PERCEPTIONS OF CREATIVITY: A SURVEY OF PRE-SERVICE TEACHERS' IMPLICIT DEFINITIONS OF CREATIVITY IN THE EVERYDAY

By

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7/18/12
Date
Acknowledgements

What everyone needs is the opportunity to create and when the occasion calls for it, to create something of aesthetic significance, that is, something which has meaning for the person who created it.

Hickman, 2010, p. 111

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CHAPTER 1

Introduction

Research in creativity, education, and the arts has evolved in the past few decades to produce a new awareness for the everyday potential of creativity as a means of improving the ways in which people live and learn. Creativity is recognized as a key component of a full, actualized life that attributes individuals with an openness to experience and a willingness to explore. New questions are being asked in relation to the accessibility of creativity to the everyday individual who lives, works, interacts, and creates within the world. These questions prompt an increase in awareness of what creativity is and what it can do, and how this can improve education.

Creativity in our everyday takes many forms; we as humans use it to help us live, work, and adjust to life situations; we use it when we form relationships with others; and we call upon it as we think abstractly and consider the unimaginable. We create better situations for ourselves through creative thinking and imaging, through analysis and intuitive thought processes. Creativity is meaningful and personal, and we better come to know who we are through a better awareness of creativity. Ruth Richards states that “In truth, our creativity is less about Activity A or B, than a way of approaching life which can expand our experiences and options, and even deeply affect who we are- and can become” (2009, p. 4).

Everyday creativity, then, becomes something very important, as it holds such strong potential for life-changing realizations, experiences, and choices. It is accessible to all persons, which is something that I find delightful and significant. However, I have come to understand that this is not the case, whether in or outside of the field. Simply stated, people are not aware of how they are creative within their everyday lives.
PERCEPTIONS OF CREATIVITY

Because I advocate strongly for the presence of creativity in education, I find myself talking with many other teachers, parents, and students, as well as friends and family members, about creativity and its place within our daily life. I was sitting in the kitchen with my mother about a year ago, sharing my plans for a new photography project that I was going to begin in conjunction with an online magazine. She began to talk about how creative I was and how she could never do something as creative as that in her life; she went on to say, in a light manner, that she was not creative and that I received all of the artistic genes from my grandmother. I stopped and stared. Not creative? My mother?

It is a conversation that I remember vividly, in part because I was developing an interest in the theory of everyday creativity, and I was coming to realize how many people associate creativity with the arts—and the arts only. I asked my mother why she believed herself not to be creative. What about her ability to cook based on limited options in the pantry; to garden and grow so many vegetables and fruits for our family in a hot and humid Georgia climate; to plan vacations; to raise my brother and I? Creativity is found in everything, I told her, and she, in so many ways, was blessed with creativity as a tool for living.

With that short conversation, I realized that I needed to look more into what laypersons, or individuals outside of the field of education, the arts, or creativity, thought about creativity. I felt like I was speaking a different language when I explained that creativity and art were not synonymous, and that creativity is found in all things that we do with purpose and meaning to create original ideas, solutions, or products. This makes sense to me, as I have come to see creativity as an innate, human ability and less of a divinely supplied talent, but is this universally understood? Is creativity something that is accessible to everyone, both in understanding and application, or does it have limits?
Context of the Problem

Creativity in Education

Although creativity is an essential component to the everyday lives of all persons living and working within the world, many individuals do not know what creativity is, nor are they aware of the potential having, sharing, and realizing it within the self. Educators still struggle amid teaching with, through, and about creativity within the classroom, even though that for the last 60 years, creativity has been studied by theoreticians and researchers working in a variety of fields (Skiba, Tan, Sternberg, & Grigorenko, 2010).

Creativity incorporates innovative lessons, abstract thinking, and personal meaning and understanding into the curriculum, requiring teachers and students to be open and flexible to multiple interpretations and differentiated learning. Despite a long history of research and studies on creativity within the classroom (Torrance & Safter, 1986), it is only recently that the topic of developing creativity within all people has been considered an essential learning characteristic and goal within the classroom.

Creativity within the classroom promotes ambiguity, openness, individual learning, and expression, as well as flexibility within teaching and learning techniques. “Creative, divergent responding is at odds with producing correct, convergent responses,” which creates a problem for students learning within a standardized educational system (Aljughaiman & Mowrer-Reynolds, 2005, p. 3). Ruth Richards (2010) states that “more than ever, we need creative thinking at all levels, both individually and together” (p. 211).

Richards (2010) found that many teachers see enthusiastic children as poorly behaved students, and that many creative children show “high spirits, enthusiasm, and a raucous independence” while working and learning within the classroom, which in turn may get them in
trouble due to the value of sitting quietly, staying in assigned seats, and remaining “in line” (p. 210). She proposes that educators introduce new teaching-learning methods and facilitate a creative learning environment.

Creativity is something that we all have, something that we use in our daily lives, something that we tap into to solve problems personal to us and meaningful to our existence; so, why is it not glorified, or better yet, why is it not given more attention? Aljughaiman and Mowrer-Reynolds (2005) found that based on a lack of support, creativity is undervalued, misunderstood, and unappreciated in educational settings. The researchers also found that teachers have “many misconceptions regarding what constitutes creativity,” showing a “lack of understanding about the nature of creativity and the characteristics of the creative student” (p. 2).

Without support for creativity within a school system, teachers may not view creativity as important, let alone something they should teach. Conceptions of creativity held by teachers often differ from conceptions of creativity that guide current research. Westby and Dawson (1995) found that when teachers’ concepts of creativity are different from definitions typically accepted, “it seems unlikely that they will recognize and nurture those students with creative potential” (p. 2).

Skiba, et al. (2010) found that “teachers’ implicit theories of creativity are often at variance with explicit theories of creativity” (p. 252) meaning that what teachers value as creative may not be in fact creative behaviors, and what they devalue may in fact be creativity within students and the classroom. Teachers, then, have the ability to suppress creativity, which would ultimately influence students negatively.

**American education.** Creativity is a challenging topic within education in the United States. Creativity promotes dynamic learning environments that may differ from the traditional
classroom makeup, and contradict the aims set in place by the No Child Left Behind Act, which is focused on standardized testing, accountability, and convergent thinking.

In May 2011, the President's Committee on the Arts and Humanities (PCAH) released a report that focused on reinvesting in arts education, creativity, and innovation in American schools, of which President Barack Obama argued for during his 2008 Arts Policy Campaign (PCAH, 2011). The report states that the PCAH conducted an in-depth review of the current challenges and opportunities facing art education, in which they discovered that the effects of an art education on student academic achievement and creativity are impressive. Not only does a good arts education lead to higher performance within academics, it provides beneficial contributions to the private sector.

In order to compete in the global economy, businesses are looking for individuals who are creative, innovative, and collaborative. The report states that "a greater investment in the arts is an effective way to equip today's students with the skills they will need to succeed in the jobs of tomorrow" (PCAH, 2011, p. 1). A strong education in the arts leads to a strong education in the general classroom, one that is based on more learning, more engagement, and gaining more creativity skills.

Acknowledging and supporting this is important; however, acknowledging that it takes more than knowledge to create an opportunity for an education rich in creativity and the arts is key; something must be done to ensure that education adopts this understanding, that creativity is important. Recent test results from a study using the Torrance Tests of Creative Thinking (TTCT) show that since 1990, creativity scores of American children have significantly decreased (Kim, 2011). These results caused alarm in the American public. An article in Newsweek, titled "The Creativity Crisis," revealed for the public the current creativity problem:
Creativity has always been prized in American society, but it’s never really been understood. While our creativity scores decline unchecked, the current national strategy for creativity consists of little more than praying for a Greek muse to drop by our houses. The problems we face now, and in the future, simply demand that we do more than just hope for inspiration to strike. Fortunately, the science can help: we know the steps to lead that elusive muse to our front door. (Bronson & Merryman, 2010, p. 7)

Knowing the steps to develop creativity, to ensure that it has a chance to be learned and explored, is half the battle for the current creativity problem in American schools. Creativity must be prioritized, it must be respected, and in a society so concerned with test results and comparison models, it wouldn’t hurt to have a system of measurement to support its importance.

Fortunately, in 1966 E. Paul Torrance found a method in which he could test individuals for creativity, based on divergent thinking, visual thinking, fluency, originality, and elaboration exercises (Kim, 2011). He published the TTCT, which began a push, and a prioritization, for creativity within education. The tests executed successfully Torrance’s research goals that focused on defining, measuring, and developing creativity.

Used now for almost fifty years, the TTCT is a successful measurement of creativity potential within children and adults of all ability levels. The test is still used for measuring creativity and giftedness, and it has proven to be extremely reliable. Creativity is becoming more readily recognized as a top skill in sustaining and improving national and international matters, including: economic growth, healthcare, environmental concerns, education, and business.

The concern for creativity in America lies within education, as teachers complain about standardized testing, a lack of time, and a lack of resources. There is also a common misconception that is still widely believed: that the arts are the only place where creativity can be
learned, used, and expressed. Without a national plan for education, creativity is vulnerable in American schools. Unlike some European and Asian countries who have established national curriculums, creativity in America is in the hands of the teachers and administrators; creativity, therefore, can be left to interpretation in individual classrooms, which may or may not be based on truthful conceptions of creativity.

It is important to note, however, that American politics have again become concerned with the state of education. The idea is there, and parents, politicians, teachers, and researchers are now asking, again: how do we ensure that students are learning how to be creative? American education may benefit from looking abroad for answers, as countries such as England and the surrounding United Kingdom have begun to explicitly ensure that creativity is being taught, learned, and expressed within schools.

**British education.** Policy makers in the United Kingdom recognized creativity in the twentieth century as an increasingly important facet within education and daily life, as it influences the economy and global production (Craft, 2010). No matter the age, area of study, or ability level, creativity is a part of individual circumstances of learning within the everyday. To some degree, every human being is capable of creative engagement (Craft, 2010). Jeffrey (2006) stated that, “there is global interest in raising educational achievement levels to benefit future economic development” (p. 399).

A report by the National Advisory Committee on Creative and Cultural Education (NACCCE) brought to attention the need for a national strategy to analyze, encourage, and develop the potential of every young person, in order to improve Britain’s economic and social situations (1999). Then Prime Minister Tony Blair stated that:
Our aim must be to create a nation where the creative talents of all the people are used to build a true enterprise economy for the twenty-first century—where we compete on brains, not brawn. (as cited in NACCCE, 1999, p. 5)

This British concern for creativity reflects the global concern for economic, social, and political development in order to improve economic stability and living conditions. The NACCCE (1999) suggests that through teaching for creativity, students can learn to believe in their creative potential and the possibility of their actions; through encouragement, teachers can give students the confidence to take risks, try new things, and solve problems.

With an initiative so widely supported in the United Kingdom, it is essential to pay attention as American educators and supporters of creativity to the course of events that take place in the educational systems abroad in order to learn by example, whether the results be highly positive or negative. It is important to learn about what is being done and what is not in relation to our local and national agendas, and reflect upon what could be done instead; it is time to be more creative with an approach for teaching for creativity in America.

**Purpose of the Study**

In search of a more purposeful and meaningful educational experience enhanced with creativity and the arts, I chose to focus this study on pre-service teachers. The purpose of this study is to identify and reveal implicit definitions of creativity by pre-service art teachers through a self-report questionnaire. It is also a major goal to discover teachers’ definitions of creativity and their beliefs of the nature of creativity within the everyday and within education.

It is the aim of this study to further the understanding of the nature of implicit definitions and misconceptions of creativity, and how teacher preparation programs may work towards correcting creativity myths. It is my goal to create an explicit awareness of the potential of
creativity within the everyday lives and classrooms of educators who work as pre-service or in-service teachers.

My interest in the study of everyday creativity began with studying creativity outside of the fields of education and the arts. The concept that we as humans are born with an innate ability to create, problem solve, improvise, cope, respond, connect, and express ourselves based on who we are and what we believe and that this is based in creativity is both beautiful and fundamental. The beauty lies in the potential; we can be, we can think, we can act, and we can share so many things about ourselves through our creativity, as it is a part of each individual and finds so many opportunities for expression. This is simple as well as it is complex, as it becomes fundamental and important to our existence and survival in daily life.

As an artist and an art educator, I value creativity in my daily life, as well as in the classroom. I agree with John Dewey’s claim that “art is the living and concrete proof that man is capable of restoring consciously, and thus on the plane of meaning, the union of sense, need, impulse and action,” which thus characterizes the active individual (1934/2005, p. 26). Artists create multi-sensory experiences for viewers, allowing an interaction between the work, the artist, and the audience that is intimate and meaningful. In education, students can learn how to create more meaningful work based on experiencing art and creating art for themselves, exploring their imaginations and creative abilities.

I find great value in the study of creativity, and I see so many connections between creativity and the arts. As I read more literature and invest more within the academic field of visual arts education, I see that creativity is a key component of learning within the arts. In my experience, I have and continue to study creativity as separate from the field of art and art education; yet, I do wonder why creativity and the arts are not married more intimately. I do not
mean to say that the arts and creativity are the same, rather, the arts depend on creativity, and creativity stimulates the artistic mind.

The current state of education in the arts is focused on creativity, despite the many prior attempts to suppress creativity within the arts classroom, as it was believed to be too soft and not appropriate for a discipline-based approach to teaching art. Creativity is a key component of new educational aims, which I am happily welcoming within my own classroom. Creativity is now included in state and federal standards, and it is making appearances in federal reports, highlighting the ability for creativity, and creative persons, to provide the world with better ideas, new products, and more unique concepts (Zimmerman, 2010). As an artist and an art teacher, I believe that creativity is an integral part of the artistic process, as it is a characteristic of the artist, a source of energy that helps develop the environment, and is pervasive in the final product.

The connection between artmaking and creativity is strong and limitless, but creativity is multifaceted. It is not limited to one domain, special persons, or specific environments; it is not only found in geniuses, in laboratories, or in popular cultural products. Creativity can be found in a small kitchen, at a PTO meeting, a newly landscaped yard, a mechanic’s workshop, or in a child’s bedroom. It is everywhere, and it is for everyone.

Guiding Research Questions

I find myself asking many questions about the relationship between creativity, daily life, and everyday persons so much that they constantly create wonder within my mind. These questions have inspired my research, and I have found it most helpful to document my own thoughts throughout this research process, using journals and altered books to keep aware of developing ideas. I ask: how is creativity perceived by individuals who are unaware of their own
creative potential, who may create on a daily basis original and meaningful things for themselves? Do they give themselves credit for their creative abilities, or do they brush it off as a mundane habit? My first thought, with relevance to the field of education, was to learn more about perceptions of creativity by educators.

I decided that looking into perceptions of pre-service educators would be beneficial to my own research, and the study of creativity became a large component of my graduate studies and became a priority in my life, both within and outside of the classroom. I took the various questions I had developed into consideration and conducted an anonymous self-report survey focused on pre-service art teachers with the aim of discovering their implicit beliefs of creativity and the implications that they may have on future teaching practices.

It is not a secret that creativity challenges traditional education and educators within the classroom, no matter the subject. Creativity is not necessarily understood based on subject of study, such as visual arts or creative writing; even the humanities experience challenges with teaching for, with, about, and through creativity. It requires and encourages unconventional thinking, expressive responses, and ambiguity; it grows from open-ended problems and unforeseen solutions. Mark Runco (2007) stated that “traditional education often stifles the creativity of students,” and that creative students “are not a part of what is known as the ideal student profile” (p. 178), which was researched by Paul E. Torrance to better understand what characteristics teachers preferred in their students and how this relates to characteristics of creativity.

