

**Teachers' Experiences of Teaching Creative Thinking Skills in Lesotho  
Classrooms**

**By**

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# **CERTIFICATION**

This is to certify that this dissertation has been read and approved as having met the requirements of the Faculty of Education, the National University of Lesotho for the award

of Masters in Education (M.ED)

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I hereby state that, except for places where other sources have been cited, this dissertation, Teachers' Experiences of Teaching Creative Thinking Skills in Lesotho Classrooms, is entirely my own work. I further attest that I have never before submitted this dissertation for a degree at any other university.

'Marets'epile Molete

July 2023

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## **LIST OF ABBREVIATIONS AND ACRONYMS**

BED	Bachelor's Degree in Education
CAP	Curriculum Assessment Policy
CTS	Creative Thinking Skills
DEPRG	Directions Evidence for Educational Research Group
DES	Diploma in Education Secondary
JC	Junior Certificate
LCE	Lesotho College of Education
LGSC	Lesotho General Certificate for Secondary Education
MOET	Ministry of Education and Training
NTTC	National Teacher Training College
NUL	National University of Lesotho
OECD	The Organization for Economic Cooperation and Development
PISA	Programme for International Student Assessment
STC	Secondary Teacher Certificate
UNESCO	United Nations Educational Scientific and Cultural Organization

## **ABSTRACT**

The study investigated teachers' experiences of teaching creative thinking skills in Lesotho classrooms. The enhancement of creative thinking skills (CTS) is required for lifelong learning and as significant skill in the 21<sup>st</sup> century in Lesotho schools. Using a qualitative approach, data for this study was collected from eight teachers using semi-structured interviews. These teachers were intentionally selected from a High School in the Leribe district. This study revealed that teachers in Lesotho rarely teach CTS in their classrooms because they have inadequate knowledge and skills relating to teaching this skill, schools lack resources to assist teachers, and the Ministry of Education and Training's lack of support in the schools' CTS teaching. Thus, much as Lesotho's education policy on curriculum and assessment recommends this skill to be taught in the classroom, the conditions that exist in the schools comprise the teaching of CTS; therefore, this study recommends that the Ministry of Education and Training find ways of supervising and monitoring the implementation of CTS in Lesotho classrooms. The study also recommends that the Ministry should offer training programmes to develop school management and teachers' pedagogical skills relating to CTS.

**Keywords:** teacher experience, creativity, skills, and creative thinking skills

# **CHAPTER 1: BACKGROUND TO THE STUDY**

## **1.1 INTRODUCTION**

In Lesotho, there had been concerns about school education which was teacher-centred and examination-driven (Raselimo & Mahao, 2015). Teaching did not emphasize the requirements and assessment of the competencies and skills outlined in the curricula documents. As a response to these concerns, the Ministry of Education and Training introduced the Curriculum and Assessment Policy which emphasized teaching, learning, and assessment that provide and assess learners' skills, attitudes, and values that enable them to overcome the challenges of the 21st Century (MoET, 2009). This document further demands that teachers use classroom strategies to develop learners' creative thinking skills (MoET, 2009). In this regard, teachers are expected to teach creative thinking skills in Lesotho classrooms. Hence, this study intended to investigate teachers' experiences of teaching creative thinking skills (CTS) in Lesotho classrooms. This chapter (Chapter 1) introduces this study, and it is structured as follows: Introduction (this section), Background to the study, Problem statement, Research questions, Research aim and objectives, Purpose of the study, Significance, Methodology of the study, Definition of terms, and Summary.

## **1.2 BACKGROUND TO THE STUDY**

In today's global competition and innovation world, creative thinking skills are becoming more valuable for personal and professional success (Robinson, 2011). Shaheen (2010) points out that it is for this reason that learners should be equipped with creative thinking skills so that in the future, they can compete in the global markets, which their success is driven by innovation and economic competitiveness. Puccio and Cabra (2010) support Shaheen by emphasizing that a learner needs to reach their creative thinking skills potential to avoid unemployment and to be able to survive in an innovative economy as well as to overcome the challenges they encounter in their communities and workplace.

