TOWARDS A PARADIGM OF CREATIVE PEDAGOGY: A STUDY OF TEACHER TRAINEES AT THE UNIVERSITY OF GHANA

BY

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DEDICATION

I dedicate this work to Ayi Kwei Armah, for the mentorship and inspiration to work towards the future of Africa (Ebibirman).

I also dedicate it to the memory of my dear late mother and first teacher: Esi Pinaman Owusu.

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ABSTRACT

This is an exploratory qualitative study of 17 in-service teacher trainees undertaking a Master of Arts Education (Sandwich) programme at the University of Ghana, aimed at designing a conceptual paradigm for creative pedagogy within the context of study. The phenomenographic method was used in the collection and analysis of data by identifying categories of description pertaining to the understanding and experiences of the phenomenon of creative pedagogy by participants. Among the key findings of the study are that; factors such as the content of the study programme, mode of delivery by teacher educators and influence of teacher educators heightened the perception of trainees of teaching as a creative practice; there were transformations in the learning experiences of both students and teachers as a result of creative and improved ways of teaching by trainees following their exposure and training on the MA Education programme; and that, participant teacher trainees were found to be intrinsically motivated as they teach creatively and for creativity. In addition, the study revealed that creative pedagogical methods and strategies cut across subject domains and levels of the school system and when these methods are enabled by favourable environments, they lead to creative teaching and learning outcomes. Based on the empirical evidence from the study, the researcher designed a proposed four-component theoretical paradigm of creative pedagogy with an emphasis on the indispensability of training of teachers for creativity. It is recommended that the training and practice of creative pedagogy would be anchored on a socio-cultural ethos of creativity.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF ACRONYMS & ABBREVIATIONS

AUC	Africa Union Commission
BCC	Big 'C' Creativity
BECE	Basic Education Certificate Examinations
CeT	Creativity Enhancement Training
ECH	Ethics Committee for Humanities
ESL	English as a Second Language
GES	Ghana Education Service
GCN	Global Creativity Network
HoD	Head of Department
ICT	Information Communication Technology
ISSER	Institute of Statistical, Social and Economic Research
LCC	Little 'c' creativity
MA	Master of Arts
NaCCA	National Council for Curriculum and Assessment
NACCCE	National Advisory Committee on Creative and Cultural Education
NCA	National Creativity Award
NEA	National Education Assessment
OECD	The Organisation for Economic Cooperation and Development
RME	Religious and Moral Education
SACF	South African Creativity Foundation
TLMs	Teaching and Learning Materials
WAEC	West Africa Examinations Council
WASSCE	West African Senior Secondary Certificate Examinations
WEF	World Economic Forum
ZPD	Zone of Proximal Development

CHAPTER ONE
INTRODUCTION AND CONTEXT OF THE STUDY

1.1. Personal Statement of Interest

Since my adolescent years, I have been most passionate about writing and teaching. While it is easy to perceive writing (and the other forms of activities or hobbies that I usually engage in, such as dancing, singing, drawing, cooking, photography, carpentry and goldsmithing) as creative, it was not initially obvious to consider teaching as a form of artistic and creative expression. However, as I engaged in teaching from time to time, I felt that there was at play, specific cognitive processes and levels of satisfaction and joy I tend to derive from teaching, similar to how I feel when I accomplish a writing project.

Digging deeper into creativity research, I realised that teaching and learning involve creative expression and when cultivated, make a big difference in nurturing creative thinkers and leaders. During my undergraduate studies at the University of Ghana, I delved into the philosophy of creativity and discovered that creativity is at the core of who we are as human beings; that, it is a fundamental component of human intelligence and it is the basis of how as humans we try to make meaning out of our existential angst and make life better through advancements in technology, philosophy, science, arts. I became convinced that creativity is potentially inherent in all human activity, including and notably, teaching which can inspire and awaken the creative potential within students. Subsequently, convinced that workplace environments could be developed to ignite creative abilities, I proceeded to design a workplace creativity programme and utilised it as a consultant to build the capacity of some cooperate entities and individuals in Ghana and Liberia to very successful outcomes.

In 2017, I enrolled as part of the first cohort of students to undertake the Master of Arts in Education (Sandwich) programme at the Department of Teacher Education at the University of Ghana. I was encouraged to choose for my research (Special Topic) any subject that I was passionate about to research about. Thus, my Special Topic was titled: Fostering Creative Teaching and Learning in Ghanaian Schools. Apart from obtaining grade A, I had the opportunity of having my Special Topic developed further and co-authored by my supervisors, into a paper titled: *Lin's creative pedagogy framework as a strategy for fostering creative learning in Ghanaian schools.*

From a sample study conducted during the MA Education programme, I discovered that the role of a teacher who is adequately trained in creative pedagogical methods, is *sine qua non* to the promotion of creativity in schools. This finding affirms the findings of Nyarko, Akenten and Abdul-Nasin (2013) that a creative teacher is bound to nurture creative students. This research is a continuation of my personal quest and sustained interest in creativity studies to develop a conceptual framework of creative pedagogy for the context of the study.

1.2. Background to the Study

During the last two decades, there have been rapid changes in the way we learn and work around the world as we now approach a 'fourth industrial revolution' characterised by unprecedented technological advancements in artificial intelligence, machine learning, nanotechnology, and telecommunication systems, among others (World Economic Forum, 2016; Harari, 2016). While the onslaught of technological advancements presents opportunities for leapfrogging development in many parts of the world, these equally lead to escalating problems of youth

unemployment around the world, mainly due to lack of skills for even available and viable jobs. For instance, it was estimated that by the end 2020, there will be 95 million jobs around the world, a lot of which will not be filled because such jobs require well-trained and creative labour force, which is increasingly lacking due to the disconnect between educational systems and the changing reality of work (Olson, 2015; Robinson, 2018).

Because of the need to bridge the global skills gap (Olson, 2015) and to thrive in the context of the fast-paced changes, creative thinking has been recognised as the crucial skill required of the job force going into the future (WEF, 2016). The concept of creativity in teaching and learning has now become very crucial, having generated a lot of studies over the last sixty years and increasingly so during the past two decades (Craft, 2000; Csikszentmihalyi, 2012; National Advisory Committee on Creative and Cultural Education, 1999; Tanggaard, 2014). According to humanistic scholars such as Maslow and Hoffman (1996), May (1980) and Rogers (1954), creativity is a natural inclination of individuals to develop and express their capabilities. Creativity is thus a potential which abides in all human beings and should no longer be perceived as preserve and luxury of some gifted individuals (Boden, 2010); rather, creativity is a fundamental and distinguishing feature of the human condition. Consequently, like literacy and numeracy skills, creativity is a crucial skill and an expected outcome of education for everyone in the 21st-century globalised world. Creativity should be taught and cultivated in our school systems to help develop the self-esteem and confidence of students (Craft, 2001; WEF, 2016). It is imperative to have teachers who are trained to be creative to teach in a manner that would encourage the creative thinking abilities of students (Lin, 2009; Piirto, 2011; Robinson, 2009).

Undoubtedly, creativity is inexplicable to the human condition as every child is born as a bundle of creative potential with an unfathomable capacity to learn like the brain, a marvellous

and powerful learning machine in the universe, continually forms millions of neural connections (Gopnik, Meltzoff & Kuhl, 2001; Thorne, 2007; Robinson, 2018). However, this natural creative tendency gets either stifled or enhanced as the child grows from the crib to the classroom. Thus, the development of creativity largely depends on environment and context and by implication varies from culture to culture (Csikszentmihalyi, 2012)

Consequently, in different parts of the world, creative education has become instrumental to the development of the potentials of individuals as well as the wellbeing of nations. For instance, at the turn of the 21st century, the British government set up the National Advisory Committee on Creative and Cultural Education (NACCCE) a body of experts which produced *All Our Futures (1999)* report, as a strategic document for developing creativity through education and culture.

The educational success stories of countries such as Finland, Singapore, Korea and more recently, Estonia, have all been anchored on creative pedagogies and the need to prepare future-ready human resources (The Organisation for Economic Cooperation and Development, 2013; Leen, Hong, Kwan & Ying, 2014)).

In the *Future of Jobs* Report (WEF, 2016), a compelling case is made for the urgency of a radical shift in educational practices around the world towards learner-centred pedagogies aimed at igniting the creative potential of children to enable them to become competent in solving problems and making decisions. For, as stated by Mullis, Martin and Foy (2008) and Tambychik and Meerah (2012), it is essential to implement creative strategies in the classroom as a sure means of nurturing independent-minded and competent global citizens.

Recognising present trends and potentials of Africa's youthful population, the fact that the future holds supreme opportunities for the African continent and how education and work

will drive development for generations to come, Africa Union's Agenda 2063 strategic plan, among other things states categorically that, "Young African men and women will be the path-breakers of the African knowledge society and will contribute significantly to innovation and entrepreneurship. The creativity, energy and innovation of Africa's youth shall be the driving force behind the continent's political, social, cultural and economic transformation" (Africa Union Commission, 2015, p. 9). It is in light of the quest for a total transformation of the African continent that Agbowuro, Saidu and Jimwan (2017) and Amponsah, Amoak & Ampadu (2019) have argued for countries in Africa to develop and implement educational policies which promote creative teaching and learning. Doing this would unleash the seething creative capacities of young Africans towards the technological, entrepreneurial, economic and socio-cultural advancements that we earnestly seek and urgently require, especially considering the levels of abject poverty amid plenty and the high rates of unemployment.

Presently, Ghana, like many other African countries, has to grapple with 12 percent youth unemployment and over 50 percent underemployment (Dadzie, Fumey & Namara, 2020) which are sources of threat to its survival as a nation. Amoak (2009) describes the situation with a metaphor of question marks for children who begin school with a lot of curiosity and a quest to learn to how the educational system stifles them into dogmatic adults, characterised by the metaphor of full stop. The uniformity of thinking fostered over the decades through formal education is no doubt a remnant of a colonial legacy of education which sought to train unquestioning civil and public officers serving the interest of the colonial system.

Many products from Ghana's institutions of high learning have been considered half-baked as they lack critical and creative thinking skills (Apt, 2015; National Education Assessment Report, 2016). However, the educational system is a reflection of a cultural system

which to a large extent does not encourage children to be critical and questioning (children are supposed to be seen not heard) and are expected to have unquestioning attitudes and readily acquiescence to the decisions and authority of parents, elders, teachers and leaders. Thus, we end up churning out young people who are mis-educated, fearful to try new things and lack authenticity of who they are because they are self-alienated and conditioned to follow the beaten tracks and trodden paths of conformism. According to Nyarko et al. (2013), the inability of the educational system to develop original and innovative thinkers is mainly due to the absence of creative teachers who foster and inspire creative thinkers.

Given the inadequacies of the current education system in the face of the exigencies of the 21st century characterised by constant and fast-paced changes, the Ghana Education Service (GES), recognised the need for a new paradigm and through the National Council for Curriculum and Assessment (NaCCA) spearheaded the redesign of the curriculum for Ghanaian elementary schools to be implemented from the 2019/2020 academic year. The new curriculum is characterised by 4Rs, namely: wRiting, Reading, aRithmetic and cReativity. Expected core competencies of the new curriculum include; critical thinking, problem solving, creativity and innovation. The notable underpinning unique pedagogical approaches of the new curriculum include; social constructivism, learner-centred classrooms, teacher-centred school and the use of ICT as tool for teaching and learning. A curriculum of such nature is the first in the series of steps and when well implemented should develop the creative potential of young people. One can then therefore anticipate that the pursuit of creative pedagogy would be a means of not only decolonising the educational system, but also radically transforming and liberating imaginative and mental faculties of young people towards being relevant, self-reliant and solving the problems of their communities.

The classroom and the school environment should inspire and nurture creative and future-ready human resources. And no one should be in a better position to navigate this nurturing than the teacher. Thus, Grifiths (2014) makes an urgent call for the adoption of a creative, imaginative and open approach to teacher education. There is an imperative to train teachers to be creative, for instance, through exposure to game-based learning and gamification which, as noted by Cozar-Gutierrez & Saez-Lopez (2016) enhance innovative teaching and learning.

The concept and awareness of creative pedagogy is relatively a new phenomenon in the context of the study. Although teachers are required by the new curriculum to develop the creative potential of children, teachers are not adequately aware and designed to foster creative teaching and learning (Amponsah et al., 2019). Based on an initial baseline study of teacher trainees at the University of Ghana which established that some teachers use creative pedagogy without being aware of the theory and framework (Amposah et al., 2019), there is the need to explore and develop a model suitable for the context of the study of how teacher trainees at the universities in Ghana can adequately utilise creative pedagogy as a foundational method of teaching and learning in the 21st century.

1.3. Statement of the Problem

There are two main gaps that this study seeks to fill, namely; the gap in the literature and theoretical gap.

Despite the need for creative thinking as an essential survival skill in the 21st century and the introduction of a new curriculum at the elementary level in Ghanaian schools with emphasis on creativity and problem solving, there is no comprehensive study in Ghana on creative pedagogy and how teacher education can and should foster creative thinking and problem-

solving skills among students towards self-reliance. So far, there have been studies such as those conducted by Amponsah et al. (2019), Eshun, Osei-Poku & de Graft-Johnson (2013) and Nyarko et al. (2013) in terms of general inhibitions to creativity, perceptions of school pupils as well as teachers' promotion of creativity. The main gap in these studies is that they do not delve into the role of teacher education programmes in preparing teachers to view their practice as creative. There is, therefore the need for more and further research on creativity and education, especially delving into creative pedagogy and the importance of teacher education programmes. This study focuses on how teacher trainees could be developed to become creative teachers and by so doing, contribute to the literature in this emerging area of study which undoubtedly is crucial and essential for current and future educational programming and policy.

In terms of theory, this study utilises Lin's (2009) creative pedagogy framework which hinges on three key components, namely; *Teaching for Creativity*, *Creative Teaching* and *Creative Learning*. There is however a theoretical gap about the context of study in the sense that Lin's (2009) widely accepted framework is inadequate in addressing the peculiarity of the need for deliberate training and development of pre-service and in-service teachers in creative pedagogy. But as it was proposed by Lin (2011), there is the need for further context-specific studies on creative pedagogy about the role of teachers, ways of learning and how teacher education can enable teachers to nurture their creativity and the creativity of school children. Consequently, the study seeks to develop and propose a theoretical paradigm relevant for the promotion of creative pedagogy within the context of the study.

1.4. Purpose and Aim of the Study

This research is an exploratory phenomenographic study of how in-service teacher trainees understand and experience the phenomenon of creative pedagogy in the context of their training on the MA Education programme at the Department of Teacher Education in the University of Ghana.

The aim of this research was to develop a conceptual paradigm of creative pedagogy within the context of study.

1.5. Objectives of the Study

There are four specific objectives of the study and these are as follows:

1. To explore the differences in the methods of teaching used by the in-service trainees before and after training on the MA Education programme.
2. To determine the types of creative methods and strategies currently used by the in-service teacher trainees and the effects of these methods on students
3. To examine the varieties of understandings and experiences of in-service teacher trainees pertaining to the phenomenon of creative pedagogy
4. To establish the kinds of environments that foster or hinder creative teaching and learning in schools

1.6. Research Questions

The research questions for this study are:

1. How does training on the MA Education programme in creative teaching methods enhance the ability of in-service teachers to teach creatively?

2. Which creative methods and strategies do in-service teacher trainees employ now in their teaching that they did not use or know of before enrolling on the MA Education programme?
3. In which ways do the creative methods of teaching used now by in-service teacher trainees affect teaching and learning?
4. What kinds of environments do teacher trainees have in their schools for fostering creative teaching and learning?

1.7. Significance of the study

Apart from contributing to the body of knowledge on creativity and creative pedagogy, the findings of this study would play a pivotal role in shaping a new paradigm for teacher education, especially for departments of education at universities. The findings of this study would equally augment training programmes at colleges of education which since 2019 have been realigned to meet the needs of Ghana's new curriculum for elementary education. Generally, this phenomenographic study would enhance policies and strategies for teaching and learning in the 21st century Ghanaian (and African) schools. Specifically, the study would provide empirical evidence to strengthen the MA Education programme at the University of Ghana.

1.8. Scope of the Study

To achieve the purpose and aim of this study, it was considered prudent to focus the study on 17 out of 38 students in the first semester of the 2019/2020 academic year Sandwich programme at the Department of Teacher Education at the College of Education in the University of Ghana.

The study delved into the variety of ways of understanding and experiences of in-service teacher trainees in respect to their training and practice of creative pedagogy, which is the phenomenon being studied.

1.9. Positionality

Although the researcher had taken this same MA Education programme two years earlier, he does not make any assumptions of knowing and understanding the lived experiences of participants. In order to safeguard from researcher bias due to the fact that the researcher undertook this study within the same department as the participants, the researcher followed a rigorous and objective process of the phenomenographic data gathering and thematic analysis.

1.10. Organisation of the Study

There are five chapters of this study. In the introductory chapter (Chapter One), the background to the study is preceded by a personal statement indicating the researcher's sustained interest in the area of study. The first chapter also examines the statement of the problem, purpose and aim of the study, the significance, as well as the scope of the study.

Chapter Two delves into the review of relevant documented literature related to the study. This section features other people's works and empirical findings as well as the theoretical framework pertaining to this study.

Chapter Three spells out the research methodology utilised for this study, vis., the research paradigm used, target population, data collection, data collection instruments, field study, methods of data processing and analysis.

The fourth chapter focuses on analysing and interpreting the data gathered. Based on the analysis and interpretations, the key findings are presented, forming the basis for the design of a proposed conceptual paradigm.

In the final chapter (Chapter Five), the main findings of the study are summarised, along with discussions of the limitations and implications of the study as well as recommendations for further research.

1.11. Chapter Summary

This foundational chapter of the study highlighted the background and context of the study, spelling out the problem statement, objectives of the study, research questions, the scope and significance of the study for educational policy and practice. In the next chapter (Chapter Two), the relevant literature about empirical studies and theoretical underpinnings of the study are discussed.

CHAPTER TWO
LITERATURE REVIEW

2.1. Introduction

This chapter, comprising six sections, is a comprehensive review and synthesis of relevant documented empirical and theoretical research about this study. Section One examines the concept of creativity, followed by a discussion in the second section about creativity as an essential skill for work in the 21st century. The inhibitions to creativity as well as efforts around the world to promote creativity in education are also discussed in the fourth and fifth sections, respectively. The final section (section six) of this chapter explores the relevant theories that have been utilised in framing the study.

2.2. The Concept of Creativity

Creativity is at the core of what it means to be human and is an attestation of phenomenal human progress over several millennia of existence (Cooledge & Wynn, 2009; Gabora & Kaufman, 2010). Like art, morality and spirituality, creativity is a universal human ability ingrained in the human DNA with origins in Stone Age Africa (Diop, 1974; Harari, 2018). The advancements and the most spectacular inventions of ancient civilisations such as the hieroglyphics in Kemet (Ancient Egypt) to the technological marvels of our present era's artificial intelligence (AI), machine learning, space explorations and nanotechnology have usually emerged from the wellspring of human creativity. While creative thinking brings about solutions to day-to-day problems of human life, it also enables individuals and societies to adapt and thrive in constantly

changing environments (Gino & Ariely, 2011; Runco, 2004), as well as imagine possibilities and create their futures (Craft, 2007; Harari, 2018).

An important source of insight into human creativity is *mythos* (myths). Myths essentially are stories that are believable but cannot necessarily be proven because their scientific or historical foundations are usually not precise (Armstrong, 2009; Atuire, 2019). Myths are among the first forms of high-level cognitive, creative metaphorical thinking of human minds as a means of making meaning of the angst of existence (Armstrong, 2009; Campbell, 1988). Humans are wired or inherently creative, endowed with highly-developed working memory and the ability to engage in convergent and divergent thinking (Gabora & Kaufman, 2010; Kaufman & Gregoire, 2016).

For several centuries, however, there was a notion that creative ability was a special benevolence from divinities endowed upon a few individuals of genius (Cropley, 2016; Cropley & Patston, 2019*;* Kant, 2000/1781*;* Obialo, 2018). But this long-held notion that creativity was a preserve of a few gifted and talented individuals has been discarded in the light of progressive research and more in-depth understanding of creativity over the past seven decades as a fundamental and distinctive feature of human nature for individual and societal wellbeing (Agbowuro et al., 2017; Amponsah et al., 2019; Boden, 2004; Craft, 2002). May (1980), asserts that creativity is a necessary sequel to our way of being as humans and that we express who we are through our creative thinking and expressions. Boden (2010) affirms that creativity is not a special faculty for some individual elites; rather, it is part and parcel of human intelligence as demonstrated in everyday thinking processes of reflection, perception, memory and conceptualisation. Howard (2018) believes that creativity is generative in the sense that its

meaning is inextricably attached to the human life process and that it requires experimentation and imagination in everyday living and being.

The Latin etymology of the verb 'create,' that is, *creare*, connotes growing, production and bringing things into existence. This is similar to the conception of creativity in most cultures and languages across Africa (Mpofu, 2002; Mpofu, Myambo, Mogaji, Mashego & Khaleefa, 2006; Obialo, 2018). According to Shemsw Bak (2016), the innovative and egalitarian practice of *Maât*, a creative and heterarchical social learning system in Kemet, led to the development of knowledge through systematic experimentation and research for social production and use; and by so doing fostered truth and integrity of being, social balance, reciprocity, just and equitable communities.

