason why they call it culinary arts. That to me is creative expression. Even entertaining, and that's part of the reason why the Food Network is so popular".

Beyond cooking and the Food Network, Rob suggested looking into the "global village" to broaden our definitions of creativity and he stated:

Rob: There's a video going around on YouTube now where all these musicians from all over the world are playing the same song all playing on the same track. It's really cool so there's stuff like this happening but it's not happening in schools. The teachers need to be aware of it happening!

Although creativity can be found in many outlets such as the examples listed above, Marc noted that he worried adults and children were under the impression that creativity was seen as specialized and that only a special group of people were skilled enough to be creative.

Characterizing Creativity

While recalling a favourite and well-known recording artists Rob reminded us that even though creativity was attainable, it did not always infiltrate the world. He noted:

Rob: So the idea of, you take a guy like Woody [Guthrie] and the only reason Woody was prolific, like he wrote hundreds and hundreds of songs but he also happened to record these songs and that's why we know them. There are a lot of people who wrote songs and never recorded them so we don't know who they are. How many songs exist in the world that we have never ever heard?

Therefore, has creativity been defined by individuals like Woody Guthrie because his songs were truly "prolific"? Or have many valuable forms of creativity been denied recognition? To this note, Chris explained that,

Chris: Creativity is something that like art is perceived by the community as creative so it's the apprehension. So it's almost like an observational decision because things that are horribly creative may not appear so. So it's almost when we look at a work of art, when is something a work of art? When is something creative? We don't know until it's perceived as creative or situated as something creative...[however]art isn't giving people what they want; art is giving people

what they didn't know they wanted. That's when it seems creative. If you give people something that's creative and they just don't want it they won't see it as creative.

Chris' explanation revealed how creativity can at times be fearfully perceived by individuals depending on how and why the creative act is offered. Presumably, if educators can accept and perceive children as creative individuals, assume faith in a child's ability to create, and situate the child's creative expression in an educational context; it is possible for educators to not only broaden their definition of creativity but also to teach for creativity.

The Need for Creative Discourses

In order for individuals to broaden their definitions of creativity, James commented that individuals do not have to necessarily change their everyday activities. In fact, just sitting down and talking about creativity had proven to be enough to broaden one's definition. While being interviewed Christine admitted that "before we started this conversation creativity in my head was always about art. But as we've discussed it, I know it's not true". Educators are therefore encouraged to talk to their peers, colleagues and of course their students! By embedding someone else's experience within their own, educators open themselves up to broader definitions of what it means to be creative.

Marc suggested bouncing ideas off colleagues and children and getting out there and visiting other classes, taking workshops and taking advantage of outlets like YouTube to take those dance classes that may be too expensive to take in the studio. He warned educators not to isolate themselves:

Marc: Someone once asked me if teaching was a lonely profession and it certainly can be. But I think it's also important to maybe just ask, meeting up for coffee and saying, well what worked for you this week? What didn't? And you're not going to copy it because we're all individuals but just being that open I think is very

important and because I think creativity is synonymous with being open minded, you're going to walk and talk it 24/7.

James recalled some time he spent in Brazil and described Brazilians as having a completely different attitude towards creativity. Brazil left James with the impression that every individual can be creative if they want to be. Therefore to broaden our definitions of creativity even further, James proposed that our Canadian society could look towards other cultures and try to understand the many different ways that creativity was perceived and what creativity offered:

James: ...it's recognition of a richer society but I think that if you can see both: let's make society richer but also let's deal with our problems and put the two of those together that could be a pretty powerful force.

In regards to schools and education, James suggested that creativity should be reconceptualized similarly to Gardner's re-conceptualization of intelligence in order to help get people to think differently about creativity and the strengths of children.

Thinking the Impossible As Being Possible

The second finding, "thinking the impossible as being possible", referred to the advantages of presenting children with opportunities to create and integrate new ideas by encouraging them to explore, experiment and express their ideas even if their ideas were not fathomable.

Creating Opportunities and Experimentation

Christine, noted that she had always encouraged children to explore and experiment with art mediums, storytelling, science and theatre and therefore believed that "there are no boundaries" when it comes to children's possibility thinking. When educators allow children to explore and test their ideas, educators will inevitably

encourage theory building. Chris agreed with Christine and suggested that one way of doing this was by using a lot of oppositional dialogue; the more open-ended question asking and problem posing educators provided for children the more they would be able to encourage children to generate personal theories. He said,

Chris: Who cares whether they actually know a theory or fact. I care that they have created a theory, and tested the theory and loved the theories that they have come up with it and who cares if they are right or wrong. Rightness can be picked up anytime in life.

Similarly, Marc stated that when children were allowed and encouraged to explore, experiment and also express their insights, educators were abiding to the *freedom* of creativity and providing a space to outwardly share that freedom. Christine described this type of freedom as, "the ability to just let go and respond to sensory in a way that is uninhibited. Creativity is about exploring and experimenting".

The freedom of open-ended learning also allowed children to move across several domains. Chris had observed this is in early learning centres when learning environments were arranged to overlap; creating opportunities for children to move experiences from one location to another. In his own teaching practice, he recalled an incident when he casually dropped some popsicle sticks on a table near some students who were engaged in trying to make a marble loop around but could not keep the marble from flying out the side. Without saying a word, Chris inspired his students and supported their successful completion of the task at hand because he introduced a material that may have not been obviously accessible. He described this as "re-localizing either personal experience from one activity to another or shifting knowledge from one activity to another, from one knowledge domain to another". Therefore, he suggested arranging learning environments in a way for children to move experiences from one place to another and being critically

aware of the environment and for educators to be able to respond to the environment and know when to intervene and to always be looking around for things such as props or additional information/activities that might all of a sudden influence what children are doing. He noted:

Chris: That movement across domains seems to really be behind what I think is creative. And if you look at some people who are considered to be really creative, they tend to work in more than one area. Da Vinci is probably the greatest example, because he's designing submarines, airplanes, painting stuff and each one of those seems to inform another type of practice and that goes against the way we train people now.

Moving across domains and re-localizing knowledge is also applicable for educators. Chris gave the example of taking ideas from physics and chemistry and looping them in a valuable way into business practices. He credited this type of creative expression as appearing novel and reasoned that that was why others would also recognize it as creative. Marc also gave an example of how re-localizing knowledge from one domain to another characterized creativity, "I could go to an aerobic class and I could get some pointers on how to lecture in a university class because they are both engaging students in one way". He revealed that he always observed how other people taught in order to improve his self and to be a more creative teacher. Therefore, Marc borrowed knowledge from fitness and re-localized it with education to broaden his own creativity and explore concepts he may have not considered if he had not stepped outside of his own domain.

Educators can Discover and Teach Creativity

The third finding, "educators can discover and teach creativity" implied that educators could promote children's creative development once they could identify children's situational interest or intrinsic motivation in an activity or idea. Chris claimed

that if educators could "catch" a child's mind they could help them commit to their choices by encouraging the child to plan and dedicate themselves to a task. However, the findings indicated that successfully identifying children's interests depended on the constructs of the learning environment and an educators' willingness to explore creative boundaries.