### **1.2.1 Defining Creative Thinking Skills**

Gafour and Gafour (2020) describe creative thinking as a cluster of skills needed to produce original and valuable ideas. This cluster of skills is considered an essential ability that an individual

needs to learn to address the daily challenges in the workplace and society (The Partnership for 21st Century and Learning, 2016). This set of skills characterizes an individual's readiness to produce new ideas.

According to Mishra and Kereluik (2013), the demand for creative thinking skills has been around for centuries, and in the 21st century, it has been pronounced in many and various contexts (Robinson, 2011). Thus, since the 19th century, several educators have been pushing schools to foster creative thinking skills in teaching (Swayer, 2015). Subsequently, many national education systems have begun to include creative thinking skills in their curriculum (The Partnership for 21st Century and Learning, 2016).

Creative thinking skills are now acknowledged as part of formal education, which promotes lifelong learning (Lucas & Venckute, 2020). For example, the Programme for International Student Assessment (PISA) now uses the Creative Thinking Framework to measure whether school systems prepare learners for the twenty-first-century global knowledge economy (OECD, 2019). This PISA for Creative Thinking Framework is used in the OECD countries, from North and South America to Europe and Asia-Pacific (OECD, 2019).

In Europe, creative thinking skills are also recognized as vital for progress in providing knowledge to society and innovation-driven economies (OECD, 2019). In most sub-Saharan countries, such as Kenya, Mali, and Zambia, the curriculum emphasizes the learner's creative thinking skills development (UNESCO, 2020). Similarly, in Lesotho, the statement from The Curriculum and Assessment Policy (CAP) emphasizes that, by the time learners leave school, they should have developed creative thinking and entrepreneurial skills for productivity (Ministry of Education and Training, 2009).

### **1.2.2 Benefits of Teaching Creative Thinking Skills**

Creativity has been viewed as the most important human attribute needed and wanted skill in the 21st Century (Akgunduz, Aydeniz, Cakmakci, Cavas, Colrlu, Oner, & Ozdemir, 2015; The Partnership for 21<sup>st</sup> Century skills of Learning, 2016). Craig (2012) indicates that learners need creative thinking skills to make their way in a complex and constantly evolving future and to develop abilities to undertake work that machines cannot quickly reproduce. According to Khoiri (2019), creative thinking skills are an essential part of cognitive learning that aims to solve



problems encountered in the present or future. Lucas and Spencer (2017) view creative thinking skills as a necessary competence for today's young people to develop. Carson (2010) argues that learners with creative thinking skills can cope, adapt and flourish in their personal lives, education, businesses, and the society. As Lucas and Venckute (2020) described, creative thinking skills are significant in the 21st Century for promoting lifelong learning as part of formal education. As such, schools are expected to prepare learners to go beyond what they have been taught and learned in the classroom by demonstrating that they can think creatively (Schleicher, 2012).

Failure to develop learners' creative thinking skills can result in unemployable school graduates and experience extreme poverty (Jacobs & Tlali, 2015). This is why Hobbs, Ebrahimi, Cabral, Yoon and Al-Humaidan (2010) emphasize that in addition to classrooms, creative thinking skills should be taught at the workplace to equip workers with these skills to create ideas and become problem-solvers. These skills are crucial for employment in most businesses and organizations.

### **1.2.3 Teachers' Practices of Teaching Creative Thinking Skills in the Classroom**

Teachers play an essential role in fostering learners' creative thinking abilities, as argued by the UNESCO International Bureau of Education (2014). They should focus on creative teaching methods that develop learners' creativity during the class (Alencar & Fleith, 2016). Teachers should encourage learners to practice self-evaluation and assessment of their ideas in a classroom context. These teachers should also improvise their teaching strategies to allow learners to construct and develop their knowledge (Besancon & Lubart, 2008; Li, 2016). According to Aripin, Sugandi, Mu'minah and Mulyani (2020), teachers should identify and use creative teaching strategies to develop learners' creative thinking skills and must create a learning process that accomplishes learners' thinking skills. Lucas and Spencer (2017) say these strategies should be practical, target application, and motivate learners to think creatively (OECD, 2019).