Knowing that creativity has a challenging existence in structured settings, I am aware that schools both welcome it and suppress it. Because creativity is unpredictable, it can become a little less than desirable within an education setting. Do teachers really want to teach the unruly
child who draws all over his math worksheet, who cannot sit still, who does not raise his hand to answer questions, and who challenges the classroom with his impulsive behavior?

Teachers who understand and value the nature of creativity welcome creativity with flexible teaching methods and classroom management plans. They prepare a stimulating classroom environment that encourages higher-order thinking, learning, and creating. Creativity is not welcome in all classrooms, despite the potential benefits, due in part to its disruptive, ambiguous, and individualistic characteristics that challenge traditional learning environments. Not all teachers welcome creativity, whether it be in students, lessons, or themselves.

But what if teachers could come to a better understanding of creativity? To know the benefits and how to teach in a way that was structured yet open, full of imagination and accountability? I find myself asking: do teachers value creativity? What do they think creativity is? How do they identify creative students? How do they identify, support, and encourage creative processes, products, and environments- if at all? Do teachers think that they are creative? Is creativity only found in the art classroom?

**Paradigm and Assumptions**

In examination of my own personal paradigm, I considered the nature of ethics, reality, knowledge, and gathering knowledge and understandings within a study. It is a goal of mine to search for useful ideas and actual behaviors within this research study, and I found it most natural to study perceptions of creativity through the pragmatic paradigm. The pragmatic approach to reality is focused both on holistic and individualistic factors; “there is a single ‘real world’ and that all individuals have their own unique interpretations of that world” (Mertens, 2010, p. 36).
The pragmatic paradigm emphasizes creating knowledge through experiential situations, which is supported by pragmatic philosopher John Dewey (1934/2005; 1938/1997) who supported the idea that education is found in interactive and continuous life-experiences. In support of a philosophy of experience within education, he stated “the principle that development of experience comes about through interaction means that education is essentially a social process” (1938/1997, p. 58). We interact within our world, and we make meaning from our experiences.

The pragmatic emphasis on the nature of reality is focused on what it means to act one way versus another; to believe and agree upon one thing versus an alternative; and what difference it may make for the individual and society based on those individual belief systems (Mertens, 2010). This emphasis on believing, of having opinions, and acting upon them aligns perfectly with this study, as it focuses on individual belief systems in relation to creativity. Through a pragmatic approach, I was able to study what I value and find interesting, which in turn had positive results for me as a researcher and a pre-service teacher.

My placement within the research study is indeed a distant observer, due to the nature of the anonymous self-report survey that was completed through an online questionnaire; however, this quantitative method was purposefully chosen for the study in order to work best for gathering candid, direct responses by participants. I was unable to be in Athens, Georgia on the campus of the University of Georgia due to my involvement with the Cortona Studies Abroad Program, and the online questionnaire allowed me to gather results despite my geographic limitations.

**Importance of the Study**
Implicit definitions have a strong power in that they provide reason and meaning behind individual belief systems. In education, it is essential to pay attention to the beliefs that teachers have about teaching, learning, assessment, and care, as well as creativity, the arts, and authentic learning experiences. While it is important to understand what teachers believe, it is also important to understand and be more aware of the beliefs that pre-service teachers have within their education courses. Researchers have added benefits when studying groups of pre-service teachers because by studying this group, they are given the ability to “identify and address potentially problematic beliefs while prospective teachers are still enrolled in their teacher preparation programs” (Beghetto, 2008, p. 135).

As an art teacher with a strong belief that creativity is essential to learning and creating, I have developed a concern for creativity in the classroom. Not only am I concerned with its place in my own classroom, but I also care about its place in the classrooms of teachers throughout various educational institutions. I am concerned with its existence in education and its role within the development of children. I am concerned as I think about teachers who do not know what creativity is and its potential to transform lives. Skiba, et al. (2010) refer to creativity as an “embarrassment of riches” (p. 254) in that creativity is so valuable and promising. However, creativity lacks a clear definition and a greater understanding, therefore it becomes something that is challenging to address within standardized organizations, such as schools.

Creativity is a way of living, working, and interacting within the world, and just as every child deserves the right to a fair and equal opportunity to learn and develop, teachers should as well. Every teacher should be aware of creativity and its potential to improve educational practice and should be given the opportunity to develop this understanding before entering into their own classrooms.
CHAPTER 2

Literature Review

Introduction

Creativity research has explored creativity in many different domains of human life (Kaufman & Beghetto, 2009). Creative greatness has been studied to analyze the lives of eminent creators working in specific domains (Gardner, 1993). The other predominant focus is on everyday average persons that exhibit creative potential (Ivcevic & Mayer, 2009). Distinctions between Big-C and little-c, or eminent and everyday creativity, are helpful for understanding and appreciating remarkable contributions to domains, as well as recognizing smaller, but just as important, contributions made by the everyday person (Kaufman & Beghetto, 2009).

Everyday creativity is considered to be our originality of everyday life (Richards, 2007a). As a broad-based view of creativity (Richards, Kinney, Benet, & Merzel, 1988), everyday creativity offers immense potential for the individual and society. It is a fundamental survival capability (Richards, 2007a; 2007b; 2007c; 2010; Sternberg, 2007), which allows individuals to become more aware of their potential for living fuller, healthier lives (Richards, 2007b).

Creativity can be found in the domain of our everyday lives (Ivcevic & Mayer, 2009; Maslow, 1971; Ripple, 1989; Runco, 2004). Researchers continue to work towards a better understanding of the nature of creativity, as it is developed, manifested, and expressed by creative persons. We are now more aware and knowledgeable about the value of creativity, as it contributes to learning, imagination, adaptation, innovation, improvisation, problem solving, planning, reflecting, and expression (Runco, 2007a). These implications for learning guide creativity research in education.
Creativity in Education

Educational research concerned with creativity focuses on the benefits of creativity in the classroom (Runco, 2003). Creative learning and teaching is believed to bring about change, a change that affects pupils, teachers and circumstances of living in and understanding the world (Jeffrey, 2006). Creative learning is enhanced, and made possible, by creative teaching. Common characteristics of creative teaching and learning involve “innovation, ownership, control, and relevance” (Jeffrey, 2006, p. 401). Creative teachers are aware of their influence in creative learning, valuing students’ ideas, questions, imagination, and spontaneity (Jeffrey, 2006), which all contribute to a dynamic learning environment.

Creativity in education involves “posing questions, making connections, being imaginative, exploring options, and engaging in critical reflection and evaluation” (Cremin, Burnard, & Craft, 2006, p. 109). Everyday creativity, which emphasizes imagination, exploration, and active engagement, can be seen throughout creative classroom environments. Such a view of creativity has proven useful and influential in education and psychology (Ripple, 1989). Most studies that use children, college students, and pre-service teachers as participants focus on assessing everyday creativity rather than eminent creativity (Kaufman & Beghetto, 2009). This may be due to the approachable nature of the theory and its implications for the everyday person.

Creativity in education has been studied extensively (Torrance & Safer, 1986) and considers many factors that go into creative learning and teaching (Cremin, et al., 2006; Jeffrey, 2006). These efforts have been conducted internationally and consider students and teachers of all ages. Beliefs of creativity are important to research, especially within education, and there are significant studies on illuminating comparisons between researchers’ and teachers’ perceptions.
(Fryer & Collings, 1991). Studies on implicit theories are significant tools for understanding the possibilities and challenges associated with creativity in the classroom.

**Conducting a Literature Review**

In order to better understand the theory of everyday creativity as it applies to one’s everyday experiences within education, I chose to conduct a literature review of everyday creativity. Research exploring teachers’ understandings and beliefs about creativity has produced valuable findings and results (Andiliou & Murphy, 2010), which have led to a better understanding of the nature of creativity. It has also provided insight into the significance of one’s individual perception, creativity in education, the role of educators and programs, and the construction of implicit definitions, as influenced by experience. However, no review to my knowledge has synthesized the theory of everyday creativity with implicit beliefs of creativity in education, which will be explored further in this review.

**Theoretical Background**

**Understandings**

To begin conducting a literature review of everyday creativity, I first needed to become acquainted with the theory of everyday creativity and how it is significant in one’s everyday life. I gathered theoretical information on the background and development of the theory in order to understand its beginnings and its growth within the field of research. Reviewing theoretical data is important in understanding how the theory is supported and viewed in an educational context. From the review of theoretical information, I was able to search for and find empirical research on the theory, which will be reviewed in this chapter. The information varied in context, subjects, researcher aims, and results; this gave a broad-based approach for me as the researcher to gain a deeper understanding of the possibilities of this theory, and way of life.
Definitions of Everyday Creativity

The definition of everyday creativity (Richards, et al. 1988; Richards, 2007a; 2007b; 2010) is based on the understanding that we as humans are all born with creative potential. It holds the belief that in our everyday lives we are capable of creating meaningful and original products, or ideas, that serve an intimate purpose for living and engaging with the world. Everyday creativity finds many opportunities for expression as it permeates our daily existence (Zausner, 2007).

The standard definition of creativity is appropriate for everyday creativity: creativity is the interaction between persons, processes, products, and the press of the environment, in which a novel, meaningful, original, imaginative, and useful product is created (Kaufman & Beghetto, 2009). Everyday creativity is considered to be a broad-based category of creativity (Richards, et al., 1988) that is associated with the belief that “the potential for creative thinking and behavior exists to a greater or lesser degree in everyone” (Ripple, 1989, p. 189). It supports the belief that creativity exists in all persons and is exhibited in a variety of ways.

Every person is seen as possessing creativity (Richards, et al., 1988), in which everyday creativity then bridges the gap between eminent creators and everyday individuals (Runco & Richards, 1998). Because creativity does not limit based on age, any one person may experience creativity within a given situation; however, not all acts are agreed upon as being creative. The efforts of children are often imaginative and possess great creative potential because they are original, meaningful, and personal (Runco, 2003). However, they do not necessarily compare with standards of creativity defined by adult persons. Because of this, everyday creativity, based on personal relevancy, becomes an accessible approach to learning about one’s own creative potential, whether child or adult, no matter the age.
Identifying Everyday Creativity

To meet the criteria for creativity, creative outcomes must be both original and meaningful, as stated by Barron in 1969 (as cited in Richards, 2007b). There needs to be something new created, whether an idea, a behavior, or a physical product. The meaningfulness criterion excludes random and accidental acts (Richards, 2010), and it is not important that the outcome is valuable or useful to all persons, however, it must hold value to the individual who is creating or experiencing creativity. The “Four P’s” of creativity, which includes products, persons, processes, and environmental presses (Richards, 2010), must be considered when identifying creative outcomes. Creativity in the everyday is manifested through a variety of processes and outcomes, as the individual interacts with their environment.

Creativity is believed to be a habit (Sternberg, 2007). Creative people are creative because of an attitude that they have towards life (Richards, 2007a; Runco & Richards, 1998; Sternberg, 2007), not because of chance or a rare, innate gift. Creativity can be encouraged, developed, taught, learned, and modeled, and can be identified in individuals working, living, and interacting in a variety of domains (Dewey, 1934/2005; Richards, et al., 1988).

Because of the nature of everyday creativity, as both a novel and a routine response to everyday life situations (Sternberg, 2007), it is common for the act, product, or person to go unnoticed or unrecognized as creative. Because of misconceptions associated with creativity and what creativity is, whom it is reserved for, and why some have it and others do not, creativity is not always acknowledged in the daily lives of individuals. Everyday creative activities, ideas, or choices may seem mundane (Runco, 2006) or ordinary (Ripple, 1989), but they contribute to our existence. Our everyday creative abilities are what help us to find something to eat when hungry, talk our way out of a life-threatening situation, find a missing child, organize an event, or simply
find a personally meaningful way to adjust to our life circumstances (Richards, et al., 1988; 2007b).

**The nature of creativity.** Because creativity is manifested in human activity, it is very difficult to define and assess (Runco, Ebersole, & Mraz, 1997). Our human ability to interact with others and our environment provides opportunity for meaningful experiences and active learning. Creativity in the everyday is manifested in our experiences; we express our everyday creative abilities as we as individuals interact with our world (Dewey, 1934/2005). Our imaginations allow us to break from conventionality and create new understandings and experiences, encouraging possibility thinking and creative learning (Craft, 2001). Zausner (2007) emphasized the potential of everyday creativity, as it can be identified in the experiences, thoughts, and desires we have, stating that each person’s reaction to life is “a creative synthesis of who they are at that moment” (p. 76).

**Other Terms for Everyday Creativity**

Everyday creativity is supported and researched in the fields of creativity, education, and psychology (Richards, 2007a). The term everyday creativity is not always used to explain this form of creativity, and some authors have created their own terms and definitions to support creativity that is broad-based and available to all living persons. Other terms to support the everyday form of creativity include ordinary creativity (Ripple, 1989) and “little-c” creativity (Craft, 2001; Gardner, 1993).

Ripple’s (1989) idea of ordinary creativity has both have negative and contradictory connotations; however, he defines ordinary creativity as being involved with solving everyday real-life problems, in which all humans have a capability achieving. Ordinary creativity relates to
everyday creativity in that it focuses on results from ordinary people thinking in "identifiably unique ways" (Ripple, 1989, p. 190).

Gardner (1993) and Craft (2001) have researched "little c" creativity, especially in comparison to "Big-C" creativity. The "little-c" category is useful for addressing misconceptions about creativity and helps to underscore the important role that creativity plays in the everyday (Kaufman & Beghetto, 2009). It involves the quality of personal agency, active engagement, use of prior knowledge in tasks and responses, and possibility thinking (Craft, 2001). This everyday form of creativity can be used when creating meals, sewing clothes, raising children, or when writing a report, among many other activities of daily life (Craft, 2001; Richards, 2007a).

Everyday creativity is found widely in the general population, and is supported with subtypes, which include "mini-c" creativity (Kaufman & Beghetto, 2009) and personal creativity (Runco, 2003). "Mini-c" creativity is defined as the "novel and personally meaningful interpretation of experiences, actions, and events" (Kaufman & Beghetto, 2009, p. 3), which represents a personal best (i.e., standards to judge students’ work or insights). This subtype has value in educational settings based on its approachableness for teachers and students. It calls for a more widely accepted form of creative thinking and performing, which has an opportunity to improve creative learning in the classroom (Richards, 2010).

Personal creativity focuses on the individual and the process within the production of an original interpretation of an experience (Runco, 2006). Runco (2007b) suggests that "all creativity starts on a personal level (with interpretation, discretion, and intentions) and only sometimes becomes a social affair" (p. 97). Runco (2003) emphasizes that "the definition of creativity as construction of personal meaning is also consistent with the notion that creativity is a kind of self-expression and self-actualization" (p. 318). Self-actualization emphasizes the
individual, which is arguably the most important portion of the creative process, and is not reserved for the eminent (Runco, 2003).

The connection between creativity and self-actualization has been considered (Richards, 2007a; Runco, et al., 1997) based on the research and writings of Maslow’s (1971) self-actualization facilitating creativity and creativity facilitating self-actualization. Self-actualizing creativity is distinct from special talent creativity in that it helps individuals to actualize and understand their potentials and talents (Richards, 2007a), which promotes growth, motivation, and personal change.

Methodology for Literature Review

Theory and Inquiry as a Guide

Recognizing the importance of everyday creative persons, processes, and products further encourages the significance of creative potential, which is an enormously important part of being human (Runco, 2007b). I took this approach to creativity and applied it to my methods for conducting a search for empirical research, in which I considered a broad-based range of possible information before conducting my literature review search. I used the theoretical information to guide my search parameters, which included considering multiple questions I had personally formed in relation to everyday creativity and education.