The Creative Environment

Christine believed that "the environment is a huge piece [because] the environment is set up to encourage children to engage in play". However the environment not only referred to the materials and toys. According to Marc, "it's also very much the interactions that take place between the teacher and the students between the teacher and other colleagues and between the teacher and the parents, which to me is the whole learning environment". Through these interactions, Marc noted that creativity could be modelled to children. He said that once a child began attending school, creativity should be woven throughout the child's whole education. Marc believed that when creativity was modelled to children from day one, than it would appear less tokenistic if it was offered just in art classes because, "every single class needs to have an angle on creativity just how we have an angle on equity". Modelling allows educators to become co-creators with children. Rob said that when educators model creativity to children, this approach to teaching evolves into a constructivist teaching partnership. Presumably, when educators are modelling creative teaching and learning to children, they can expect their students to mirror it.

Hitting a Learning Curve on the Road to Creativity

Marc is an ECE educator at the college and university level, however before he was preparing ECEs for the field he accumulated over 10 years of experience in the fitness industry where he learned that throughout any type of learning or goal setting, individuals eventually experience a learning curve. Therefore, he warned his students that those periods of doubt and self-questioning would arise. "Telling someone to make changes in their lifestyle is great but change takes time and you will inevitably hit a plateau and go through that disequilibrium" (Marc). This requires educators to accept that change takes time but to also applaud themselves for taking a risk. Meaning that, educators should not give up trying to foster creativity in their students just because they do not see students mirroring their efforts. Through this process, Marc advised teachers to always remain genuine and authentic because students, regardless of age, could see through insincerity. Aligning with Marc's advice, Matt, a visual artist, warned that developing creativity involved patience because, "often things go horribly wrong".

In addition, Rob also warned educators that the creative learning process was not always fun, and so when his students appeared to be struggling with something and working diligently to succeed, he modeled the behaviour right back to them. He said,

Rob: So for me, if you are working really hard on your reading, I'm going to do deep knee bends because I have to do deep knee bends. And I'll work just as hard as you will and so you model that kind of effort.

Rob described this approach of modelling and teaching as allowing an "okayness" for creativity. He recalled visiting several grade two classrooms and noticing a distinct energy in some of the classes which was lacking in others. He described the energized classroom as feeling more "wild" and the classrooms that lacked energy as having more

of a structured feel to them. He ascribed the "wildness" to the educator that was open to taking risks and open to exploring and developing creative learning perimeters. This approach to teaching involved risk taking because the lesson outcomes were not always guaranteed, however the participants highlighted that accepting the possibility of failure was a major characteristic of creativity.

Chris suggested that one way for educators to begin to accustom themselves to the possibility of failure was by accepting the willingness of not being afraid to give up control in the classroom. Chris said that he had been credited as a creative teacher because he was not afraid to give up his own lesson plans and engage and explore his students' ideas and interests. Once educators initiated a creative environment and learning space, and began to develop creative boundaries Chris said that a transdisciplinary approach to education would ensue. According to Chris, most education and teaching happens within an interdisciplinary approach, however, when a transdisciplinary approach is introduced creative energy surfaces and "that's when ideas actually move. It's much more messy, convoluted, with unknowable outcomes and those are the features that are seen as being creative" (Chris). Educators capitalize on the child's interest because as Chris stated, educators can then motivate children by recognizing what children are intrinsically interested in. That is when children commit and dedicate themselves to the task at hand and achieve more than they thought they would. They reach a state or accomplish a task that is both novel and personal which will be seen by others as creative.

Identifying Creativity in Educators

The fourth finding, "identifying creativity in educators" referred to educators who claimed that they "didn't have a creative bone in their body". In response, the findings suggested that educators should find their "inner child" and locate when and where they began to feel creatively deficient. All the participants believed that the process began with the individual, recognizing one's own creativity. One way for educators to recognize their own creativity would involve mapping and then reflecting on their life experiences.

Reflecting on Experiences with Creativity

Educators may begin to rediscover creativity within themselves by reflecting on their past experiences such as when they felt or observed creativity and when their creativity was complemented and recognized. However, going back to when educators believed that their creativity began to be stifled is also another part of self-reflection.

Both Rob and Chris suggested that one way for educators to reflect on these past experiences was by writing a narrative. Rob believed that there was great value in understanding how and *why* we interpreted our stories and experiences and referred to this as "breaking the cycle". He explained,

Rob: I tell students, so if you were creative as a four-year-old and you're not creative as a twenty-two year old, what happened? Well school happened, peer pressure happened, what's cool what isn't cool you know whatever...all the things that go together that make us our stories. So if you want to re-connect to your creativity then you have to go back and look at those stories and reframe them because all that stuff gets stored.

Rob stated that reframing personal stories allowed individuals to realize where their attitudes towards creativity may have stemmed from.

Chris also suggested that educators could chart their creative development through narrative reflection. He said,

Chris: We have to take our life experience and figure out some way to reflect on that. It's a reflection on past action to be able to reflect on present action... critical reflection and critical reflective inquiry tends to be something you have to instill in people so they can see the possibility of doing something in a very creative manner.

Chris specifically suggested reflecting on the course of education many educators may have experienced: "They learn within an institution, all the way through their life and into university. They meet up with professors here [in university] and talk about creativity and talk about constructivist learning, but they [professors] don't actually model it". Therefore, in order for educators to be able to change their practice and teach for creativity, Chris believed it had to begin with teacher educators. He explained that when he taught ECEs, he immersed himself in a lot of critical reflection and asked his students to do the same. Critical reflection happened in Chris' courses once his students read each other's reflections and realized how many different ways there are to do the same thing. "That embeds the novelty of someone else's experience within your own versus just reading a book about whose doing something different. You can't internalize it the same way" (Chris). As another form of reflection, he documented his students by videotaping them so they could review what they did, and what their peers did when he played it back for them the following week. Documenting students' work created a sense of continuity on their path to developing creativity.

James noted that although self-reflection comes naturally to some people, others may need guidance to evoke their own past experiences. He noted,

James: I think some people need to be taken through the steps and then really immersed in it so they can do some really exciting reflection on what they're doing. So I think that that's really the underlying skill that is going to help teachers teach for creativity".

However, Marc admitted that he often reflected and questioned how constructivist or emergent his teaching really was, given that his own school experiences had made him a

product of direct instruction. Therefore, can educators be expected to immerse themselves in critical self-inquiry on their own accord given their past experiences as products of direct instruction? Or are schools and teacher educators responsible for fostering the necessary skills required for critical self-reflection?