According to Craft (2011), teachers can utilise techniques in their classrooms to develop creative thinking skills, including establishing links between or among concepts, asking learners to reflect on the possibilities and solutions of one problem, and thinking critically about their ideas. The teachers should also develop learners' ability to generate creative ideas that improve how they predict the efficacy and consequences of their proposed solutions (Byrne, Shipman & Mumford,

2010). According to Zabelina and Robinson (2010), there are many creative thinking strategies that teachers can use to help learners to develop cognitive flexibility, which is the brain's ability to adapt to unplanned events, and they should also offer these learners opportunities to enhance the way they organize concepts and information.

#### **1.2.4 Challenges that Teachers Experience in Teaching Creative Thinking Skills**

Despite the perceived benefits of creative thinking skills, it has been established that teachers do not teach these skills because of various reasons. For example, Tanujaya (2016) observes that for teachers to find strategies that effectively develop creative thinking is challenging. Tangaard (2011) also identifies time as one factor influencing teachers' reluctance to engage in creative teaching. Tangaard (2013) explained that teachers complain that the strategies used for teaching creative thinking require a lot of time and effort for preparation.

Consequently, the intensive preparation required for creative thinking lessons eats into the time of other subjects (Tangaard, 2013). Beghetto and Kaufman (2010) also established that the intensive planning for creative thinking skills puts much pressure on teachers to design learning tasks that foster learners' creative thinking, and yet at the same time, these teachers are expected to meet the requirements of other subjects they teach. However, even though the importance of developing learners' creative thinking skills has been well emphasized in the literature, there is still limited information on teachers' classroom practices with this strategy (Swayer, 2015). This has also been observed by Gafour and Gafour (2020), who observed that more information about creative skills would be helpful. There are very few studies that investigated how these skills should be taught. However, such studies are described in Chapter 2.

### **1.3 PROBLEM STATEMENT**

The Curriculum and Assessment Policy (CAP) of 2009, emphasizes education that develops learners' creative skills and attitudes for achieving rapid social and economic change (MoET, 2009). In this policy, creative thinking is regarded as problem-solving oriented and capable of equipping learners with the skills that deal with the challenges they experience in everyday modern life (MoET, 2009). The curriculum also promotes creating, acquiring, and developing knowledge and skills (CAP, 2009), some of which are creative thinking skills. However, there are

no clear guidelines for how teachers should develop these skills. Studies focusing on teaching these skills since the policy introduced them could not be located. As it is, the information about how these skills are taught in Lesotho schools is scarce. Therefore, this study investigated teachers' experiences of teaching creative thinking skills in Lesotho classrooms.

## **1.4 RESEARCH PURPOSE AND QUESTIONS**

This study investigated teachers experiences of teaching creative thinking skills in Lesotho classrooms. Thus, the main question asked in this study was: What are teachers experiences of teaching creative thinking skills in Lesotho classrooms? The questions that were used to collect datathat would answer the main question of this study were:

1. How do teachers in Lesotho classrooms interpret creative thinking skills?
2. What are teachers' practices of teaching creative thinking skills?
3. Which factors leading to the challenges teachers experience in teaching creative thinking skills?
4. How are teachers supported to teach creative thinking in the classroom?
5. What are teachers' general views about teaching creative thinking skills in Lesotho classrooms?

### **1.4.1 Research Aim and Objectives**

This study aimed to collect information that explained teachers experiences in teaching creative thinking skills in Lesotho classrooms. Thus, the objectives of this study are:

1. To establish how teachers in Lesotho classrooms interpret creative thinking skills.
2. To investigate teachers practices in teaching creative thinking skills.
3. To identify the factors leading to the challenges that teachers experience in teaching creative thinking skills.
4. To establish how teachers are supported to teach creative thinking skills.
5. To establish teachers' general views of teaching creative thinking skills in Lesotho classrooms.