I kept many journals and notebooks, while collecting data for this literature review, in which I wrote reflections and notes, based on my interpretations of the theory and associated beliefs. I also asked questions, including: What is everyday creativity? Why is it important to study in relation to education? Does this theory provide an easier approach to learning and teaching for creativity in the classroom? Do teachers agree with this broad-based understanding of creative potential? Do they understand the importance of creativity, and are they aware? What
are their beliefs? Who has researched implicit definitions of creativity and what did they find? What role does experience, support, self-efficacy, and motivation play in personal creativity?

Expressing these questions and reflecting back on them over a course of several months allowed for a deeper understanding of my own personal inquiries into the subject of creativity in education, as well as its relevancy to my personal life. Reading theory proposed by scholars in education and psychology helped me gather my thoughts, beliefs, inquiries, and goals for this review. It also motivated me to inquire further into the research of creativity in education as it is believed to hold so much potential for the lives of every individual (Runco, 2003).

Search Parameters

The theoretical background on everyday creativity and creativity in education gave insight into what should be considered in a search for empirical data in relation to everyday creativity, education, and beliefs associated with creativity. Throughout this process of reading and reflecting on everyday creativity theory, I gathered the understanding that everyday creativity is commonly discussed and supported, but not necessarily given the term “everyday creativity.” This understanding allowed me to conduct beginning searches on everyday creativity, as a term and a theory, with the flexibility of rearranging associated terms and beliefs.

Multiple terms were used in the search for articles, journals, books, and other publications. Given the availability of on-line resources and electronic databases, I conducted multiple searches over a course of a few months to locate empirical studies on everyday creativity, education, and definitions of creativity. Prior to searching in the online databases, which included the Educational Resources Information Center (ERIC) and PsychInfo, I gathered terms to use in a preliminary search. These terms included: creativity, everyday creativity, education, values, creative thinking, and creative students. I paired these terms together in
different combinations, resulting in a large pool of research studies, literature reviews, book reviews, journal articles, and book chapters written on relating topics and themes.

After reviewing the results, I conducted a second search using the following terms: implicit definitions, perceptions, beliefs, creativity, everyday creativity, education, students, teacher practice, in-service teachers, and pre-service teachers. I included these terms in order to narrow the results of empirical data to focus specifically on education, teachers, and students in relation to creativity. This included a large amount of studies focused on implicit definitions of creativity in education, which became a prominent theme in the literature review.

The empirical research from journal articles and books that was collected is relevant to the theory of everyday creativity. These included studies conducted on laypersons and educators, as well as persons working within the domains of science, mathematics, and art. The studies focused on the awareness and importance of creativity in the everyday activities of the participants, as well as their conceptions of creativity, as found in their abilities and the abilities of others.

Criteria for Inclusion

Three criteria were established to narrow the amount of empirical studies that were to be included in the literature review. The criteria consisted of: relevancy to the theory of everyday creativity; creativity in education and learning; and individual beliefs of creativity. The resulting data included thirty-two empirical studies performed by scholars working internationally. There was no limit based on date of publication; the history of creativity research, as well as research focused primarily with everyday creativities, has only been directly studied within the past forty or so years. The criteria for participants did not limit domain-association. Research conducted on gifted and talented persons, as well as eminent creators, was not included in the review of
literature. Not every study used the terminology “everyday creativity” in the research, but reference to creativity that was broad-based and defined as a potential in all persons was emphasized, and was considered for inclusion.

Results

Characteristics of the Studies

The study of everyday creativity in laypersons and those in the domain of education has attracted researchers worldwide (i.e., North America, Europe, and Asia) who have conducted empirical research on implicit theories of creativity, teachers’ beliefs of creativity, and creativity in teaching and learning. The importance of experience, in both educational and non-educational environments, is also heavily considered. Thirty-two studies were gathered for the literature review, ranging from years 1986-2011. Both quantitative (15) and qualitative (9) methods of data collection were used, as well as mixed methods (5) and ethnographic studies (3). All of the studies included in the literature review focus on: creativity, individual experiences, learning, and conceptions of creativity.

These creativity studies included focus in a variety of domains, including intelligence (Ivcevic & Mayer, 2009; Sternberg, 1986), personal identity (Jaussi, Randel, & Dionne, 2007), self-efficacy (Jaussi, et al., 2007; Lemons, 2010), artistic ability (Ivcevic, 2007; Ivcevic & Mayer, 2009; Oreck, 2004), scientific ability (Runco & Bhhleda, 1986), and perceptions of self (Pachucki, Lena, & Tepper, 2010).

Categories and Participants

The literature is primarily concerned with the personal experience of creativity. The results were categorized to create an organized synthesis of the literature, which resulted in two general categories: studies of creativity in non-academic settings (6) and studies of creativity in
academic settings (26). Within the academic setting, the studies were further categorized to include views of creativity from the perception of: undergraduate college students in non-education degrees or classes (6), pre-service teachers in teacher-training undergraduate classes (7), and in-service teachers teaching full-time in the classroom (13).

The different categories allowed for a more in-depth understanding of the connections of creativity in the everyday, and experiences in different environments of learning and creating. The perspectives of teachers, students, parents, and laypersons allowed for a more diverse approach to studying everyday conceptions, values, definitions, and uses of creativity.

**Instruments**

The majority of the studies used self-reports and surveys to conduct research on individuals in regards to their beliefs of creativity. These took the form of: creativity questionnaires (12), creativity checklists (10), and interviews (6). The remaining studies (4) used a combination of different instruments, such as frequency scores (Schacter, Thum, & Zifkin, 2006) and observations (Bird, 1993; Cremin, et al., 2006; Jeffrey, 2006; Jeffrey & Craft, 2004).

**Lifetime creativity scale (LCS).** Richards, et al. (1988) introduced a tool called the Lifetime Creativity Scale (LCS), which went beyond previous measures of creativity to focus on real-life activities and accomplishments in diverse groups of people. The scale provides a broad-based assessment of creativity in leisure and work, without requiring that these activities be socially recognized. This instrument was a beginning step in assessing everyday creative accomplishments, as well as a promoter of the theory, for which Richards (2007a) is a leading scholar and advocate.
Creativity Definitions and Theories

Because of the nature of creativity and the lack of one established definition, researchers have found it valuable to collect implicit definitions and compare them with scholarly definitions. The studies in the review suggest key ideas of creativity in the form of descriptions, actual examples, adjectives, and ability descriptions. The theory of everyday creativity supports a broad-based definition of creativity that is flexible and personally constructed, however, not all individuals believe this sort of creativity exists. The studies show beliefs of creativity that agreed with an everyday form, as well as an eminent form, specific to domains.

Implicit Theories of Creativity

Implicit theories of creativity are studied in order to gain a deeper understanding of conceptions and definitions created by persons outside of the field of creativity research (Runco & Bahleda, 1986; Sternberg, 1986). People have implicit definitions about creativity and use their understandings to evaluate themselves, others, and systems (Sternberg, 1986). Thus, creativity is not immune from inaccurate schematic or implicit representations (Plucker & Dow, 2010). These theories act as standards for evaluation and judgment (Runco & Johnson, 1993), and it is important to know how one uses their implicit theories throughout their daily lives (Sternberg, 1986).

Researching individual implicit theories gives researchers the opportunity to better understand why people act or think the way they do in relation to social systems or normalities. There are multiple terms used to describe individual implicit theories, including beliefs, values, attitudes, views, perceptions, conceptions, and schematic representations. These terms are used synonymously with one another in the studies to emphasize the flexibility associated with the study of creativity.
It is important to understand that these terms are used together to support the conceptual nature of implicit theories as they derive from individual belief systems. They are important to consider when defining creativity because they may provide a more practical, realistic, and socially valid conception of creativity (Runco & Bahleda, 1986). It is also important to consider how this relates to schematic development; schemas grow from interconnected ideas and complex structures of information, which are hard to change once constructed (Plucker & Dow, 2010). The significance of studying implicit beliefs of creativity extends to education because teachers act in the classroom according to their implicit theories (Kampylis, Berki, & Saariluoma, 2009).

**Characteristics of Creativity**

Nine of the studies had participants complete a creativity checklist or questionnaire regarding creativity characteristics, or personality characteristics of creative persons. Runco and Johnson (1993) surveyed parents and teachers, finding that most agreed on 11 adjectives: active, adventurous, alert, ambitious, artistic, capable, curious, dreamy, energetic, enthusiastic, and imaginative. The groups agreed on five adjectives to describe uncreative persons: apathetic, cold, cynical, dull, and interests narrow.

Socially desirable characteristics of creativity have been studied, which was made possible by Torrance and his Ideal Pupil Checklist (Fryer, 1996). The Ideal Pupil Checklist identifies behavioral and personality traits parents and teachers regard as ideal, and Fryer used it in her studies of teachers’ attitudes towards pupils’ creativity. She found that teachers most valued students who were considerate, socially well-adjusted, self-confident, independent in thinking, and curious; they did not value negative, self-satisfied, stubborn, domineering, or
disturbing characteristics. Creativity, then, becomes a question of being either an asset or a burden in the classroom, based on the perception of the teacher (Westby & Dawson, 1995).

The literature cited the following characteristics of creative persons most often: imaginative, original, nonconforming, active/adventurous, curious, self-expression, emotional, risk-taking, intelligence, and artistic (Aljughaiman & Mowrer-Reynolds, 2005; Fryer & Collings, 1991; Runco & Bahleda, 1986; Westby & Dawson, 1995). Common domains of creativity were also identified, including literature, education, arts (visual, music, theatre, dance), science/mathematics, and everyday dimensions (Diakidoy & Kanari, 1999; Pachucki, et al., 2010; Runco & Bahleda, 1986).

The majority of studies saw descriptions of a considerable amount of eminent forms of creativity, but there were also many everyday forms of creativity. Participants discussed the opportunity for creativity in the everyday setting, as it is socially dynamic; self-expression, networking, and general interaction were common factors in social settings (Pachucki, et al., 2010). Pachucki, et al. (2010) found that the creative self (or perception of one’s self as creative) is deeply linked to one’s everyday activities and interactions with one’s environment.

**Difference in Researcher and Teacher Definitions**

The literature revealed disconnects between the beliefs of teachers and those of researchers in relation to creativity definitions. Divergent thinking is a key element in experts’ conceptions of creativity (Runco, 2007a). The skills associated with divergent thinking include generating multiple ideas that are different, unique, and detailed (Fairweather & Cramond, 2010). Divergent thinking is interconnected with creative thinking and problem solving, however, teachers did not seem to identify this skill as important (Aljughaiman & Mowrer-Reynolds, 2005; Fryer, 1996). Creative problem solving was not regarded as an important tool.
for creativity (Fryer, 1996; Fryer & Collings, 1991), and teachers had difficulty explaining how these skills of creativity could be developed in students.

Researchers believe that problem solving is more pervasive and common in learning and teaching than teachers generally realize (Fryer, 1996). We are constantly reacting to our environments, our life situations, and the actions of others; we improvise (Lemons, 2005) and adapt to make our situations more enjoyable based on who we are at that moment.

**Conceptual Issues: The Nature of Creativity**

In the literature reviewed, teachers commonly attribute creativity to special persons and as a rare trait (Fryer, 1996; Fryer & Collings, 1991). In Fryer’s (1996) study, 70% of teachers believed creativity to be a rare trait, which is consistent with Kampylis, et al.’s (2009) study, in which half of the teachers viewed creativity as a rare phenomenon. Teachers who believe that creativity is reserved for special persons or is something that is an all-or-nothing trait might not be aware of the potential of creativity within their students or themselves. This may result in a lack of effort to facilitate or even address creativity in the classroom.

**Decoding Creativity Myths**

It is well supported that creativity is not immune from inaccurate schematic representations, which results in the nature of creativity being misunderstood and plagued by implicit myths (Plucker & Dow, 2010). These myths were addressed in two studies (Lemons, 2010; Plucker & Dow, 2010), which surveyed undergraduate students on their beliefs of creativity. The most common myths include: people are born creative or uncreative, creativity is only found in the arts, creativity happens constantly/on demand for creative persons, and creativity is enhanced by groups. These myths were categorized by the researchers (Plucker & Dow, 2010) based on students statements, which included, “I am not a creative individual” “You
have to be born creative” “You can’t increase your creativity through experience” “You are only creative if you are an artist or a musician” (p. 369). These statements represent the detrimental effect of creativity myths, which results in a lack of faith in one’s creative potential.

Plucker and Dow (2010) found that in order to change or alter these myths and incorrect schemas, the cognitive, affective, and behavior aspects must be considered and eliminated. This requires correctly identifying negative or incorrect stereotypes of creativity and providing individuals with information from scientific research that is correct. This further supports the importance of implicit beliefs of creativity in students, teachers, and everyday persons.

**Pre-service Teacher Experiences with Creativity**

It is well supported that as we live and interact with our world, we create meaningful conceptions that in turn become our belief systems that we come to live by (Dewey, 1934/2005). From the literature on pre-service teachers, the concept of learning “through” an experience, rather than about an experience, was emphasized in five studies. These studies emphasized a process of learning that was meant to guide participants without explicitly teaching about creativity or the practices of creative teaching.

In the studies conducted by White (2006) and Bird, Anderson, Sullivan, and Swidler (1993), the researchers challenged the participants to learn through experiences; this included ambiguous teacher expectations, flexible curriculum material, active learning, and creative problem solving. In both cases, the students had a choice to make: to either embrace the ambiguous teaching methods and creatively adjust, or resent the goals of the researcher and refuse to participate. The students in White’s (2006) study found the lesson, which required practicing and performing an operatic piece meaningful and educational. The lesson was developed by the researcher, and provided both the students and the researcher with a highly
creative learning experience. Bird, et al.’s (1993) students did not, however, handle ambiguity well, and resented the goals of the researchers. The researchers found that it was difficult to establish a connection with the students based on their previously formed beliefs about schooling, teaching, and learning.

Pre-service teachers argued that they needed hands-on experience to experiment and practice teaching in real-life classroom settings (Bird, et al., 1993; Schmidt, 2010; White, 2006), and identified the actual teaching experience as a valuable element in their preparation for teaching, when given an opportunity (Schmidt, 2010). The opportunity for a hands-on experience was not always available to the participants (Bird, et al., 1993). Beghetto (2006) found that prior to ever setting foot in their own classroom, teachers have constructed implicit theories of teaching and learning based on their schooling experiences. Experience in unimaginative and constrained school settings early in one’s life may affect one’s ability to open up and learn in ways that are creative and imaginative (Beghetto, 2008).

Beghetto (2006) found the theme of “creative justice” in his participants’ narratives. They expressed motivation to encourage creativity because of the negative, uncreative environments they experienced growing up. The students were able to reflect upon their past and positively channel these associations of creativity into hopeful aims. This relationship surprised the researchers, and is not a commonly found result (Kokotsaki, 2011). The common result is that teachers do not have an understanding for creativity, and do not consider it in their teaching practices.

**Teachers Not Equipped to Teach for Creativity**

Based on longitudinal studies of children’s creativity scores, Torrance and Safter (1986) found that teachers were not equipped to meet the needs of students in terms of creativity.
Schacter, et al. (2006) found that instead of increasing student creativity, teachers had a tendency to stifle and discourage it. From their results, the researchers found that a majority of teachers did not implement creative teaching strategies or foster creative development in their students.