Creativity is complex, paradoxical and multi-dimensional nature (Boden, 2010; Gaut & Kieran, 2018; Tiovanen, Halkilahti & Ruismaki, 2013). Craft, Jeffrey and Leibling (2001) affirm that creativity is an elusive concept to define. Nonetheless, a definition by the British NACCCE (1999), that, creativity is 'imaginative activity fashioned to produce outcomes that are original and of value,' (p.29) has become the widely accepted definition in this field of study. That notwithstanding, Lubart (2010) proposes a comparative study about creativity to allow people in diverse cultural contexts to define creativity in a manner appropriate to their own cultural experiences.

Creativity is further defined as having some fundamental elements referred to as the 4Ps: *person, place, product* and *process* (Csikszentmihalyi, 1999; Richards, 1999; Sawyer, 2003; Wu & Albanese, 2013). The alternative feature for *place* is *press* which as Wu and Albanese (2013) indicate consists of environmental factors which have a strong influence on how the other three Ps (person, product and process) function, that is, a *person* engaging in a *process* to create a

product or outcome. Craft (2011) proposes that in education, these 4Ps are enhanced by other 4Ps: *pluralities, playfulness, participation* and *possibilities*.

The influence of environmental factors on creativity (Csikszentmihalyi, 1996; Wu & Abenese, 2013) notwithstanding, factors like motivation, personality traits and disposition of the person who brings her feelings and experiences to bear in generating creative ideas also matter (Collins & Amabile, 1999; Kaufman & Sternberg, 2007). Thus, creative persons, irrespective of domain or field of endeavour are noted for their curiosity, intuition, high levels of energy and drive, perseverance, willingness to take risks and make mistakes, having broad interests and being open-minded. They tend to be comfortable with, in fact, court ambiguity as they strive to dare the status quo, generating from experience and existing knowledge new, original and/or alternative ideas to solve problems. Creative persons are also distinguished by their knack for metaphorical thinking, logical thinking, independent-mindedness, introspection, imagination, flexibility, playfulness (Audi, 2018; Lily & Bramwell, 2004; Starko, 2010; Sternberg, 2001) and cooperativeness, that is, being a team player, networked, and collectivistic (Mpofu et al., 2006). Playfulness is a valuable mindset and instrumental for the development of creativity (Craft, 2007).

These qualities of creative persons notwithstanding, Clapp (2016) who argues for equitable practice in creative teaching and learning, insists that people are not creative; it is ideas that are creative, so that a variety of individuals can participate in different ways in the development of creative ideas.

The understanding that creativity is 'imaginative activity fashioned so as to produce outcomes that are original and of value,' (NACCCE, 1999. p.29) indicates that the processes or products emanating from a person's creative mental processes should have value and be relevant

to one's environment. Boden (2010) states that one's creative ability should lead to ideas- encompassing concepts, theories, literature, music or artefacts- which are *new* or *novel*, *surprising* and *valuable*. For Lee (2013), the value of creativity should be considered within the context of a holistic conception of creativity as having different spheres, notably; physical-physiological, social, rational, moral, artistic and religious (Lee, 2001). Thus, the physical-physiological sphere has been ascribed the value of vividness. In contrast, the values of cooperation, quest, virtue, beauty and belief are attributed respectively to the social, rational, moral, artistic and religious spheres of creativity. Kieran (2014) equally argues for a holistic view of creativity as a valuable human virtue comprising intrinsic motivation, perseverance and integrity:

> "It matters not whether we are talking about creativity in art, philosophy or science. It takes honesty to evaluate the nature and value of what one is doing properly; it takes courage to be prepared to fail; it takes humility and open-mindedness to recognize when one has gone wrong; and it takes perseverance and fortitude to continue to work at something for its own sake or in seeking to do justice to an idea." (Kieran, 2014, pp. 132-133).

Whether it is the creative endeavours of mundane daily activities or great artworks, philosophical concepts, scientific theories and inventions, socio-political ideas and business solutions, humans exercise creativity in varying degrees. In James Joyce's *Portrait of the Artist as a Young Man*, Stephen Dedalus, the protagonist proclaims: "I go to encounter for the millionth time the reality of experience and to forge in the smithy of my soul the uncreated conscience of my race." (Joyce, 1916; 2004, p. 225). Thus, individuals and groups tap into the possibilities of the human mind and experiences in varying degrees and abilities to bring forth creative ideas that are useful

and valuable and sometimes push the boundaries of existing knowledge, ushering us into new heights of understanding and progress (Sawyer, 2006).

A holistic view of the concept of creativity and value judgement logically implies that creativity does not always lead to the best beneficial results. Not all creativity is positive and valuable since not all kinds of things produced from creative processes are beneficial to the wellbeing of people (Gaut, 2018). Hills and Bird (2018) argue that creativity is not essentially disposed towards producing valuable things, and creativity can be exercised in domains where ideas and behaviours lead to outcomes that are morally abhorrent and objectively bad. Gino and Arielly (2011) conducted a study on the dark side of creativity which revealed that due to the disposition and motivation of creative individuals to think outside the box, such motivation also tends to lead creative people to behave unethically, and that original thinkers can be more dishonest. In this regard, generating ideas and producing or building systems that are used destructively are not valuable outcomes of creativity. The destructive aspect of creativity has for instance been utilsed in the creation of systems-political, religious, economic and religious-for the enslavement, manipulation and exploitation of others and their resources as in the case of the Trans-Atlantic trade or rather theft (Lauer & Anyidoho, 2012) and the evils of colonialism in Africa and other parts of the world. One could cite several examples in human history of the dark side or troubling aspects of creativity or the abuse of it, for instance, in the case of nuclear weapons.

In recent years, there have been raging debates and concerns by leading technologists and scientists about what human creations of artificial intelligence could do, including the potential threat of obliterating the human species (Harari, 2018) and its use in political systems to abuse the rights of citizens (Snowdon, 2019). In this regard, Larrey (2019) poses a critical question

that, “in our rush to create artificial general intelligence, are we sure that we have contemplated all the unintended consequences of such a creation?” (Larrey, 2019, p. 126)

However, the fact that creativity does not always yield valuable results has a positive and even indispensable dimension in the development of creativity. This is in connection with the experimentation, trial and error phases of the creative process. Audi (2018) stresses that because of the teachability of creativity, it is necessary to tolerate and encourage creative expressions, especially those of children which may not be valuable or useful. Such seemingly ‘valueless’ or ‘useless’ creative expressions form an integral part of imaginative thinking and a pathos of wondering (Di Paolantonio, 2014), essential for fostering creativity. Many creative successes which are transformative, be it a written piece, musical composition, philosophical or scientific theory usually come about following many failures and attempts at fine-tuning, tearing down and building up the idea before it succeeds (Craft et al., 2001; Hawley, 2018).

Gardner (1993) and Csikszentmihalyi (1996) identified creativity in any endeavour as characterised by ‘little c’ or ‘big C’. In explaining this distinction, Craft (2001) indicates that the ‘little c creativity’ (LCC) stands for everyday subtler and smaller acts of creativity and ‘big C Creativity’ (BCC) refers to the actions and productions of creative minds which ought to be original and add significant value and meaning to more people. Craft (2012) recommends that educators and schools should pay attention to developing the everyday creativity of teachers and students. Apart from the fact that LCC should be considered the bedrock for future success (Craft, 2012; Lin, 2011), it is invariably by paying attention to and developing the potential for creative thinking to solve day-to-day problems that we develop the capacity to create or produce things to benefit a larger group of people (Richards, 2007). Necka, Gohman and Slbosz (2006) classified the extent of creativity from the day-to-day cognitive abilities to big breakthroughs

with levels of creativity, that is; fluid creativity (common of every human cognitive function like speaking), crystalised creativity (synonymous to problem-solving), mature creativity (addresses complex problems with originality) and eminent creativity (addresses problems substantial enough to cause a shift in perspectives of a discipline). Creativity therefore matters at all levels, small and big, for human wellbeing (Richards, 2007).

Kaufman and Beghetto (2009) include two more categories, namely; pro-c creativity and mini-c creativity to the little c (LCC) and big C creativity (BCC) to have a 'four c' model. According to their model, pro-c creativity refers to professional creativity that is yet to have any historical impact while mini-c stands for the creative insights that students experience in the course of learning.

Boden (2004) has outlined a distinction between psychological creativity (P-Creativity) and historical creativity (H-Creativity). According to her, an idea should be considered an H-creative provided it is P-creative.

In a similar vein, Boden (2004) identified three broad types of creative thinking and expression, namely; Combinational creativity which is new unfamiliar things coming out combination of familiar elements; exploratory creativity which refers to how one can explore existing conceptual frameworks to bring out something new which previously could not be anticipated. The third type of creativity, according to Boden (2004) is transformational or radical creativity due to the fact that it is the type of creative thoughts one could not have thought of before in the conceptual spaces of one's mind. Boden's typology, although the most influential so far in the philosophical study of creativity (Gaut & Kieren, 2018) has been contested (especially in respect of conceptual spaces, particularly the creation of entirely new framework in

transformative creativity) by some scholars like Beaney (2005) and Stokes (2011) who maintain that creativity requires pre-existing conceptual frameworks.

Creative thinking is an attitude or disposition of mind and ability (Boden, 2010; Steinberg, 2006), being combinatorial in nature (Henrikson & Mishra, 2015); hence, the all-rounded perspectives of creative people who think divergently (De Bono, 2010) and tap into a wellspring of varied experiences, background, knowledge and expertise that have been cultivated and sustained over some time. Creativity therefore does not simply emerge out some *eureka* moment but deliberately developed upon existing ideas, things and from experiences and inspirations from the lives we live and sustained effort (Henrikson & Mishra, 2015). Creative skills, be it in everyday life activities or the generation of original and big ideas, thrives, like all other skills not only on keen interest, but crucially dependent on consistent, deliberate practice. In this regard, Duckworth (2017) emphasises that any complex and creative human ability or talent can be categorised into its component skills and mastered through deliberate practice, in other words, grit.

The development of creativity, therefore requires intentionality and a lot of effort. Creative outputs which may appear effortless and bring about what Csikszentmihalyi (1990) refers to as 'flow,' that is, a highly enjoyable state of mind, do not come out of the blue but honed over hours, days and years of resilient and strenuous effort. This leads to a fundamental notion that creativity in any form or profession can and should be taught and learned through deliberate training and practice with the appropriate enabling socio-cultural factors and environments (Audi, 2018; Csikszentmihaly, 1999; Kaufman & Sternberg, 2007; Obialo, 2018).

Socio-cultural factors like beliefs and values enhance or impede creativity because creativity and culture are intertwined. Auntlett and Thomsen (2013) believe that culture itself is

made, emerging out of collective creative thought. A look at African cultures reveals that Africa is a heartbeat of creative expressions which abound in varied forms such as indigenous knowledge systems in governance, language, food production, agriculture, healthcare architecture, artefacts, music-making, among others (Andoh & Amuah, 2014). Despite these however, Obialo (2018) states that literature on creativity is dominated by Western conceptions and African conceptions of creativity are obscure. This is misleading because the assertion is made from the typical lens of an inherited colonial politics of knowledge production and economy in academia which, until recently, deliberately discredited oral literature and other African epistemological foundations (Armah, 2006; Lauer, 2012; Ngara, 2007; Yankah, 2006). The systems of knowledge production in academia, which Dei (1994) refers to as the 'Euroamerican hegemonic discourse', according to Lauer (2012) and Yankah, (2006), are alien to the socio-cultural milieu of Africans which still persist in favour of so-called Western epistemologies. However, Appiah (2016) has indicated that the idea of a 'Western world' is a widely shared fiction. Hence, it is certainly not the African conceptions of creativity that are obscure or lacking as these are evident in languages and expressive art forms, indigenous philosophies of being and ways of knowing (Ajei, 2000; Andoh & Amuah, 2014; Ngara, 2007; Yankah, 2006). It is rather the 'acceptable' mode of presentation of the vast body of knowledge on creativity in African cultures that is problematic and limiting due to the inherent imperialism of the methods of study and analysis especially pertaining to the social sciences and the maintenance of the status quo not to fully incorporate indigenous knowledge systems (Lauer & Anyidoho, 2012) which provide alternative ways of knowing (Ajei, 2000; Ngara, 2007). Wa Thiong'o (1992) has called for the rethinking of the idea of Africa, reorganising the creation and

presentation of knowledge to stimulate creativity, for the desired progress in the 21st century and beyond.

2.3. Creativity as an Essential Skill for Work in the 21st Century

It is evident from the discussions above that creativity has been a pivotal human trait in the evolution and wellbeing of societies since early human civilisations. However, more than ever in our human history, the 21st century presents moments for disruption as, long-held cherished beliefs are shattered within seconds and new worldviews constantly emerging in an up-to-the-minute explosion of ideas. The enormous fast-paced changes and uncertainties of the 21st century have been described as unprecedented (Harari, 2018), leading to calls to turn to creative thinking skill as an imperative skill to have to survive now and in the coming decades.

Considering the fact that creative thinking enables one to be highly successful in life, adapt to situations and innovate, there is now a call to recognize creative thinking as an indispensable skill of the 21st century which is increasingly becoming complex with more connected and interdependent societies (Robinson, 2009; Sachs, 2018; Schleicher, 2018;WEF, 2017). Creativity is highly valued in both school and work settings and there have been calls to teach students and workers skills that will improve their creativity not only as cognitive and professional trait for success but also for the socio-cultural wellbeing of societies (Richards, 2007; Sternberg, 2006).

Schleicher (2018) believes that the future generation of young people has to create more jobs and collaborate for the advancement of humanity and doing this requires imagination, curiosity, resilience, entrepreneurship skills and learning from mistakes. Gardner (2006) proposes five types of minds needed to adapt and survive in the future, foremost among them

being a 'creating mind'. Gardner's (2006) other four minds or mindset which relate to different aspects of the concept of creativity are; disciplined mind, the respectful mind, synthesising mind and ethical mind. It is these minds that should enable people to live meaningful lives by adapting and growing from the constant changes and having the motivation for lifelong learning (Schleicher, 2018). It implies that one needs to think creatively by being flexible and using one's imagination, work creatively with others by appreciating different backgrounds of others and implementing innovative ideas to impact society (Piirto, 2011; Starko, 2010). Pink (2005) is of the view that left-brain qualities like rational and logical thinking which led to the Information Age, although necessary for the 21st century, are insufficient. He therefore believes that in addition to left-brain thinking qualities, right-brain qualities of empathy, meaning, inventiveness and joyfulness will be determining attributes of people who succeed in the 21st century (Pink, 2005; Henrikson & Mishru, 2015).

In Africa, there have been initiatives and policies to promote creativity as a 21st century skill. One could refer to Nigeria's declaration of 14 September as National Day of Creativity in January 1995 followed by the institution of a National Creativity Award (NCA) in 1999 (Mpofu et al., 2006). Other institutions that are noted for the promotion of creativity on the continent include the South African Creativity Foundation (SACF) and the Global Creativity Network (GCN). In Ghana, the National Council for Curriculum and Assessment (NaCCA) recently started the implementation of a redesigned curriculum for elementary schools aimed at promoting problem-solving, critical thinking and creative thinking skills through approaches like social constructivism, learner-centred classrooms and the use of ICT tools for teaching and learning. The promotion of creativity in Africa is crucial, considering the increasing rate of

population and the need to harness the potential of the population to develop economies manned by a creatively empowered youth and workforce (AUC, 2015).

2.4. Inhibitions to Creativity

For Ghana's new curriculum (NaCCA, 2019) and any other possible curriculum changes at different levels of education to be effective, certain endemic factors that have historically impeded the development of creativity, some of which are brought to light in this sub-section have to be addressed. Most of these impediments are largely endemic and systemic in nature. Foremost among the factors which inhibit the development of creative thinking and abilities are the educational system, socio-cultural environments and misconceptions about creativity.

2.4.1. The Educational System

Although every child is born with a bundle of creative potential (Gopnik, Meltzoff & Kuhl, 2001; Thorne, 2007; Robinson, 2018), this natural creative tendency gets either stifled or enhanced as the child grows from the crib to the classroom. Thus, the development of creativity largely depends on environment and context and by implication varies from culture to culture (Amponsah et al., 2019; Csikszentmihalyi, 2012; Howard, 2018; Sahlberg, 2009).

As indicated by Sachs (2018), there are social pressures that work against creativity which he refers to as 'unsafe' thinking. Although the educational system is expected to be the place to nurture creative thinkers, it has been noted by Robinson (2009) that the educational system itself is a major inhibitor of creative potential. This assertion is currently evident in the context of study as many products from Ghana's institutions of higher learning are considered

half-baked, deficient of critical and creative thinking skills (Amoak, 2009; Apt, 2015; NEA Report, 2016). A major root cause of the current state of education is its colonial origins.

The formal educational (schooling) systems in Ghana and the entire continent of Africa were started by slave raiders and colonialists for colonial purposes of subjugation of colonial subjects and exploitation of the human and natural resources of these colonies for imperialist interests (Armah, 2006; 2019; Yankah, 2006; Chinweizu, 2010; Rodney, 2018). The first formal educational institutions set up in the slave castles were meant to get the "mulattoes," or mixed-race offspring of whites with local women schooled so they would become intermediaries, serving as clerks and interpreters for the colonial government (Perbi, 2004). As Chinweizu (2010) has pointed out, the purpose of the colonial educational system was to train an elite workforce and auxiliaries for the colonisers to continue to foster exploitative interests and due to that, the system was not meant to provide creative economic producers of goods and services needed by the African population. Indeed, not too long after most African former colonies gained Independence, Fanon (1968) observed that, the educated elites of the colonial system had 'done nothing more than take over unchanged the legacy of the economy, the thought, and the institutions left by the colonialists.' (Fanon, 1968, p.176). In view of this, the neo-colonial educational system is not designed to teach how to solve problems, adequately face challenges and create our own futures as we are often alienated from our cultural origins and creative potential (Chinweizu, 2010).

Consequently, Ghana's formal educational system, due to its colonial roots and purpose to produce the best out of the many who were schooled, a workforce and leaders for the colonial machinery (Armah, 2019), has largely been focused on assessments, with over-emphasis and fixation on usually stressful competitive high-stake tests and 'teacher-proof' curricula (Henriksen

& Mishra, 2015). From the basic level to the secondary level of education, children have to be subjected to rote and mechanical learning (Awuah, 2008) to pass exams at the end of the term or at one stage of the educational system with exams supervised by the West African Examination Council (WAEC) in the Basic Education Certificate Examination (BECE) or West Africa Senior Secondary Certificate Examination (WASSCE). These tests unfortunately become the main measures of performance, even intelligence, when in reality this system of rote learning-although useful for the memorisation of formulars, dates and so forth, actually squelches the creative and critical thinking abilities of students. This system then encourages teachers to become sages on the stages of learning, churning out information in a pontificating manner.

Yet, after more than six decades of Ghana's attainment of Independence, this same educational system has prevailed through the first two decades of the 21st century, still steeped in maintaining the status quo and conformity of thinking which hitherto, were the explicit requirements for white-colour jobs but not sufficient for our current dispensation (Apt, 2015; Awuah, 2008). Robinson (2009) points out that although good qualifications are still relevant it is not enough for students to make progress by merely showing that they are good at passing examinations. These students will therefore not be able to adequately imagine future possibilities; they will lack critical and creative thinking skills which are indispensable for living and working in the 21st century. They may be boxed-up in maintaining ways of thinking and doing things which are obsolete and cannot withstand the tense-filled, fast-paced changes of the present and coming decades. Nyarko et al.,(2013) have argued the need for a paradigm shift since the current educational practices fail to prepare students to be original and creative thinkers.

In describing how the system of education in Ghana, Amoak (2009) uses "question marks" as metaphor to describe the creative curiosity of children at the beginning of school and how by the end of formal education at the tertiary level students become dogmatised, unquestioning of the status quo, uncritical attitude towards authority figures, lacking curiosity and the ability to solve problems as symbolised by the metaphor of a "full stop" (Amponsah et al., 2019).

The inherited colonial legacy of education, with its structural defects effected the education of teachers. The policies for the training of teachers over a long period of time, were largely not engineered towards educating teachers who are pivotal in the realisation of inherent creative potential of students (Salifu & Agbenyega, 2013) to be creative so as to nurture creative thinkers who would generate philosophic and scientific ideas, social innovations, create businesses to innovate products and services as they utilise the natural resources for the advancement and benefit of all. Rather, teachers were for a long time trained to tacitly and unknowingly be part of a system which was not set up to empower people for them to transform their economies through creative production (Chinweizu, 2010).

Even in the recent implementation of a new curriculum (NaCCA, 2019), teachers were rushed through a one-week training on teaching the new curriculum, followed by an absence of teaching and learning materials (Asamoah, 2019). Teachers are unlikely to produce the kind of core competencies that the new curriculum calls for when they who are pivotal to the whole process were given inadequate preparation.

Nyarko et al., (2013), affirm that the inability of the educational system to develop original and innovative thinkers is mainly due to the absence of creative teachers who foster and inspire creative thinkers, for teachers who are trained to be creative will naturally foster

creativity in their classrooms through methods and techniques aimed at bringing out creative potential in students (Amertordzi, Osei-Poku & Eshun, 2012; Amponsah et al., 2019; Nyarko et al., 2013). Ametordzi et al. (2012) indicated from their research on teaching methods that the use of the lecture method which is the common method used in teaching (in their case, 65 % of teachers researched on were using it while 15 % of teachers used project-based method) does not promote creativity. While bearing in mind that teachers lacked adequate training in creative teaching and 21st century methods of teaching, Amponsah et al. (2019), have emphasised the need for teachers to equally be equipped with the necessary resources such as Information Communication Technology tools like computers, reading materials and other teaching and learning materials for fostering creativity.