Balancing Creativity in Education

The fifth finding "balancing creativity in education" considered what schools and teachers were responsible to teach and how curriculums should be communicated. Rob described creativity as a matter of "thinking outside of the box" and then immediately emphasized that school, curriculums and teaching as a profession instinctually repelled against creativity because:

Rob: Creativity often goes with a little bit of wildness. When we are sending our children to schools, which are all about boxing kids, then we are living in this contradiction. So we're saying we want people to think outside the box but we're going to create a box in which to put them in so they can think outside the box.

If the purpose of education is for children to learn in an institutionalized setting, is there room for creativity in the classroom? Or does creativity have to be subversively incorporated into the curriculum?

Creativity vs. Curriculum

When it comes to balancing creativity with compulsory curriculums and fundamental subjects like math and literacy, Christine observed that in her experience, it was difficult for many educators to implement both without minimizing the child's "journey to interpret something". She indicated that unless you have a really strong teacher; it is very challenging to fulfill the curriculum guidelines without impeding on a child's creativity. For example, she stated that reading and writing should be the

foundation in the early years; however educators must not neglect how children interpret and understand the story and how they decide the story should evolve. Therefore, as an example, she advised teachers not to become fixated on children's spelling when they were beginning to write because if children can read and re-read their written story that is an appropriate indicator of their learning. Christine worried that educators failed to see *beyond* the curriculum guidelines. She said,

Christine: I think there's a difference between teachers understanding creativity and understanding process. They get the process piece but they don't get the creativity piece. So they don't know how to take children past, how to take what the children are figuring out themselves and turn it into something else...somewhere along the way education fails us and teaches us the whole story about the lollipop trees and that's the only way you make trees.

If educators only focus on the fundamentals of learning and neglect to weave creativity throughout a child's education, will children's learning cease before it has had chance to flourish?

Chris related to Christine's viewpoint and said that "right answers can be picked up anytime in life" meaning that learning coupled with creativity transcends the obvious textbook answers. He related this to how he believed science should be taught to children. He said,

Chris: The biggest thing that bugs me about teaching children science is that we try to give them correct knowledge. But if I tell them what the answer is at the end of the activity. Done. Don't need to learn or think. Just have to wait for somebody to tell me what the answer is and reproduce it. So it's a much more process based way of looking at learning because the outcomes really aren't that important in terms of accuracy. But did you try hard?

Although the findings focused on process-oriented teaching, the participants notably reported that end products were not regarded as negative learning or teaching. For example, James explained that as long as children individualize their finished products and can recall the joy they experienced accomplishing their work "there's a

place for product...but I'm convinced that if we spend more time figuring out the process then we will come out with the product" (James). Matt also agreed with James and said that there was a place for product because he had observed that once children reached kindergarten they sometimes desired an end product because they had a concept in their mind that they really wanted to get out on paper. However, like James, he also emphasized that the process is an important means to an end. He described how taking pleasure in the process transcribed in an early years lesson and stated:

Matt: I think a lot of it is the process and how you explore those materials. So say today we're going to explore parts of the tree. You're going to look at trees, dig in the ground stick your hand in there and see and feel the roots. You're going to collect the leaves and make it a creative process. It's not going to be cut and dry like, this is a tree, it has these and these parts and in the fall it changes colour. The creative process is related to the senses and especially with younger children. So if you are a teacher and thinking creatively you need to ask, how are we going to explore this?

It appears that the solution to balancing creativity and education involves embracing a process-oriented approach to teaching, however, according to the findings many educators continue to place more emphasis on the product than the process.

Preparing Educators for the Field

Educators in the school system are obligated to teach certain subjects and Marc, a teacher himself, empathized with teachers in the school system because he highlighted that teachers and the system were too often and habitually blamed. He said,

Marc: ...let's face it math and literacy are the foundation in the early years so you need to do that. And when you have the pressure of a curriculum there is that subtle message and sometimes that obvious message that somehow, certain subjects have more value than others... and so when it comes down to time, children get the subtle or obvious message that creativity is just fun that's all it is...which really hasn't changed from the time when I was young.

Like Marc, James also recalled a time when preparing educators was a very rigid process.

As a teacher educator himself, he reported that the profession should work harder at helping their students recognize their creative outlets:

James: I think we do a disservice, not intentionally, by not really framing teaching as a creative act. So a lot of it again is our attitude as teacher educators but it has to go beyond attitude where we foster creativity.

He admitted that preparing teachers for creativity would involve a lot more work on behalf of teacher educators because students would have to be evaluated on a wider spectrum of qualifications and not limited to specific courses and assignment requirements. He suggested teaching pre-service teachers how to be more "positively assertive" as a way of balancing curriculum guidelines with creative development. This kind of "attitude education", as James referred to it, would help students broaden their definitions of creativity beyond specialized sects. As a result, when educators initially enter the field, they may be more confident to suggest a more creative approach to a lesson plan or to a senior educator.

However, although educators in the school system are confined to compulsory curriculums, early childhood educators are not obligated to teach dictated curriculums to the same degree. For example, Christine emphasized that:

Christine: ...we have a very different position as child care providers because we don't have to deliver a curriculum necessarily. We have to encourage the growth of the whole person. So we have a little bit more leeway, yes, science, math and all that stuff should be in there but so can the creative person because we don't necessarily have a set curriculum that we have to deliver.

Educators, who are confined to teach compulsory curriculums in the school system and early childhood educators, who follow less structured curriculums are both neglecting to integrate creativity into education, therefore it is important to explore what additional factors are influencing how education is executed.

Societal Values

Schools are not separate from the wider society. Societal values influence schools and schools inevitably mirror those values. For example, James lamented that unfortunately, our current government's values had not changed much since the infamous "Harris" years.

James: "One of the things they [the Harris government] boasted about was that you could go into any school on any given day in the province and find the same things being taught. That scares me".

It appears that societal values govern our schools and given that the participants highlight a need for more creativity in schools, schools are presumably still reeling in the after-effects of the "Harris" years.

Matt also lamented that environments in early learning centres were guilty of not supporting creativity. He said that in order for creativity to thrive, it all depended on work conditions. He explained,

Matt: There are so many other things to deal with so you can get overwhelmed so it's really important to have the supports there. The management there, everything needs to be in place to allow for the creative process to happen in class. And also having enough trained staff to deal with all the other stuff that comes up with the children and families. And I think it takes to be valued as an employee and part of that is being paid well. So with the founding with the College of ECE there is a long term process ahead with raising pay so it's not overworked underpaid people.

Given that societal values influence the amount of creative teaching and learning that takes place in education, in order for schools to begin to support creativity, values in society must align. Marc proposed that the solution could begin with a hub model with the child at the centre, where "the parents, the teachers, the policy, overall culture is literally holding hands around that child". If society could create a hub model to nurture

creativity, would that be enough incentive to accept and integrate creativity into the education system?

Unfortunately, Rob believed that it would take more than that and he noted:

Rob: We may have to revisit this whole notion of what school is which means you have to look at notions of what school is and perhaps look at the notion of what childhood is. When you consider that school didn't really work for Einstein, didn't really work for John Lennon, we need to look at these people and say, does school educate for creativity?