Kampylis, et al. (2009) found that 98.4% of teachers agreed that their role involves the facilitation of creativity, but that 51.6% did not feel well trained to teach for creativity. This could be explained by a lack of preparation or preparedness, as well as low confidence levels.

Aljughaiman and Mowrer-Reynolds (2005) found that teachers had positive attitudes and perceptions toward creativity, but they did not feel responsible for teaching the development of creativity in their students. This “rejection of responsibility” (p. 7) is inconsistent with support for creativity in students’ learning; why did the teachers feel it was important, but that they should not be the ones responsible for teaching it? In addition, the teachers saw the enhancement of creativity and creative thinking as something additional and separate from the traditional curriculum. They also associated creativity with art products, which is commonly seen in laypersons’ conceptions of creativity (Lemons, 2010; Plucker & Dow, 2010).

Oreck (2004) also found this belief in his study of general classroom teachers, in which teachers who had positive self-efficacy beliefs and views of creativity were motivated to use creative and artistic teaching strategies; those who did not felt a lack of preparation, time, support, and motivation to teach creatively.

These results, along with misconceptions of creativity in learning, teaching, and everyday living, emphasize the importance of implicit theories as they affect education. Kampylis, et al. (2009) found that a majority of their participants believed that creativity could not be taught. Fryer (1996) found that teachers agreed that it could be developed, but not taught, because it is a rare attribute. If teachers agree that creativity can be developed (Aljughaiman & Mowrer-
Reynolds, 2005; Fryer, 1996; Kokotsaki, 2011; Morais & Azevedo, 2011), they should also believe that it is their responsibility to teach for creativity development (Diakidoy & Kanari, 1999). How else will students learn to be creative and use creativity in their everyday lives?

**Support for Everyday Creativity in Education**

The majority of the literature that was analyzed focuses on misconceptions of creativity, the abilities of teachers teach for, with, through, and about creativity, and negative attitudes towards creative personality characteristics. There is an emphasis on the negative effects that a non-creative education has on students and the future of education. However, there are four hopeful studies within the review that need to be addressed due to their promising teaching practices (Cremin, et al., 2006; Jeffrey, 2006), intellectual levels of inquiry (Jeffrey, 2006; Jeffrey & Craft, 2004), and promising results of teacher preparation programs (Diakidoy & Kanari, 1999).

**Teaching Creativity Outside of America**

All four of the studies examine classroom environments that promote, encourage, and value creative teaching and learning in the everyday; the participants conceptualized creativity as a general ability with multiple forms, and a source of individual differences (Diakidoy & Kanari, 1999). This aligns with the views of everyday creativity (Richards, 2007a; Ripple, 1989).

Cremin, et al. (2006) observed characteristics of everyday creativity in teacher practice, which included three major pedagogical themes: "standing back, profiling agency, and creating time and space," (p. 113) in response to learners.

Cremin, et al. (2006) found multiple models of an everyday form of creativity within perspectives of teaching that emphasized the individual. Through in-depth interviews with teachers, classroom observations, and revisiting data and video recordings, the researchers were
able to identify teachers’ creative pedagogies. The nature of creativity and promotion of creative learning in the classroom was explored in order to “identify and characterize common pedagogical strategies which promote possibility thinking” (p. 112).

Possibility thinking (Craft, 2000) is a major tool used in classrooms in the United Kingdom (Cremin, et al., 2006; Jeffrey, 2006; Jeffrey & Craft, 2004), which involves posing questions and seeking solutions; being open to possibilities; imagination and speculation; and having an exploratory attitude. Through a pedagogy rooted in possibility thinking, teachers are able to gather essential understandings of their students’ learning by standing back, watching, and listening from outside of the action of the classroom, but remaining available to the learners’ questions or concerns (Cremin, et al., 2006).

The educational emphasis on creativity and cultural awareness in British education is supported by a national curriculum that emphasizes creativity development. The 1999 report by the NACCCE created a concise mission statement supporting the importance of creativity in education for the present and future states of the economy. Due in part to the changing economic status of the United Kingdom and surrounding European countries, as well as the United States and other world powers, scholars in education and leaders in the business community both saw an opportunity for recovery through the promotion of creativity in education, both in and outside of the traditional classroom. This report influenced the British National Curriculum based on its recommendations, and many of the studies that take place in Britain mention the influence and suggestions put forth by the report.

Creative learning spaces are supported by the British National Curriculum, believing that they create opportunities and time for students to gain agency in their learning, take risks, explore options, and discover new ways of doing and seeing. Pedagogies rooted in possibility
thinking allow educators to “observe closely, examine, discuss and reflect deeply about learners’ ideas in a way that highlighted the importance of ‘what ifs’ or possibilities in the creative learning process” (Cremin, et al. 2006, p. 114). Creating an open and flexible culture of learning is essential when promoting creative learning, as is an environment that promotes ownership, responsibility, and independence.

Diakidoy and Kanari (1999) found that a majority of the student teachers in their sample firmly believed that it was possible to facilitate creativity in everyone, and that the role of the teacher was to do this in the classroom. Seventy-five percent of participants agreed that creativity was not a characteristic of all persons and that some children are more creative than others, which indicates that “creativity is primarily conceptualised as a general ability and a source of individual difference” (p. 235). Similar to the British National Curriculum, the Cypriot National Curriculum was influenced by the NACCCE, of which is the context of the study by Diakidoy and Kanari.

The participants in the study completed by Diakidoy and Kanari (1999) were student teachers who were in their last year of a teacher-preparation program and were either finished or in the process of completing their teaching practicums at the time of the study. The teaching practicum consisted of twelve hours of supervised subject teaching and four weeks of solo teaching responsibility. The researchers aimed to examine the participants’ beliefs about creativity, factors relating to creativity, and outcomes resulting from creativity.

Most of the definitions of creativity by the respondents referred to creativity as a process that leads to a novel outcome. Seventy-five percent of participants agreed that “the child who discovers a new strategy to carry out a three-digit addition is creative, even though the strategy leads to an incorrect solution” (p. 230). The focus, by the pre-service teachers, was not the
answer, rather the process of getting to the answer. The researchers conclude that based on their optimistic findings, the role of the teacher is instrumental in the manifestation of creativity, as creativity is largely influenced by environmental factors.

There was a majority belief in the study concerning the importance of the classroom environment in the promotion of creativity, and that “environments which emphasise conformity, competition, and evaluation are least likely to encourage creativity” (p. 235). With a strong concern for the environment and facilitation of creativity in the classroom, the pre-service teachers displayed a great understanding for the ways in which teachers can increase creative learning within their classrooms. The participants agreed that creativity is facilitated best through offering students open-ended problems, divergent-thinking tasks, and ambiguous questions. This reiterates the significance of the creative process over the creative product or person.

There was no information given within the study that listed or referred to certain curriculum objectives of the teacher education program in which the participants were enrolled; however, the researchers did suggest that educational systems may view creativity differently when approaching specific educational objectives within the classroom. It can be agreed, however, that creativity was viewed as extremely important in education and that it is possible for teachers to facilitate creativity in all students.

Jeffrey and Craft (2004) explored the positive nature of teaching creatively and teaching for creativity within their study. The educators’ focus on pedagogic relevance emphasizes the importance in teaching that is appropriate to “age range, context, and individual” (p. 80). The teachers focused on the interests of their students in order to foster creativity, encourage individual creative identity, and motivate their learning through asking questions, identifying
problems, and discussing their thinking processes. This “brings the learner into the heart of both the teaching and learning process” as an active, involved, and engaged co-participant (p. 82).

The skills learned in classrooms that promote possibility thinking (Cremin, et al., 2006; Jeffrey, 2006; Jeffrey & Craft, 2004) and a positive perspective for creative teaching and learning (Diakidoy & Kanari, 1999) emphasize the significance of creativity in the lives of all individuals. Creating a creative learning environment and opportunities for student learning and development that is genuine and flexible is key for promoting creative growth within education.

Everyday forms of creativity may become ways for future educators to explore being, living, and interacting within their classrooms and their world system. This emphasis on creative teaching has the potential to change the beliefs of educators, which could create a broader understanding of possibilities through creativity. Through an understanding for creative teaching and learning, there is potential in the lives of teachers and students to become more active participants within their everyday lives. This way of being and learning promotes a belief that the learners’ work becomes the learners’ play (Cremin, et al., 2006).

Conclusions and Implications

Everyday creativity, as a broad-based theory of creativity, is concerned with the human element. As individuals experience life, they learn, create meaningful connections, and reflect on their lives as active members of society. There is a common theme throughout the literature reviewed, which can be referred to as learning within the everyday, individual life (Kleszcz, 2011). Opportunities for learning were found in settings inside and outside of traditional educational institutions, emphasizing that learning is a human ability that motivates us to create and experience as we learn about our abilities, our interests, and ourselves. It is evident that self-actualizing people often live healthier, happier, and more fulfilled lives, motivated by an intrinsic
force that allows for personal growth and awareness of potential (Maslow, 1971; Richards, 2007a).

Learning is a natural human ability, and it is used throughout our everyday as we find, solve, and cope with problems in our lives. We learn based on our experiences with our environment (Dewey, 1934/2005; White, 2006). The studies included in the literature review focus on the learning of the individual, based on prior experiences with creativity, perceptions or developed schemas of creativity, assessments of creativity, and self-beliefs of creative potential. The ways in which we learn are personal (Runco, 2006), and our creativity allows us to expand upon what we learn and how we apply it to our daily lives.

The potential to educate creatively and to facilitate creative learning is found in all educational institutions. The studies conducted in educational settings concluded with common beliefs that it is the role of the teacher, the practices, the curriculum and environment of learning that must embrace and support creativity as children experience schooling. The majority of studies supported the importance of teacher preparation programs and their impacts on future teachers, teacher-educators, and students. Personal conceptions of creativity depend on experiences and various models of creativity, which are considered key in promoting a future for creativity in education (Diakidoy & Kanari, 1999).

All of the studies support the belief that creativity is an important ability, trait, and human characteristic in a world that is constantly changing. “People need constantly to cope with novel kinds of tasks and situations... [and] people constantly need to be thinking in new ways” (Sternberg, 2007, p. 7), which emphasizes further the importance of creativity development. Attitudes that support creativity as an essential survival capability (Richards, 2007a; 2007b; 2010) support creativity in all persons, all ways of living, and all expressions of self. The various
ways that we respond to our individual life circumstances is our everyday creativity at its most basic form of expression (Zausner, 2007).
CHAPTER 3

Research Methods

Literature reviews of creativity and studies of pre-service teachers’ implicit theories of creativity frequently identify a separation between implicit definitions and researchers’ explicit definitions of creativity. Because of this, it is imperative to create a connection between these two fields of learning and discovery. The benefits of creativity are too great to be left in the summaries of research studies or the volumes of creativity journals; teachers need to be introduced to creativity in order to understand what it is, how it can benefit themselves and their students, and how it can be utilized within the classroom.

Creativity within the classroom has been researched as a belief system and a priority through behaviors and teaching techniques of educators working within various subjects (Aljughaiman & Mower-Reynolds, 2005; Fryer, 1996; Kampylis, et. al., 2009; Morais & Azevedo, 2011; Westby & Dawson, 1995). Creativity has also been the subject for surveys of pre-service teachers (Diakidoy & Kanari, 1999). It is important to review these studies in order to understand what results have been found, and what questions are still being asked.

After a critical review of the literature, I discovered that misconceptions of creativity were found, but not addressed. It is beneficial to look at the implicit theories and come to a better understanding of what creativity is in the classroom, as teachers’ understand it to be. Researchers, then, must consider what and how to address these creativity problems, as they exist and continue to become conceived within education. It is in my opinion that a little-c creativity approach is the best way to communicate, define, and implement creativity within education, as it is a practical and approachable form of creativity found in all persons.
I developed my own plans to survey pre-service teachers with the intention of finding answers that relate to creativity found in the everyday. Creativity, as it is associated with the arts and special talents, can become overshadowing to everyday creativity skills and behaviors; it is because of this that I aimed to ask many questions regarding the daily, social, and future benefits of creativity. I wanted to bring awareness to the participants’ understanding of creativity, simply through a question and answer experience. It is rare that we have an opportunity to share what we think about creativity, and for this, I wanted to give pre-service teachers the opportunity to think about creativity.

The purpose of the survey was to examine implicit beliefs of creativity held by pre-service teachers enrolled in undergraduate and graduate education courses. There is great importance in beliefs of pre-service teachers. They have ideas and experiences that affect what they think and how they plan to, or actually do, act within the classroom as teachers. Surveying a group of pre-service teachers gives insight into implicit theories that are untainted by school policy, curriculum, and in-service teaching pressures. Working heavily in theory and development of self as a teacher, students learn about teaching in a process that is more hands-off, which precedes the student teaching requirement.

More importantly, the survey was developed in order to bridge the gap between creativity in education and creativity in the everyday by looking at creativity as something that is an everyday occurrence that can be found anywhere. Creativity, however, is not random; it has purpose and meaning. The theory of everyday creativity (Richards, et al. 1988; Richards, 2007a; 2007b; 2010) supports the belief that we as humans are all born with creative potential and are capable of creating meaningful and original products or ideas within our lives. As a guiding
definition and theory of creativity, I believe that everyday creativity strongly provides support for creativity within education as a practical and desirable life skill.

Skiba, et al. (2010) supports the ability of little-c creativity to enhance educational experiences and promote creative thinking within the classroom. They state that:

Concepts such as little-c creativity, creativity as a skill, and the universal possibilities for creativity in almost any context or subject matter can and should support creativity in the classroom. (p. 266)

An examination of beliefs about creativity, creative outcomes, creativity within education, and personal factors related to creativity was used in order to better identify and understand implicit theories of creativity. This information is needed in order to better understand what pre-service teachers think about creativity in relation to the nature of creativity, themselves as individuals, and education before they enter into the classroom as full-time instructors.

The methodology approach to this study was quantitative and used a web-based questionnaire to conduct research. Working within the pragmatic paradigm, my goal was to search for useful points of connection within the research. The theory of everyday creativity works within a constructivist paradigm, emphasizing a construction of knowledge and a raised awareness for the potential of a more creative and realized self. Because of this, the questions in the survey have a constructivist nature that encourages ideas, thoughts, and feelings to unfold as the participants answer the questions.

**Research Design**

The development of the questionnaire began after completion of the literature review, which allowed for a design approach that was cognizant of the research already conducted within
the field. The first step of the research design was to identify what questions had been asked in relation to everyday creativity and education in previous studies, and to analyze what results were found. This was addressed within the literature review, and it gave insight into different survey-development approaches that I could take in designing a creativity questionnaire.

Looking at the creativity questionnaires (12) and checklists (10) from the literature review, I created two categories in which I would examine implicit theories of creativity in pre-service teachers: the nature of creativity and creativity in education. Within these categories, I addressed many subtopics, including: benefits, constraints, enhancers, influences, and origins; personal reflection about self in relation to creativity; and the role of teachers, education, and learning in creativity development. These allowed me to expand on everyday forms of creativity within the study as they relate to education, teaching, learning, and being an individual within society.

Instrument

Pre-service teachers’ beliefs about creativity were assessed with a questionnaire that included 29 questions (Appendix A). The questionnaire was designed to include three sections. The first section included questions that address beliefs of the nature of creativity (10 items). Two of the questions were open-ended, and required participants to create and share their own definitions of creativity, and to share opportunities that they have within their life to be original. The participants were asked to specifically share when, where, and how they are original within their lives. There were three questions that used a five-point Likert scale from “strongly disagree” to “strongly agree,” and included statements that related to creativity as a key factor for social and personal progress, as well as a self-assessment. Two of the questions provided multiple options in the form of a checklist that followed statements regarding sources of
creativity. Three questions required participants to indicate their beliefs about the nature, characteristics, and potential negative/positive benefits of creativity; these were presented in checklist form.