## **1.5 SIGNIFICANCE OF THE STUDY**

This study attempted to shed light on teachers' experiences of teaching Creative Thinking Skills In Lesotho. The study will play a significant role in sharing its findings with the Ministry of Education and NCDC, LCE and NUL about the status of teaching creative thinking skills in Lesotho classrooms. These bodies can use the information this study will generate to help teachers modify their teaching and learning from others who proposed creative thinking skills. The findings of this study will also help teachers find strategies that support them in developing creative thinking skills and emphasise the implementation of those teaching strategies that will enhance the development of creative thinking in Lesotho classrooms. The study will add value in how teachers in Lesotho schools can be supported to teach this skill in their classrooms and contribute to curriculum change.

## **1.6 THEORETICAL FRAMEWORK**

This study was guided by the theory of constructivism, which believes that learners use their existing experience to construct a reality that makes sense to them (Mascolo & Fisher, 2005). Winfree (2017) advocates that learning in constructivism theory involves learners developing their knowledge. Therefore, in this study, creative thinking skills teaching involves using constructivism strategies that encourage learners to develop practical skills to open up a platform where they have opportunities to create ideas and express themselves (Winfree, 2017).

## **1.7 RESEARCH METHODOLOGY**

The methodology used in the study is structured in the following manner: Interpretivism epistemology, constructivism paradigm, and qualitative approach and research methods.

### **1.7.1 Epistemology: Interpretivism**

The study used interpretivism epistemology, arguing that truth and knowledge are subjective based on people's experiences and their understanding of cultural and historical beliefs (Flick, 2014).

### **1.7.2 Paradigm: Constructivism**

The study employed the constructivism paradigm, the mother of the interpretivism paradigm of philosophy. Their relationship is that the interpretivism perspective holds that individuals, in their reasoning, do not have access to the real world, suggesting that their knowledge of the perceived world is meaningful in its terms and can be understood through the careful use of Interpretivism procedures (Bereiter, 1994).

### **1.7.3 Research Approach: Qualitative**

This study uses a qualitative research approach associated with the constructivist philosophical paradigm, which seeks to understand a phenomenon under study from the participants' experiences (Cresswell, 2013).

### **1.7.4 Research Methods and instruments: Semi-structured Interviews**

In this study, the research method that was used was an interview. This study used semi-structured interviews to collect participant data (Abawi, 2017).

## **1.8 DEFINITION OF KEY CONCEPTS**

The key concepts in this study are **Teacher Experiences, Creativity, Skills and Creative thinkingskills**. The key concepts discussed in this section concern the teachers' experience of teaching CTS.

**Teacher experience** : In this study, the definition of teacher experience has been used in line with Harris and Sass (2011) definition. They describe teacher experience as teacher effectiveness influenced significantly by teacher personality factors, especially caring, intelligence, subject matter knowledge and teaching skills. In a Directions Evidence and Policy Research Group (DEPRG, 2014) report, teacher experience is defined as the number of years of teaching a teacher has in the classroom setting. In this study, the definition of Harris and Sass is adopted as it emphasizes the teacher effectiveness of teaching experience in the teaching and learning process.

**Creativity**: Schubert (2021) views creativity as the process that leads to an outcome that generates a positive effect. Further, Amabile and Pratt (2016) define creativity as a phenomenon whereby something new and valuable is formed. Even Scott (2015) defines creativity as the ability

to generate something new. Also, Apino and Retnawati (2017) state that creativity is the ability to generate new ideas. The study adopted the definitions of Amabile and Pratt (2016), Apino and Retnawati (2017) and Scott (2015), establishing that creativity involves the generation of something new to solve a problem.

**Skills:** According to Kassema (2016), skills is the ability of an individual to put into action the knowledge one has to accomplish the proposed goal. Gafour and Gafour (2020) view skills as the ability that requires one to produce original and valuable ideas with the expectation of a specific outcome. Both the definitions of Kassema (2016) and, Gafour and Gafour (2020) have been adopted as they have a similar meaning related to the context of this study.

**Creative thinking skills:** Craft (2011) describes creative skills as the ability to make or bring to existence something new, whether a new solution to a problem, a new method or a new object. Gardner (2008), Sternberg (2007) both cited in Scott (2015) define creative skills as the capacity to generate new ideas and solutions, break new ground, invoke fresh thinking, pose unfamiliar questions and arrive at unexpected answers. Gafour and Gafour (2020) view creative thinking skills as a set of abilities required to generate original and valuable ideas. Literature provides various definitions of creative skills, but this study adopts the definition of Sternberg (2001), cited in Scott (2015) and, Gafour and Gafour (2020), which emphasizes that learners need to acquire creative thinking skills in order to produce valuable ideas.