Even though the school system did not support creative thinkers in the past and even if schools and society are still not ready or willing to support creative thinkers, can we presume, based on the responses from the participants that educators are ready to assume the role of creativity gatekeepers? Rob for example, declared that educators are at a moment in time, ready and willing to teach for creativity, "I think there's something about the zeitgeist, the spirit of the time which says, we need this right now" (Rob).

Wisdom follows Experience

The last finding, "wisdom follows experience" referred to the wisdom educators' gained through teaching. As well, previous life experiences and how those experiences translated into the willingness to accept and recognize uncertainty were considered essential if educators planned to teach for creativity. The context of these experiences and how they are interpreted by educators is also important to consider.

Graduation is only the Beginning

Marc considered how many new teachers often enter the workforce disillusioned, realizing that not everything they were taught in university can transfer to the actual demands of teaching. He recalled the expression, "your real education starts once you graduate, that's why they call your graduation a commencement". Marc observed that

some teachers, especially new graduates, were only in their consolidation phase of teaching. Therefore, the idea of time and growth is important especially when teaching for creativity because of the lack of self-assurance that accompanies new teachers. Chris reaffirmed Marc's perspective and alluded to the "self-limiting factor" imposed on individuals when they chose to become teachers at a young age:

Chris: If you are coming into ECE at an early age from high school, you are in university and doing this because you actually want to work in a space that you spent most of life. It's a safe space [however] I think that experience in a wide variety of areas is something that helps nurture that level of confidence. And if you've had five or six jobs, five or six careers, you're just not scared of anything more. You are willing to walk in and say, "I know absolutely nothing about this, let's go!" So that willingness of not being scared of failure and trying new things is one of the most difficult things for somebody who has been successful within the institution of learning to get comfortable with.

Therefore, some educators are better equipped to teach for creativity because they have had the opportunity to try new things and have consequently experienced a greater range of successes and failures in their teaching.

It appears that teaching for creativity requires educators to accept that they may not know all the answers. However, Chris previously stated that schools educate with one right answer in mind given the focus on product-oriented teaching and learning.

Consequently, Rob questioned, "How do we teach teachers to go back and look at this and say, oh maybe that wasn't the best way for me to learn that?" Rob referred to the relationship between uncertainty and wisdom as "the older you get the less you know" because the more experience you have the more you realize that there is much more to learn. He professed that "knowledge is much more fluid that we have ever imagined". He said,

Rob: When I was younger I had much more of an attachment to being right. It's a balance because you have to be uncertain about some things certain about

others... as you get older you learn more about what you don't know. And when you're young you think you know it all. So how do we prepare teachers to have an authentic experience with a four year old? I think we have to prepare them to know that they don't know enough.

Given that creativity necessitates acceptance of the unknown, Rob suggested that educators who had the most experience and highest education were consequently the most qualified to teach our youngest children because "we have to remember that they are the future and we are the past...So teaching them our stories is teaching them the history instead of learning from their stories which are the stories of the future" (Rob). Even if educators may not have a wealth of experience to substantiate their teaching ability, the following section indicates how educators can encourage creativity in their students by primarily identifying creativity within themselves.

CHAPTER V

Discussion and Recommendations

The significance of this study highlights the need for more creativity. Both the literature and participants reveal that there is a need for more creative teaching and more creativity in learning environments (Cropley & Cropley, 2008; Csikszentmihalyi, 1996; Edwards, 2008; Florida, 2005; Friedman, 2007, 2005; Makel, 2008; Martin & Florida, 2009; Mau, 2004; Pink, 2005; Vygotsky as cited in Lindqvist, 2003, 2004; Niu & Sternberg, 2003; Simonton, as cited in Kaufman & Sternberg, 2006). The findings and literature indicate that creative teaching and learning increases children's motivation, self-esteem and children are more open to mistakes and in turn, more open to learning (Sternberg, 2006; Fasko, 2000-2001). Cropley and Cropley (2008) state that "creativity-oriented teaching and learning processes have also been shown to foster positive attitudes to school, enhanced self-image and positive motivation" (p. 356).

Respectively, the participants shared similar attitudes stating that creativity impacts children's learning. Without developing creative attitudes and skills, educators and children risked hindering their creative interests and limiting the number of ways there was to learn and respond to the world (Millard, 2006). This presumably only leads educators and children to underestimate their creative selves and in turn, curb their potential and enthusiasm for learning. Therefore, the literature and findings proposed that educators and schools should inspire and encourage children to explore their creative identities and ideas and apply them in multiple learning contexts (Binder, 2008; Millard, 2006).

The findings further highlighted that educators could begin to encourage creativity in children by primarily identifying creativity in themselves. The study therefore, explored and exemplified that by reconceptualising how creativity is defined it can be discovered throughout an individual's daily life, throughout many personal creative outlets, and across many domains. Therefore once educators begin to understand their own creativity and consequently, recognize creative expression in their students; educators may begin to articulate creative development through their teaching. The study further considered how creative development was situated in our present education system and how it could be further integrated. The findings represent creativity as a stepping stone towards a higher order of thinking which results in children's exploration, collaborative learning, intrinsic motivation and the resolution to take more risks in order to pursue interests and generate new theories.

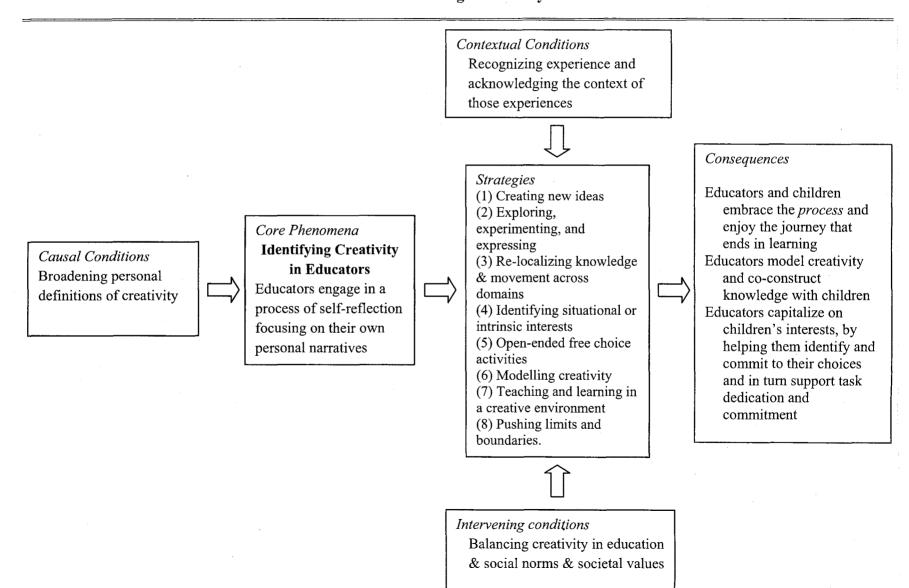
Encouraging Creativity in Children

The following discussion of "how educators can encourage creativity in children" refers to the axial coding model (Figure 1). It was developed during the second phase of data analysis. This visual model is intended for educators to use as guide and apply in practice.