The second section included questions that address attitudes relating to creativity in education (13 items). Five questions used a five-point Likert scale “strongly disagree” to “strongly agree” to answer statements relating to the ability for creativity to be taught and developed. The role of the teacher is included in these questions. There were six questions with statements that followed with yes/no, agree/disagree items. These were asked in relation to creativity within the classroom and everyday life, creative thinking, and constraints of creativity. One question asked participants to choose from a checklist factors that they felt best enhanced creativity. There was one question that focused on characteristics of creativity; respondents were given a list of 19 terms typically associated with creativity, of which they were asked to choose one or more items. These key terms were collected based on their presence in past studies (Fryer & Collings, 1991; Runco & Johnson, 1993).

The third section was specifically focused on respondent demographics (6 items) and included Race, Gender, Age, Class Cohort, Area of Study, and Self-Perception in relation to creativity. Respondents were asked to choose the answer that best described themselves out of the choices provided.

**Data Gathering Procedures**

The questionnaire was distributed electronically to professors working within the art education department at the University of Georgia in Athens, Georgia in the months of April and May in the spring 2012 semester. The instructors were contacted in January and were given a small introduction to my plans for research and my intentions to survey their classes. Some
professors were not teaching pre-service courses and therefore were not given the final survey. A consent form was given to participants as a pre-cursor to the online survey, which explained the voluntary nature of completing the survey.

I was also able to administer the survey to one group of pre-service teachers (9) who were studying in Cortona, Italy while I was studying and working at the University of Georgia Studies Abroad Program in Cortona, Italy. Participants both in Athens and Cortona completed the survey on a volunteer basis. Participants were asked to complete the questionnaire in full; however, it was not mandatory that they answer all questions. The questionnaire used in this study is presented in Appendix A.

I was interested in surveying non-art education majors within this study, however, plans to survey this group of individuals did not materialize and proved challenging, especially when studying abroad. There were discussions held with non-art education instructors within the education department at the University of Georgia, however, there were no classes being taught by these instructors to pre-service educators during the spring 2012 semester, which was a requirement for participation. There is great value in surveying a diverse pool of participants in order to better understand beliefs held by pre-service educators who are planning to teach subjects other than the arts.

Participants

The questionnaire was distributed to undergraduates enrolled in four pre-service art education courses at the University of Georgia. Data were collected from 24 participants studying K-12 art education at the University of Georgia, including both undergraduate and graduate students studying in Athens, GA and Cortona, Italy. The majority of participants were in their later years of college: junior (n=7, 29%) and senior (n=15, 63%). Graduate students (n=2,
8%) also participated in the survey. These were 21 females (88%) and 3 males (12%) within the age range of 18-25 years old (n=23, 96%) and 26-33 years old (n=1, 4%). The majority of respondents reported their ethnicity as White (n=21, 88%); a small number identified themselves as Asian American (n=2, 8%) and Hispanic (n=1, 4%). The participants were studying fine arts (n=20, 83%) and humanities (n=4, 17%) within their declared majors.

Validity and Reliability

A pilot test was issued to one student who was not enrolled within a University of Georgia art education course; however, the student was enrolled as an art education student at another American university. The student was given the survey while studying abroad through the University of Georgia Cortona Program and agreed to volunteer as a participant. The student was not a participant in the final study. The pilot study was conducted in order to ensure clarification of questions and format, and the student agreed to meet with the researcher about the questionnaire and the experience had while answering. Based on the discussion, a few questions were altered with the intention for an easier survey-taking experience.

The survey is based on self-reports of participants; therefore the validity of the information is reliant on the honesty of the respondent. Validity of online surveys can be questionable based on individual circumstances (e.g. if the participant was in a hurry). As in all self-report questionnaires, participants are asked to be authentic when answering questions, however, it cannot be guaranteed that all respondents answered truthfully.

Protection of the participants was confirmed through the University of Georgia’s institutional review board (IRB) in March 2012. The IRB approval form is included in Appendix B. The survey was submitted under the title of “Survey of Pre-Service Teachers’ Perceptions of
Creativity.” Results of the survey are anonymous, although there is a limit to the confidentiality that can be guaranteed due to the use of the Internet.

Data Analysis

The data were analyzed through quantitative analysis, using descriptive statistics to analyze frequency, percentages, and averages of the questionnaire results. No correlations or comparisons were used in analysis of the data, as comparing groups was not relevant to the research design. Open-ended questions were analyzed and categorized based on my personal interpretations of the responses, which allowed for the analysis of frequency and percentage within the results. I looked for key terms associated with creativity to provide categories for the results, which I examined thoroughly based on each individual response. The amount of data collected is small; however, due to the nature of the study and its relationship to suggestions for creative thinking, teaching, living, and learning, it provides interesting insight into the belief systems of pre-service teachers whose predominant focus is in the arts.

Limitations

The current study was limited to a small group (24) of pre-service teachers enrolled within arts education courses at the University of Georgia. The teacher preparation program within the art education department prioritizes creativity in learning, teaching, and artmaking, and aims to teach students within the program about the benefits of creativity in education. This limits the ability to generalize the results and findings to a larger population of pre-service teachers working outside of the arts, specifically the visual arts. A larger and more diverse sample of participants would have been more effective. This study is limited to the American educational system and culture, and reflects beliefs of pre-service teachers studying within the southern region of the United States.
As the researcher, I was limited geographically in distributing and administering the questionnaire. Living in Italy during the spring semester prevented my personal administering of the survey to individuals within pre-service education courses, both in the arts and general education courses. Participation was completely voluntary and participants were not required to complete the study for class credit or participation, which may have affected the response rate.

There is subjectivity within this study as I worked within the pragmatic paradigm, as well as within my own beliefs of creativity. I support the theory of everyday creativity, as well as the idea that creativity is in all persons, or that everyone has the potential to be creative within his or her life situation through meaningful and original creations of ideas or products, in all areas or domains. I support authors and research studies that support everyday creativity, and I also acknowledge that not every person believes that creativity is a natural trait.
CHAPTER 4

Results

The main purpose of this study was to examine implicit beliefs of creativity held by pre-service art teachers enrolled in teacher preparation programs. The results serve as evidence that pre-service teachers hold implicit beliefs of creativity, which may affect future teaching and classroom management strategies, as well as encouragement of creativity within the educational experience.

The nature of creativity is complex; without a single established definition, every person has his or her own idea of what creativity is and what it can provide for the individual, the community, and the future. Creativity can be eminent and life changing, as well as personal and meaningful. The study reveals that pre-service art teachers believe that creativity is mostly associated with imagination and problem solving, as well as expression of self through a process of creation. It was agreed by the majority of participants that creativity could be developed within all persons and that teachers should have knowledge about creativity.

Definitions of Creativity

Results from Question 1 reveal that most respondents felt comfortable with answering the open-ended question, “How do you define creativity?” although one participant chose not to submit an answer. This question was included as the first question on the survey because it gives opportunity for explanation of personal beliefs. By asking this first, participants provided their initial understandings of creativity without a tremendous amount of influence from more detailed questions that were to follow.

Asking participants “What is creativity?” is a commonly asked question in creativity studies (Aljughaiman & Mowrer-Reynolds, 2005; Diakidoy & Kanari, 1999; Fryer & Collings,
1991; Fryer, 1996; Lemons, 2010; Plucker & Dow, 2010). By asking this question, researchers can gather insight into initial understandings of creativity, and they can search for key words that may or may not align with previous studies or explicit definitions of creativity.

In the present study, participants provided a variety of definitions relating to their general understanding of creativity. The results from the study show that pre-service teachers believe creativity to be associated with originality, imagination, pushing limits, problem solving, and expression of one’s self and ideas. These key terms led me to group the data into categories as they emerged from the open-ended responses; this allowed me to better organize and understand the frequency of responses in comparison to others. The categories are similar to the categories that emerged from Lemons’ (2010) study, which surveyed 242 undergraduate students studying in either English or science courses at a western university in the United States.

The categorization is subject to my interpretation of the data results, and key terms and phrases were used; examples were often provided within the responses, which were grouped accordingly to the most frequently mentioned key term. Table 1 shows the categories that were used in the final analysis of data and the frequency of responses for the first question of the survey.

<table>
<thead>
<tr>
<th>Table 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results for Question 1: “How do you define creativity?”</td>
</tr>
<tr>
<td>Category</td>
</tr>
<tr>
<td>Original, coming up with a new idea or product from imagination</td>
</tr>
<tr>
<td>Pushing limits, thinking outside of the box; problem solving</td>
</tr>
<tr>
<td>Expression of self and/or ideas</td>
</tr>
</tbody>
</table>

*Note. One of the participants chose not to answer Question 1, therefore N=23.*
**Originality.** From the results, it is clear to see that the most frequently occurring definition of creativity can be associated with originality and pushing limits. Originality, or coming up with new ideas or products from the imagination, is a common definition of creativity. Runco (2007a) states that originality is difficult to separate from creativity because most creative things are original and novel, unique and unusual, and they must, in some form or fashion, be original (p. 379). Imagination was categorized with “original” in the analysis because with individual mention of the imagination, participants referred to the production of something new or original.

For example, responses that mentioned originality include:

“Creativity is the ability to imagine, use, and create things in new, original, and unexpected ways.”

“The ability to create something new from the imagination or inspiration from the world around you.”

“Creativity is the ability to transform something from nothing.”

**Pushing limits.** Pushing limits was a category that frequently occurred within the responses, as participants mentioned looking at problems in new ways to possibly create a solution that may be unexpected. Pushing limits may refer to the process and the temperament of the individual, as well as the nature of creativity.

For example, responses that mentioned pushing the limits include:

“Creativity defies and crosses disciplines. It is the act of using what you know in a new, often times unconventional, way. It is an act that does not define the box you are supposed to think in for nothing is off limits. It is the harmonious flow of divergent and convergent thinking.”
“Being creative means having the ability to see a problem and thinking outside the box in terms of answering it. Seeing there is not one right answer but multiple approaches and solutions to any given problem or situation.”

“Being open minded and inventive in any situation using materials on hand. Being able to expand initial ideas and push the limits!”

**Self-expression.** The last category, expression of self and/or ideas, was a less commonly referred to component of creativity. It is important to note that when analyzing open-ended questions, key terms were used when categorizing responses; self-expression emerged out of responses that included creating things or ideas that helped him/her express their inner selves. Some responses mentioned ways of living, dressing, and creating relationships.

For example, responses that mentioned self-expression include:

“Creativity can be defined as a way of expressing what is stored and locked up inside of yourself and then making a visual of any kind to give life to this idea.”

“When a person goes beyond traditional ways of thinking in order to express himself/herself.”

**Origins of Creativity**

In relation to defining creativity, participants were asked about the origin of creativity. Question 2 asked “Where do you think creativity comes from?” and over half of the participants (14, 58%) believed creativity to come from the imagination. This is in contrast with: life experiences (4, 17%), mind and brain (2, 8%), heart and soul (1, 4%), early upbringing (0), learned (0), and other (3, 13%). Each category was a choice provided within the questionnaire.

This question was asked in order to better understand perceptions of creative beginnings. When surveying pre-service teachers, it is important to understand where they believe creativity
to originate from in order to understand better their beliefs of creativity. The categories were from a study by Lemons (2010), in which participants found creativity to come from life experiences, the mind and brain, and the heart and soul over imagination, early upbringing, and learned knowledge.

**Creativity Development**

It is extremely significant to note that in Question 5 of the study, 88% of participants agreed that creativity could be developed in every person. 8% believed that creativity is something that is innate, and therefore cannot be developed within individuals. This is important because the majority of pre-service teachers believe that creativity can be developed within individuals, which has great implications for teaching within the classroom. These results differ from Fryer’s (1996) study on general education teachers in which 70% of the teachers believed creativity to be a rare gift.

Results show that participants found that the most helpful way for developing creativity was through encouraging pupils to ask questions, building pupils’ confidence in the classroom, and having a creative teacher. Other important characteristics included having involved and supportive family members and some choice of learning methods within the classroom. It is important to note that all of the participants agreed that creativity is a key factor for personal progress, and a majority (19, 79%) agree that it is key for social progress.

It was important that participants share their beliefs of creativity development as well as the relevancy of creativity to their individual lives in order to understand how they may interpret creativity development within themselves. With this, I wanted to ask pre-service teachers when in their lives they felt that they could be creative, which could create an opportunity for the respondents to give real-life examples of themselves as creative persons. By asking, "Do you
have many opportunities to be original?” I wanted to discover when, where, and how individuals found themselves being creative. Leaving the question open-ended instead of in categorical form allowed participants to share candid answers to the somewhat ambiguous question.

The theory of everyday creativity supports the belief that creativity is something that can be used anywhere by anyone, as long as there is intent, meaning, and purpose, as well as original creation for that individual.

The participants in this study answered as such:

“Every day! Any time I speak, choose my outfit, choose how to handle situations small and large, etc, etc. The list can go on and on because we make choices every day!”

“Anything can be done creatively. Even vacuuming. In art school and education classes there is a demand to be creative and develop individual ideas on a deadline to create a product or to be the facilitator of the creativity of others. I develop ideas by brainstorming in my sketchbook, taking walks, writing, looking at other artists/teachers and talking with peers, but mainly following my feelings.”

“Everyday I have the opportunity to be original and to create. The college courses I take allow me to be original through writings and studio projects. Originality is also practiced in the ways in which I choose to spend my spare time. I can be original with the foods that I prepare in my kitchen and with the clothes that I dress myself in. I can be original with the conversations that I have with others and the thoughts and ideas that I have throughout the day.”

“I think the way I live my life allows for a lot of original thoughts, whether it be in creating lesson plans and curriculum, my choice in books to read, places to go and ideas to explore. Having a passion for art naturally lends itself to originality and creative thinking.”
"I think everyone has as many opportunities to be creative as they allow for themselves. I can be creative in expressing myself through my clothes, my school work, my friendships/relationships, where I live, my faith, cooking, and so many more."

The key terms and concepts used include: everyday, anything, expression, creative thinking, problem solving, originality, choice, and individual. Respondents used examples that include daily routines, such as vacuuming, wardrobe and presentation of self, reading, traveling, and thinking. They mentioned relationships and conversation, brainstorming, lifestyle, and creating lesson plans. All of the participants in the study were enrolled in art education pre-service teaching courses, and the majority of the answers included some reference to making art, journaling, or creative writing within college courses or within own personal time.

The most important characteristic of the responses was the use of the term “everyday” due to the implications involved with the concept of creativity as it is manifested and expressed in daily situations. There is a clear indication of individual awareness by participants that creativity is not limited to academics, art, or problem solving, rather it is something that is a part of the everyday life of all persons.

The extent to which people manifest their creativity depends on many factors. The pre-service teachers in the study were asked to identify factors that they believed impacted creative development and production. Half of the participants agreed that environmental factors were important, and 29% believed that personality was another important influence of creativity.

**Creative Thinking.** Creative thinking processes are strongly associated with creativity development within education, and the participants were asked about the differences, if any, between creative thinking and thinking required in school. Half of the participants agree that creative thinking and the thinking required to solve problems in school is different, and half
disagree and say that it is in fact the same. It is interesting that half of the pre-service teachers separate creative thinking from thinking and problem solving done in school because a majority of learning is through problem solving and discovery of solutions.