## **1.9 SUMMARY**

This chapter intended to introduce the study investigating teachers' experiences of teaching thinking skills in Lesotho classrooms. In the background of this chapter, creative thinking skills are defined, benefits and the factors leading to the challenges that teachers experience in teaching these skills have been discussed. In addition to the background, the study presented the purpose and the research questions of the study, the objectives and the significance of the study, the theoretical framework, the research methodology and the definition of key concepts, the summary (this section) and an outline of the study was introduced by in this chapter. The next Chapter will discuss the literature reviewed for this study.

## 1.10 DISSERTATION LAYOUT STRUCTURE

This study is organized into five chapters which are:

**Chapter 1** provides an overview of this study. It outlines the study background to the problem statement, research purpose and questions, research aim and objectives, significance of the study, theoretical framework, research methodology, definition of terms, and Summary. **Chapter 2** reports on the literature reviewed for this study this literature includes theoretical framework, conceptual framework and exiting studies on CTS. **Chapter 3** describes the methodological approaches used for data collection and analysis. The chapter also explains how research ethics, trustworthiness, credibility and dependability were considered and ensured in this study. **Chapter 4** presents the findings of this study. **Chapter 5** summarizes and discusses the findings of this study, describes the study's limitations and makes recommendations.

## **CHAPTER 2: RELATED REVIEW OF LITERATURE**

### **2.1 INTRODUCTION**

This study aimed to investigate teachers' experience of teaching creative thinking skills in Lesotho classrooms. Chapter 1 introduced and gave an overview of this study. This chapter reports on the literature reviewed to inform this study. The chapter is structured into five main sections: Introduction (this section), Theoretical Framework, Conceptual Framework, Studies on Teaching Creative Thinking, and Summary. The report on the review of the studies carried out is presented under the empirical literature section.

### **2.2 THEORETICAL FRAMEWORK: CONSTRUCTIVISM**

Many learning theories, including behaviourism and constructivism, guide the teaching and learning process. This study was guided by constructivism theory. Constructivism is a process in which new information is connected to previously held beliefs, resulting in the understanding and creation of new knowledge (Tomljenovic & Vorkapic, 2020). Piaget (1968) is the father of the constructivist view of learning. He believes a learner's interactions with the environment result in patterned and transformed knowledge. Apart from Piaget (1968), the other pioneer of constructivism is Vygotsky (1986), who believes that a teacher can intentionally nurture and teach learners in collaboration with them. Even Naylor and Keogh (1999) observe that learning in constructivism involves an active process in which learners construct meaning by linking their understanding and knowledge through experiences. Therefore, in this study, the teacher helps learners to construct or create their knowledge through experiences and apply creative thinking skills to overcome complex problems. Further, it contributes to widening learners thinking and reinforce their abilities in transforming ideas to creative applications.

#### **2.2.1 Teaching and Learning Strategies Associated with Constructivism**

In this study, the researcher employed constructivist teaching and learning strategies to develop creative thinking skills in the classroom. According to Gunduz and Hursen (2015), teachers that practice constructivist teaching strategies empower learners to access their previous experiences and beliefs, reshaping their prior knowledge in light of the applied class content. Karpov (2014) advocates that in a constructivist classroom, teachers enhance learners experiences to develop



their creative skills and must be encouraged to use innovative approaches to facilitate this development process. As observed by (Vygotsky, 2016), the activities such as brainstorming performed in a constructivist classroom lead to the development of learners' creative and critical abilities, which are then applied in the workplace and the community.

Therefore, the focus of this study is on constructivism theory since the constructivist teacher engages instructional strategies that direct the teaching and learning process that, is a learner-centered approach; thus, by following the constructivist approach of teaching in the classroom, the teacher can open up the scope of creative expression and think of the learners (Woolfolk, 2010). Winfree (2017) advocates that, in a constructivist classroom, learners develop their knowledge through thinking and understanding; hence they become creative learners who can make informed and thoughtful decisions.