The Core Phenomena: Identifying Creativity in Educators.

The core phenomena was identified as "identifying creativity in educators" because before educators can identify creativity in children, they must be able to identify it within themselves. According to Vygotsky (1978) children's creativity cannot develop on its own because a "social agent" is needed to assist the child. Csikszentmihalyi (1996) describes the development of creativity as a 'social system', reflecting the individual's

FIGURE 1 Paradigm Model of How Educators Can Encourage Creativity in Children



culture and role of key players, which in the case of the child may include parents, teachers, or peers. Interpreting one's social and cultural environment, involves forming relationships between emotions, thoughts, and imagination (Feldman, as cited in Sternberg, 2006; Simonton, as cited in Kaufman & Sternberg, 2006). Given that a child's 'creative conscious process is affected by social stimuli rather than universal, age-related, developmental stages, Freire (1987) proposed (Freire and Macedo, 1987) that schools should consider this when planning and implementing curriculums, especially when planning for creativity. Aligning with the literature, the participants also noted that recognizing creativity in yourself and your own creative outlets allowed educators to reflect on their past creative experiences and recognize and (in some cases) revive their creativity. This was a critical measure for educators to take before they could encourage creativity in children.

Causal Conditions that Influence the Core Phenomena

Before educators could identify creativity within themselves, they must initially reconceptualize how they define creativity. Therefore, "broadening personal definitions of creativity" was positioned as a causal condition because all the participants contended that creativity was too often narrowly defined. And so educators were encouraged to explore how creativity exceeded the arts, originality and renowned creative ideas and contributions. Scholarly and popular literature highlight that creativity is not domain specific and consequently not limited to the arts (Cropley & Cropley, 2008; Csikszentmihalyi, 1996; Edwards, 2008; Florida, 2005; Friedman, 2005; Kaufman & Sternberg, 2006; Martin & Florida, 2009; Mau, 2004; Pink, 2005; Sternberg, 2006, 1999). According to Vygotsky (2004) "children who attempt to master the process of scientific and technological creativity are relying on the creative imagination to the same extent as in the area of artistic creation" (p. 87).

Several participants noted that originality, although often ascribed as a trait of creativity, usually referred to "slightly new" creative ideas. Correspondingly, in 2007 the Canadian Intellectual Property Office reported that 90% of the patents issued that year were improvements on already existing knowledge (Cropley & Cropley, 2008). Yet, our everyday notions of creativity are further limited to the accomplishments of great world renowned individuals and inventions (Vygotsky, 2004). However, broadening our definitions of creativity involves recognizing what works for an individual and what their creative outlet is because Vygotsky (2004) insists that creativity is present in daily acts of creation, innovation and design because "in the everyday life that surrounds us, creativity is an essential condition for existence" (p. 11).

Therefore, how can educators begin to critically reflect on their creative development? Educators may begin by reflecting on their personal stories and narratives as suggested by several participants. Davis (1991) states, (as cited in Fasko, 2000-2001) once individuals can metacognitively understand their conceptions of creativity they will begin to be able to once again emanate their own creativity. While learning about our personal stories/narratives the critical reflection piece comes in once we begin to try to understand how we came to understand our stories. Therefore educators are challenged to recover their creativity (that they may have lost along the way) and let the world know by sharing it with their students or even posting their creativity on YouTube. By doing so, educators document their creative acts and ideas and dare to broaden other individual's definitions of creativity!

Strategies Taken in Response to the Core Phenomena

Once educators have tapped into their own creativity, the following strategies will assist educators to encourage creativity in children and construct creative classrooms. Participants suggested strategies similar to the teaching approaches designed to promote creativity listed in the

framework created by the Qualifications and Curriculum Authority in 2005 (Cremin et al., 2006). The following eight strategies were adapted from the second and third findings. The findings revealed that these strategies were utilized by the participants, applied in practice and resulted in successfully encouraging creativity in students. Therefore these strategies were identified as follows: (1) presenting children with opportunities to create new ideas (2) encouraging children to explore, experiment, and express their ideas (3) re-localizing knowledge and encouraging movement across domains (4) identifying a sense of situational or intrinsic interest in the child (5) providing open-ended free choice activities (6) modelling creativity (7) teaching and learning in a creative environment, and (8) pushing limits and boundaries.

The first strategy, "presenting children with opportunities to create new ideas" referred to the root of creativity, which according to Vygotsky (2004) is imagination. Mindham (2005) attributed imagination and imagining to children. However, Vygotsky (2004) claimed that our imaginations actually develop with age and are rooted in the type of experiences we have as children. According to Vygotsky (2004) children only appear to be more imaginative because they have more *faith* in their imagination. Therefore educators are encouraged to give children opportunities to imagine new ideas and as a result pave the way for children to construct their own personal theories. The findings indicate that generating, testing and either applying or discarding theories is a function essential to learning. And correspondingly, Vygotsky (2004) explains that "imagination is not just an idle mental amusement, not merely an activity without consequences in reality, but rather a function essential to life" (p. 13).

When Cremin et al., (2006) studied the nature of creativity and how it was promoted in classrooms, they found that the core indicator of creative learning was "possibility thinking".

Possibility thinking embraces the second strategy "exploring, experimenting and expressing" and

refers to educators supporting children's creativity by providing activities and tasks that support different levels of exploration in their students. According to Kelly and Leggo (2008) this is possible by structuring learning experiences around opportunities for children to immerse themselves in.

"Re-localizing knowledge and movement across domains" implies that educators and children should consider how knowledge or experience from one area of study or interest can be applied to another. Beghetto (2009) and Cremin et al., (2006) also report that when educators encouraged children to apply their understanding of a subject or a particular skill into another learning area, children were able to decipher if their ideas are relevant and resourceful.

The findings reveal that the fourth strategy, "identifying a sense of situational or intrinsic interest" helped children commit to their choices and supported task dedication. By doing so, Makel (2008) states that educators will assist children to recognize and evaluate their ideas and transition their ideas from a novel concept to a creative one. The fifth strategy, "open-ended free choice activities" referred to educators allowing children to engage in open-ended activities/play of their own choice (Weininger, 1979). Educators capitalize on children's interests when children create through their play and expand their own imaginative ideas. This leads to collaborative learning and teaching once educators include themselves in the creative process by "modelling creativity", the sixth strategy (Jeffrey & Craft, 2004).

Strategy number seven, "teaching and learning in a creative environment is supported by materials that assist and challenge children to develop and practice skills and not frustrate them. Instead, the environment, according to Kelly and Lego (2008) is meant to accommodate creative exploration and support unexpected outcomes. According to Vygotsky (2004) the environment is one of the most important stimuli in helping to spark creativity in children.