A critical component of how the educational system itself could impede creativity is the nature of school environments prevalent across the country, especially in public schools. Salifu and Agbenyega (2013) have stated that the obnoxious legacies of colonialism are still visible in the practice of teachers, notably public pre-tertiary teachers who work in learning environments characterised by overcrowded classrooms, inadequate teaching and learning materials (TLMs) with school leaders and administrators who are authoritarian. Such common environments are still typical characteristics of public education in Ghana especially in rural communities where the inequalities of the system of education are prevalent. Clearly, these environments do not foster creativity which requires nurturing within welcoming and safe physical, social and cultural atmospheres where both teachers and students are enabled to express their own ideas without fear of making mistakes (Amponsah et al., 2019; Eshun et al., 2013; Thompson & Wheeler, 2008). In a similar vein, teachers who are effective and creative are usually challenged by school environments which focus more on high-stake examinations and assessments (Henrikson &

Mishra, 2015), thereby stifling creative abilities. Teachers have to struggle with systemic challenges, such as, the mandate to complete syllabi, as they strive to foster creativity which requires them to pay more attention to individual needs of students, being flexible, open-minded and acting independently (Sahlberg, 2009) to support the creative evolution of their students.

In addition, there are some misconceptions about creativity which often play out in the classroom setting because teachers who have wrong notions about creativity and are ignorant of their own creative potential are bound to block and frustrate any attempt to incorporate creativity in the school curriculum (Cropley & Patston, 2019; Nyarko et al., 2013). For instance, the wrong and pervasive misconception of creativity as a special ability of a select few, breeds another misconception that these gifted creative persons tend to behave in dysfunctional manners (Cropley & Patston, 2019; Kaufman, 2016; Sternberg, 2015). In other words, creative people are wrongly perceived to be antisocial, lack discipline, have a disregard for rules and authorities and they like to cause trouble. Westby and Dawson's (1995) research on teacher judgements showed that teachers disliked creative students as a result of the erroneous conception that creative people behaved dysfunctionally.

Another misconception which affects teaching and learning is the idea that creativity is limited to the arts and no other subject area (Runco, 2007). This wrong notion equally emanates from the misconception that creativity is a reserve of exceptionally artistic individuals (Kaufman & Beghetto, 2009). By this notion, teachers believe creativity is not accessible to most people and that it is only a reality in the arts and impossible in subject domains such as languages (like English), Geography, History, Mathematics, Accounting, Physics among others (Cropley & Patston, 2019).

Cropley and Patston (2019) state that misconceptions of creativity may take implicit forms such as the unconscious association of creativity with artistic talent or manifested explicitly like the notion that it is not possible to teach people to become creative or for people to understand creativity (Cropley, 2016).

2.4.2. Socio-cultural factors

Ghana's educational system is a reflection of aspects of culture and society in terms of the upbringing of children and the effects of colonialism which are still pervasive in virtually all spheres of society (Awuah, 2008; Salifu & Agbenyega, 2013). Sachs (2018) states that there are social pressures that work against creative thinking which is not encouraged much in Ghanaian society which has largely been engineered towards dependency of thought in maintaining the status quo (Imoh, 2015). Of course, human society thrives on safety in norms, established customs and beliefs so when aspects of creative thinking lead to ground-breaking, eminent and transformative ideas (Boden, 2010; Craft, 2001; Richards, 2007) and therefore unsafe (Sachs, 2018), there would be social pressures to conform.

However, Imoh (2016) has observed that in the Ghanaian context of conforming to social norms, children are brought up and obliged to agree with decisions of parents because as a child you are fed by your parents and so long as you are dependent on them you are to agree and acquiesce with their decisions. In typical cultural settings of parenting, children are to be seen but not to be heard (Imoh, 2016; Tisdall, 2014). These social constructs which lead to over-dependency and unhealthy control by adults inhibit expression of views, abilities and inquiry, thereby stifling the curiosity of children and for that matter, their creativity. As children grow, they adopt non-questioning behaviours and will not dare challenge what people say by virtue of

the fact that they are elderly or persons in some authority. In most cases they would say things that would get them receive approval from adults, even if it is not the truth (Mpuntusem TV, 2019). This lays the foundation for the educational system which then compounds the problem, by churning out young people who have unquestioning attitudes, accepting and believing knowledge transferred to them by authorities of parents, teachers, pastors, Imams and so on and so forth. Young people therefore get smothered from home to school to fit into the beaten truck which could be likened to procrustean beds (Amoak, 2009).

A critical socio-cultural inhibitor of creativity is religion, with particular reference to Eurocentric religious indoctrination which was systematically utilised by colonisers to exploit resources, alienate people from their historical heritage and useful cultural practices and beliefs (Armah, 2006; Lauer & Anyidoho, 2012). The belief in Eurocentric deities has had debilitating impacts on the psyche of generations who mistrust their own creative abilities to solve their own problems (Chinweizu, 2010) and go to modern day economic saviours such as the Briton Woods Institutions or the 'Washington consensus' (Abraham, 2015). The insatiable penchant for looking for answers from outside and receiving grants from Britton Woods institutions come with conditionality and programmes like Ghana's Structural Adjustment programme, a policy which led to the decline of the quality of education and its antecedent effects of lack of critical and creative thinking skills as evidenced by the majority of products from institutions of higher learning (Lauer & Anyidoho, 2012).

Closely associated with indoctrination is the misconception of creativity which still persists, despite the numerous researches to the contrary, that creativity is some benevolent endowment to a few people from divinities and mystical sources (Cropley & Patston, 2019; Mpofu et al., 2006; Obialo, 2018). This implies that people who still have such misconceptions

are ignorant of their own creative abilities as expressed in different ways and never consider themselves as creative, thereby blocking and self-sabotaging any inherent potential to grow creatively and to solve their own problems.

In the end, the educated or schooled is in actual fact largely mis-educated and alienated from his or her origins in terms of cultural heritage so s/he looks down on things indigenous or African in preference for things external and knowledge systems outside his or her purview (Lauer & Anyidoho, 2012) and s/he therefore becomes inauthentic and lacks integrity of being which then makes him/her develop uncritical attitude to authority and fearful pretentious behaviour (Mpuntusem TV, 2019).

Having discussed the concept of creativity and how creative thinking skills are indispensable for thriving in the 21st century, we proceeded to identify some impediments to the development of creativity. Knowing the factors which are stumbling blocks to creativity enables us to be in the position to actually foster creativity through education. How should creativity be developed in education? What strategies should we use in nurturing creative thinking and abilities among teachers and students? In the next segment, a body of literature that explores these questions pertaining to creativity in education is discussed.

2.5. Efforts at ensuring Creativity in Educational Systems around the World

Over the past three decades, there has been increasing recognition by states and governments around the world that creativity is a tool for the empowerment of citizens (Craft, Jeffrey & Leibling, 2001) and that, it is a driver for economic development, thereby leading to policies to enhance creativity education (Beghetto, 2010). The British Government for instance, established

the Creative Partnerships in 2008, to train young people for the future. Ken Robinson, the renowned global creative educator who leads the Creative Partnership, had indicated that, there is the need for a completely different kind of education for students of today to adequately equip them for 21st century learning and living (Robinson, 2005). In Taiwan, the government tasked its Ministry of Education to spearhead a deliberate policy and agenda of making Taiwan, the 'Republic of Creativity' as creativity is indispensable to everyone's life (Niu, 2006; Wu & Albenese, 2013). At the turn of the 21st Century, the Singaporean government developed an initiative for the development of creative abilities dubbed, 'Thinking School, Learning Nation' which was championed by a Thinking Unit in their Ministry of Education (Leen et al., 2014). Similarly, the educational successes of countries like Finland and Estonia in recent years have all been attributed to curricular that hinge on creativity development strategies (OECD, 2013).

Due to the urgent need for creative thinking skills and related 21st century competencies, the National Council for Curriculum and Assessment of Ghana's Ministry of Education redesigned the curriculum of primary schools which was rolled out from September, 2019. The expected core competencies of the new curriculum are; critical thinking, problem solving, creativity and innovation (NaCCA, 2019). Clearly, the classroom and the school environment should inspire and nurture creative and future-ready human resources. Creativity should be nurtured within the educational environment (Craft, 2001). It is to this end that Bloom's taxonomy has since the year 2000 been revised to have at its apex 'create' which now is considered a higher order cognitive skill (Jerslin & Devaki, 2016).

However, as has been noted by Craft (2005), Lin (2011), Henrikson and Mishara (2015), there is inadequate research and discussion regarding pedagogical strategies for fostering creativity in schools. As a result, there have been calls for more research into the creativity of

teachers who are pivotal in enhancing creativity in students as they influence the learning, thinking and behaviour of students. Understanding how creative teachers practice their profession, their mindset and attitude to work is crucial in efforts to nurture creativity in schools (Amponsah et al., 2019; Henrikson & Mishara, 2015; Nyarko et al., 2013).

No one would be in a better position to navigate the nurturing of creativity in schools than the teacher. Thus, Griffiths (2014) makes an urgent call for adoption of creative, imaginative and open approach to teacher education. There is an imperative to train teachers to be creative for instance through exposure to game-based learning and gamification which as noted by Cozar-Gutierrez & Saez-Lopez (2016) enhance creative teaching and learning. Similarly, Amponsah et al. (2019), emphasise that creativity should be fostered in Ghanaian schools because it develops self-confidence and self-esteem of young people in preparing them for the future.

Meanwhile, Craft (2006) advocated for wisdom in fostering creativity in schools as she raised objections to a market-driven, profit-oriented approach to development of creativity in education. We are cautioned that in fostering creativity in the curriculum we should not fall into the universerlisation of creativity (Jeffrey & Craft, 2001) which tends to be culture blind (Craft, 2005; Ng, 2003) and promotes liberal individualism tied to a capitalist market-driven system. It is crucial that we pay attention to cultural values and contexts in nurturing creativity as a desired outcome of the education. This is quite an imperative in the context of Africa, a continent endowed with immense diversity of languages yet distinct and enduring commonalities of indigenous knowledges and practices which transcend ethnic and geopolitical boundaries (Ngara, 2007). Considering the current multi-layered knowledge systems in operation on the continent (Mpofu, 2002) as a result of colonialism and recognising that the current state of education on

the continent 'is far from being regarded a true pedagogy of liberation and progress' (Ngara, 2007, p.7) the necessity of fostering creativity in African educational practices should be undertaken in a manner that African paradigms of knowing would inform and enhance creative pedagogical frameworks. In view of this, Amponsah et al., (2019) have proposed that teachers should be trained to know how to develop and incorporate indigenous folk games in teaching to enhance creative learning.

2.6. The Theory of Creative Pedagogy

Creativity is promoted in education through the theoretical framework of creative pedagogy (Aleinikov, 1989). Creative pedagogy refers to the methods and strategies for developing creativity through education, characterised by three interrelated elements, that is, *Creative Teaching, Teaching for Creativity* and *Creative Learning* (Lin, 2009). Creative pedagogy is underpinned by the fact that creativity is teachable within the appropriate and conducive environments and systems (Cziksentimihalyi, 1990; Craft, 2001; Starko, 2010).

2.6.1. Elements of Creative Pedagogy

Lin (2009) has proposed a framework of the interconnectedness of the three elements of creative pedagogy in the following diagramme:

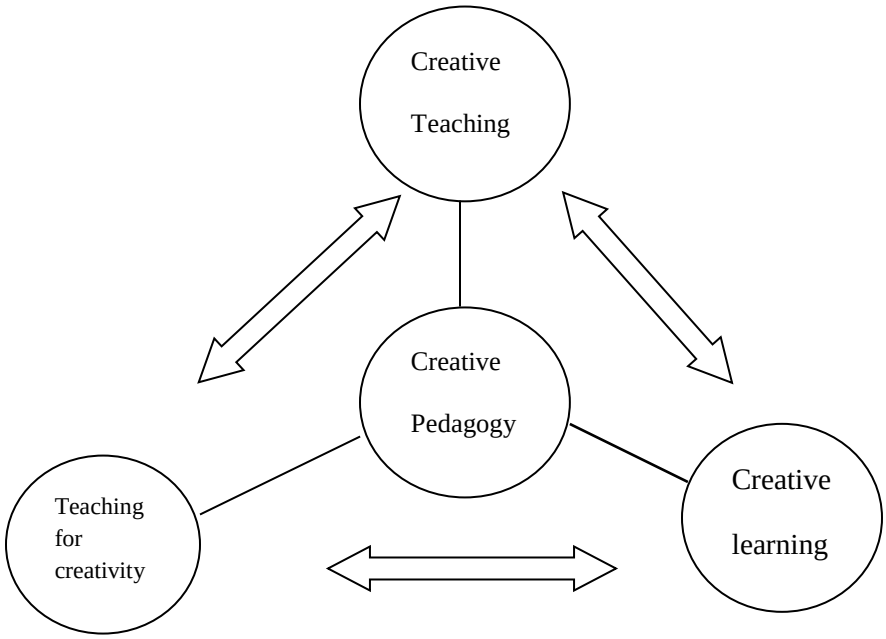

Figure 1: The three elements of creative pedagogy
Source: Lin (2009)

Lin's (2009) framework for integrated practice of creative pedagogy which has since been widely accepted around the world (Amponsah et al., 2019; Tiovanem et al., 2013) differs from the onventional linear approach to teaching and learning which Lin (2009) displays as follows:

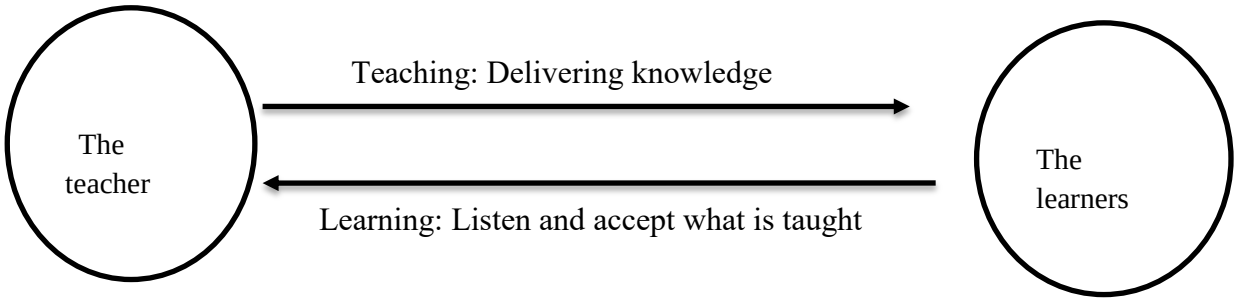

Figure 2. Conventional teaching and learning process

Source: Lin (2009)

Unlike the linear approach to teaching and learning which Torrance (1963) described as learning by authority, Sahlberg (2009) identifies some features of creative pedagogy, notably, collaborative and cooperative learning, risk-taking and willingness to accept one's mistakes and wrongs. In addition, it has been proposed by Woods (1990) and subsequently, Jeffrey and Craft (2004) that all forms of creative teaching and learning are characterised by relevance, control, ownership and innovation.

As stated by NACCCE's *All Our Futures* (1999) report, there is a distinction between *Creative Teaching* (teaching creatively) and *Teaching for Creativity*. Creative teaching involves utilizing imaginative, innovative, dynamic approaches to make teaching more interesting, effective and engaging (Jeffrey & Craft, 2004; Lin, 2009; NACCCE, 1999). Creative teachers operating within the necessary enabling environment are able to ignite the creative abilities of students by using strategies such as; paying attention to individual students, eliciting more questions from students/pupils, promoting inquiry and using divergent methods to teaching, that is, finding alternative ways of explaining concepts and lessons to students (Alencar, 2002; Sahlberg, 2009). For a teacher to champion creative methods of teaching and ignite the creative potential of students, the teacher must be creative and noted among other things to be curious, knowledgeable, open-minded, team-player, energetic, confident, intuitive, enthusiastic and have the awareness of self as a creative being (Baer, 2015***;*** Craft, 2001). As noted by Lily and Bramwell (2004), creative teachers provide regular and constructive feedback, model flexibility, create and support environments of curiosity and consider the need to develop their own creativity to enable them foster the creativity of students. In this regard, teachers are able to ignite the creativity of learners as they pass on their enthusiasm, imagination and confidence to learners (Lin, 2009; Lucas, 2001). It is with such traits that creative teachers are able to navigate

the learning experiences of students through student-centred creative teaching methods such as student inquiry, demonstration, discovery learning, role playing, group discussions and presentation (Horng, Hong, ChanLin, Chang & Chu, 2005; Starko, 2010). These methods are both effective and creative and can be utilized across subject domains (Starko, 2010).

Scholars such as Anderson (2002) and Esquivel (1995) have argued that creative teaching is invariably effective teaching. The effective teacher is thus a creative teacher and vice versa, for the creative teacher practices effectively in class (Henriksen & Mishra, 2015). An essential component of creative and effective teaching is reflective practice which requires keeping records of instructional practice, knowledge of best practices, collaboration and obtaining feedback from students, peers, parents and research (Lily & Bramwell, 2004).

In the practice of creative teaching, teachers must learn the art of letting go. Creative teachers must from time to time be prepared to risk letting go of structured lesson plans and embrace new insights and questions from students about real life situations and problems which may demand spontaneous response and discovery. Teachers must have the courage to improvise and adapt to ideas from students on lessons and be able to re-adjust lesson plans to still achieve the goals and objectives of lessons (Horng et al, 2005; Sawyer, 2006). Similarly, the creative teacher should be willing to make mistakes and learn from students (Lucas, 2001).

Creative teaching methods require the use of some tools and learning aids. Csikszentmihalyi (2010) states that children of the 21st century grow up in universes of virtual electronics, hence creative teachers are encouraged to utilize the use of Information Communication Technology (ICT) tools to develop creativity of students through collaborative learning, problem solving and discovery (Craft, 2010).

Since teachers play a pivotal role in the development of creative abilities in students (Amabile, 1996; Starko, 2010) teacher identity and motivation are crucial factors for creative teaching and learning. When teachers identify themselves and teaching practice as creative it makes a big difference in fostering the creativity of students. Creative teachers are usually intrinsically motivated displaying qualities such as enjoyment of tasks, keen interest and involvement (in students and teaching), self-determination, confidence, independent-minded, devotion to teaching and high levels of positive energy (Collins & Amabile, 1999; Csikszentmihalyi, 1990; Horng et al., 2005; Lily & Bramwell, 2004). When teachers are motivated by their passion, love and genuine interest to facilitate students learning as well as satisfaction for their work, they continuously get inspired and motivated. This is so because as Sternberg (1999) indicated, creativity no doubt requires motivation but it also generates motivation as one engages in creative practice. Engaging in creative teaching itself is therefore a constant source of motivation and creative energy for teaching and learning.

An equally essential factor for creative teaching is the training of teachers. This aspect of training teachers to be creative is a missing gap in Lin's (2009) framework of creative pedagogy which was based on earlier studies (NACCCE, 1999). Although creative teachers may be intrinsically motivated, they need to be trained in creative approaches to teaching. Teacher trainees need to be adequately equipped and mentored- by teacher educators who are themselves creative- with the requisite knowledge and practical strategies and techniques for fostering creativity (Craft, Jeffrey & Leibling, 2001; Griffiths, 2014; Horng et al., 2005). Clearly, when teacher trainees are exposed to creative teaching they get inspired and motivated to teach as they have been taught.

Teaching for Creativity on the other hand has to do with recognising the creative potential of students and providing opportunities for them to develop such abilities (Jeffrey & Craft, 2001; Lin, 2009). In other words, teaching to enhance creativity offers opportunity for students to be creative themselves as they respond to the creative teaching methods of the teacher. What this implies is that teaching creatively, although a necessary condition for creative pedagogy, is not a sufficient condition in the sense that if a teacher is able to teach creatively without getting students to respond to her teaching with their own creative expressions, then the teacher would have failed to teach for creativity. A teacher who is able to create a crossword puzzle in class but does not provide adequate opportunities for students to create their own new and different crossword puzzles would not be teaching for creativity although he demonstrates creative teaching skills. The sufficient condition for creative pedagogy is therefore the creativity which occurs on the part of students (Starko, 2010). Hence, students are given the opportunity to exercise and display creative thinking abilities through the making of their own science experiments, creation of artworks, discovering alternative ways of solving mathematical equations, composing a poem, a short story and many other forms of creative expression.

Starko (2010) believes that teaching to enhance creativity means that apart from the teacher growing as a creative person, she provides students the requisite skills, knowledge and atmosphere for them to discover their own creativity which they utilise in identifying and solving problems. Due to this, teachers use creative and formative means of assessing students through assignments which require students to exercise creative thinking. In assessing students in ways that encourage them to be creative, teachers have to give room for and encourage learning from failures and mistakes while acknowledging and rewarding risk-taking, new and original ideas and experimentation (Joubert, 2001).