## **2.3 CONCEPTUAL FRAMEWORK: CREATIVE THINKING**

In recent years, and with rapid changes in globalization, creative thinking and creativity have become one of the most regarded skills to possess (Songkram, 2015). The view is mainly held by those interested in education. They argue that creative thinking skills should be fostered as one of the valued outcomes of schooling in the 21st century (The Partnership for 21st Century Skills of Learning, 2016; Griffin, McGaw & Care, 2012; Mishra & Kereluik, 2013; Adams, 2019). Zabelina and Robinson (2011) argue that learners with creative thinking skills tend to have high and flexible levels of cognitive control. In addition, creative thinking skills train learners to develop many ideas and arguments, ask questions, acknowledge the argument's truth, and make them open-minded and responsive to different perspectives (Arifin, 2017; Tendrita, Mohanal & Zubaidah, 2016). Even Grohman and Szmids (2013) further point out that creative thinking can enhance teacher instruction and the learning process of the learners and is, therefore, an essential part of teacher training that can influence the professionalism of future teachers.

### **2.3.1 Definition of Creative Thinking Skills**

Even though the importance of creative thinking is widely accepted, there is a lack of agreement regarding a definition of this concept among scholars. This results from the fact that creativity is a broad and difficult to define concept, particularly in academic research; hence, defining creative thinking has similarly become difficult. Also, different scholars have defined this concept

differently (Reunamo, 2014). For example, Sternberg and Kaufman (2011), and Gafour and Gafour (2020) describe creative thinking skills as abilities required to generate unique and valuable ideas. Craft (2011) views this concept as an ability to make or bring to existence something new, whether a new solution to a problem, a new method or a new object. Similarly, Fredagsvik (2021) expounds on creative thinking as developing new ideas and finding new ways of looking at problems and opportunities. Daud, Omar, Turiman and Osman (2012) define creative thinking similarly to Craft (2011). They say it is a process in which a person can use thinking to develop new ideas in detail during the acquisition process. Scott (2015) supports both Craft (2011) and Daud et al. (2012) in their description of this concept, where they view it as the capacity to generate new ideas and solutions, break new ground, invoke fresh ways of thinking, pose unfamiliar questions and arrive at unexpected answers. Based on all these definitions, Hursen, Kaplan, and Ozdal (2014) emphasize that creative thinking ability should be acknowledged as essential to boosting innovation and as the main factor in developing one's competence. Similarly, Akgunduz et al. (2015) point out that creative thinking is now considered the most important human attribute needed in the 21st century.

Although these definitions do not vary that much in meaning, this study adopted the definition of Scott (2015), who describes creative thinking skills as the ability to generate something new. This definition can apply even in a teaching and learning situation where learners' skills are developed to use their knowledge to create new solutions for their learning problems or everyday life.

## **2.4 RESEARCH ON CREATIVE THINKING SKILLS**

This section explored the related studies on the benefits of creative thinking skills (CTS), teachers practices of teaching CTS, the factors leading to the challenges that teachers experience in teaching CTS, and strategies for developing CTS. It also focused on studies reviewed on teaching CTS.

### **2.4.1 The Benefits of Teaching Creative Thinking Skills**

Studies have revealed that teaching creative thinking is vital for developing learners' creative ability, which is considerable in this era (Albar & Southcott, 2021). Other scholars like Pesout and Nietfeld (2021) have also observed that creative thinking is considered a primary objective of

teaching and learning instruction that applies to today's market and employability. Accordingly, learning creative thinking skills has become an important goal in teacher instruction and is associated with promoting quality teaching (Geronik & Kimhi, 2019). This skill further allows learners to gain knowledge and experience to solve problems, and this has been affirmed by Hobbs et al. (2010), who stated that creative thinking skills help learners create ideas with their knowledge and become problem-solvers in the classroom. Creative thinking skills allow learners to gain knowledge and experiences and discover, recognize, and solve problems with multiple techniques (Zarkasyi, 2015).