Participants were then asked, “Is creative thinking different from the thinking required to solve problems in daily life?” and 88% said no, that they are not different. This result is interesting in comparison to the previous result in that problem solving is clearly associated with creative thinking, however, some of the participants do not see the relationship between creative thinking and problem solving that takes place in education.

**Personal Creativity**

It is key to understand the development of creativity as it relates to the individual, in terms of individual association with creativity as an ability, personality trait, or unique skill. From the results, it is clear that participants consider themselves to be creative. On a scale of 1-5, 17% of the participants feel that they are extremely creative, while 58% find themselves to be somewhat creative. Twenty-five percent of participants believe they are somewhere in between the extremes, selecting a neutral position on the scale. These results can be seen in Table 3.

<table>
<thead>
<tr>
<th>Question</th>
<th>1 Extremely Uncreative</th>
<th>2 Not Creative</th>
<th>3 Neither Creative or Uncreative</th>
<th>4 Somewhat Creative</th>
<th>5 Extremely Creative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q9: How creative do you think you are?</td>
<td>0</td>
<td>0</td>
<td>25%</td>
<td>58%</td>
<td>17%</td>
</tr>
</tbody>
</table>

*Note. Scores are on a scale from 1-5.*

What can be seen in Table 3 is that the pre-service teachers have confidence in their creative potential; they acknowledge that creativity is something one can develop and express,
seen in an overall review of the results, and with Question 9, 75% express that they too are creative. It is interesting that over half believe that they are somewhat creative, and less than a quarter find that they are extremely creative. This communicates positive implications; if pre-service teachers find themselves to be creative before they enter the classroom, and feel that they have had time to develop a sense of self within creative acts and processes, they will be more willing to be creative in their teaching and lesson planning.

**Creativity in Education**

It is important to recognize and understand the perceptions of pre-service teachers in regards to teaching and learning for creativity, assessment of creativity, and opportunities provided that allow growth within an educational experience. Results from the present study suggest that pre-service teachers value creativity within the classroom and learning environment, and believe that all teachers should have knowledge about creativity.

The results conclude that there is a strong belief that all teachers should have knowledge about creativity (13% agree, 88% strongly agree), which indicates that creativity is an education aim and responsibility that teachers should have the competency to address in the classroom. It is interesting to note, however, that the participants did not strongly agree that all teachers are responsible for teaching and facilitating creativity. Sixty-three percent strongly agree and 25% agree that all teachers are responsible, however, 13% neither agree nor disagree. It is interesting that the participants strongly agree that all teachers should have knowledge of creativity, but not all are convinced that teachers should be responsible to teach for creativity.
Table 3
Perceptions of Creativity in Education

<table>
<thead>
<tr>
<th>Question</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q11: Creativity can be taught.</td>
<td>4%</td>
<td>0%</td>
<td>29%</td>
<td>33%</td>
<td>33%</td>
</tr>
<tr>
<td>Q12: Student creativity can be developed in the classroom.</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>29%</td>
<td>71%</td>
</tr>
<tr>
<td>Q13: All teachers are responsible for teaching and facilitating creativity.</td>
<td>0%</td>
<td>0%</td>
<td>13%</td>
<td>25%</td>
<td>63%</td>
</tr>
<tr>
<td>Q14: All teachers should have knowledge about creativity.</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>13%</td>
<td>88%</td>
</tr>
</tbody>
</table>

From the results in Question 11, 71% of participants strongly agree and 29% agree that student creativity can be developed in the classroom. A majority of the participants agreed that creativity is something that can be taught; however, one participant strongly disagreed. If it is a belief of a pre-service teacher that creativity cannot be taught, there is a problem at hand. This result is somewhat contradictory to the results from Question 12, which had positive results for the belief that creativity could be developed.

In order to understand ways in which creativity can be developed within the classroom and facilitated by an educator’s instruction, it is important to understand what people, both laypersons and teachers, identify as “being creative.” Without proper identification, and an openness to do so, creativity may go unrecognized within children working and learning within the classroom. Question 16 addresses the extent to which persons are creative. A majority (83%) of the participants believe that some children are more creative than others, whereas only 17% believe that all children are creative to the same extent. It is important to recognize that the nature of everyday creativity holds strong the belief that all persons are creative; however, it is possible that creativity does not, or cannot, emerge from the individual if this creativity is never encouraged, recognized or explored.
Through opportunities in the classroom to be creative, teachers can possibly "unearth" the hidden potential within students who may not seem as creative as others. From the study, half of the participants agreed that students have many opportunities in school to be creative, whereas half disagreed. It is important that teachers and students have opportunities to be creative in educational practices and experiences. Through an education in creative learning and teaching, as well as thinking and meaning making, teachers can begin to understand how to offer students a creative education.

**Constraints.** Many teachers and laypersons view constraints as something that either limits or assists creativity. Constraints impact creativity in many ways; they essentially provide guidelines, structure, learned knowledge along with free choice, openness, and ambiguity (Plucker & Dow, 2010). The role of constraints on creativity play a dangerous balancing act in that too much can kill the creative spirit, and too little can leave the individual with no boundaries and limitless ideas—that may or may not result in a creative product, solution, or idea.

The pre-service teachers in the study were asked, "Do you believe that constraints hinder creativity? Yes, no, or both" in which 58% agreed that yes, they do hinder creativity; however, 13% agreed that they do not, and 29% believed that constraints both hinder and promote creative development. This relates to the idea that creativity is sometimes regarded as a fuzzy construct (Fryer, 1996; Plucker & Dow, 2010).

There is also this idea associated with creativity that it is free—free from constraints, limits, and boundaries, composed of organic, imaginative thoughts that come from inside the individual. Creativity needs constraints as much as it needs openness; it is important that teachers become more aware of the necessity of guiding situations that could possibly influence creative
development. It is important to note that over a quarter of pre-service teachers in this study recognize this.

**Creativity Characteristics**

Participants were presented a checklist in Question 22 that gave example characteristics that may relate to creativity, and were asked to select characteristics that they believed best describe creativity. Selection was not limited to one answer, and participants were encouraged to select more than one. The list is comprised of a combination of characteristics that were used in previous studies (Fryer & Collings, 1991; Fryer, 1996). Table 4 shows the characteristics that pre-service teachers most identified with creativity.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Frequency, N=24</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>imagination</td>
<td>24</td>
<td>100%</td>
</tr>
<tr>
<td>tangible products</td>
<td>2</td>
<td>8%</td>
</tr>
<tr>
<td>original ideas</td>
<td>21</td>
<td>88%</td>
</tr>
<tr>
<td>mysterious processes</td>
<td>8</td>
<td>33%</td>
</tr>
<tr>
<td>discovery</td>
<td>18</td>
<td>75%</td>
</tr>
<tr>
<td>seeing connections</td>
<td>22</td>
<td>92%</td>
</tr>
<tr>
<td>convergent thinking</td>
<td>9</td>
<td>38%</td>
</tr>
<tr>
<td>divergent thinking</td>
<td>11</td>
<td>46%</td>
</tr>
<tr>
<td>invention</td>
<td>19</td>
<td>79%</td>
</tr>
<tr>
<td>unconscious activities</td>
<td>7</td>
<td>29%</td>
</tr>
<tr>
<td>valuable ideas</td>
<td>12</td>
<td>50%</td>
</tr>
<tr>
<td>aesthetic products</td>
<td>6</td>
<td>25%</td>
</tr>
<tr>
<td>innovation</td>
<td>19</td>
<td>79%</td>
</tr>
<tr>
<td>thinking processes</td>
<td>20</td>
<td>83%</td>
</tr>
<tr>
<td>awareness of beauty</td>
<td>13</td>
<td>54%</td>
</tr>
<tr>
<td>combining ideas</td>
<td>21</td>
<td>88%</td>
</tr>
<tr>
<td>inspiration</td>
<td>20</td>
<td>83%</td>
</tr>
<tr>
<td>other aspects</td>
<td>4</td>
<td>17%</td>
</tr>
</tbody>
</table>

*Note. Percentages may add up to more than 100% because participants were encouraged to check one or more boxes from the list of terms.*
Similar to previous results surveying teachers, imagination was the most popular way of defining creativity (Diakidoy & Kanari, 1999; Fryer, 1996; Fryer & Collings, 1991). Also, high percentages were seeing connections (92%), original ideas (88%), combining ideas (88%), thinking processes (83%), inspiration (83%), invention (79%), innovation (79%), and discovery (75%). A majority of participants did not select products, with tangible or aesthetic, as characteristics of creativity, nor did they identify processes involving the unconscious or mysterious with creativity.

Discussion

Definitions of Creativity

The categories that emerged from Question 1 met my expectations, as I had anticipated the participants associating creativity with one of the three main components of creativity: originality, problem solving, and self-expression. However, I think it is important to recognize associations with creativity definitions and development that surprised my initial expectations for the pre-service teachers.

Individuality. First, no one person mentioned creativity in relation to individuality, which was a category in Lemons’ (2010) study. This is interesting because with creativity, persons can view creativity through one, or more, of the four: person, process, product, or place. The participants identified the process of creating to be most important (20, 88%), recognizing creativity less with the individual’s personality, the product created, and the place of creation. It is possible that respondents found this aspect of creativity to be most important because they identified themselves as artists, or individuals studying within the arts and humanities. It is important to note that all components of creativity are important and completely necessary (Runco, 2007a).
Intelligence. Also interesting was a lack of association with creativity to intelligence. When asked, “Do you think it is possible for a very intelligent person not to be creative,” the majority of participants (21, 88%) answered yes, that it was possible for intelligent persons not to be creative. Diakidoy and Kanari (1999) found that 81.6% of their participants agreed with the same question, which reinstates a belief that in order to be creative, one does not necessarily need to be identified as “intelligent.”

Like creativity, intelligence means different things to different people. Runco (2007a) found that “creative potential and intelligence may not be entirely independent,” and that there is a threshold of “traditional” intelligence that is necessary for creative achievement (p. 6). Fryer (1996) found that a majority of the participants discussed levels of intelligence in relation to creativity, and that both more and less intelligent pupils could produce creative work; however, it “tended to be the more intelligent ones who knew what it was that made the work creative” (p. 36).

Artistic creativity. The group of pre-service teachers self-identified themselves as being members of either the fine arts (20) or humanities (4) degree programs at the University of Georgia; all of the participants were enrolled in an art education course at the time of participation in the questionnaire. It was a surprise to me to find that the participants did not define creativity as being related to or associated with the arts.

Art is so commonly associated with creativity, as creativity is so commonly associated with the arts; it is a common misconception of laypersons that creativity is only found within the arts; however, with these pre-service teachers training to be educators, no person defined creativity as being related to or synonymous with any art medium. A few respondents mentioned
production of something visual to express creativity, however, they did not specify an artistic production.

It is important to note, however, that in Question 10, over half of the participants (13, 54%) claimed that they had a greater opportunity within the art studio, visual art courses, and artmaking in their own time to be creative. Another common response by participants (4, 17%) was that creative writing and journaling provided a great opportunity to be creative, which may also be categorized within the fine arts area of study. So, although the participants find art to supply themselves with opportunities to be creative, they do not define creativity as being within the arts, rather a component of everyday life.

Imagination. From the results in Question 1, it is clear that participants saw a connection between creativity, originality, and the imagination. It is an important component of creativity, and it is my belief that imagination can be found within all components of creativity, including the person, product, process, or place. John Dewey (2005) defines imagination as “a way of seeing and feeling things as they compose an integral whole... when old and familiar things are made new in experience” (p. 278).

Imagination is commonly associated with creativity, observation, and thinking processes. Root-Bernstein and Root-Bernstein (1999) state that “What we can observe, we can imagine; what we imagine, we image” (p. 57). This gives insight into the ability for imagination to transcend beyond thought and into visual imaging, expression, and creation.

It is important to note that the participants believe creativity to come from within the person through the imagination, rather than more experiential processes such as life experiences, early upbringing, and learned knowledge. In the study by Fryer (1996), 88.7% of teachers believed imagination to be the most significant identifier of creativity. The teachers had a more
modern view of creativity, coming less from a mysterious or unconscious part of the person, rather from an awake and aware respondent to the creative process.

**Divergent thinking.** Diakidoy and Kanari (1999) found that within their study, 89.8% of participants consider divergent thinking necessary for creativity. In the present study, less than half of participants identified divergent thinking as a characteristic of creativity. This result is similar to the study by Fryer (1996) in which only half of the participants saw creativity as related to divergent thinking. Divergent thinking is used when persons are faced with open-ended questions, prompting the individual to imagine, or conceive, of many possible answers to a question; this is in contrast with convergent thinking, which entails one correct answer or response to a question (Runco, 2007a).

Although divergent thinking is not synonymous with the creative thinking process, it is key to solving ambiguous problems or open-ended scenarios. Perhaps there is a lack of understanding for divergent thinking and multiple thinking processes amongst the participants, explaining why so few chose divergent thinking to be associated with creativity. It is clear that a majority of the pre-service teachers view thinking processes to be important characteristics of creativity (20, 83%), however, it may be unclear the specific types of thinking processes necessary for creativity.

Overall, creative thinking is present and constantly utilized in educational settings, which requires that teachers be aware of different approaches to processing information and understanding content within a lesson. Teachers will have a more challenging time identifying and valuing creative problem solving if they are not open to nontraditional ways of problem finding and problem solving. There are potential challenges with this, specifically with the goal
of nurturing creativity within the classroom. These challenges could lead to difficulty tolerating the creative personality, as well as a priority for convergent thinking over divergent thinking.

**Teaching and Learning**

Many studies ask the question “Whose job is it to teach creativity?” which inquires upon responsibility associated with teaching and providing opportunity for creative development; it also gives insight into attitudes regarding creativity (Aljughaiman & Mowrer-Reynolds, 2005). It is important to understand what teachers think about creativity, its role in the classroom, its place in everyday learning and teaching, and whose role it is in the school to ensure that creativity is being facilitated and manifested.

In Questions 11-14, the respondents were asked to answer questions regarding the ability for creativity to be taught, developed, or learned, which emphasized the role of the teacher in facilitating creativity in the classroom. Based on the responses, it was agreed that creativity could be developed in the classroom and that all teachers should have knowledge about creativity. However, the answers to the question of whether or not creativity can be taught and who is responsible for teaching for creativity were divided within the participating pre-service teachers.

If all participants agreed that it could be developed, but not all agree that it can be taught, how are students to gain creative knowledge or opportunities to be creative? How are they to teach for creativity, or through creativity, if it cannot be taught—only developed? There may be a possible confusion between the concepts of developing a trait versus learning or teaching a trait, and the definitions associated with each of these terms. Development refers to the ability to generate understanding, increase ability and improve; whereas learning refers to studying and acquiring knowledge through experience. These are things to consider in further research, and it
is important to look at past studies to understand what this could imply in reference to the psychology associated with creativity and education.

Fryer (1996) found that all but one teacher of the 1028 sampled in the study believed that creativity has a role in teaching and learning. Seventeen percent believe it has a very important role, 9% believed it was not especially important, and a majority of the teachers (758, 74%) believed that it was somewhere in between the two extremes.

Fryer’s (1996) results relate to the results from the present study in that many participants who are in education, whether teaching and learning how to teach, have positive views of creativity but are unsure how important it is in education—that is to say, the actual lesson planning and teaching within the classroom. Creativity is still an idea that holds many ambiguous meanings, and using it in the classroom and learning is complicated for many.