The final strategy, "pushing your limits and boundaries" refers to taking risks and accepting the possibility of failure. Empirical studies have identified risk-taking as a major characteristic of creativity (Cremin et al., 2006; Cropley & Cropley, 2008; Dawson et al., 1999). According to Csikszentmihalyi (1996), risk-taking and embracing uncertainty inevitably leads to accepting the possibility of failure, which all the participants agreed is unquestionably necessary in creative development.

Factors that Influence the Strategies

Contextual conditions.

Contextual conditions that affect how the strategies are implemented include "recognizing experience and acknowledging the context of those experiences". This influences how educators interpret their creative development and consequently, how they interpret and implement the strategies. Educators' experiences are further contextualized in the amount and types of teaching they have had and their teaching philosophy. This is important because according to Westby et al., (1995) an educator's teaching philosophy, and experience effects and dictates how educators recognize creative development in their students.

Intervening conditions.

Despite an educator's choice and determination to identify their own creativity and in turn, encourage creativity in their students, specific and general situational factors will naturally influence the strategies described above. In the case of educators, these intervening conditions will reveal themselves dependent upon one's teacher training, and ability to balance curriculum guidelines with creative education. These intervening factors are further enveloped within social norms and societal values. The following section explores how these factors can shape and affect an educator's journey to creative self-discovery.

There is indication from the findings that teacher educators lecture and instruct pre-service teachers and early childhood educators to apply creative curriculums in practice while not modelling this approach themselves. Consequently, once educators enter the work force, they have difficulty applying constructivist learning theories into practice (Fasko, 2000-2001; Makel, 2008). The relationship between creativity and education has been overtly questioned since the 1950's (Fasko, 2000-2001). Teacher education programs have undoubtedly changed over the years but it appears that many are still educating teachers "inside the box". Teacher educators should support and illustrate creative development in their own teaching and throughout program requirements (Beghetto, 2009). However, if pre-service teachers are only offered one way to construct an assignment, essay, or major research paper; can they be expected to decipher multiple ways of extending children's learning? The findings illustrate that allowing pre-service teachers to define their own proximities of learning requires teacher educators to allow their students to push and test their boundaries. In addition, the findings reveal that once educators enter the field, they are often confined to either compulsory curriculums or may feel pressure to focus on fundamentals such as math and literacy. However, regardless of whether an educator teaches in ECE or the school system, balancing a curriculum while teaching for creativity can prove to be very challenging, but not impossible.

Beyond the limitations and constraints of curriculums and school boards, educators (and children) are faced with pressures of social norms. Each time an individual embarks on a creative act or idea for example, they are always judged by their social environment (Sternberg, 2006; Csikszentmihalyi, 1999). The findings denote that children tend to be judged just as often, if not more than adults. Not only are children preoccupied with appearing their teachers, according to

Scott (1999) and Westby and Dawson (1995), but participants also allude to the constraints of peer pressure.

The literature review referenced several commercially successful books written about the need for society to embrace and encourage more creativity. Although, it appears that our society is beginning to recognize the importance and value in creative development and attributes; several participants noted that society's attitude and definitions of creativity must also change in order for an individual to be able to recognize creativity in his/her self. However, this attitude change and recognition needs to be reflected in our government and policies if we expect individuals to mirror it.

In recent years, two of Toronto's most prominent cultural landmarks and institutions: The Art Gallery of Ontario and Royal Ontario Museum both underwent massive renovations and were not only architecturally transformed but also morphed Toronto's cityscape and culture. Yet with adult admission prices set just under the twenty dollar mark, it is difficult to interpret what message our government is sending to individuals. Accessibility to culture and education become obstacles for a large population of people. Can creativity survive in this kind of environment? According to the findings, overhauling society's attitude would sanction more flexible curriculums in order to allow teachers to be creative and nurture creativity in children. Therefore, the following section describes the consequences educators can look forward to once creativity is successfully encouraged allowing children's creative development to surface.

Consequences of the Strategies.

The benefits of educators encouraging creative development echoes through classrooms with process-oriented learning, the co-construction of knowledge and teacher's capitalizing on children's interests (Cropley & Cropley, 2008). Exploration and discovery in the early years gives

Children the freedom and incentive to engage in the process and journey that ends in learning. Vygotsky (2004), states that educators can identify these processes in children throughout various developmental stages. He argued that these processes, found within and through children's play are "the basic law of children's creativity...that its value lays not in its results, not in the product of creation, but in the process itself. It is not important what children create, but that they do create, that they exercise and implement their creative imagination" (Vygotsky, 2004, p. 72).

Discovering children's original and creative processes generates theory building. Kelly and Leggo (2008), state that "to focus on the growth and development of ideas is perhaps of greater use to educators in creating and educational culture of creativity" (p. 19). Notably, all the participants stated that end products and desired lesson outcomes were also necessary. When educators and children engage in a process-oriented teaching relationship they synchronize the teacher-learner relationship in the co-construction of knowledge. The efforts of educators culminate once they capitalize on children's interests; supporting them in their commitment and dedication to a task. At this moment educators have not only elevated children's abilities to reflect, imagine and create but they have also tapped into, what is arguably humanities most precious resource, creativity.

Although creativity-oriented teaching begins with educators, it ends with schools. If schools are to educate children to be thoughtful, innovative, and knowledgeable creative learners and listeners equipped to solve the problems of the twenty-first century; schools must begin to serve some other kind of function (Freire, 1970). Given that our schools are not apart from the wider society, our societal problems and social injustices are increasingly becoming problems of our schools. How can schools teach for creativity and structure themselves as agents of social change? Education must reach students beyond the curriculum. In order for learning to surpass textbooks and ministry policies, a holistic world view to education must be applied where "there are many

ways to see things as there are people to see them"(Antone, 2003, p. 11). When educators and schools accept such a position, they create inviting environments for children that not only welcome their creative ideas and theories but also validate and build on them. Teaching therefore should extend beyond information and facts to ensure that children have multiple ways of communicating their experiences and interpreting the experiences of others. Vygotsky (2004) believes that "the right kind of education involves awakening in the child what already exists within him, helping him to develop it and directing this development in a particular direction" (p. 51). Educators and schools should consequently be held responsible for awakening the next generation of creative thinkers because our civilizations collective inheritance depends on it.

Limitations to the Study

The results of this study are only an initial step for educators to consider if they wish to encourage creativity in children. Once educators identify creativity within themselves they may be ready to accept and recognize creativity in their students. However, to nurture creativity in children requires educators to make "concrete decisions about what to do in specific situations" (Cropley & Cropley, 2008, p. 361). Educators therefore may wish to study a set of principles/guidelines such as Cropley and Cropley's (2008) *Extended phase model of the creative process* and evaluate how this process may be infused throughout their teaching.

Whether or not creativity can be regarded as a universal concept is questionable. The majority of the literature used throughout this study stems from a Western perspective. And in view of these research results, sociocultural values not only influence individual perceptions of creativity but they also determine how creativity is identified and assessed. Finally, if narrow definitions and measurements of creativity are accepted, there is a risk of supporting collective perspectives and thoughts and behaviours of creativity ...a very unimaginative stance.