Educational environments therefore matter in any context of fostering creativity in schools and specifically useful for providing opportunities for students in teaching for creativity. Creativity cannot be summoned forth, or forced, but emerges when the conditions and the context are supportive and nurturing. Thus, Tiovanen et al. (2013) emphasize that no creativity develops in isolation; hence, the environment and beliefs of teachers and learners matter in fostering creativity. Teachers are to serve as models through creative behavior and ensure that there is enabling environment which propels students to express their creative thinking (Jeffrey & Craft, 2004; Starko, 2010).

In synthesising the distinction between creative teaching and teaching for creativity, Lin (2009) states that the two elements lead to *creative learning* which should be considered a salient feature of creative pedagogy. Among the characteristic of creative learning are; autonomy, spontaneity, resilience, not being afraid to make and learn from mistakes, discovering new ways of looking at a problem, recognising alternatives and possibilities, self-discipline and playfulness (Craft, 2001; Lin, 2009; Starko, 2010). Torrance (1963) stated that children explore their natural curiosity through creative learning in the form of inquiring, searching, manipulating, questioning, experimenting and sometimes engaging in aimless play.

The idea of aimless play echoes the original meaning of school which originated from the Greek word, *skholē,* meaning, 'leisure' or 'a place where leisure is employed'. According to Di Paolantonio (2014) the notion of *skholē* connotes that school should be time and place for igniting thoughtfulness through the cultivation of wonderment so that teachers and students alike can dwell on questions and ideas which may appear impractical especially in our up-to-the-minute world of constant emergency responses and need for instant solutions. Yet, it is out of

such seemingly aimless wonderment and playfulness about the world that creative ideas spring forth (Hawley, 2018).

2.6.2. Constructivism of creative pedagogy

Creative pedagogy is underpinned by constructivist theories**.** Constructivism is primarily about how people construct meaning and knowledge. In the field of education, the constructivist theory deals with how students learn by constructing knowledge out of their experiences. Thus, some core beliefs of constructivism as noted by Taber (2006) include the view that the learner actively constructs knowledge and that knowledge is not an imposition which is passively received by the learner. In addition, it is believed that the learner comes to a learning situation not empty but with existing ideas (some well-developed and others unstable) about several phenomena. As a result, teaching effectively in a constructivist learning environment means that a teacher has to consider seriously, the learner's existing ideas to be able to challenge the learner to develop on such ideas or change them.

There are two main strands of constructivism relevant to this research, namely; cognitive constructivism and social constructivism. The development of cognitive constructivist theory is attributed to the Swiss psychologist and epistemologist, Jean Piaget (1896 – 1980). Piaget's life work was about the nature of knowledge and how it develops, leading him to propose a constructivist epistemology based on the biological processes of adaptation in the form of assimilation and accommodation. Piaget believed that thinking and intelligence evolves as a result of an individual's biological adaption to the external world. In cognitive constructivism therefore, ideas are constructed in individuals through a personal process of learning.

For the social constructivists on the other hand, although it is agreed that knowledge is constructed at the personal and individual level, the development of knowledge does not happen only through individual cognitive process but rather through interaction with the physical world, collaboratively in sociocultural environments (Taber, 2006). The social constructivist theory of learning and creativity is traced to the works of Russian psychologist, Lev Vygostsky (1896-1934), who was a contemporary of Piaget. Vygostsky's research emphasised the sociocultural factors that influence human thoughts and abilities. He believed that, "Any inventor, even a genius is always a plant growing in a certain time and environment. His creativity issues from needs, which are given him. He operates on possibilities that exist around him" (Vygotsky, 1969, cited in Smolucha, 1992, p.54). Thus, social conditions and interactions enable individuals to generate creative ideas in the form of inventions, arts or scientific discoveries. In view of Vygotsky's emphasis on learning emanating from social interactions with adults, and more capable peers he further proposed the theory of Zone of Proximal Development (ZPD) as a process for learners to construct knowledge through interactions with others.

Vygotsky's theory of social constructivism has been supported by a number of scholars, notable among them being, Csikszentmihalyi (1999) who highlighted the importance of social systems, environments and interactions to the development of creativity. Other aspects of social constructivism are collaborative learning and co-operative learning which are all essential in the methods for creative teaching and teaching for creativity.

By implication, a classroom whereby cognitive constructivist principles apply would mean that learning is student-centered with more emphasis on the active participation of individual learners. The teacher is to be a facilitator, a guide, who navigates the learning process by engaging students to think through challenging problems, questions and tasks from different

individual or personal perspectives. Student-centered methods such as the inquiry method are useful in this regard.

In the classroom setting of the social constructivist, there is collaborative and co-operative learning as students engage in peer-to-peer interactions as well as interactions with their teacher. It is in this setting that we find a community of learners who learn through presentations, discussions, sharing of ideas and collaborating to find solutions to a problem or undertake an assigned task. The teacher serves as a facilitator ensuring equal and active participation in discussions and group activities.

The beliefs of both cognitive and social constructivism are relevant to this study in the sense that constructivist teaching strategies greatly improve the cognitive and social development of students. To be able to run a constructivist and 21st century learner-centered classroom, a teacher must have a grasp of and utilize methods of both cognitive and social constructivism. Through the facilitation of a teacher equipped with learner-centered strategies, students are able to discover knowledge and meaning as they learn to be creative, solve problems, tolerate the views of others (as a collaborative and co-operative learning), and be responsible.

It is expected that through the findings of this research, teachers would be trained to teach creatively and for creativity, grounded in the realities of cultural contexts and understanding of creativity. With such foundations, the practice of creative pedagogy could transform the educational landscape by overcoming the inhibitions to creative thinking and abilities that are inherent in Ghana's current system of education.

2.7. Chapter Summary

The chapter has been a detour of ideas emanating from empirical and theoretical research, starting with a comprehensive philosophical dive into the concept of creativity. The chapter also highlighted why creativity is considered an essential skill for the 21st century, therefore a desired educational outcome backed by policies in many countries around the world. But to realise the promise of creativity for 21st century living and working, it is important to understand the endemic impediments to nurturing creative thinking and abilities within the context of study as discussed in the fourth section of the chapter. The fifth section of this review explored efforts at ensuring development and promotion of creativity within educational systems around the world. Building on the preceeding sections, the sixth and final section discussed the theoretical foundations of of the study pertaining to creative pedagogy and constructivism.

CHAPTER THREE
METHODOLOGY

3.1. Introduction

This chapter presents the research approach and design used, along with elaborations on the target population, sample size and sampling technique. Explanations have also been provided on methods of data collection, process of data analysis, as well as the ethical considerations for this research.

3.2. Research Design

This is a qualitative study using phenomenography, an empirical research approach to educational research for describing, through interpretation, the varying ways that people experience a phenomenon (Bowden & Green, 2005; Marton, 1986). Phenomenography is best used for investigating the variations entailed in the conceptions of different kinds of educational phenomena such as learning and teaching (Akerlind, 2008). Although the researcher had initially intended to use a case study method, the change was necessitated to enable the collection and analysis of data to explore the varied ways of understanding and experiences of the phenomenon of creative pedagogy. The use of phenomenography was therefore appropriate for this study as it enhanced the gathering of depth and breadth of responses and insights from participants, of which a case study design would not have yielded.

Creswell (2012) argues that qualitative research is an emerging design and that the process of inquiry may lead to some changes based on feedback, for ultimately, ‘qualitative research intends to understand and explore the central phenomenon, not to develop a consensus

from the people you study' (Creswell, 2012, p. 130). Thus, the phenomenographic approach enhanced the constructivist epistemological underpinnings of this research and fostered the realization of the aim to develop a pedagogical framework or paradigm regarding the phenomenon. Indeed, as Ibhakewanlan (2004) states, the epistemological and ontological views that a person holds affect how s/he conducts research, hence, the academy should not play down on the crucial link between epistemology, ontology and pedagogy. This assertion is important for this study which explored the extent to which the motivation and perceptions of interviewee teacher trainees affected their teaching practice.

The researcher sought to find out how in-service trainee teachers understand or make sense of the phenomenon of creative pedagogy from their own experiences of training received and their teaching practices. In doing so, the phenomenographic approach enabled the researcher to establish and gauge the differences in participants' understanding and practices of creativity in teaching and learning prior to and after enrolling on the MA Education programme. The process also enabled a rigorous interpretation of research data and construction of knowledge through categories of description or outcome spaces from the second-order, non-dualistic perspective of ways of knowing and being about the phenomenon of creative pedagogy within the context of the study.

The process of phenomenographic research as undertaken and applied in this study is demonstrated through the following flowchart:

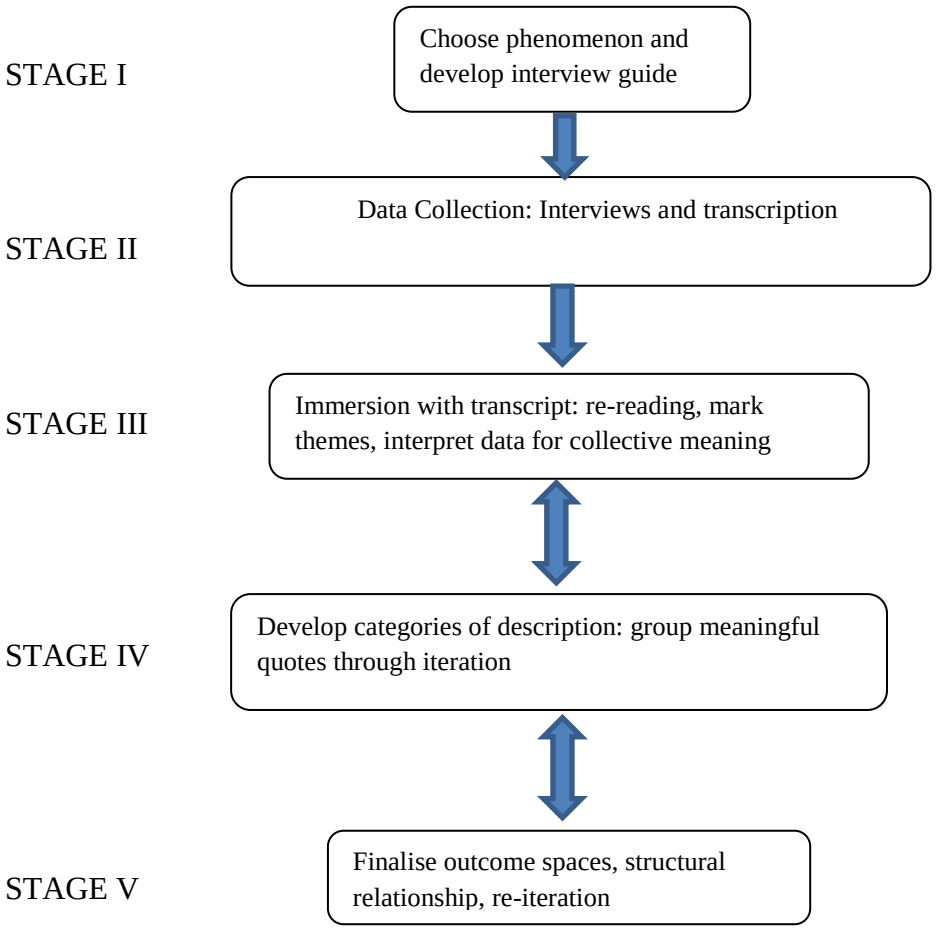

Figure 3: Phenomenographic research process pertaining to the study
Source: Author's construct (2020)

3.3. Population

The target population of the study was the 2019/2020 cohort of 38 teacher trainees undergoing a Sandwich Master of Arts (MA) Education programme at the Department of Teacher Education in the University of Ghana. Some of these are in-service teacher trainees, and others are now training to enable them to enter into the teaching profession.

The sample population comprised an initial number of 20 in-service teacher trainees undergoing the MA Education (Sandwich) programme. The number dropped to 17 participants as three opted out of the research without any explanations. These teachers were sampled through purposive random sampling to determine and maximise the variations and experiences of meaning and ways of teaching by participant in-service trainees before and after their exposure to creative pedagogical methods.

There were variations of backgrounds of participants in terms of levels of teaching (primary or secondary) and type of schools (public and private).

3.4. Data Collection

In phenomenographic research, the interview is the main source of data collection. Hence, in order to investigate how different teacher trainees think about and experience creative pedagogy through training and detailed instances of practice, the researcher relied solely on interviews with participants.

The main instrument for data collection was an interview guide which consisted of open-ended, semi-structured questions was developed. To ensure the validity of the instrument, this guide was subsequently fine-tuned following feedback obtained from two piloted interviews.

It is prerequisite in the phenomenographic approach that although the researcher plays an essential role in defining and eliciting responses with reference to the phenomenon, a phenomenographic researcher in order to ensure vality of the instrument used, must focus on what the phenomenon means to the participant (Akerlind, 2005). There is therefore the need for a kind of detachment on the part of the interviewer to elicit a true reflection of how each

interviewee perceived of and experienced the phenomenon of creative pedagogy. Bearing this in mind and to ensure validity of the interview guide, the researcher endeavoured during the interview sessions, to put aside his conceptions of the phenomenon being studied (i.e. creative pedagogy) and maintained an open-mind while probing when necessary, for any clarifications beyond the set questions. Through this process, the researcher was able to elicit responses of the varied perspectives and experiences backed by situated instances to form a conception of collective pool of meaning (Bowden & Green, 2005) regarding the phenomenon of creative pedagogy.

In all, a total of seventeen (17) in-service teacher trainees were interviewed on one-on-one basis within a period two months. Out of the seventeen, four of the interview sessions were held face-to-face while the remaining thirteen (13) were conducted via phone. It was necessary to conduct the majority of the interviews via phone due to social distancing directives by Government to curtail the spread of the Covid-19 pandemic in Ghana.

All interviews were conducted in English and recorded with an audio-recording device. The duration for the interviews ranged from a minimum of 25 minutes to a maximum of one hour, with the majority being around 30 minutes. Each interview was then transcribed leading to transcripts that ranged between six and fifteen pages long.

3.5. Data Analysis

Phenomenographic thematic analysis focuses on the relationship between the participant and the phenomenon as each of the transcripts reveals towards a collective meaning (Akerlind, 2005). The following five steps are the phenomenographic processes of thematic analysis the researcher undertook to analyse the research data:

Step One: Initial reading of transcripts

To start with, I did a first reading of each of the transcripts, followed by a second reading of transcripts with openness to gain a sense of the whole or the collective range of views about the phenomenon of creative pedagogy.

Step Two: Thorough reading of transcripts

I continued immersing myself in the transcripts with a third and thorough reading, highlighting and underlining sections of each transcript relevant to the research question

Step three: Clarification of differences and similarities

At this stage, having made notes of each transcript, I sought to clarify differences and similarities in the range of views, meanings and experiences, noting major themes.

Step Four: Development of categories of description

This was achieved by further interpreting and 'mining' transcripts to develop a fuller set of categories or outcome spaces. Initially, about 12 categories of description were developed. These were cut down through iteration and re-iteration whereby some categories were merged with others and subsequently refined further through critical scrutiny of categories vis-à-vis the transcript to refine the outcome spaces into five main categories, namely; *1. Perception, 2. Methods and Strategies, 3. Effects and Impacts, 4. Environment* and *5. Motivation*. These five categories along with sub-themes, which Akerlind (2005) refers to as themes of expanding awareness, formed an aggregation of the collective view of how participants understand and experience the phenomenon of creative pedagogy. Quotes from each transcript relating to each of

the categories of description were selected and grouped accordingly. These categories of description are amply presented and elaborated upon in the next chapter (Chapter Four).

Step Five: Development of structural relationship between categories of description.

In this final interpretive process, I identified, through further iteration of the empirical evidence contained in the transcripts and logical analysis, the hierarchy of relationship of the final outcome spaces in connection with the phenomenon. By integrating the various categories of description into a flow of connected relationships about the phenomenon, this analysis revealed that the ultimate way in which the participants understand and experience the phenomenon of creative pedagogy is the transformative impacts which have occurred following the training. Such impacts occur when a rightly motivated teacher, acting on enabling environments and with the right perception of self and teaching as creative would use the appropriate teaching methods and strategies to achieve the desired impacts on students and teachers alike.

Below is a diagram showing the hierarchy of relationships between the categories of description:

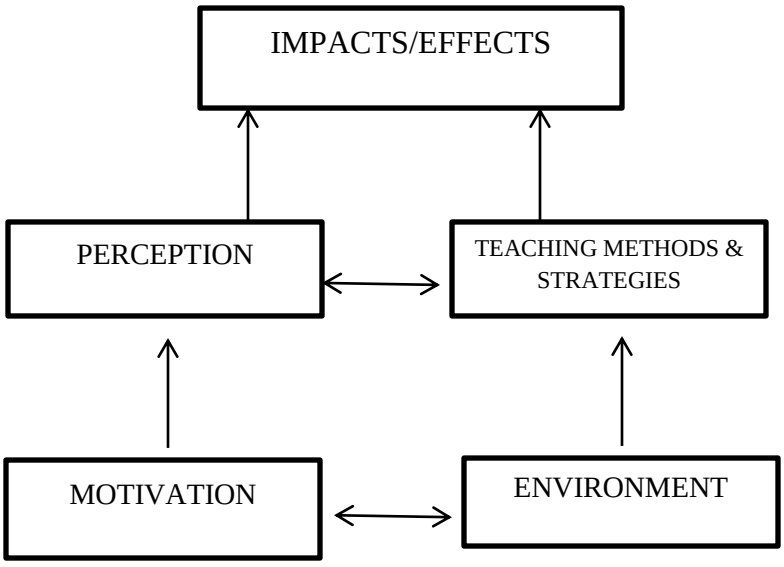

Figure 4: Hierarchy of relationships
Source: Author's construct (2020)

3.6. Ethical Consideration

In conformity with the University of Ghana's code of ethics governing research, the researcher ensured that the informed consent of each participant was duly obtained by informing them in advance about the purpose of the research. The class representative of the MA Education Sandwich programme was contacted to inform the entire class through their class' WhatsApp platform about the research and intention to obtain data from some of them. This information was backed by a formal letter of introduction signed by the researcher's head of department.

Once the 20 in-service teacher trainees voluntarily agreed to partake in the research, they were informed through text and phone call that they could exit the interview at any point of the process without incurring any sanctions. Consequently, three out of the 20 participants exited the process, although they had agreed to scheduled dates and times for interviews.

Ethical clearance was obtained for this research from the Ethics Committee for Humanities (ECH) after the researcher had undertaken all the required protocols. The number, ECH 106/19-20 was subsequently assigned to this research, along with a certificate.

In order to ensure strict confidentiality and protecting the identity of participants, pseudonyms were used for each participant.

3.7. Chapter Summary

This chapter provides a justification of the research methodology used in line with the epistemological orientation and purpose of this thesis. Thus, in order to study the variations of perceptions and experiences pertaining to the phenomenon of creative pedagogy within the context of the study, a phenomenographic approach was utilised to gather data mainly through semi-structured open-ended interviews with participant in-service teachers. The participants were

selected through a purposeful random sampling. Based on the transcripts of the interviews, the researcher undertook a rigorous process of data analysis through iteration to develop categories of description or outcome spaces. The findings thereof and a proposed conceptual paradigm, are the content of the next chapter (Chapter Four).

CHAPTER FOUR

PRESENTATION OF FINDINGS AND PROPOSED PARADIGM

4.1. Introduction

This chapter is in three parts. The first part provides demographic information about the participants the of study. In the second part of the chapter, the outcome spaces or findings which comprise five main categories of description from the phenomenographic analysis are presented in detail. The final part of the chapter presents a proposed paradigm for creative pedagogy, based on the key outcome spaces emanating from the research.

4.2. Background of Study Participants

Out of the 17 participants, 12 were females, and five were males. The majority (13) of the participants teach in private schools while four teach in the public system as employees of the Ghana Education Service (GES). Of a particular variation is Trainee 5 who for the past three years has consistently been teaching her child daily after school for one hour using the GES syllabus.