There are many misconceptions about creativity and the nature of what it actually is, what it looks like, who has it, what processes it requires, and what environments encourage it. Creativity is misunderstood in most contexts of the education world, as some people associate creativity in education to be rooted in giftedness and lack in discipline (NACCCE, p. 10). Creativity is not for the few, it is not for the gifted, it is not reserved for special individuals with high IQs, and it does not exist solely in the arts. Everyday creativity supports that creativity can be developed in individuals, and it is supported that creativity can be developed in the classroom (Skiba, et al., 2010).

**Conclusion**

A noteworthy possibility may be necessary to discuss in relation to an education in the arts versus an education in general curriculum. The participants involved with this study intend to teach within some form of education after their pre-service courses are completed. This
includes both graduate and undergraduate participants. A majority of the participants were enrolled in a fine arts degree (20) and were training in the same teacher preparation program. This characteristic of the participants had a large impact on the study, for it gave the participants a well-established understanding of the role of the arts in education.

From the studies reviewed in Chapters 2 and 4, one study found that general classroom teachers largely associate creativity with the arts classroom, curriculum, and the arts teacher (Aljughaiman & Mowrer-Reynolds, 2005; Fryer & Collings, 1991). This is important because the participants in this study, with their involvement within an arts education program, seem to hold a broader view of creativity in comparison to the participants in other studies who were not within an arts education program (Aljughaiman & Mowrer-Reynolds, 2005; Fryer & Collings, 1991). They also share results from past studies that express a similarity with teacher and pre-service teacher populations that are not focused in the arts which support creativity in teaching and learning (Diakidoy & Kanari, 1999; Pachucki, et al., 2010).

The pre-service teachers believe that creativity can be developed, taught, and encouraged within the classroom, acknowledging that imagination, creative thinking, posing questions, seeing connections, and having original and novel thoughts is key for creative development. They acknowledge that children manifest their creativity in a variety of ways, and believe that the process of creating is most important.

They also believe that all teachers should have knowledge about creativity, and over half of the participants believe that all teachers are responsible for teaching and facilitating creativity. The majority of participants believe that creativity can be taught, with only one participant completely disagreeing. These results are not necessarily novel or surprising, considering the artistic backgrounds of the participants; it is true that creativity and the arts marry strongly,
however, everyday creativity expresses the everyday nature of creativity, which includes, but
does not limit creative activity or products.

This poses a question: do art teachers trust general classroom teachers to provide students
with a creative education? Do they trust that all general classroom teachers can handle creative
students, creative lesson planning, and creative teaching methods—components that exist so
commonly in an arts classroom? The results do not necessarily indicate that they do not trust
general classroom teachers, however, it is important to call attention to the possibility for further
research.

If this were to be the case, that general classroom teachers believe that creativity is better
suited for the arts classroom and arts teachers believe that they have a stronger capability to teach
for creativity, a major problem would arise. So where would we begin to stop this
miscommunication of role-play in creative education? The answer, simply, is teacher preparation
programs. It is key that teacher preparation programs address creativity as an essential,
multifaceted component of everyday living, working, and being. The theory of everyday
creativity provides so many approachable dimensions to the complexity of creativity, many of
which only contribute positively to the education of children and teachers.

In the related research, Fryer and Collings (1991) found that 89.6% of teachers agree that
creativity can be developed. Aljughaiman and Mowrer-Reynolds (2005) found that 81% of
teachers surveyed agree that it can be developed in the regular classroom; however, only 33%
agreed that it was the regular classroom teachers’ responsibility to develop creativity in students.
This inconsistency with beliefs is puzzling. Why is creativity important if teachers do not feel
that they should be responsible for teaching it?
It seems to me that the answer is simple, not as a solution to the creativity problem, but to creating a chance for creativity in pre-service teacher education. If teachers can learn how to be, teach, live, and learn in creative ways through the vast potential that lies within creativity as a component of living, they can use it within their teaching. They can teach with creativity, and lead as examples for students and other teachers.

They can communicate the possibilities that lie within asking questions, wondering and observing, taking risks and making mistakes, and presenting new information through ways that encourage openness and use of imagination. New ways of teaching and learning need to be offered to teachers who will eventually go into their own classrooms and begin a community of learning with their students. To provide this opportunity could potentially change education within one classroom to another, from the world of research and explicit beliefs to the daily living spaces of laypersons that hold beliefs, which guide how they live and view the world.
CHAPTER 5

Implications and Recommendations

Creativity is a part of who we are, how we learn, how we view the world, and how we respond to life challenges. We use our creativity daily as we create meaning and express our ideas, thoughts, and feelings through original modes of creating and communicating. Because creativity is fundamentally individualistic, it requires unconventional thinking and usually results in unpredictable outcomes. This is what supplies society with diversity, with inventions, with breakthroughs in technology and product design, with everyday solutions to everyday problems that may only require a fresh perspective.

The truth is, creativity is an intrinsic part of every individual as they live within their everyday lives. It is a core component of living well, of creating solutions to problems that may seem practical, of being human. David Schulberg (2007) argued that, “living well and creating beauty inhabit and emerge from activities that are literally mundane” (p. 56). He asks:

Is it possible to find some of the most beautiful and even exalted aspects of human life in ordinary activities? Is the seemingly simple conduct of daily life somehow more complex, deeper, richer in its implications, than it seems? (p. 56)

These questions are answered with an enthusiastic “yes!” through the theory of everyday creativity, and based on my understanding of the power of creative potential. Living well means living a healthy, productive, and meaningful life that takes a new form every day. Through the presentation of problems, persons adjust their lives according to how they want to live, solving problems and creating opportunities for themselves—specifically for the betterment of one’s survival. We better our lives when we want something more pleasing, more stimulating, more experiential.
In the last pages of *Everyday Creativity and New Views of Human Nature*, Ruth Richards addresses twelve valuable characteristics of everyday creativity that highlight important considerations for living creatively. She introduces these twelve as important benefits of living more creatively, not reflecting, she assures, “a 12-step program for recovery from lowered creativity!” (2007, p. 289). However, I can’t imagine a creativity recovery-plan being anything but constructive.

The twelve characteristics create a clear view of what living creatively can mean for an individual. Prefacing the chart with “When I’m Creative I Am,” Richards creates an opportunity for inner dialogue between the reader and the text and the concepts that are introduced through the selected features of each characteristic. The characteristics include a variety of loaded descriptors, including: dynamic, conscious, healthy, nondefensive, open, integrating, observing activity, caring, collaborative, androgynous, developing, and brave.

These characteristics are all associated with everyday creativity; however, some are universally linked to creativity, while some are more specific and depend on the individual experience and interaction with the world. They provide positive benefits and guiding values, all transformative in potential, for individuals and groups. The benefits are vast, and Richards (2007) stated that potential benefits may include:

- new purpose, connection, richness of experience, comfort with self and others, personal development, deeper knowing and life meaning, and enhanced well-being—both physically and psychologically. We might even come to see self and life in a whole new way. (p. 291)
These benefits are grand, promising that life could become so much more for the individual experiencing life through a more creative way, one that includes everyday acknowledgement of the self as creative, as able, and as deserving.

From the results in the present study, it is clear that creativity is believed to be valuable and important in teaching and learning, and that creativity is something that all persons have the capability to utilize within their lives. It requires imagination, originality, and purposefulness, and it highly depends on encouragement and opportunities for expression. The implicit beliefs of pre-service teachers give insight into beliefs acquired from life experiences both as students and as teachers in training. There is great potential in knowing these beliefs and understanding where they originate; this will provide researchers and teacher educators with a basic understanding to then create plans for learning about creativity and teaching it within a classroom setting.

**Creativity and Education**

In response to Sculdenberg's (2007) questions regarding beauty within the ordinary, I would like to propose a suggestion, as it relates to the current research study. I find that there is great value and complexity within the profession of teaching. Teaching is a habitual, repetitive, ordinary, innovative, and novel profession. It requires deep commitment, clear communication, and intrinsic motivation by individuals who work with students on a daily basis. It encourages growth and development in academics, the arts, and extra-curricular activities, and is deeply personal and relational.

Teaching is a daily activity for many individuals. With this, I argue that it is possible to find some of the most beautiful aspects of human life in ordinary activities, such as teaching; teaching gives an individual the opportunity to be creative. The act of teaching can be rich,
complex, innovative, and full of risks. Teachers have the ability to learn about themselves, about their students, and, in return, about humanity through the daily processes of teaching.

Teachers create meaning and significance within their daily lives as they teach in creative ways as they live in the community of the classroom alongside their students and coworkers. This creation of meaning and significance, of addressing educational aims and utilizing skills and personal intuition to answer some of the most problematic issues, is extremely creative; however, not all teachers within their teaching practices are creative. I aim to express the idea that teaching for creativity, with creativity, through creativity, and about creativity are all independent things that should be incorporated into education through the actions of teachers. Teachers are, thus, utilizing forms of everyday creativity to solve the unpredictable and countless challenges within the classroom when they are incorporating creativity within their teaching and learning techniques.

Teacher Preparation Programs

Many of the studies from Chapter 2 offer concluding remarks for the future of creativity in education with focus on a consideration for improvement of teacher preparation programs. It is a simple idea: what teachers learn within their teacher preparation programs is essentially a good indication of what they will take with them into the classroom. What information they gather, they will use; whatever they feel most comfortable doing, they will do; and whatever beliefs they create, they will ensure that they are not altered.

This does not mean to say that teachers do not change, however it simply implies that teacher preparation programs have a tremendous influence on pre-service teachers before they enter into classrooms of their own. The participants within the current study share what is currently being learned, absorbed, understood, and taken into consideration within their
experience as pre-service teachers in a teacher preparation program at the University of Georgia. They believe that students can be creative, that teachers can develop this creativity in students, and that they themselves view creativity as something accessible and part of their lives.

These beliefs show that there is a level of confidence, as well as a level of misunderstanding, based on the ideas and concepts associated with creativity. It should never occur that a teacher should say that they are not the creative type; this idea should be addressed in teacher preparation programs in order to give individuals a level of belief in themselves as capable persons fit for a profession full of ambiguity, quick judgments, and personal involvement. I believe that if pre-service teachers learn to see themselves as creative, to believe that they can create on a daily basis opportunities for themselves and students to be creative, education will improve and students will become more engaged in learning.

Within the studies, authors discuss the role of pre-service teacher programs. Aljughaiman and Mowrer-Reynolds (2005) discuss concern for the general classroom teachers’ ability to identify creative students and teach with knowledge for creativity, and intentions to develop creativity within students. They claim that “pre-service training programs do little to broaden knowledge of the phenomenon of creativity” (p. 16) and that teachers will feel unqualified to teach for/with creativity in the classroom if they do not know how to “define creativity, recognize creativity, appreciate creative behaviors” (p. 16) or prioritize time for creative learning in a high-stakes standardized system.

It is clear that if this is true, we must take steps towards creating better teacher preparation programs that can ensure an education rich in creative learning, thinking, and teaching skills. Kampylis, et al. (2009) state that further research is needed to better understand and examine if teacher preparation programs are effective in the promotion of creativity within
classroom teaching practices. They believe that “specific courses that focus on fostering creative thinking together with critical, caring and reflective thinking are in need of initial and continuous teachers’ training” (p. 26).

This is indeed necessary. Our creativity allows us to break free from what we know and explore what is ambiguous; it allows for expression, actualization, and a deep awareness of personal capabilities that are not limited to daily thinking or problem-solving activities. Fryer (1996) agrees that there is a need for pre-service teachers to be “more informed about creativity in order to clear up misconceptions about notions of giftedness and the relationship between creativity and intelligence” (p. 123). This also relates to the association of creativity to the arts, which is no doubt strong, however it does not and should not limit creative endeavors or an understanding of what creativity actually is.

Morais and Azevedo (2011) suggest that teacher training aimed at improving an overall awareness and knowledge of creativity should be done on a practical, not theoretical basis, taking into account real-life teaching practices. They offer that it could be done through “class observations, planning and assessment and also through the development of structurally creative tasks” (p. 337) that are appropriate to their classroom circumstances.

There is much to be done to solve the creativity problem, to change misconceptions of creativity, whether they exist in the form of products or processes; it is important, too, that we come to a better understanding of who is creative and what that may or may not look like. Teaching is an organic, personal, and important profession, requiring and demanding so much from an individual; however, despite the challenges that may come with different policies, it is important to reserve priority for teaching for creativity. Through a creative education, students
may come to better know themselves, their potential, and their surrounding environments, gaining confidence to risk being wrong and create new possibilities for themselves.

**Recommendations**

There are many teaching strategies that researchers have found effective for teaching for creativity, with creativity, and through creativity within the classroom. Many researchers emphasize that creativity can be developed within the classroom, and that clarity, then, must be established to define what constitutes creativity skills, creative behavior and teaching methods (Skiba, et al., 2010). A useful method for introducing creativity into teaching and learning methods is through the theory of everyday creativity, supporting the individual potential of every person in their experiences within education and living to be creative and create meaningful things or ideas.

Skiba, et al. (2010) found that it is necessary to introduce valid classroom management and teaching techniques, as well as assessment and identification methods, to ensure that creative potential is identified and encouraged by educators. They emphasize that these should be agreed-upon by both researchers and practitioners, stating that, “views of creativity need to be merged and refocused” (p. 266) and teachers need an applicable definition of creativity, they need to be taught how to use creativity within the classroom, and they need to be given examples on how it should and can be assessed.

Teachers should also become more aware of how creativity is an important skill within an emerging global economy, as well as the universal possibility for creativity in any context, subject matter, or life situation, no matter the age or ability level. This awareness is not reserved for one specific teacher; it should be among all teachers hoping to create better opportunities for students as they grow and learn in educational settings.
Within art education, teachers must be aware of the changing demands for educational curriculum and standards, as well as the opportunity for the arts to cross-curricular lines and become engrossed with other subjects. Creativity does not simply unfold in the arts classroom, therefore as an art educator, one "should not stand in the wings, but should be aware of political, economic, and socio-cultural agendas to reconceptualize creative practice and concurrently satisfy educational goals" (Zimmerman, 2010, p. 90).

Jeffrey and Craft (2001) suggest that one of the most important concerns for the current global economy is the competitiveness within markets, which has caused nation-states to raise standards within education. It is believed that educational systems should be more effective in contributing to a greater degree of success for national economies, which has had the effect of universalizing creativity. Through a more purposeful education in preparation for success in the working world, students will have a better chance at success within their work. If one learns to be confident and creative in classrooms and schools, one will feel comfortable being creative in the workplace.

Creativity is becoming more and more important within the world market, as businesses strive to create new, innovative ideas and products that can beat out competitors and gain popularity within the consumer population. Not only is it imperative that students have an understanding for creative problem solving and thinking skills, one needs to be aware of social responsibility as they enter into the world as adults. There is a high social responsibility within the working world, no matter the area of work. In order to succeed, the individual must be able to relate to, respect, and listen to others if they plan to gain success within their careers. Students need to learn how to live and work within the demands of the twenty-first century, and it has
been argued that creativity is key to this survival (Jeffrey & Craft, 2001; NACCCE, 1999; PCAH, 2012).

Richard's Seven Suggestions for Creative Learning

In her 2010 article “Everyday Creativity in the Classroom: A Trip through Time with Seven Suggestions,” Richards gave examples of the possibilities associated with the theory of everyday creativity. She created an outline for the seven suggested areas of further value and development, which include considerations of the individual in relation to self and to the world.

Table 5 shows that the suggested areas include space, both in and outside of ourselves to ensure that we create meaning and purpose where we live and create; bravery, within oneself and within the world to ensure that we are aware and that we are able to take risks, even when things feel uncomfortable; recognizing creativity in ourselves and others, cherishing and embracing it while acknowledging the joy of a creative life; and creating relationships based on creativity through valuing and encouraging oneself and others.