Due to the nature of qualitative research, this study has several other limitations. During the data collection process, the responses elicited from the participants by the researcher may have been affected by the researcher's level of research skills and experience. In addition, participant responses may have been affected during the interview process given that participants may have never considered their thoughts and opinions regarding creativity in advance and in depth if it were not for agreeing to participate in this particular study.

Direction for Further Research

Recommendations for further studies would be to continue to interview educators and explore how they conceptualize creativity. Given that the initial findings in this study are limited to educators working in the field of early childhood studies, it would be beneficial to explore how educators teaching in primary, secondary, and post secondary institutions view and interpret creativity. Several participants mentioned that creativity-oriented teaching is also found outside of schools, therefore interviewing coaches and instructors that work with children would also be of value.

A second investigation could explore how sociocultural factors have shaped educators perceptions of creativity and how those experiences are used to judge creative expression. The distinct social values and systems found in individualistic and collectivist cultures not only influence the beliefs and actions of individuals and families, but they also define educational experiences. Therefore further research should examine the critical role that social and cultural values play in developing creativity, particularly when they are contextualized in objective environments such as international schools.

A third investigation could explore societies that appear to be rich in creativity and creative expression. If looking towards other cultures can help broaden our understanding of creativity and

calculate its essential value in relation to our children's and civilizations future; we may inspire a global realignment of priorities, commitment to change and begin to reconceptualize the institution of education.

Recommendations for Practice

Drawing from the axial coding model of "how educators can encourage creativity in children", the following recommendations are offered for practice.

- 1. Redefining and broadening personal ideas of creativity allow individuals to reconceptualize how creativity is perceived by others.
- 2. When educators identify their own creativity and creative outlets, they may begin to:
 - recognize and anticipate children's creative development
 - accept children's creative expressions
 - encourage creativity in children
- 3. Individuals can recognize and refine their notions of creativity through a variety ways, such as:
 - creating a narrative of their own life story
 - reflecting on their personal experiences
 - deciphering how those experiences have shaped their creative development
 - exploring how those experiences translate in classroom practices
- 4. While trying to identify their creative selves, educators may encounter several conditions that may delay and affect the process:
 - prior schooling
 - teacher education

- social norms
- societal values
- 5. Critical reflection and inquiry permits educators to:
 - evaluate their creative development
 - encourage educators to document their students work and consequently form a sense of creative continuity.

Appendix A: Consent Agreement

RYERSON UNIVERSITY

SCHOOL OF EARLY CHILDHOOD EDUCATION FACULTY OF COMMUNITY SERVICES

Master of Arts in Early Childhood Studies

Ryerson University Consent Agreement

Title: Elevating the Next Generation of Creative Thinkers: A Grounded Theory

You are being asked to participate in a research study. Before you give your consent to be a volunteer, it is important that you read the following information and ask as many questions as necessary to be sure you understand what you will be asked to do.

<u>Investigators</u>: Investigators in the study include Patricia Gora as the primary investigator and Dr. Marni Binder as research supervisor; in affiliation with the Early Childhood Studies (MA) program at Ryerson University.

Purpose of the Study: This study is an attempt to elaborate on and clarify how creativity is conceptualized and assessed by Early Childhood Educators. The data will be collected over the projected dates: June 1, 2009 – July 15, 2009. This study involves a single 60 minute interview with unstructured, open-ended questions. Potential benefits of this study include contributing to the limited literature regarding creativity and children. Risks or discomforts which you may encounter as a result of involvement are anticipated to be minimal but may include feeling obligated or committed to offer your expertise in the name of research. Consequently, you are reminded that you may discontinue participation, either temporarily or permanently from the study. Your choice of whether or not to participate will not influence your future relations with Ryerson University. Participation in this study is voluntary.

<u>Description of the Study</u>: The procedures that you will be asked to follow include consent agreement to Ryerson University and participating in a 60 minute interview with unstructured, open-ended questions. The interview location will be selected by you or arranged by the investigator by request. The types of questions that you will be asked to answer concern your views in regards to how creativity is conceptualized, assessed and promoted in early years' settings.

<u>Risks or Discomforts</u>: Risks or discomforts that you may encounter as a result of involvement are anticipated to be minimal. However, you are reminded that your choice to participate or not will not have an effect on your relationship with Ryerson University and that you are free not to answer any particular questions without negative consequences. In addition, you will be invited to participate in member checking within the first 3 weeks following your interview. If you should happen to have any questions, concerns, or hesitations about the research or process the investigator's and faculty supervisor's telephone number and email address will be offered. Participation in this study is voluntary.

Benefits of the Study: Potential benefits of the study include an opportunity for you to share your expertise and contribute to creativity research. The investigator cannot guarantee, however, that you will receive any benefits from participating in this study.

Method of Data Collection: Data will be recorded by written notes and audio tapes.

Confidentiality: The confidentiality of records identifying you will be maintained by the investigator and research supervisor. Both the investigator and the research supervisor will have access to the data. The data will be stored in the investigators personal computer and in her residence in a secure place. The data will be password protected and encrypted. All hard copies of the data will be stored at Ryerson University. Email correspondence between the investigator and research supervisor will be kept secure and with other data. The data will be in the possession of the investigator for one year.

<u>Incentives to Participate</u>: You will not be paid to participate in this study. At any particular point in the study, you may refuse to answer any particular question or stop participation altogether.

<u>Voluntary Nature of Participation:</u> Participation in this study is voluntary. Your choice of whether or not to participate will not influence your future relations with Ryerson University. If you decide to participate, you are free to withdraw your consent and to stop your participation at any time without penalty or loss of benefits to which you are allowed.

<u>Questions about the Study</u>: If you have any questions about the research now, please ask. If you have questions later about the research, you may contact either me or my faculty supervisor, Dr. Marni Binder.

Patricia Gora

Telephone Number: (416) 578-4672

Email: pgora@ryerson.ca

Dr. Marni Binder

Telephone Number: (416) 979-5000 x. 7130

Email: mbinder@ryerson.ca

If you have questions regarding your rights as a human subject and participant in this study, you may contact the Ryerson University Research Ethics Board for information.

Research Ethics Board c/o Office of the Vice President, Research and Innovation Ryerson University 350 Victoria Street Toronto, ON M5B 2K3 416-979-5042

Agreement:

Your signature below indicates that you have read the information in this agreement and have had a chance to ask any questions you have about the study. Your signature also indicates that you agree to be in the study and have been told that you can change your mind and withdraw your consent to participate at any time. You have been given a copy of this agreement.

You have been told that by signing this consent agreement you are not giving up any of your legal rights.