There were also variations in the subject domains that the participants teach at the Primary, Junior High and Senior High school levels. The subject areas include; Economics, History, Religious and Moral Education, Spanish, English Language, Physics, Agricultural Science, Social Studies, Information and Communication Technology (ICT), Core Science, Mathematics and Literature. The table below shows the demographic details of the participants:

Table 1: Demographics of participants

TRAINEE (T)	GENDER	YEARS OF TEACHING EXPERIENCE	TYPE OF SCHOOL	SUBJECT (S)	LEVEL OF TEACHING
Trainee 1	Male	7yrs	Private	Rel. & Moral Education (RME)	Upper Primary
Trainee 2	Female	3yrs	Private	English Language & Eng. Literature	Senior High School
Trainee 3	Female	9yrs	Private	Spanish	Senior High
Trainee 4	Female	4yrs	Private (Remedial)	Home Economics	Senior High
Trainee 5	Female	3yrs	Private (Home)	All subjects	Lower Primary
Trainee 6	Male	8yrs	Public	Agricultural Science (Core)	Senior High
Trainee 7	Female	8yrs	Private	English Language & Social Studies	Senior High
Trainee 8	Female	3yrs	Private	All subjects (Class Teacher)	Lower Primary
Trainee 9	Female	12yrs	Public	Home Economics & ICT	Junior High School
Trainee 10	Female	12yrs	Private	All subjects (Class Teacher)	Lower Primary
Trainee 11	Male	4yrs	Private	Integrated Science	Senior High
Trainee 12	Male	4yrs	Private	History	Senior High
Trainee 13	Female	6yrs	Private	Literacy, Numeracy & Science	Lower Primary
Trainee 14	Female	9yrs	Private	All subjects (Class Teacher)	Lower Primary
Trainee 15	Male	2yrs	Public	Physics	Senior High
Trainee 16	Female	2yrs	Private	ICT	Upper Primary
Trainee 17	Female	5yrs	Public	English Language	Senior High

Source: Field Data (2020)

4.3. Presentation and Discussion of Categories of Description

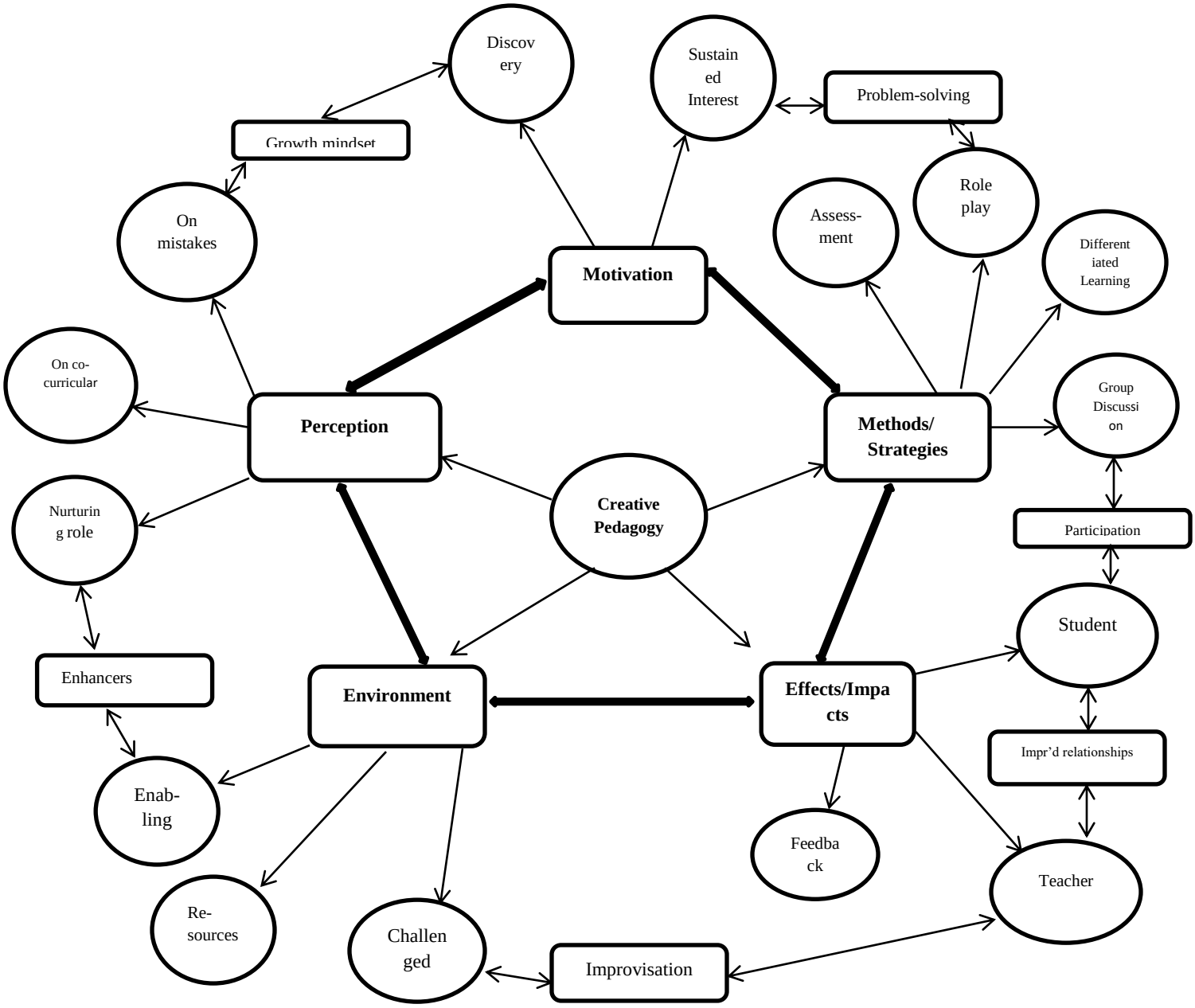

Figure 5: Categories of description, expanding themes of awareness and relationships
Source: Author's construct (2020)

The details of the five categories of description, namely; perception and level of awareness, methods and strategies, effects of creative pedagogy, environments and motivation are presented in this section as findings and responses to the four main questions of the study. Teacher motivation is presented as an emerging theme and category of description underpinning the results.

4.3.1. Perceptions and awareness of creative pedagogy

Research Question 1

How does training on the MA Education programme in creative teaching methods enhance the ability of in-service teachers to teach creatively?

The MA Education programme enhanced the ability of participants through a change in perception and heightened awareness of creative teaching practice. The researcher discovered differences in the extent of awareness or perception of teaching practice as creative by participants, prior to their enrollment on the MA Education programme. A total of 10 participants considered teaching as creative while the remaining seven were not aware that teaching could be considered a creative practice, as shown in the table below:

Table 2: Awareness of Teaching as Creative Prior to Enrolling on the MA Education Programme

A) Trainees who perceived of teaching as creative practice	Trainee (T): T1, T2, T3, T4, T8, T9, T10, T12, T14 and T15
B) Trainees who did not perceive of teaching as creative	Trainee (T): T5, T6, T7, T11, T13, T16 and T17

Source: Field Data (2020)

Participants indicated how as a result of the MA Education programme, they have better understanding of their own creative abilities, teaching as a creative practice, on making mistakes and not being all-knowing, and their role in nurturing creativity. Many excerpts from the transcript threw more light on this category of description. As indicated in *Table 2* above, the majority (10) of the participants perceived teaching as creative while seven of them were not aware teaching could be considered creative until they enrolled on the MA programme. However, the transcripts reveal that although some trainees were aware-due to the type of curriculum they were using, like Montessori or Cambridge- they were not enlightened about creative methodologies. In the end, the MA Education programme heightened their awareness of creative pedagogy. Similarly, those (except one trainee) who were not aware, prior to enrolling on the course became conscious of their creative abilities and creative ways of teaching and learning. The following instances of perceptions of teaching as creative practice, reveal that for participants like Trainee 11 and Trainee 13, before they enrolled on the MA programme they had no idea that teaching could be considered creative. They have now discovered through training that teaching is creative and one has to go beyond the traditional linear approaches to teaching and learning usually through the lecture method:

> *"It was when I got onto the programme that I discovered that teaching is creative. Previously, I thought that once you have knowledge that is all that matters." (Trainee 11)*

> *"Previously all I knew was I was teaching and I love to teach. I never knew teaching was a creative practice. But with this programme, it has helped me to know that it is a creative way, it involves a lot of creative measures, you have to be creative in teaching, especially with the level of my children you can't be using the lecture method; you have to be creative to get them to get what you are teaching." (Trainee 13)*

Meanwhile, Trainee 14 indicates a prior understanding of teaching as a creative practice but she admits that the MA Education programme has enabled her to become more creative and utilizing divergent methods of teaching:

> *"I have always thought that teaching is a creative profession, I have always had that idea. But entering the MA programme now I am more aware of the ways or methods I can use. I had about two or three methods I was using previously, but now there are many more different ways I have learnt from the programme" (Trainee 14)*

From the evidence of the transcripts, it can be deduced that the heightened level of participants' awarness of creative pedagogy emanated from three aspects of the MA Education programme, namely; the content of the programme, how they experienced the delivery of content and the attitudinal influence of teacher educators. In respect of the content of the programme, examples of two participants show the extent of improvement through the understanding and practical application of educational theories such as constructivism (Taber, 2006) and Bloom's taxonomy (Jerslin & Devaki, 2016). Due to their use of learner-centred theories in their classrooms as a result of the content of the MA Education programme, participant 8 and 10 report of being more creative and having improved in getting students actively involved in the teaching and learning process:

> *"A subject like Theories of Instruction has helped me to better understand every stage a child is in especially with the constructivist theory." (Trainee 8)*

> *"Now I'm more aware of how to manoeuver with my teaching, like how to give instruction to children, how to be more creative, how to involve them in the teaching. How to even ask questions was something I was just doing but with the help of this*

course, I use the Bloom taxonomy as a guide to ask questions so that it will elicit much information just to help the lesson." (Trainee 10)

The fact that Trainee 10 was guided by Bloom's taxonomy in asking questions and eliciting responses from students is relevant in the context of creative pedagogy particularly because as noted by Jerslin and Devaki (2016) Bloom's taxonomy, has at the turn of the 21st century been revised such that the objective, "Create" has since become the apex of the congnitive taxonomies.

The extent to which participants observed and experienced the strategies employed by teacher educators on the programme equally led to participants' heightened awareness of creative pedagogy as indicated by Trainee 3:

"These days at the end of each class I try to get feedback from students. I make each student write down one thing s/he has learnt from the class or a question on his or her mind then they share with the class. So that was one improvement because at first when the class ends, we have ended but now it is sort of, we end properly. That's one thing I learnt from how the lecturers deliver on the MA Education programme." (Trainee 3)

The influence of teacher educators also played a role in improving participants perceptions and awareness of creative pedagogy. Trainee 4 indicates that she learnt from the deeds and words of a particular lecturer during the MA Education programme:

" On the MA Education programme, I have learnt a lot from one of our lecturers. In fact, his attitude has influenced me to bond with my students. His inspiring words alone let me know that I'm not doing much, I have to improve myself so I realized that teaching

is not just delivering but it is more of a relationship with the students than just delivering what is in the book to them." (Trainee 4)

There was only one exception with regards to perception of teaching as creative. Although Trainee 17 was exposed to creative pedagogy and has started using formative assessments, she had not considered herself creative, neither did she consider her teaching practice as creative. In her understanding, teaching is methodical and she did not think that anything which follows a method or rule qualifies as creative:

"I don't think I am creative at all. Yeah, that's what I think. You know why I think I am not creative? It's because I don't see any form of originality in what I do. I never thought of teaching as creative. For me, it's something methodical. Though I read English and Theatre Arts I won't consider myself creative, so for instance I didn't do poetry, I was more of a drama person. I'm more systematic, following what is structured. So teaching for me is like I'm teaching you, this is the rule, so you follow the rule. I didn't and still don't think of teaching as creative." (Trainee 17)

It could be inferred from the above excerpt and also further probing (which revealed among other things that she loves dancing) that Trainee 17's perceptions stem from some misconceptions of creativity (Cropley & Patston, 2019), that, creativity is synonymous to originality by exceptionally gifted individuals and that the process of creativity does not follow rules or structure, therefore cannot be systematic or methodical.

Other excerpts elaborate on the perceptions of participants on their role in nurturing creative thinkers. For instance, as far as Trainee 10 is concerned, a teacher's responsibility is to nurture creative thinkers but to do so a teacher has to first of all be creative and be able to think outside

the box. Trainee 10's reason for the need to nurture creative thinking is the fact that the world has become a creative village and it is important to move beyond theoretical teaching and let children bring out their imaginative and creative potentials. This, Trainee 10 believes would make children future ready as admonished by Robinson and Aromica (2018):

> *"What kind of future are we enabling the children to mold for themselves? We need to get the children to be more creative even in their thinking and bring whatever they think into life. So as a teacher you should try to maneuver with that skill so that your children will be able to think outside the box." (Trainee 10)*

Trainee 10's quest to nurture future-ready creative persons resonates further with Gardner (2006) who proposes five types of minds needed to adapt and survive in the future, foremost among them being a 'creating mind'.

In terms of perceptions and lived experiences of making and learning from mistakes, Trainee 12 and Trainee 15 indicated that they have, through the MA programme, come to see their teaching practice as facilitators and this manifests in their willingness to show students by their own examples to learn through mistakes which proves that they are teaching for creativity (Lin, 2009; Starko, 2010). Trainee 12 gives an example of how this plays out in class in relations to an interaction with a student who is well-read:

> *"Personally, I have come to the realization that as a teacher you are not the container of all knowledge, you can make mistakes…and sometimes I say something and a particular student who is well-read says, 'No sir, I don't agree with you' I pause and ask, 'So what is your view-share it'. He explains and when I know he's right, I'll openly say, 'I think his view is rather better than mine'. He brings out his analysis and you realise that he is*

actually read widely and has an improved view, so I acknowledge openly for all of us to adopt the improved view. You see, he doesn't give you empty analysis; he gives you concrete examples to back his analysis." (Trainee 12)

On his part, Trainee 15 heighlights the need for having a constructivist classroom environment (Csikszentmihalyi, 1999) which enables students to learn creatively and construct their own knowledge:

"I now make it known to them (students) that they shouldn't be relying fully on the teacher that is going to give them every knowledge, because as teachers we can also make mistakes. So they should also try and learn on their own and not be saying, 'my teacher says this or that." (Trainee 15)

Unlike the responses from the participants above, Trainee 11 appears to be teaching creatively but not yet teaching for creativity (Starko, 2010). Although this participant admits not being all knowing, participant is still not open to the idea of making and admitting mistakes as a teacher since this for him would be detrimental:

"No, that would be suicidal, because once you stand in front of the students, whatever you say, they would take it as the gospel truth. I don't think that's a place where you are to make mistakes." (Trainee 11)

For Trainee 11 to teach for creativity, it is important to get students involved and like Trainees 12 and 15 come to an understanding that it is not a bad thing to make mistakes as a teacher as this is the crux of getting children to learn creatively (Lin, 2009; Sahlberg, 2009).

4.3.2. Methods and strategies of instruction

Research Question 2:

Which creative methods and strategies do in-service teacher trainees employ now in their teaching that they did not use or know of prior to enrolling on the MA Education programme?

Teaching creatively and for creativity requires the use of instructional methods and strategies which are among other things child-centred, constructivist, co-operative, problem-based and participatory (Jeffrey & Craft, 2004; Sahlberg, 2009). The fundamental and overarching strategy adopted by trainees, following their exposure to creative pedagogical methods at the initial stages of their training is differentiated learning, that is, varying instruction and processes of teaching in a manner to meet the needs of different students (Tomlinson, 2004). They had developed the mindset to understand the fact that as each person has a unique gamut of capabilities and talents (Amoak, 2009), it is important to recognize and appreciate the unique paradigm of learning that each child or student brings to class. Some relevant excerpts from the transcript show instances of how the participants, following training, now appreciate the necessity to pay attention to the needs and uniqueness of individual students through differentiated learning. Consequently, according to Trainee 8:

> *"You have to first of all know your students, it begins from there. When you know them, you know how to teach them well. I would say that the MA Education programme actually got me in a way to not get restricted to old patterns like if it worked for the previous group it would work for these students. I have come to understand that every child is different and in their difference there is their uniqueness." (Trainee 8)*

Trainee 8 gives a concrete instance of how through her understanding of differentiated learning, she has been able to identify and support the learning needs of two autistic children in her lower primary class:

> *"I realise that I have two students in my class who are autistic. For one of them when you use single sounds and numbers he finds it difficult to learn. I came to understand that he notices by picture, by sight and by saying it. That is his uniqueness. Collectively when you are teaching sounds in a chorus way by singing and having fun with it, it helps the autistic children learn. This makes them feel part of the class and it makes teaching and learning more fun and easier." (Trainer 8)*

Through the use of differentiated learning strategies to the unique learning needs of autistic children by making them feel part of the class, Trainee 8 ensures equity and inclusiveness in the creative teaching and learning process (Clapp, 2016). Similar to the experience of Trainee 8, Trainee 12 recognises the different learning styles of students and as a result now pays more attention to the needs of individual students in class, particularly with reference to their learning styles:

> *"I believe I do now pay more attention to the needs of individual students because formerly when I went to class I would consider everybody to be the same, whether you are an audio learner, audiovisual, kinesthetic- everyone for me was the same. Now, I have realized people learn in different ways so after enrolling on the MA Education programme , I go to class and I recognise that I have students who are audiovisual learners and others are not." (Trainee 12)*

In view of his appreciation for the different learning styles of his students, Trainee 12, incorporates targeted differentiated learning strategies when planning lessons as he demonstrates with an example of a student who has a short attention span:

> *"There is this particular student in my class who doesn't really like you talking plenty for the 2-hour duration of the class. She gets bored easily and after barely 30 minutes, her concentration would be gone. So for such a person, I mostly now give her short assignments while in class to get her pre-occupied. When planning the class, I consider her because I know and acknowledge that her attention span is very short. But she is smart and she's someone who requires more." (Trainee 12)*

The importance of creatively planning lessons to incorporate strategies that ensure active participation of students and effective teaching has been emphasized by scholars such as Henriksen and Mishra (2015) and Sawyer (2006). Thus, like Trainee 12, Trainee 16 equally considered it essential to have several methods and strategies to ensure that the varied needs of individual learners are met:

> *"Before I started this programme, the individual needs of students were not at the forefront of my mind. But now, before I prepare a lesson or when I am preparing a lesson, I take into account my different learners and their individual needs to create the lesson, so that I don't use just one method of teaching but several methods to be able to meet the needs of individual learners." (Trainee 16)*

Based on the understanding of student learning styles and abilities, trainees were subsequently able to teach creatively and for creativity using imaginative, innovative and divergent methods and strategies which promoted inquiry, encouraged participation, enthusiasm and cooperation in

class (Lucas, 2001). These methods and strategies include; inquiry method, demonstration, role-play, dramatization, group discussion and pairing, audio-visual learning, debating, discovery through research and presentation (Horng et al., 2005; Starko, 2010).

There were many examples of the variety of creative methods and strategies employed by the participants in view of their training. For instance, Trainee 13 revealed that presently she starts lessons in the morning by getting pupils to become enthused as they sing and share their personal stories.

> *"Formerly, we would just start our lesson straight from Assembly, but now we have a starter: We have to sing a little, just to get their minds relaxed for the day. I would ask them questions like, how did your day go yesterday? What did you eat? And that gets them excited, all jumping around and then I infuse the lessons and we take it from there." (Trainee 13)*

The ability of Trainee 13 to find creative ways of starting her class resonates with typical characteristics of creative teachers to create and support environments of curiosity (Lily & Bramwell, 2004) as well as pass on their enthusiasm to learners (Lucas, 2001).

On her part, Trainee 7 reported of how through encouraging students to conduct research on deviant behaviours in a Social Studies class, students were able to unearth and present useful information which you would not normally find in the prescribed textbook:

> *"With reference to Social Studies, you give them a topic to go and research on they come and find out things that are actually not in their textbooks, so they now want to know if what they researched is true. I recently asked them to conduct research on deviant behaviours; I was amazed at the kind of information they had and when they presented, I*

myself ended up asking them questions because I wasn't even aware of some of the things they found out." (Trainee 7)

For Trainee 12, he found group discussion as a necessary strategy for collobrative learning and exchange of divergent perspectives as he himself had discovered through training on the MA Education programme. In his own words,

"I had gone to learn about the benefits of group learning and we used discussions in our MA class. So once we used it and I realized people have different views, perspectives and ways of seeing things, I encourage my students to do group discussions."(Trainee 12)

In a subject like History, Trainee 14 following her exposure to creative teaching methods and strategies on the MA Education programme, she utilised role playing to treat the topic of the "Big Six" who were leading personalities involved in Ghana's Independence struggle. Due to the need to recall the names involved, it was previously difficult treating the topic to her Lower Primary class, but by creatively getting the pupils to play the roles of the personalities of the "Big Six," Trainee 14 succeeded at making the topic more fun. She indicated that the pupils were able to easily recall the names of the personalities involved when they were assessed at the end of the term:

"In our History class, I knew from previously teaching the topic on the Big Six that it was difficult. This time around, I decided to use the children for role playing, so I pointed out six boys in the class and told them they were the Big Six and named them accordingly, so anytime I mentioned Big Six, they have to mention their names; they would take turns to role play and mention their Big Six names: I'm Edward Akufo-Addo, I'm Paa Grant, I am Arko Adjei, I'm Kwame Nkrumah and so forth. At the end of this term, I gave them a

question on the names of the Big Six and everyone in class got it correct. They could easily remember the names as represented by their colleagues in class. The course has helped me to be creative with regards to the way I teach." (Trainee 14)

Similar to the role-playing strategy employed by Trainee 14 to successful outcomes, Trainee 16 who teaches ICT in Upper Primary, used dramatisation to get students to learn and appreciate the use of Microsoft Excel programme:

"It's easier to act out certain scenarios to make students understand the concept that you are trying to teach. Recently, I brainstormed with the students and asked them what situations they think Microsoft Excel would be useful, having explained to them what the programme is used for. They came up with scenarios of professions and dramatised situations like a doctor who instead of calling out folders, had a list of patients on Excel. Other students acted as bankers, accountants and so forth." (Trainee, 16).

According to Trainee 16, the creative use of dramatisation got students keenly involved in the lesson, they discovered the practical benefits of the Excel computer programme and that,

"Students realised that the programme is actually profitable for everyday life. The idea of the subject is to teach them not only for the future but also for the present."