<table>
<thead>
<tr>
<th>Table 5</th>
<th>Seven suggestions for creative learning (Richards, 2010, p. 212)</th>
</tr>
</thead>
<tbody>
<tr>
<td>We need greater valuing and conscious development of our:</td>
<td></td>
</tr>
<tr>
<td>Outer space</td>
<td>Creating a rich environment, safe, and accepting of divergence, errors, novelty, surprise; making room for innovation</td>
</tr>
<tr>
<td>Inner space</td>
<td>Valuing our fullest experience and ways of knowing including unconscious modes and the curious revelations they may force upon us, even when we do not want them</td>
</tr>
<tr>
<td>Bravery—within oneself</td>
<td>Taking creative risks, conscious of inner pressures and fears, and doing what is needed even when it is uncomfortable</td>
</tr>
<tr>
<td>Bravery—in the world</td>
<td>Awareness of social constraints and pressures, yet able to follow what is creatively necessary to produce and share one’s creative activity</td>
</tr>
<tr>
<td>Cherishing of creativity</td>
<td>Recognizing, valuing, and taking care not to devalue creative qualities in self and others including multiple modes of life experience and knowing</td>
</tr>
<tr>
<td>Ability to relate creatively to each other</td>
<td>Practicing and valuing interpersonal creativity including the revelations and mutual growth that can result</td>
</tr>
<tr>
<td>Knowing the joy</td>
<td>Embracing the glowing moments that can result while turning creative talents toward personal growth and social good</td>
</tr>
</tbody>
</table>
These suggestions are great steps towards a more creative life. They emphasize the aspects of life that should encourage and value creativity, including personal, communal, and worldly spaces that should know and cherish creative qualities in mankind. Richards presents suggestions that have the potential to change learning, teaching, and education; these suggestions may be essential if we are to introduce more manageable and meaningful means of creativity within the classroom, which would naturally include the theory of everyday creativity.

**Sternberg’s Tips for Developing Creativity in Students**

Sternberg is known for defining creativity as a habit (2007; 2010) that schools sometimes view as an undesirable characteristic in the classroom; in other words, they view creativity as a “bad” habit, and therefore it is at times discouraged. As has been discussed, teachers like creativity; it is an educational aim that is required by administrators and curriculum plans, however, not always instituted. Ask teachers if they believe that creativity is important and they will say yes; ask them if they know what it is, what it looks like, who has it, or what benefits come from a creative education, and they may be a little hesitant to respond. Why is that?

It can be stated based on studies (Beghetto & Kaufman, 2010; Fryer, 1996; Runco & Bahleda, 1986; Runco & Johnson, 1993; Skiba, et al. 2010) that implicit definitions of creativity varies in laypersons, and that there is no one commonly agreed upon definition of what creativity is. In the present study, it can be assumed that pre-service teachers hold beliefs of creativity based on their understanding of its role within the classroom, as well as daily life. The merit in this is that creativity means different things to different persons, affecting how one may assess and value creativity in others and within themselves.

Sternberg (2010) believes that in order to teach for creativity, to encourage it within persons, there must be an opportunity to engage, external encouragement, and an award for
creative behavior or production. In order to develop creativity within students, he suggests that teachers encourage students to do six things within the classroom. Teachers must encourage children to: 1. Create, 2. Invent, 3. Discover, 4. Imagine if..., 5. Suppose that..., and 6. Predict (p. 402). This is not enough on its own, for teachers must understand the significance within their own modeling of creativity and learning how to recognize, support, and reward it when it is displayed.

He offers practical ways that teachers could encourage these six things, offering suggestions that include different educational domains, such as literature, French, physics, political science, music, and linguistics. Sternberg draws attention to other ways in which teachers may help students develop creativity, through thinking skills and problem solving, as well as the act of redefining problems and questioning assumptions. Other ways that students can learn to think more creatively, or “outside of the box,” include sensible risk-taking, tolerating ambiguous ideas, and idea generation, which all have the potential to increase self-efficacy. This can teach students that they have the ability to make a difference through their own actions and ideas, something that they can be proud of and use throughout their lives.

It is essential that teachers allow time for the creative process to develop and for students to become comfortable thinking in new and abstract ways. Our society, as Sternberg points out, is in a hurry; we do everything fast, and we want everything right now. However, that is not how creativity works, and it is not how education—one that is authentic and meant for life-long learning—should be approached. Students need time to think, to make mistakes, and to consider options that may or may not be successful approaches to solving problems.

Sternberg (2010) concludes his argument by stating:
Creativity is very much a habit and an attitude toward life as it is a matter of ability. Creativity is often obvious in young students, but it may be harder to find in older students and adults… Yet, anyone can decide to adopt the creativity habit. Start right now! (p. 412)

This “call to creativity” has strong potential to encourage creativity in persons of all ages, in all circumstances, and it should be adopted within educational classrooms. With a strong support for everyday creativity and developing creativity in all persons, it could begin a shift in how we think, teach, and learn.

**Possibility Thinking in the Classroom**

Possibility thinking is a major characteristic of creativity that has been researched within classrooms throughout the United Kingdom, and is defined by Jeffrey (2006) as encompassing an attitude that “refuses to be stumped by circumstances, but uses imagination, with intention, to find a way around a problem. It involves the posing of questions, whether or not these are actually formulated or voiced” (p. 407). In educational settings, it is aligned with activity and action, involving play, the posing of questions, problem finding, being imaginative, self-determination, risk-taking, and making connections.

The strength that lies within possibility thinking is that it is a creative thinking and learning technique that is both approachable and successful within the classroom (Cremin, et al., 2006; Jeffrey, 2006; Jeffrey & Craft, 2004). It encourages learners to take control and act innovatively due to its strong emphasis in problem solving, imagining alternative solutions to problems, and posing questions that aim at problem definition. This type of thinking is key in education; it encourages divergent thinking along with convergent thinking: once a circumstance
has been observed, analyzed, and investigated, a solution can be imagined and plans for actual solving of the problem can be executed.

Jeffrey (2006) studied creative teaching and learning in nine European countries through his Creative Learning and Student Perspectives (CLASP) research project; he and other researchers shared mutual values of creative learning and teaching through experiential circumstances. They experienced a great amount of possibility thinking within the classroom; this included engagement with problems, open adventures, open tasks, solution-seeking activities, reflection, risk-taking, co-participation, comparisons, experimenting, and developing new knowledge.

With strong focus on the role of teachers, the researchers were able to observe creative teaching techniques that both modeled and encouraged creativity development. The teachers valued creativity within the classroom as they “were aware of their influences as stimulators for creative learning… [and] drew out students’ ideas and celebrated them” (p. 406). They took the role of facilitator seriously, investing time in discussion, critique, and understanding of concepts, experimenting with ideas, imagining, and recognizing individual creativity in their students.

The teachers “modeled creative learning by acting spontaneously and changing plans as classroom circumstances altered” (p. 406), and exhibited joy for teaching and learning alongside the children. The students were encouraged to bring their own experiences and imagination to the learning situations as the teachers supported multiple ways of thinking within the learning process.

The teachers in the study by Jeffrey and Craft (2004) implemented teaching for creativity principles that were laid out by the NACCCE (1999) report. They encouraged “young people to believe in their creative identity… by firstly making teaching and learning relevant and
encouraging ownership of learning" (p. 81) by the students, which aimed at encouraging innovative contributions. The teachers believed it important to identify individual creative abilities and foster creativity by providing hands-on opportunities to be creative in the classroom.

An important outcome of the NACCCE (1999) report and the study by Jeffrey and Craft (2004) is the idea that teaching for creativity is not something that can be made routine through the explicit planning for creative teaching and creative learning. Creativity within the classroom is not a header for a lesson plan or a simple standard to be met; it is a mindset, a way of living and thinking, a way of approaching life and learning that exists based on a belief system. It has strong potential, when applied to education authentically, and has the potential to engage learners in constructive, challenging, and innovative perspectives through problem finding, problem solving, and divergent thinking.

Within possibility thinking are multiple characteristics that contribute to and support the place of everyday creativity within the classroom. Cremin, et al. (2006) state that possibility thinking is implicit in the learning processes of students, as it is embodied within the posing of questions, problem finding, and problem solving; it is at the core of learning as it poses “the question ‘what if?’ and… it involves the shift from ‘what is this and what does it do?’ to ‘what can I do with this?’” (p. 109).

Cremin, et al. (2006) found that key pedagogical practices that fostered possibility thinking included standing back, identifying learner agency, and creating time and space for learners to experience, think, and imagine. This type of learning and teaching supports meaningful engagement within education, focused on authentic learning experiences and life-long development. Possibility thinking allows the “learners’ work to become the learners’ play” (p. 116), and for students to find joy in the engagement of learning, which in turn creates
opportunities for teachers to explore the possibilities of autonomy and choice within the classroom.

**Conclusion**

Because of the potential life-changing impact that teachers have on children, it should be a priority to educate teachers about creativity. Pre-service teachers need to be introduced to the benefits of creativity before they enter the classroom, for their own sake as future educators and for the sake of their future students. Teachers have within themselves such strong facets of creativity; the profession of teaching is built upon the idea of creating new and effective ways to learn, communicate, teach, and reflect, and teachers should be aware of ways to teach creatively.

Bird, et. al. (1993) found that pre-service teachers' theories are essentially a form of familiar equipment and are ready to respond to what they see and hear within the classroom. If they become aware of the benefits, the accessibility, and the relevancy of creativity in the lives of all persons, teachers could begin to change education, infusing creativity into everyday lessons and teaching methods. This may ensure an appreciation for creativity, as well as an awareness of everyday and eminent forms that are multifaceted and innate in all persons.

It is true that creativity is complex and misunderstood; because it has so many characteristics, and because it takes the form of products, persons, processes, and places, it can become hard to distinguish, identify, and value. Despite the challenges, it is key to our future. Fryer (1996) concluded her Project 1000 study with this advice for future implications for creativity:

Children and young adults need a good range of problem solving, communication and practical skills and opportunities to try these out confidently... Learning activities which encourage them to imagine are essential, as are those in which they can get really
absorbed. Teachers who are really keen to develop creativity prefer to teach in a whole
variety of ways and value every child’s contribution. (p. 124)

Teachers can, and should, provide an opportunity for creative growth for students. They need
knowledge of creativity in relation to teaching, lesson planning, and curriculum development in
order to communicate the benefits and importance of creativity in the everyday. I find that what
lacks in classrooms and teacher preparation programs is an awareness and understanding of
creativity.

The theory of everyday creativity needs to expand deeper into the field of education, and
with this, into the classrooms and lessons taught by everyday persons. Educators change the lives
of the students they teach, and if they can learn more about the potential of a creative education,
students may gain a better understanding of their own creative potential. It is my goal to further
research creativity within the classroom as I myself leave the role of student and become a
teacher, teaching art and creativity.

The process of experiencing aesthetics, creativity, and learning changes persons;
experience as a mode of transformation is something that John Dewey believed could only
happen with conscious awareness. He stated in *Art As Experience* (2005):

In an experience, things and events belonging to the world, physical and social, are
transformed through the human context they enter, while the live creature is changed and
developed through its intercourse with things previously external to it. (p. 257)

We must, then, be consciously aware as educators in providing opportunities for children to
become “live creatures” who actively create and engage with educational lessons and
experiences so that they may experience a transformation within and outside of the classroom.
REFERENCES


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APPENDIX A:

CREATIVITY QUESTIONNAIRE
○ Creativity is innate; it cannot be developed.
Which do you think is more important?
- the process of creating
- the product that results from creating
- the person who creates
- the environmental factors that affect the process, product, and person

Mental illness, drug abuse, and other disorders and negative behaviors may characterize creative persons or processes. Creativity, is then, related to mental health in what way?
- creativity encourages positive and stable mental health
- creativity encourages negative and unstable mental health
- creativity may affect mental health in both positive and negative ways
- creativity is not a factor in mental health or wellness

The extent to which people manifest their creativity depends on:
- the environment
- their knowledge
- the domain
- their personality
- the task
- their intelligence

How creative do you think you are?
1 2 3 4 5
Not at all Extremely

Do you have many opportunities to be original? When, where, and how?

Creativity in Education

Creativity can be taught.
1 2 3 4 5
Strongly Disagree Strongly Agree
Student creativity can be developed in the classroom.

1 2 3 4 5
Strongly Disagree       Strongly Agree

All teachers are responsible for teaching and facilitating creativity.

1 2 3 4 5
Strongly Disagree       Strongly Agree

All teachers should have knowledge about creativity.

1 2 3 4 5
Strongly Disagree       Strongly Agree

Creative children manifest their creativity in a variety of domains and in a variety of ways.

1 2 3 4 5
Strongly Disagree       Strongly Agree

Please choose which answer you believe to be true.

• All children are creative to the same extent
• Some children are more creative than others

Students have many opportunities in school to express creativity.  Agree ᴥ

Is creative thinking different from the thinking required to solve problems in school?

Yes ᴥ

Is creative thinking different from the thinking required to solve problems in daily life?

Yes ᴥ

Do you think it is possible for a very intelligent person not to be creative?  Yes ᴥ

Which characteristic is most helpful for developing creativity?

• Building pupils' confidence
• Encouraging pupils to ask questions
• A creative teacher
• Some free choice at home
Creativity Questionnaire

- Involved and supportive family
- Some choice of learning methods
- Good health

Please check the boxes beside the characteristics that you believe best describe creativity. You may check one or more items.
- imagination
- tangible products
- original ideas
- mysterious processes
- discovery
- seeing connections
- convergent thinking
- divergent thinking
- invention
- unconscious activities
- valuable ideas
- aesthetic products
- innovation
- thinking processes
- awareness of beauty
- combining ideas
- inspiration
- other aspects

Do you believe that constraints hinder creativity?
- Yes
- No
- Both

Personal Information

Race/Ethnicity
- White
- African American
- Asian American
- Biracial
- Hispanic
- Other
Gender
- Male
- Female
- N/A

Age
- under 18
- 18-25
- 26-33
- 34+

Class Cohort
- Freshman
- Sophomore
- Junior
- Senior
- Graduate school

Area of Study
- social sciences
- sciences
- humanities
- mathematics
- fine arts
- other

Self-perception, in relation to creativity
- creative
- somewhat creative
- not creative
APPENDIX B:

IRB APPROVAL FORM
APPROVAL FORM

Date Proposal Received: 2012-03-05
Project Number: 2012-10742-0

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Address</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>

Title of Study: Survey of Pre-Service Teachers' Perceptions of Creativity

45 CFR 46 Category: Administrative 2
Parameters: None
Approved: 2012-03-30 Begins: 2012-03-30 Exploration date: 2017-03-29
NOTE: Any research conducted before the approval date or after the end date collection date shown above is not covered by IRRM approval, and cannot be retroactively approved.

Number Assigned by Sponsored Program:
Funding Agency:

Please be aware that it is your responsibility to inform the IRB:
... of any adverse events or unanticipated risks to the subjects or others within 24 to 72 hours;
... of any significant changes or additions to your study and obtain approval of them before they are put into effect;
... that you need to extend the approval period beyond the expiration date shown above;
... that you have completed your data collection as approved, within the approval period shown above, so that your file may be closed.

For additional information regarding your responsibilities as an investigator refer to the IRBM Guidelines. Use the attached Researcher Request Form for requesting renewals, changes, or closures. Keep this original approval form for your records.

[Signature]
Chairperson or Designee,
Institutional Review Board