Name of Participant (please print)		
Signature of Participant	Date	
Signature of Participant	Date	
You have been told that by signing this coninterview.	asent agreement you will be	audio taped during the
Name of Participant (please print)		
Signature of Participant	Date	
Signature of Participant	Date	

Appendix B: Unstructured Interview for educators actively involved in the field of Early Childhood Studies

Study: Awakening the Next Generation of Creative Thinkers: A Grounded Theory		
Time of Interview (Start Time):	(End Time):	
Interviewer:	Date:	
Interviewee (Pseudonym):	·	
 This interview can go in any direction and questing the researcher and participant can return to any at the time of inquiry. The researcher is expected to probe participant linking back to the central research question of 	ts for answers beyond the obvious scope by	
Sample Questions: 1) What does creativity mean to you?		
1) What does creativity mean to you?2) How would you define creativity?		
3) What traits would ascribe to a creative individ	lual?	
4) Can you give me an example of when you pla	nned for creativity? How and why did this work?	
5) Can you give me an example of when you pla	nned for creativity and it fell through? Why do you	
think it fell through and how did you handle it?		
6) Do you think we need to see more creativity in	n early years settings?	
7) How can practitioners plan for creativity?		
8) Do you think creativity is can be developed or	is it an innate behaviour?	
9) How can practitioners encourage creativity?		

References

- Antone, E. (2003). Culturally framing Aboriginal literacy and learning. *Canadian Journal of Native Education*, 27(1), 7-15.
- Beghetto, R.A. (2009). In search of the unexpected: Finding creativity in the micromoments of the classroom. *Psychology of Aesthetics, Creativity, and the Arts*, 3(1), 2-5.
- Binder, M. (2008). Experiencing multiple literacies through picture books. In D. Booth (Ed.), *It's critical! Classroom strategies for promoting critical and creative comprehension* (pp.120-122). Markham, ON, Canada: Pembroke Publishers.
- Birks, M., Chapman, Y., & Francis, K. (2008). Memoing in qualitative research: Probing data and process. *Journal of Research in Nursing*, 13(1), 68-75.
- Cremin, T., Burnard, P., & Craft, A. (2006). Pedagogy and possibility thinking in the early years.

 Thinking Skills and Creativity, 1, 108-119.
- Creswell, J.W. (2008). Educational research: Planning, conducting, and evaluating quantitative and qualitative research. Upper Saddle River, NJ: Pearson.
- Creswell, J.W. (2005). Educational research: Planning, conducting, and evaluating quantitative and qualitative research. Upper Saddle River, NJ: Pearson.
- Creswell, J.W. (2003). Research design: Qualitative, quantitative, and mixed methods approaches.

 Thousand Oaks, CA: Sage Publications, Inc.
- Cropley, A. & Cropley, D. (2008). Resolving the paradoxes of creativity: An extended phase model. *Cambridge Journal of Education*. *38*(3), 355-373.
- Csikszentmihalyi, M. (1999). Implications of a systems perspective for the study of creativity. In R. J. Sternberg (Ed.), *Handbook of creativity* (pp. 313-335). New York: Cambridge University Press.

- Csikszentmihalyi, M. (1996). *Creativity: Flow and the psychology of discovery and invention*. New York: Harper Collins Publishers.
- Dawson, V.L., D'Andrea, T., Affinito, R., & Westby, E.L. (1999). Predicting creative behaviour: A re-examination of the divergence between traditional and teacher-defined concepts of creativity. *Creativity Research Journal*, *12*(1), 57-66.
- Dineen, R. & Niu, W. (2008). The effectiveness of western creative teaching methods in China: An action research project. *Psychology of Aesthetics, Creativity, and the Arts*, 2(1), 42-52.
- Edwards, D. (2008). Artscience: Creativity in the post-google generation. Cambridge, MA: Harvard University Press.
- Fasko, Jr., D. (2000-2001). Education and creativity. *Creativity Research Journal*, 13(3-4), 317-327.
- Fielding, R.M. (1997). A socio-cognitive perspective on cross-cultural attitudes and practices in creativity development. *Australian Art Education*, 20(1-2), 27-33.
- Florida, R. (2005). The rise of the creative class. New York: Basic Books.
- Freire, P. (1970). Pedagogy of the oppressed. New York: Continuum.
- Freire, P. & Macedo, D. (1987). Rethinking Literacy: A dialogue. In P. Freire and D. Macedo.

 Literacy: Reading the word & the world. (pp. 47-62). South Hadley, MA: Bergin & Garvey.
- Friedman, T.L. (2007, April 27). China needs An Einstein. So do we. *The New York Times on the Web*. Retrieved November 26, 2008, from

 HTTP://SELECT.NYTIMES.COM/2007/04/27/OPINION/27FRIEDMAN.HTML?SCP=4&SQ=CHINA%
 - 20AND%20CREATIVITY&ST=CSE
- Friedman, T.L. (2005). The world is flat: A brief history of the twenty –first century. Vancouver, BC, Canada: Douglas & MacIntyre.

- Jeffery, B. & Craft, A. (2004). Teaching creativity and teaching for creativity: Distinctions and relationships. *Educational Studies*, 30(1), 77-87.
- Lindqvist, G. (2003). Vygotsky's theory of creativity. *Creativity Research Journal*, 15(2-3), 245-251.
- Kaufman, J.C. & Sternberg, R.J. (2006). *The international handbook of creativity*. New York: Cambridge University Press.
- Kelly, R. & Leggo, C. (2008). *Creative expression, creative education*. Calgary, AB, Canada: Detselig Enterprises Ltd.
- Makel, M. (2008). Help us creativity researchers, you're our only hope. *Psychology of Aesthetics, Creativity, and the Arts, 3*(1), 38-42.
- Martin, R.L. & Florida, R. (2009). *Ontario in the creative age*. Toronto, ON: Martin Prosperity Institute.
- Mau, B. (2004). Massive change. London: Phaidon Pres Limited.
- Millard, E. (2006). Transformative pedagogy: Teachers creating a literacy of fusion. In K. Pahl and J. Roswell. *Travel notes from the new literacy studies: Instances of practices* (pp. 234-253). Cleavedon, England: Multilingual Matters Ltd.
- Mindham, C. (2005). Creativity and the young child. Early Years, (25)(1), 81-84.
- Niu, W. & Sternberg, R. J. (2003) Societal and school influences on student creativity: The case of China. *Psychology in the Schools*, 40(1), 103-114.
- Pink, D. H. (2005). A whole new mind: Moving from the information age to the conceptual age.

 New York: Riverhead Books.
- Scott, C.L. (1999). Teachers' biases toward creative children. *Creativity Research Journal*, 12(4), 321-328.

Sternberg, R.J. (2006). The nature of creativity. Creativity Research Journal, 18(1), 87-98.

Sternberg, R.J. (Ed.) (1999). Handbook of creativity. Cambridge: Cambridge University Press.

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

Vygotsky, L.S. (1978). Mind in society. Cambridge, MA: Harvard University Press.

Weininger, O. (1979). Play and education. Springfield, IL: Charles C. Thomas Publisher.

Westby, E.L. and Dawson, V.L. (1995). Creativity: Asset or burden in the classroom? *Creativity Research Journal*, 8(1), 1-10.