As part of strategies to foster creative teaching and learning, participants utilised information communication technology (ICT) tools in class. Trainee 7 for instance indicated how her teengage students at the Senior High School level were becoming skilled at PowerPoint presentations:

> *"With the students too, they never knew that computers and ICT had anything to do with English and Social studies, but now they do. They are becoming more practical with the ICT because I just don't allow one person to do the PowerPoint presentation, everyone gets to bring his or her creative side to contribute to preparation of slides and presentation." (Trainee 7)*

Indeed, Craft (2010) advocates for the use of ICT tools which promote collaborative learning, discovery and problem-solving in developing the creativity of children. It is in this regard that Trainee 13 also used online audio-visual tools like YouTube in explaining concepts such as the metamorphosis of a butterfly to a Lower Primary class:

> *"With regards to my creativity in class, I have learnt how to inculcate ICT in my lessons. For instance, previously we could learn about the stages of a butterfly, the children would not be able to get it well, but by infusing videos on YouTube for them to see how the stages occur it really got them to understand what I was teaching." (Trainee 13)*

As stated by Csikszentmihalyi (2010), children growing up in the 21st century do so within universes of virtual electronics, hence the use of ICT tools in creative pedagogy is appropriate and essential.

In respect of assessments, some participants reported using creative and formative ways of assessing students to enhance creative thinking abilities. Trainee 7 for instance shows how she has shifted from the use of usual class tests to now using more class presentations by students as a means of assessment:

> *"Formerly it was just the class tests, but now I hardly do class tests. Instead of the class tests, we do the presentations, and we score. The one who contributes a lot also gets*

additional marks, so you get all of them talking. These are planned constructive approaches to assessment." (Trainee 7)

In addition to the constructive ways of assessing students, other participants, through their understanding of theories of learning on the MA Education programme, were now motivating students to learn through positive reinforcement as a creative teaching strategy. For instance, Trainee 14 stated that:

"Formerly, I was quite quick to punish a student. But now, if a person pays more attention, I give him/her a sticker and I shower them with praises. So because I praise them, everyone wants me to shower them praises so they pay attention. That's one way that has helped a lot." (Trainee 14)

It is clear from the above findings that the use of teaching methods and strategies such as role-playing, dramatisation, research, presentation, demonstration, ICT tools, positive reinforcement, among others by participants clearly foster the learner-centred approaches, active participation, playfulness, imagination and cooperative learning essential for creative pedagogy (Craft, 2001; Jeffrey & Craft, 2004; Lin, 2009).

4.3.3. Effects of creative ways of teaching and learning

Research Question 3:

In which ways do the creative methods of teaching used now by in-service teacher trainees affect teaching and learning?

This category of description delves into the transformations-on students and teachers alike-emanating from the implementation of improved and creative ways of teaching. With regards to

students, excerpts from the transcript reveal that they have become empowered and confident; students are in addition curious and asking more questions; they have also developed more interest and love for subjects, they are proactive and are no more afraid to make mistakes as they enjoy class and are excited about learning.

To start with, it was noted that as a result of the improved ways of teaching by participants, students were asking broader questions and connecting trends with what they learn in class. Trainee 1 for instance revealed that,

> "*They (students) are now able to ask questions and not just any question; they ask questions that probably are even out there on social media, political issues, things that they have heard." (Trainee 1)*

The ability of students to inquire not only about classroom issues but wondering about issues pertaining to their daily socio-cultural realities implies that the students were learning creatively and consequently broadening their horizons. As stated by Di Paolantonio (2014), it is important to cultivate creative thinking in school through a pathos of wonderment that enable both teachers and students to dwell on questions which although may not necessarily be applicable or practical to the immediate classroom situation, lead to the generation of creative ideas and solutions.

Some participants equally reported of students' hightened interests and enthusiams in different subjects such as Literature, English, Science and History. This affirms the fact that creative pedagogy cuts across subject domains and not limited to the arts (Runco, 2007).

> *"The MA Education programme has made teaching easier and learning enjoyable for my students especially when we do Literature. They are now allowed to come out with their opinions and defend them to make logical sense. When I use things like puzzles, they are*

> *like, 'We didn't know English was this interesting…we didn't know there are other creative ways of learning the language.'" (Trainee 2)*

For participant 12 who teaches History at the secondary school level, his improved and creative ways of teaching as a result of the MA Education programme do not only lead to keen interest in the subject but also a new found autonomy for students. As emphasised by Taber (2006), knowledge is not an imposition and that learners ought to be guided to construct their own knowledge. Hence, enlightened by the constructivist approach to teaching and learning, Trainee 12 views himself as a teacher who facilitates students' construction of their own knowledge. By giving students more opportunity to express themselves, students have stopped negative behaviours such as sleeping during class as they are now eager to learn and they feel in charge of what they learn. They now actively participate in class discussions and feel a certain ownership of the History class as revealed by Trainee 12 in the following excerpt:

> *"I have also come to the realization that the more power you give to students, the more they contribute in class. Power being you giving them the chance for them to express themselves. That has also stopped them from sleeping in class. Everybody is eager to have his or her turn to explain a topic. Now they ask me anything and if I don't know I may throw it back to them, so they learn from each other. As a result, they feel when they come to class they take charge of their learning. I have heard them telling their colleagues that 'The History Class is for us' I make them own the space." (Trainee 12)*

In encouraging students to own their learning space, Trainee 12 was able to ensure the autonomy of learners which according to Craft (2001) and Lin (2009) is important for nurturing creative thinking. Trainee 12 further gave an instance of one student's keen interest in ensuring she did

not miss the History class, even when she was out of school for a medical check-up at the hospital:

> *"A student who used to complain in class about stomach ache and would usually be found with her head on her desk during History class has since changed. In fact recently, she went for a check-up at the hospital. She wasn't supposed to be in class, but she came to school purposely for the History class. She said she had found out something through research and wanted to come and debate and verify with me. During the class, she brought it up and we all discussed it and she got the understanding she wanted. After the History class, she called her mum to come and pick her up and she left for the house." (Trainee 12)*

Another participant, Trainee 11, expressed satisfaction from knowing that due to the effects of her improved and creative ways of teaching, students are now in love with the subject she teaches, that is, Integrated Science, which was formerly considered difficult.

> *"I am satisfied, because I have actually got them to love Integrated Science. Once they love the subject, learning it becomes easier." (Trainee 11)*

In terms of effects of the use of creative teaching methods and strategies, Trainee 16 revealed that her students become excited whenever she uses dramatisation or game-based learning:

> *"The students are also very excited by my improved ways of teaching, especially the use of theatre (dramatisation) and games. When you tell them that at the end of a lesson you'll play a game, their level of excitement completely skyrockets." (Trainee 16)*

As participants implement creative teaching methods and strategies in class which impact on students, the participants themselves report of being transformed by their practice of creative pedagogy. Trainees who prior to enrolling on the MA Education programme never thought of themselves as creative now do and the more they practice creative teaching, the more their creative abilities heighten. This affirms Sternberg's (1999) assertion that creative practice generates more motivation.

As the following excerpts from the transcript show, participants have been positively impacted by their practice especially in terms of their emotional wellbeing as they are now more confident, enthused, energized, more creative, efficient, intentional and satisfied. These attributes of emotional wellbeing prove the devotion of teachers to duty, genuine interest to facilitate learning and high levels of positive energy which according to Lily and Bramwell (2004) are essential for creative teaching and learning. In the case of Trainee 2 for instance, she now feels excited going to teach because she has become more confident due to her improved practice of planning and delivery of lessons:

> *"The impact of the MA Education programme has been a lot. For instance, my school doesn't require me to write lessons plans but because of what I have learnt on my MA programme, I don't go to class unprepared. I plan my lessons. It has become a part of me because I know it is valuable and this has made me feel so much confident. When I'm teaching, I know what I'm about and it helps me to deliver well. I'm just excited going to work and students are also happy to see me. I am having fun, that's the thing, really. The MA programme has really helped me to be more creative."(Trainee 2)*

Like Trainee 2, Trainee 3 reported of improvement in class management due to her now creative ways of teaching, there is no room for students to misbehave primarily because students are keenly involved in classroom activities:

> *"I will say the MA Education programme has helped me to improve upon the control and management of my class. I realised that the only time students misbehave is when they feel bored or there is nothing happening. But with some of these methods I now use, you realize there is no room for misbehaving because there is an interest and everybody wants to partake." (Trainee 3)*

Lucas (2001) stated that one distinctive characteristic of a creative teacher is her ability to learn from students. In this regard, Trainee 7 indicated how her training on the MA Education programme had led to personal transformations as she is now able to learn from students. She revealed that she is more efficient as together with her students she accomplishes her lessons within a short period of time. And like her colleague Trainee 2, Trainee 7 now enjoys teaching and looks forward to going to class:

> *"There has been a very big transformation in me, in the sense that at first in class I thought I was the only custodian of knowledge, but now I am learning more from the students. Sometimes the questions they ask me push me to read more than I used to. It's fun. It's interesting. I get home and look forward to going to school the next day. They are discovering and constructing their own knowledge and I can do a lot within a short period of time." (Trainee 7)*

A few more excerpts from the transcript highlight how participants have grown in confidence, especially by producing desired results. Trainee 13 for instance stated that she is now bold,

happy and energised in the awareness that she can confidently utilise different creative ways to teach:

> *"I'm happy…I feel more energized going to class now, I am more bolder as compared to former times when I'd have to learn and read whatever I was going to teach, but now I'm bold and happy with myself knowing that I am able to find different and creative ways to start and deliver lessons." (Trainee 13)*

There have also been varieties of experiences of improved and empathetic relationships between teachers and students, as well as between teachers and parents who provide useful feedback about the effects of teaching. For instance,

> *"Sometimes I get positive feedback from the parents about the positive impacts of my new ways of teaching. The students also show concern and want to be helpful. I have students I taught last term who are now in Grade 6 and JHS 1. They come all the way to me and say, 'Sir we want to check up on you, how are you doing?' And I'm surprised and motivated to do much more." (Trainee 1)*

On her part, Trainee 14 revealed how a mother compared the difference in how she taught her daughter a few years back and the improvement in her son's current learning experience with Trainee 14:

> *"For one parent, I taught her daughter a few years ago and I'm teaching her son now. She recently remarked that how her son is learning is better than how her daughter learnt. I told her that I know. The son is able to learn better and understand things better as compared to the daughter with regards to the same topics. I know that I have improved thanks to the MA Education programme." (Trainee 14)*

4.3.4. Environments

Research Question 4:

What kinds of environments do teacher trainees have in their schools for fostering creative teaching and learning?

There were some similarities and differences in how generally the school environments within which the participants worked supported or inhibited creative pedagogy. This is illustrated in the table below:

Table 3: Supportive and Non-Supportive Environments of Schools where Trainees teach

TYPE OF SCHOOL	ENABLING ENVIRONMENT	NON-SUPPORTIVE ENVIRONMENT
Private	Schools of trainee (T): T2, T3, T5, T8, T10, T11, T12, T13, T14 and T16	Schools of trainee (T): T1, T4, and T7
Public	Schools of trainee (T): T15 and T17	Schools of trainee (T): T9 and T6

Source: Field Data (2020)

From the research findings, as shown in *Table 3*, most private schools where participants teach have environments which are generally supportive for fostering creative teaching and learning within and out of the classroom. We could talk of the availability of co-curricular activities, use of ICT tools, laboratories and TLMs as well as collaboration between teaching staff and administrators. That notwithstanding, not all private schools where participants teach have the enabling environments for fostering creative pedagogy. On the other hand it could be inferred

from the transcripts that some public schools have environments which promote creative pedagogy.

Tiovanene et al., (2013) have emphasised the necessesity of conducive environments and attitudes of teachers in fosteing creativity among children. Consequently, Trainee 2 highlighted the supportive environment of his school in terms of available teaching and learning resources, as well as the independence and appreciation of teachers as follows:

> *"We have the opportunity of using a projector; we have a library. I mean, we have all the basic things that we need to run the school. As a teacher, you have the liberty to manage your class. There is supervision but it is not a fault-finding one. They (the school administrators) want to see progress and when they see progress, they are happy. My school appreciates the teacher. It gives the teacher room to be creative." (Trainee 2)*

Trainee 5 is a unique participant in the sense that she does homeschooling and unlike her colleague in-service trainees who teach in schools, she consistently and daily teaches her child at home after school, using the GES syllabus. She reported of how through the MA Education programme she has learnt to create the enabling environment at home for her teaching practice:

> *"Formerlly, it was just me and my son and the table but now I have posters all over. We have one up to ten on the wall depicting my son's fingers. We have other posters that show colours. Also we have the floor, in my kitchen. It is like a 12x12 room so we have the floor cleaned and we put our mats and other playful toys there so that some of the things we are learning, I just sit on the floor with him and learn together."*

By turning the space at home into a conducive learning environment, Trainee 5 modeled creative thinking and behaviour which Jeffrey and Craft (2004) show to be important to propel learners to express their creativity.

The importance of co-curricular activities and how these activities foster creative learning were emphasized by some of the participants. For instance, Trainee 8 revealed that in her school, they have a combination of indoor and outdoor games, learning of musical instruments and folklore:

> *"We have co-curricular activities that help to build coordination among them (students). We have the piano, the guitar and the violin. Then we have the folklore where we tell them about stories, events from the past and some of the games we used to do in the past that help with our brain and hand coordination or mind and feet coordination. We play the game of oware too." (Trainee 8)*

The outstanding thing about the co-curricular activities in Trainee 8's school is the use of indigenous knowledge systems through traditional folklore and indigenous games like *oware*, a board game. This is in line with proposal by Amponsah et al., (2019) for Ghanaian schools to incorporate indigenous games and ideas as a creative pedagogy strategy.

Trainee 13 equally mentioned a variety of co-curricular activities undertaken in her school such as football, swimming, drama, ballet and of particular interest, coding.

> *"In my school, we talk to parents to get their wards enrolled in extra-curricular activities. We have the coding club, we have the ballet club, drama club, swimming club, football club. It helps them. One of my students is in the coding club and she is always*

talking about what they are building, she really enjoys what she does in the club." (Trainee 13)

It is commendable that Trainee 13's school has coding as part of its co-curricular activities for children. As noted by Bers (2018), coding should form an integral part of 21st century education since coding programmes for children enhance open-ended exploration, social interaction, creativity and problem-solving skills.

Other school environments were not conducive largely due to factors such as time constraints, work overload, non-availability of resources and administrative bottlenecks. These are obvious inhibitors to creativity within the school environment as noted by Salifu and Agbenyega (2013). Within such stifling environments, participants, through their own creative initiatives have had to improvise. The following examples portray some non-supportive environments in respect of creative pedagogy and how teachers improvise within such environments. In the case of Trainee 7 for instance, the head of her school does not see the need to incorporate ICT into the teaching of subjects like English and Social Studies. According to her, the school (which is a private school) does not encourage any co-curricular activities as the main focus is to get students to study to pass the final examinations:

"We do presentations every three weeks, using my own laptop and projector. But just getting the headmaster to understand and agree for me to use the laptop and projector is hectic. He (the headmaster) just doesn't understand why subjects like English or Social studies require using the ICT lab for research when there are text books and all they (students) have to do is to read. The school doesn't encourage co-curricular activities at

> *all because they believe that, as a senior secondary school students their only aim is to learn and go and pass WASCCE." (Trainee 7)*

Henrikson and Mishra (2015) have underscored how effective and creative teaching often get impeded by school environments which focus on high-stake examinations as pertaining to the challenges faced by Trainee 7 in her school.

For Trainee 9 who teaches in a public Senior High School, she improvises using her own phone and data to show students some useful information on online portals such as YouTube. She said,

> *"In my school, everything is not so conducive but it doesn't also mean we shouldn't teach and impact. Sometimes some of the things that I want to show them are on the internet so I will just go to the Net and retrieve the information. If it is pictures, sometimes it is an activity or it is a demonstration I pick it from YouTube and show it around." (Trainee 9)*

The ability of participants to improvise within stifling conditions points to their flexibility, open-mindednes, tenacity and enthusiasm which as stated by Baer (2015) and Lin (2009) distinquish creative teachers who are poised to make a difference.

4.3.5. Emerging Theme: Motivation

An overarching theme which emerged from the thematic analysis and outcome spaces was the question of teacher identity and motivation. This category of description deals with what motivated participants to become teachers and what motivates them to continue to identify themselves as teachers. Do they find teaching meaningful? Is teaching something they love and enjoy doing? Participants' responses to the question, "Why are you into teaching?" revealed that they are generally intrinsically motivated to teach. Intrinsic motivation is an essential factor for

creativity development, particularly for a successful creative pedagogical practice (Amible, 1996; Starko, 2010).

The motivation of participant trainees however is in varying ways. Some trainees developed the interest for teaching through the influence of inspiring teachers while in high school or at the university. These trainees therefore made a deliberate choice to go into teaching based on inspiration and interest which they sustained over a period of time. Trainee 7 for example spoke about the joy of explaining things to others as motivation for becoming a teacher:

> *"I went into teaching because of the joy I saw in people anytime I finished teaching or explained something to them. I realized I get so happy when I am able to get someone have a better understanding of a concept. That's what motivated me. My first teaching appointment was right after secondary school." (Trainee 7)*

For some participants, such as Trainee 8 and Trainee 9, their motivation to become teachers developed while growing up through inspiring experiences with their teachers. Trainee 8 revealed how with the help of her teachers she was able to overcome her lack of confidence and in view of that she chose to be a teacher to push students to realise their potential:

> *"I chose teaching because I want to do the same things my teachers did for me. Growing up I realized that I felt I wasn't good enough; I felt like other people were better than me but I had teachers from every grade who wanted to push me to go the extra mile and they did and I turned out very well." (Trainee 8)*

Similarly, Trainee 9's decision to get into the teaching profession since Junior High School was borne out of inspiration from some teachers of hers who were devoted to making students become better and attain greater heights:

> *"I chose teaching because growing up I saw how my teachers were so involved with us and trying to always make us become better. The first teacher who inspired me most was when I was in Junior High School. So growing up, I knew I wanted to be a teacher" (Trainee, 9)*

Unlike the responses from Trainees 9, 8 and 7, Trainee 13 followed her sustained passion when she took a crucial decision to resign from a job in the corperate world to become a teacher:

> *"After school, I worked with a financial institution for seven years, then I resigned to solely go into teaching, because I love teaching, it's my passion and I love working with children." (Trainee 13)*

It can be deduced from the statements of participants above that they had passion and interest in the teaching profession and sustained their interest over many years. By exerting effort on their passion, these participants through deliberate and sustained practice (Duckworth, 2017) and further training obtained through the MA Education programme, were able to become increasingly skilled and master teaching.

Some other participants had not initially intended to go into teaching; however, they indicated that they took up teaching appointments to soon discover their love and passion for the work. An example is Trainee 1 whose passion for teaching increased during the mandatory National Service and once he discovered his zeal for teaching, he did not hesitate to apply for a job as a teacher:

> *"I had a little passion for teaching, then when I completed university, I happened to do National Service at a Basic school. Within that one year of National Service, the passion grew. I realized I'm really okay with teaching children. As soon as I finished my National*

Service, I applied to an International School and that very day they made me start." (Trainee 1)

Through exposure to creative ways of teaching on the MA Education programme, trainees started implementing creative ways in class which led to further motivation and transformation. As Sternberg (1999) noted, creative practice itself generates motivation for further action. The following excerpts of responses exemplify how participants such as Trainees 9 and 13 felt motivated, transformed and inspired to do more and improve upon teaching practice:

"It is fulfilling even though I still think that there is much more that I can also do to help students." (Trainee 9)

"I'm still yearning to be a better teacher. I can never be a best teacher; there is always room for improvement so I'm always willing to be a better teacher, every day to improve upon myself to be a better teacher."(Trainee 13)

4.4. Proposed Paradigm: Training for Creativity

From the findings of this research, it is obvious that training serves as the bedrock of creative pedagogy. It is through training in creative pedagogical methods that teacher trainees become aware of their own creative thinking abilities and get oriented in the ways of teaching creatively, teaching for creativity and ultimately to enhance creative learning (Lin, 2009).

In furtherance of the aim of this research to design a framework within the context of study, I shall therefore proceed to propose a comprehensive four-pronged conceptual paradigm of creative pedagogy, with emphasis on training as the starting point, thus; *Training for*

Creativity, *Creative Teaching*, *Teaching for Creativity* and *Creative Learning*. This paradigm builds on Lin's (2009) three-pronged framework which served as the theoretical basis for this research. In view of the socio-cultural realities of creative expression which vary from culture to culture (Csikszentmihalyi, 2012), Lin (2009) had argued for context-specific practices of creative pedagogy. Consequently, in the Ghanaian (and for that matter, African) context within which this phenomenographic study is situated, it is paramount to ground creative pedagogical practice, starting from the education and training of teachers. For, as attested to by the empirical findings of this research, teachers can only teach creatively and for creativity if they have adequately been trained to do so.

The proposed four-pronged pedagogical paradigm is illustrated as follows:

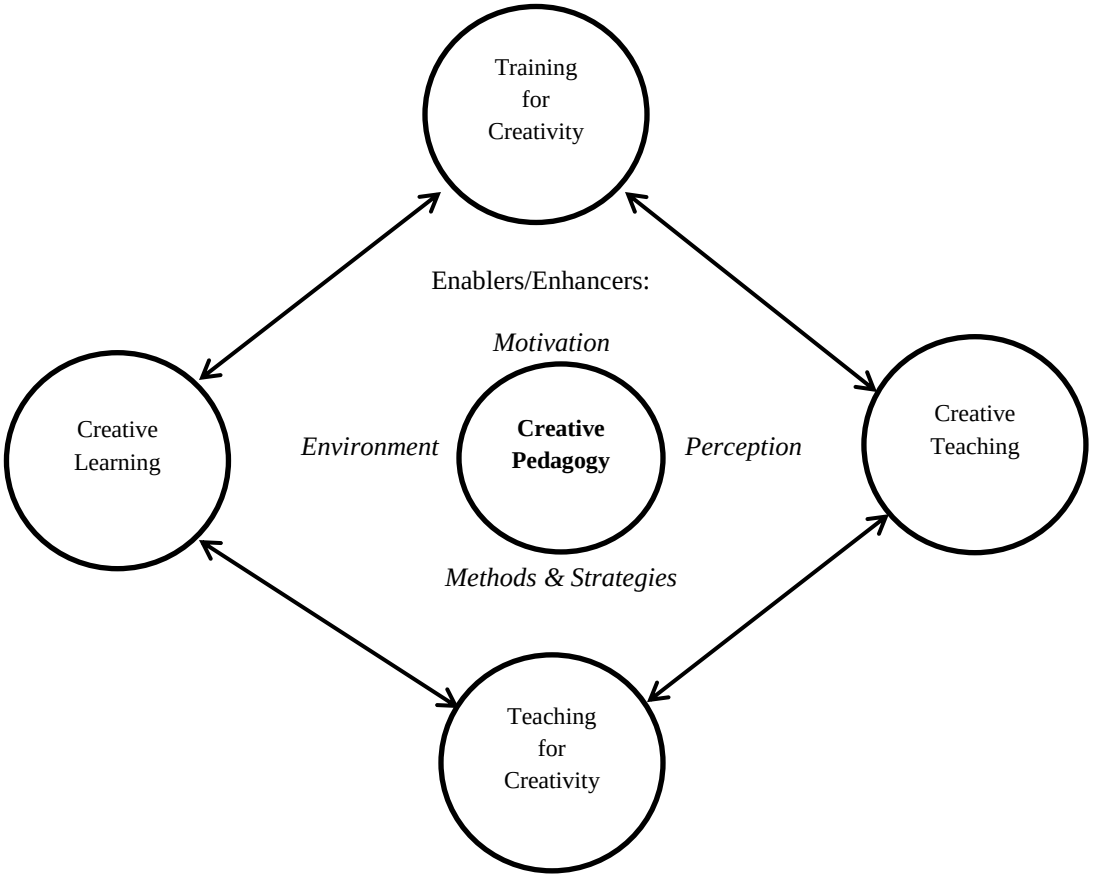

Figure 6: The four elements of creative pedagogy
Source: Author's construct (2020)

The four-pronged framework could equally be further elaborated and indicated by a formula as follows:

Creative Pedagogy (CP) = Training for Creativity (Tr4C) + Creative Teaching (CT) +

Teaching for Creativity (T4C) + Creative Learning (CL)

Thus,

$$CP = Tr4C + CT + T4C + CL$$

Source: Author's construct (2020)

In the context of the emphasis on *Training for Creativity*, the above formula could further be explained by another formula:

$$Tr4C \rightarrow CT + CL = T4C$$

Source: Author's construct (2020)

This formula, Tr4C→CT+CL=T4C, simply means that *Training for Creativity* (Tr4C) leads to *Creative Teaching (CT)* and *Creative Learning (CL)* which together make up the sufficient condition for *Teaching for Creativity (T4C).* In other words, any teaching activity which produces or leads to enjoyable creative outcomes does not necessarily enhance students' creativity unless students equally have the opportunity for creative thinking and action. So, *Creative Teaching (CT)* which shows how creative a teacher is, although a necessary condition, is not a sufficient condition for *Creative Learning (CL)* which is the ultimate purpose of creative pedagogy that can only be realized when students- through teacher's ability and skills to *Teach*

for Creativity (T4C)- are given opportunities to express their creative abilities. Teachers, as the evidence from this research proves, can only be adequately prepared and skilled enough to *Teach for Creativity (T4C)* through training, thus *Training for Creativity (Tr4C).*

From the empirical evidence of this research, analysed to establish a logical hierarchical relationship between the categories of description as shown in *Figure 4.1* above, it can be deduced that the success of a creative pedagogical practice has to be anchored on certain enabling or enhancing factors. In this research, four enabling factors (enablers or enhancers), were identified as key components of the categories of description, viz., *motivation*, *perception*, *environments* and *methods*. Within the context of this proposed paradigm, it could be argued that motivation and perception form the basis or mental disposition (or frame), which enable a teacher's reception to training and resolve to change from one's previous ways of practice to new and improved ways of teaching as training has exposed him or her to. However, motivation and perception alone will not suffice. To be able to realise the full cycle of creative pedagogy, the teacher who has undergone *Training for Creativity (Tr4C),* armed with the appropriate motivation and perceptions (or beliefs) has to act on enabling environments to implement, through *Creative Teaching (CT)* and *Teaching for Creativity (T4C)* with strategic methods of instructions for *Creative Learning (CL)* to occur. As attested to in the excerpts of transcripts above about the understanding and ways of experiencing by in-service trainees, these enablers or enhancers serve as the fuel or the conduit for the phenomenon of creative pedagogy.

4.5. Chapter Summary

This chapter evolved through the step-by-step process of phenomenographic analysis, from the identification of differences and similarities in views from the transcripts to obtain a pool of meaning with regards to the phenomenon of creative pedagogy. Through reiteration, five main categories of description or outcome spaces were developed along with a hierarchical relationship between these categories. Each of the five categories was subsequently expatiated upon with excerpts from the transcripts. Based on the findings from the analysis, the final section of the chapter was devoted to designing a four element conceptual paradigm of creative pedagogy with emphasis on the indispensability of training as bedrock for creative pedagogical practice. The implications of this study in general and the proposed framework in particular are addressed in the next and final chapter.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1. Introduction

This final chapter discusses the key findings of the study emanating from the categories of the description contained in the previous chapter (Chapter Four) within the parameters of the aim and research questions of the study as recapped here. The limitations, implications, as well as directions of the study for further research, are equally discussed.

5.2. Recapture of Aim of the Study and Research Questions

The aim of this phenomenographic study was to design a paradigm for creative pedagogy which has been achieved as my original contribution to the body of knowledge with specific reference to the theory and practice of creative pedagogy. The proposed paradigm which is presented in Chapter Four of the study, with accompanying diagram and formulae, comprises four components, consisting of *Training for Creativity* in addition to Lin's (2009) three-pronged elements of *Creative Teaching*, *Teaching for Creativity* and *Creative Learning.* The emphasis of this proposed four-pronged framework on training as the bedrock of creative pedagogy is backed by the empirical findings of the research.

The findings of the research were based solely on the phenomenographic analysis of the interview transcripts of participant in-service trainees with regards to their understanding and experiences of the phenomenon of creative pedagogy. The questions which guided me to elicit

responses in relations to the phenomenon were based on the following four main questions of the study:

5. How does training on the MA Education programme in creative teaching methods enhance the ability of in-service teachers to teach creatively?
6. Which creative methods and strategies do in-service teacher trainees employ now in their teaching that they did not use or know of prior to enrolling on the MA Education programme?
7. In which ways do the creative methods of teaching used now by in-service teacher trainees affect teaching and learning?
8. What kinds of environments do teacher trainees have in their schools for fostering creative teaching and learning?

5.3. Conclusions pertaining to Key Findings

5.3.1. How training in creative teaching methods enhances the ability of in-service teachers to teach creatively

From the findings of this research, it has emerged that three key factors influenced the creativity training and heightened the perception of trainees of teaching as a creative practice. These factors are; the content of the study programme, mode of delivery by teacher educators and influence of teacher educators. For instance, in terms of the content of the programme, some participants indicated the extent of improvement in their teaching practice through the understanding and application of theories such as constructivism (Taber, 2006) and Bloom's taxonomy (Jerslin & Devaki, 2016).

Participants were found to be intrinsically motivated which affirms Lin and Bramwell's (2007) claim that creative teachers are usually intrinscially motivated. While some participants had nurtured and sustained their interest to become teachers over a period of time, others took up teaching appointments and discovered their love for it. From the findings, it is obvious the MA Education programme affirmed their motivation and inspired them to identify themselves as creative teachers. Through motivation, participants were able to significantly influence the creativity of students which proves an essential aspect of creative teaching and learning as stated by Lin (2009).

Similarly, the course heightened the awareness of trainees and teaching as creative. However, a single participant who prior to and after exposure to training, did not consider teaching as creative although she had started implementing some creative methods of assessment. When probed further it was established that she had misconceptions about creativity, such as noted by Cropley and Petston (2019) that creativity is a preserve of some gifted individuals. Her misconceptions therefore inhibited her understanding unlike the transformations which all the other interviewees experienced in relation to the phenomenon of creative pedagogy.

5.3.2. Creative methods and strategies now used by teacher trainees

It was evident that most teachers previously, mainly used and relied on the lecture method to deliver their lessons. However, through the training obtained on the MA Education programme, they discovered that the lecture method is generally not useful for creative pedagogy because it does not involve the students as learners. They were now equipped with varied student-centred and creative methods and strategies for teaching. The methods and strategies adopted following

their training include but not limited to; differentiated learning (Tomlinson, 2004), which was foundational to their use of other instructional methods like dramatization, presentation, peer-to-peer and co-operative learning, debating, discussions, among others. According to Sahlberg (2009), these child-centered and constructivists methods and strategies of learning lead to participation, cooperation and creative problem-solving skills.

These creative pedagogical methods and strategies cut across subject domains and levels of the school system (Kaufman & Baer, 2005), and in the case of this research from Lower Primary to Secondary levels. It was established that irrespective of the subject areas such as Language studies (Spanish and English), Social Studies, Religious and Moral Education, Arts, Science, ICT, History, Mathematics and Economics, the methods yielded positive impacts, including students' increased interest and enthusiasm in some of these subjects. This finding proves a view expressed by Runco (2007) that the strategies entailed in creative pedagogy are not limited to the arts and they must be applied to all subject areas.

5.3.3. Effects and impacts of creative ways of teaching

There were transformations in the learning experiences of both students and teachers in respect of creative and improved ways of teaching by trainees following their exposure and training on the MA Education course. It was discovered from the study that students had become more curious, confident, empowered, proactive, developed keen interests in certain subjects that they previously did not like and they enjoyed participating and collaborating with their peers. Thus, the students had become empowered, commited to their own learning. As creative learners, students of participants were as reiterated by Smith, Nerantzi and Middleton (2014) now able to

ask more questions and were not afraid to make mistakes as they learn how to think and be creative. Undoubtedly, these learning outcomes point to the practical realisation of the social constructivism (Taber, 2006) which underpines creative pedagogy.

On the other hand, the in-service teacher trainees who were interviewed had drastically transformed their ways of practice due to the training they received so far. Most participant teachers proved Lucas' (2001) assession that creative teachers are willing to learn from students and are not afraid to make and admit to making mistakes. They were mostly now aware of their creative abilities and more confident as they deliver desired results like improved grades and being able to relate better and understand the needs of their students. They were now expressing attributes of emotional wellbeing as they had become more confident, intentional about their teaching practices while being more energized, enthused and satisfied with their work. It is such positive attributes of emotional wellbeing which Lily and Bramwell (2004) emphasised as essential for creative teaching and learning. Some trainee teachers also described improved relationships with parents of students who gave them positive feedback about the transformative changes they had observed in their wards at home.

5.3.4. Kinds of environments

According to Tiovenem et al. (2013), school environments are essential factors in fostering creativity. The findings of the research showed that there were both favourable or enhancing environments and inhibiting environments of schools where participants teach. While the majority of private schools where interviewees teach have environments which are generally supportive environments for fostering creative teaching and learning within and out of the classroom in terms of availability of resources like ICT tools, science laboratories and conduce

staff relationships, some other private schools had inhibiting environments. Similarly the public schools of where some participants work had a balance of both supportive and non-supportive environments.

The use of ICT tools such as PowerPoint presentations and online audio-visual resources like YouTube featured prominently in the the creative teaching strategies of some participants within supportive and non-supportive school environments. Csikszentmihalyi (2010) noted that children of the 21st century are surrounded by virtual realities and universes, hence Craft (2010) underscored the importance of ICT tools to develop the creativity of school children.

The inhibiting environments, as the research revealed, were mainly attributed to administrative bottlenecks, time constraints, work overload and non-availability of teaching and learning materials (TLMs). These factors, according to Salifu and Agbenyega (2013), stifle efforts at developing the creativity of students. Within the confines of non-supportive environments, it was discovered that the creative teacher trainees found ways to improvise, by for instance, using their own resources such as laptops and projectors.

Consequently, irrespective of the type of school, creative pedagogical methods, when used and propelled by favourable environment lead to transformative results in teaching and learning, impacting students and teachers as well as parents, schools and all stakeholders within the educational eco-system.

5.4. Limitations of the Study

The main limitation of this study is in connection with the phenomenographic methodology used. The usual practice in phenomenographic research, whether undertaken by a group of researcher (which is mostly the case) or a lone researcher, the analysis of interviews benefits from re-iterations by more than one person, although this is not a requirement for validity. The gains of for instance having another researcher make tentative allocations of transcripts to categories of description for comparison helps to strengthen the process of analysis. Notwithstanding the lack of reiteration from another researcher (which typically occurs with individual phenomenographic research), I studied and as much as possible rigorously followed the standard procedures of developmental phenomenographic research data gathering and analysis (Bowden & Green, 2005) to limit researcher bias. The excerpts from transcripts revealed, by themselves, the depth and breadth of the varieties of interviewees' ways of understanding and experiencing the phenomenon of creative pedagogy.

Although the sample size of 17 interviewees is adequate for a phenomenographic research and a true representation of the population of cohort MA Education students from which the sample was drawn, any generalised application of the findings from this study may be limited because 17 in-service teacher trainees cannot be a true representation of the many teacher trainees undertaken other teacher education programmes around the country. Nonetheless, being a qualitative study, the strengths, validity and merits of this research and the phenomenographic approach used lie in the quality of responses elicited in respect of the studied phenomenon, that is, creative pedagogy as occurred within a specific context of study with particular reference to the newly introduced MA Education programme.

5.5. Implications and Recommendations of the Study

5.5.1. Mentorship

The *Training for Creativity* component of the proposed framework of creative pedagogy implies mentorship and the creative delivery of lessons by teacher educators, what I will refer to as *Creative Teacher Training (CTT)*, in a manner that ignites creative thinking and actions from teacher trainees as indicated by excerpts from the transcripts. In a lot of ways, the creative teachers in this research reflect the teachers who educated them. We can equally deduce from the findings of this research that teacher trainees mentored by teacher educators who by *Training for Creativity* do not consider themselves fonts of all knowledge will influence teachers to practice creative pedagogy also not afraid to make and admit to their mistakes in class. This is a crucial mindset shown in this research to be essential to creative pedagogy because it changes the perception of students who, no longer considering their teachers as all-knowing, are unafraid to make mistakes as they learn.

Through mentorship, the teacher who is trained to teach creatively and for creativity equally grows through creative learning as s/he reflects and improves upon teaching to foster creative learning among students. In this way, *Training for Creativity* should be considered not only from the perspective of training obtained through a teacher education programme but also as the ongoing learning obtained through teaching practice and experience. In other words, *Training for Creativity* should develop teaching practitioners who should learn *with* and *from* students who do likewise *with* and *from* their peers as well as their teachers. This implies reverse mentoring as teachers learn from student and vice versa. Consequently, *Training for Creativity*, within the conceptual framework of the proposed four elements of creative pedagogy should be

viewed as a continuous and deliberate process of teaching and learning by both teacher and student alike, hence, a cyclical praxis of construction and application of creative knowledge.

5.5.2. Need for deliberate orientation in creative pedagogy

From the research, it can be deduced that teachers are employed and left to their fate with whatever to do to teach children. There appears to be inadequate or absence of orientation training programmes for newly employed teachers. Schools, especially private schools, should have training in creative pedagogies for newly employed teachers as part of orientation and regularly as they continue to teach so that they are in touch with the trends of 21st century education.

Similarly, the proposed four-pronged framework, based on the findings of this research highlights the indispensability and imperative of training in achieving creative pedagogical goals. This should inform teacher education programmes to consciously orient and train teacher trainees in the awareness of teaching as a creative practice. In this regard, teacher education programmes should strive to have clearly stated and developed courses in the theories and practices of creative pedagogy.

5.5.3. Proposed framework as paradigm for social transformation

A major implication and contribution of the study to the body of knowledge is that creative pedagogy, consisting of the proposed four elements of *Training for Creativity*, *Creative Teaching*, *Teaching for Creativity* and *Creative Learning*, implies that it is a socially

transformative paradigm impacting ways of knowing and being. Creative pedagogy is socially transformative because as shown from the empirical evidence of this research, it transforms both the teacher and student who end up being agents of transformation in society. The interactions which occur through the practice of creative pedagogy make learning a social activity (Toivanem et al., 2013). The promise of creative pedagogy then, is that, it develops a community of learners who are facilitated to use their imagination through a pathos of wonderment (Di Paolantonio, 2014) and accumulated experiences to construct their own knowledge as they visualise possibilities, and with time, generate ideas and solutions to problems in life while living creatively meaningful lives that impact society.

The four components of creative pedagogy involve cooperation and this fosters relationships for personal and communal wellbeing, social innovation, among others. The cooperative aspect of creative pedagogy grounds students and teachers in learning towards a purpose of social cohesion. Timostsuk and Ugaste (2010) have suggested the need to consciously develop the social aspects of learning by supporting teacher identity formation in initial training. Stronger links between teacher education and society might better prepare students for their future work.

Also, the cooperative approach to teaching and learning ingrained in creative pedagogy leads to sharing and transfer of knowledge for the welfare of society, for as Armah (2019) stated, creative knowledge is infinitely sharable and when you share knowledge, everybody gains knowledge. This is in in tandem with a common African proverb that, “knowledge is like a baobab tree that one person cannot embrace it with both arms” (Grant & Asimeng-Boahene, 2006). Societies are transformed through the sharing and application of creative knowledge and skills in the conception and production of useful ideas and resources for the benefit of all

(Armah, 2019). Collaborative and co-operative learning lead to co-operative and egalitarian social systems, thereby decolonizing the canon of educational practices which have led to unnecessarily competitive and harmful sociocultural, economic and political systems (Armah, 2019; Chinweizu, 2010).

Similarly, an Akan proverb says that, *"Ɔbaako na okum sono, na amansan die."* In other words, although an elephant may be killed by an individual, its meat will be enjoyed by the entire community (Crabbe, 2017). The belief that the quest of an individual has the potential of benefitting the entire society or community echoes the principle of *Ubuntu* (Mpofu, 2002; Ramose, 1999). The same belief underpins the formation and development of a nation which starts with the individual, then the family, the clan, the community and the whole becoming a nation (Atuire, 2019; Crabbe, 2017). With specific reference to the development of Ghana as a nation, Danquah (1968) noted that:

> "To make the development of the individual social, there must be progress in Ghana, and to make the achievement of Ghana progressive, there must be individual progress…in education lies the greatest secret to perfecting Ghana. The liberation of the individual abilities is the liberation of Ghana," (Danquah, 1968, p. 94).

Similarly, in his classic *Ethiopian Unbound*, Hayford (1969) states that 'the salvation of a people depended upon education' (Hayford, 1969, p.15). By liberating the inherent creative potential of students and teachers, creative pedagogy, understood within this proposed four component conceptual framework, leads to a true realisation of what it means to be educated in line with the etymology of the word 'education'. The word 'education', comes from two related Latin verbs, *educare* which means 'to bring up' and *educere* which means to 'bring or lead forth' to imply

that the process of education should bring one up or make a person grow in ways that enable her to bring out her inherent creative potential. Such is the teleological foundation of education of which Kant (1803) (cited in Cahn, 2009) argued in his *Lectures on Pedagogy* that human beings can only realise who they are through education. By implication, through the liberation of the creative abilities of individual teachers and students as established by this empirical study, creative pedagogical curriculum and practice ultimately foster the wellbeing of the larger society.

5.6. Direction for Further Research

As mentioned earlier in this chapter, the content of the recently introduced MA Education programme at the Department of Teacher Education, a new department at the University of Ghana, played a pivotal role in the transformative change which the teacher trainees experienced in respect of creative pedagogy. Considering the debilitating effects of the inherited colonial educational system with its inherent inhibitions to creativity development and the need to overcome such inhibitions, it would be important, moving forward, to undertake further studies aimed at incorporating indigenous conceptions and practices of creativity into the content of teacher education programmes. In this regard, it is recommended that there should be critical postcolonial studies towards an Afrocentric paradigm (Asante, 1991; Dei, 1994; Kumah-Abiwu, 2016) of creative pedagogy, primarily because there is the urgent need to decolonise the received canon of educational practices to incorporate useful indigenous epistemologies pertaining to creativity and creative expression.

The necessity of critical postcolonial studies emanates from the fact that the domination of the colonised by the colonisers- through for instance, systems of education and knowledge

production- was based on a false sense of superiority which led to Euroamerican worldviews, coupled with the denigration of what is African while stealing and plundering the resources and ideas of Africans (Armah, 2009; Dei, 1994; Lauer & Anyidoho, 2012; Traoré, 2007). Indeed, proponents of such false sense of superiority are well-known European philosophers like David Human, John Locke and Hegel. Hume (1985 /1777) falsely claimed, contrary to historical facts, that, "I am apt to suspect the Negroes to be naturally inferior to the Whites. There scarcely ever was a civilized nation of that complexion, nor even any individual, eminent either in action or in speculation. No ingenious manufacture among them, no arts, no sciences," (Hume, 1985/1777, p. 208). It is such unfortunate and palpable false claims-quoted by racists and slave raiders- that led to exploitations and many shades of discrimination perpetrated for centuries on Africans and other colonised and racialised people and even up to date through forcible global spread of capitalist socio-economic relations and the universalization of so-called Western onto-epistemologies (Stein, 2020). These presumed constructs in the global sphere however, should be challenged and discarded through the lens of postcolonial theory and pedagogical practices.

The proposed four-pronged paradigm of creative pedagogy which I have duly presented in Chapter Four could therefore be enhanced and backed by further studies to serve as a decolonial paradigm aimed at training more creative teachers within the context of their societies as they would be grounded in their socio-cultural dimensions of creative pedagogy. These teachers would then in turn nurture creative thinkers who are empowered and have the courage to solve problems of society, through social innovations, production of useful things and just economic systems through the proper utilisation of their natural resources for the benefit of all to make Ghanaian and other colonised societies truly independent of exploitative neo-colonial forces. Hence, the direction of this research towards a postcolonial study is crucial so as to have

and implement futures of decolonised alternatives of knowing, being and relating (Stein, Andreotti, Suša, Ahenakew & de Souza, 2020) as well as ensure that we move away from the presently dominant westernised capitalist market-driven frameworks of fostering creativity, particularly in education (Craft, 2006). The quest towards decolonial futures may appear as some jejune aspiration but I am convinced that this vision can be realised by unlearning the falsehoods of colonialism, reclaiming indigenous onto-epistemological frames as well as through persistent creative envisioning and enduring work. The social transformations inherent in the proposed four-pronged component paradigm of creative pedagogy in this research may therefore be considered the first in a series of essential steps towards decolonising the educational canon.

The use of technological tools equally was instrumental in how participant trainees were able to teach creatively and to teach for creativity. This aspect of the study also requires further research to establish the extent of impacts of the use of ICT tools on creative pedagogical practices and also to find out what appropriate technologies, including indigenous technologies, at different levels of the educational system for fostering creativity as a 21st century skill. Due to the potential of abuse of human-made tools, Abraham (2015) has admonished that ICT tools should be used wisely and well to achieve positive results of inclusive development across Africa.

Finally, the phenomenographic approach of data gathering and data analysis proved very useful in enabling me to develop the proposed conceptual framework for creative pedagogy based on the research outcome spaces or the categories of description. This approach led to discovering participant teacher trainees' understanding and experiences of the phenomenon of creative pedagogy emerging from the kind of training received and how that has enabled them to change their teaching practices for the better. Using such insights and findings to influence

positive change in the educational system is in line with what Bowden (2000) characterizes as developmental phenomenology. Thus, the subjects of this research (in-service teacher trainees) and others, such as colleague teachers, learners, teacher educators and other stakeholders in the educational sector should learn and benefit from it, especially towards planning of leaning experiences at colleges of education. The lessons from the study indicating successful outcomes of the newly introduced MA Education programme could then be replicated in other teacher training programmes around the country. Phenomenography, although not so well known, is a viable, rigorous and innovative approach to educational research, a departure from the norm and it is anticipated that this study lays the foundation for further phenomenographic researches, particularly within Ghanaian and African contexts.

5.7. Chapter Summary

In this concluding chapter, the aims and research questions undergirding the study were revisited, followed by a discussion of key findings and limitations of the study. The implications of the findings and empirical evidence based on which a proposed paradigm of creative pedagogy has been developed are also discussed in addition to recommendations for further research.

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APPENDICES

APPENDIX 1: ETHICAL CLEARANCE CERTICATE

UNIVERSITY OF GHANA
ETHICS COMMITTEE FOR THE HUMANITIES (ECH)

P. O. Box LG 74, Legon, Accra, Ghana

My Ref. No...**ECH 106 /19-20**...

April 17th, 2020

Mr. Benjamin Kwesi Amoak
Department of Teacher Education
University of Ghana, Legon

ETHICAL CLEARANCE
(ECH 106/19-20)

The protocol tittle below has been reviewed and approved by the ECH Committee.

TITLE OF PROTOCOL: **TOWARDS A PARADIGM OF CREATIVE PEDAGOGY: A STUDY OF TEACHER TRAINEES AT THE UNIVERSITY OF GHANA**

PRINCIPAL INVESTIGATOR: **MR. BENJAMIN KWESI AMOAK**

Please note that the final review report must be submitted to the Committee at the completion of the study. Your research records may be audited at any time during or after the implementation. Any modification of this research project must be submitted to ECH for review and approval prior to implementation.

Please report all serious adverse events related to this study to ECH within seven (7) days verbally and in writing within fourteen (14) days.

This certificate is valid till April 16th, 2021. You are to submit annual reports for continuing review.

Please accept my congratulations.

Yours Sincerely,

Professor C. Charles Mate-Kole
ECH Chair

Cc: Dr. Ernest Ampadu, Department of Teacher Education, UG
Dr. Samuel Amponsah, Department of Teacher Education, UG

Tel: +233-303933866 Email: ech@ug.edu.gh

APPENDIX 2: DATA COLLECTION INSTRUMENT

INTERVIEW GUIDE

*Hello, my name is Benjamin Kwesi Amoak from the Department of Teacher Education at University of Ghana and I am conducting a research on the topic '**Towards a Paradigm of Creative Pedagogy: A study of Teacher Trainees at the University of Ghana" and** I would be grateful to have your views. Answering the questions on this instrument would enable the University to improved services.*

Please note that all your responses will be strictly confidential. All the responses will be anonymised and stored securely on a laptop that is password protected and no one will have access to your data apart from the researcher. Hence, I encourage you to answer all questions; however, if you find any question distressing and you wish to skip you are free to do so.

1. Why did you become a teacher and how long have you been teaching?
2. In what way(s) has the MA Education course aroused or ignited your creative thinking abilities with specific reference to teaching?
3. From your experience so far, how do you think the MA Teacher Education programme at the University of Ghana has enhanced your creative potential as a person?
4. Did you ever think of teaching as a creative practice?
5. Do you now think of teaching as a creative practice and if so, has the Teacher Education programme contributed to your new perspective of teaching as creative? How so?
6. What methods do you now utilise in your classroom that you were not using or aware of prior to embarking on the Teacher Education programme at the University of Ghana?
7. Do you consider your new methods and approaches to teaching as creative? If so, how?
8. Do you pay more attention to the individual needs of students than you used to do prior to enrolling on the Teacher Education programme? If so, how?
9. How do your new methods of teaching elicit more questions and promote inquiry among students?

10. What divergent methods or alternative ways do you use in explaining concepts or lessons to students?
11. How satisfied are you with your new methods or ways of teaching? Are there any instances of impacts of your innovative ways of teaching on yourself and your students/pupils?
12. How do students respond to your new and improved methods of teaching?
13. Do you feel that student/pupils are now more open to ask questions and express their own ideas as a result of your new and improved ways of teaching? Are there any instances in this regard?
14. How do you consider your role to nurture creative thinking skills in class and out of the classroom?
15. Do you think that your school environment encourages nurturing of creativity among students and teachers? How so?
16. How do you get your students to partake in co-curricular activities? Do you believe that the involvement of students in such co-curricular activities enhances the creative abilities of students?

APPENDIX 3: SAMPLE TRANSCRIPT

TRAINEE (T) 14

Kwesi Amoak (KA): How did you get into teaching? How long have you been teaching? What do you teach?

T 14: I have been teaching for nine years, I teach at an International School, at Grade 2. I teach all subjects (Mathematics, English, Science, Geography, History)

I got it from school. I have always been teaching my colleagues, after lessons. I believe that's how I started getting interested in teaching. I did initially consider some other work but after school, I decided to teach for a year, but I ended up loving it so I decided to stay.

KA: How has the MA Education programme aroused your creative thinking abilities with reference to teaching?

T14: With regards to teaching, I think the topic/discussion on differential instruction has helped me a lot. With my school, because we use the Cambridge system we do a lot of differentiated instruction but the course made me more aware of it and plan my lessons accordingly.

As a teacher, now when I am preparing my lessons, especially with regards to readiness to learn, the course has helped me a lot because unlike formerly when we would start lessons as soon as the kids come into class in the morning, I now have a starter for them to do, something for them to get into the lesson before we start. So it has really helped.

KA: With your perception of teaching as creative?

T14: I have always thought that teaching is a creative profession, I have always had that idea. But entering the course now I am more aware of the ways or methods I can use. I had about two or three methods I was using previously, but now there are many more different ways I have learnt from the course.

KA: Do you consider these methods as creative?

Yes, I consider these methods as creative

KA: And what are some of these methods that you use in your classroom?

T14: So now I use a lot of motivation now. Formerly, I was quite quick to punish a student, like let her go and stand in the corner a class and listen to whatever would be going on. But now, if a person pays more attention, I give him/her a sticker and I shower them praises. So because I show praises, everyone wants me to shower them praises so they pay attention. That's one way that has helped a lot.

Also, I have kind of figured out that most of my children in class are visual learners and some of them do learn really quickly so when you are teaching and giving examples like when we are treating Nouns, I now use actions. So when I say A noun is a person, they point to themselves, a noun is a place, they point to the air and animal, they squat and go down, acting like animals, and a thing, they bang the table. And since, we do that no one forgets what a now is and they are able to identify it in a sentence.

Also, with adjectives, I do raise my forehand and indicate adjectives as colour, size and number. So when I write lots of words on the board and ask them to pick the adjectives, they remember and look out for colour, size and number. It does help a lot in the way I teach now, and it's quite different.

Sometimes they (pupils) like going outdoors, they don't like siting indoors the whole day. Knowing this fully now, I sometimes plan and hold my lessons outside the classroom. I am responding to what they need. Sometimes, they actually would ask, "can we have this lesson outside?" I agree and we go outside to have it and they get it.

My projector is currently not working, but about a month ago, I was teaching a topic: Island. So I needed to show them how an island is formed. So I used three children to demonstrate it for them. So I said, a continental island for instance is formed- using two people who were together to stand for islands with a river down, then I said, the river moved up and the two islands were separated. So I used them as real examples and they got it.

When we are treating the sun and the solar system, I move them around while one (standing for the sun) is stagnant and another (standing for the earth for instance) moving around the sun. And they always get it.

In our History lesson too we are learning about the Big Six and getting the names, I knew from teaching it last year that it was difficult. This time around, I decided to use the children, so I pointed out six boys in the class and told them they were the Big Six and named them according, so anytime I mentioned Big Six, they have to mention their names; they would take turns to role play and mention their Big Six names: I'm Edward Akufo-Addo, I'm Paa Grant, I am Arko Adje, I'm Kwame Nkrumah etc… at the end of this term, I gave them a question on the names of the Big Six and everyone in class got it correct. They could easily remember the names as represented by their colleagues in class.

The course has helped me to be creative with regards to the way I teach. It has really helped.

KA: Wow. How do you pay attention to individual needs of students, compared to how you used to do before enrolling on the course?

T 14: My approach is very different now. Now I do a lot of group work and I do different types of grouping; sometimes I let them do it themselves and sometimes I really select them because I

want them to do specific tasks, sometimes too I group them based on their abilities, so I can stay with those with lower abilities to let them get understanding of a topic. So the grouping has really helped to do better when it comes to individual attention and sometimes strangely some of them like the one-on-one and it works for them. I have actually identified two kids in my class who prefer one-on-one, when they are grouped they don't tend to pay attention and shy away. But when it is one-on-one they pay attention and get it more. Right now, I am more aware of what they need.

I do a lot of repetition also and that also helps for me to know the type of students I have to attend to their needs.

KA: Would you say that your improved ways of teaching enable these children to ask more questions, bring up new ideas or promote inquiry among them?

T14: Very much so; they bring in new ideas. Sometimes when I group them and give them vague topics, like once, I asked them to go and research on rocks. Believe me, some of the findings they came up with, I didn't even know. Some of them found out about space rocks-which I wasn't really expecting them to get into, but once they did, I went to research on space rocks to be able to have a discussion with them.

So I would usually give them such similar topics a week ahead and ask them to let their parents Google it for them to research.

And so when they come, I'll simply ask them if they know anything about the topic and they'll be willing to tell what they know from the research or reading that they did. When I give them a week or at least two days before the lesson to just read on it, it makes learning easier for them. And they know that they are sharing something that they know. I try and channel it in a way that they are supposed to learn for a Grade Two level.

KA: What alternative ways to explain a concept or lessons to students?

T14: Sometimes, you sing. So if I wanted them to know the characteristics of living organisms. I created a song, using the characteristics such as breathing, moving and so forth to teach them. During exams, I let them sing to it. I ask for instance, a cat is a living thing because…then they'll sing the characteristics of the cat as a living thing. They write the characteristics as they sing. They like it.

And also all the Even Numbers, I realize that some of them can't identify them from Odd Numbers, so I devised a strategy whereby we clap to identify the numbers. So if it is one, we position our hands like we are praying, if it is two we open our hands and three they close the hands by clapping. So anytime they open their hands it means an Even Number and when they close or clap it stands for Odd numbers. So in exams when they are asked if a number is odd, they clap to it.

And still on Even and Odd numbers I also have an alternative way of explaining it to them. I tell them that when we are going out, we walk in pairs. I call about seven children to the board, then ask them to hold hands and walk in pairs. So, the seventh person will not have a partner and I tell them that because the seven person doesn't have a partner, the seventh person makes the whole team odd. So I instruct them to look out for the last number to identify. In exams some would pair and the number that can't be paired they'll know that to be odd.

Those that are quite faster would straight away know for instance that 2, 4, 6 and 8 are even numbers and 1, 3, 5 are odd. So I try and give these alternatives and they pick which they are comfortable with. And it works.

So there is a lot of demonstration now. With my children, if you don't demonstrate, they can't get the abstract. And I believe that when you demonstrate, children get it faster than any abstract explanations.

Audio-visual aids also help a lot. Recently, we treated noun phrases. I got an audio-visual from YouTube, I made them watch it and I spent less than 15 minutes on that topic. At their level noun phrases could be a difficult topic to treat but with the video from YouTube it was easy to treat. When I assessed them to identify noun phrases in sentences, all of them were able to do so.

KA: Are you using different kinds of assessments now that you were not using previously?

T 14: First, I thought assessment should come at the end of the term, but now it's an ongoing thing. So sometimes in the middle of a lesson, I chip in some assessment to enable me know whether to go over the lesson. Formerly, I would wait till the end of the term. These days assessments are regular and I assess them based on different ways because of their abilities. Some of the high achievers, I would for instance ask them to define a noun with examples but with the others I would write down two words and ask them to pick out the nouns, the whole idea being that at the end of the day, the child should be able to identify what a noun is.

KA: How are the children responding to your new/improved ways of teaching?

T 14: They love it. One parent- I taught her daughter a few years ago and I'm teaching her son now-remarked that how her son is learning is better than how her daughter learnt. I told her that I know. I have improved. The son is able to learn better and understand things better as compared to the daughter with regards to the same topics. I know that I have improved.

KA: Are there instances of how your improved ways enable children to ask more questions and express their own ideas?

T 14: Yes. They are so keen on asking me questions that sometimes I go off the topic but eventually navigate us back. So I don't prevent them when they ask questions that take us off the topic, because I know they are learning. So when they ask questions that require going into some

detail about a topic, beyond what they are required to know, I give the space and explain then we move on.

Sometimes when they ask a question, I would ask them to all go and read on it and come and tell me. You'd realize that they are eager to go and read to bring to class what the learnt from reading.

KA: How satisfied are you with these new approaches that you are using in class, are there any instances of impacts on yourself as a teacher and on your pupils/students? Do you feel transformed in any way with your practice?

T 14: In Grade 2, there are two streams, my class and the other class. In terms of impacts, you find out that in my class, my pupils are very good compared to the other class. In their overall assessments, you could see that they perform better. They are academically good and apart from that they are vocal, they are confident. They are very confident because they know that I would not shut them down and allow them to express themselves. And they always want to learn something new to come and show.

KA: And these positive behaviours of your pupils are as a result of your new/improved ways of teaching?

T 14: Yes, they are more confident now due to my improved ways of teaching now.

With regards to me, as a teacher, right now, an international person-from Oxford- is supposed to come and see our teaching. Our CEO came to my class to watch me teach (part of a routine exercise) and she told me that when this person comes I should be the first person to start it for all teachers, because she believes my teaching would let the whole school to get a high rating. She comes over from time to time and gets fascinated at how I start my lessons.

I know kids forget, so before I begin a lesson, I always try to bring up things I've taught already so they recall. So I can tell them that I'm going to mention some words, if it's a noun they should stamp their feet, if it's an adverb they should raise up their hands, if it's a verb, they should jog around the class. If someone comes to meet us, the person would think we are playing. Yes, we would be playing but as teacher, I would use that opportunity to identify who is getting what right and who is getting it wrong.

The administration knows I'm in school undergoing training so they see the improvement. They see that even how I assess students has changed. I don't use the usual "What is". My whole style of assessment has changed now.

KA: How do you view yourself as a creative teacher now? Now you are more aware of teaching as creative, but how do you view yourself as a teacher?

T 14: Right now, I think I'm sufficient with regards to teaching. I'm yet to get outstanding.

KA: How is the process for you; how do you come by these creative strategies, is so easy for you now, that you are of your creative abilities as a teacher?

T 14: I think it's only normal. At first it was difficult. Sometimes when you get to a class and you are not able to get how a particular child is learning. I always think of how I would teach my child. Sometimes it would get frustration and I'd get annoyed but then you'd think that this child is struggling with this area, so you try and brainstorm on ways to teach that child and as I'm doing so I'm also learning in different ways. For instance, in class a child asked why when a word that has 'y' at its end has to be dropped to become '-ies' in the plural but why is that, 'boy' never turn into 'ies', why is that not all the words don't turn into –ies. So I wondered about it myself. I thought it was an irregular thing, but when he asked, it downed on me so I told him I'd tell him the answer the following day. That night, I had to stay up Googling to get the answer myself to be able to explain to the boy.

You'd see that this is not really a Grade 2 thing, but once he asked, I wanted them to know the answer and explained that it's the vowels that make it so, the consonant doesn't help. So sometimes, you end up learning a lot. I tend to do a lot of research online on how others elsewhere might have taught a lesson. I get the opinions of others and incorporate that into my lessons.

KA:Would you say you are willing to learn and make mistakes?

T 14: Yes, I am. And I learn a lot from my pupils.

They now love History lessons because of my improved approaches to teaching the subject. I always say that teachers have a bias. They love History, Geography, English, Maths, it's science that they don't seem very enthused about and I'm working on that…Their interests in all those subjects have heightened because of the way I have been teaching now. And now I'm also thinking of creative ways to teach science that they might get it and love it like the way they have come to love the other subjects. If I don't take care they will be biased as I'm. I have to learn to use the same methods and twist them a bit differently for teaching science, so that they don't become biased.

KA: How necessary is your role as a teacher in nurturing creative thinkers and problem solvers in class and out of the classroom?

T 14: It's very necessary because I always say the teacher, with my instance I think that I'm more open to creative ways because of the way I was taught. Back in school, I always thought I was a below average person, until I met one teacher who just turned my life around. This was an encounter in SSS Form One. He had this huge confidence in me, even when I made a mistake he would even congratulate me for my effort. He knew that I could make it and I really did. Since then, I have always had an idea that every student can learn. With that mindset, I have always

believed that I can make a child learn. That's how come I'm able to go way out to find creative ways to make children learn.

KA: What about your school environment? It's obvious but let's talk about it nonetheless. Do you feel that your school environment generally encourages nurturing of creativity among students and teachers?

T 14: Yes, in some ways my school does. Although it is not 100% it does, largely in terms of resources which are helpful. So if we are teaching types of rocks, you could find that available in the science lab and if it's electricity you can also demonstrate it there. I also think that our curriculum has a good advantage. We use pure Cambridge but we have been allowed to blend the History bit because we want them to learn the History of Ghana.

So the Cambridge has some advantages compared to the GES. My daughter goes to a very good school in GES and she is in Grade 1 but the kinds of stuff I used to teach in Grade 1 she doesn't know half of it. It's also partly the methods her teacher uses which are quite abstract. But when I demonstrate to her a concept like greater than and less than using the image of a crocodile (that the crocodile leans towards the greater number and uses the butt or *bombom* to push away the lesser/ smaller number) she gets it's easily than the abstract ways of using the hand.

KA: How do you get your pupils to take part in co-curricular activities, how do you get them to partake and do you believe that partaking in such activities enhances their creative abilities?

T 14: I believe so. In my school, we have at least five co-curricular activities (Arts, Boys Scout, Girls Guide/Brownies, Ballet and Drama & Dance) and each child is mandated to join at least one of them. Some children may not particularly like academic learning but they enjoy extra-curricular activities. So sometimes in class, even in for Maths lessons of addition, I could give examples involving dancing steps. I try and look out for their interests in co-curricular activities and infuse them in class. Sometimes too, I reward them with such activities, so I'll tell them that if they all get a question correct, we'll have a dance in class on say Friday. They do their best to get all correct and when Friday comes I dance with them as promised. Sometimes, they want me to go for PE with them. So I'd tell them that I'd go with them only if they do A, B or C. They'll do so and I'd be compelled to bring my PE kits to school. And they love that.