#### **2.4.2 Teachers' Practices of Teaching Creative Thinking Skills**

In education, to develop learners' creativity, teachers have to create and assign learners learning activities capable of developing creative thinking skills (Ulfah, Prabawanto & Jupri, 2017). As observed by Selkrig and Keamy (2017), teachers should be informed or equipped with the skills that are appropriate for teaching creative skills and teaching for creativity.

Concerning how to teach creative thinking, the learning tasks developed and assigned by teachers should be divergent and progressive to allow learners to identify a problem, find solutions and communicate the results (Senel, 2019). This kind of task should provide learners with an opportunity to give more than one correct answer and encourage them to think differently and flexibly. Further, Lubart and Batton (2017) maintain that a lesson that encourages creativity must include divergent and convergent thinking. These learning activities should be designed to ensure that learners are at the forefront of learning activities or learner-centred (Sharma & Arif, 2015; Husaman, 2015). However, Sarwinda (2013) established that teachers should implement creative thinking skills that must be complemented by creative instructional planning.

#### **2.4.3 Factors Leading to the Challenges that Teachers Experience in Teaching Creative Thinking Skills**

Despite the value observed in creative thinking skills, it has been observed that studies conducted showed that there are factors leading to the challenges that teachers experience in teaching creative thinking skills in the classroom. However, learning institutions still use teaching strategies that do not promote this skill because of many challenges. (Al-Zoubei, 2014). Many studies associate such challenges with teachers. They observe that teachers do not possess the

skills needed to develop learners' creative thinking in the classroom (Laius and Rannikmae, 2011). Also other studies observed that teachers have poor self-confidence and a feeling of helplessness to practice teaching that promotes creative thinking skills (Suciawati, 2019; Al-Atoom et al. (2011). Teachers also find it challenging to attain strategies that effectively develop creative teaching (Tanujaya, 2016).

The time required for preparing for and teaching creative skills influences teachers' reluctance to engage in creative teaching. Teachers believe that the intensive planning required to design learning tasks that foster learners' creative thinking puts much pressure on them while, at the same time, they are expected to meet the requirements of other subjects they teach (Tangaard, 2013);

According to Chang (2013) teachers find it difficult to develop creative thinking skills if learners have limited knowledge and other thinking skills.

Teachers' classroom management and interaction with learners do not encourage creative thinking (Arvyati, Ibrahim, & Irawan, 2015).

Based on all these observations, Arvyati, Ibrahim, and Irawan (2015) suggest that teachers should be exposed to training programs that develop their abilities to identify and effectively use strategies that develop creative thinking skills in the classrooms. Suciawati (2019) also argues that a lack of self-confidence among learners towards their abilities, such as feeling embarrassed and afraid to show themselves and of being wrong, feeling tense working on questions, are some factors that complicate creative thinking teaching in the classroom.

Apart from teacher-related factors, Eragamreddy (2013) observe that schools also lack facilities for learners to develop the ability to think independently. They say that due to the lack of facilities, the learning process in schools emphasizes unproductive thinking, focuses on drilling learners to memorize, and looks for one correct answer to the questions. Yusnaeni, Corebima, Susilo, and Zubaidah (2017) observed that learners' unique creative thinking abilities require conditions that pay attention and involve each learner in the learning experiences that suit their abilities and learning styles.

#### **2.4.4 Strategies for Developing Creative Thinking Skills**

Juliantine (2019) argues that despite these factors and challenges, creative thinking must be developed in education to achieve high creative human resources in the workplace and society's everyday life. Even in human resource development, the emphasis is on promoting creative thinking ability in the knowledge of the economic era (Cheng-Shin Lin, 2016). UNESCO International Bureau of Education (2014) affirms that creative thinking skills should be fostered in all disciplines and intellectual and social areas. This is supported by Nuzliah (2015), who argues that it is often difficult to solve problems and create new ideas that overcome life and workplace challenges without creative thinking ability.

Thus, even where there are challenges in developing these skills, there should be a way of addressing these challenges. Some of the strategies that teachers may use to develop CTS is to design learning activities that are learner-centred and that ensure that learners are in the front position when these activities are executed (Sharma & Arif, 2015; Husaman, 2015). As observed by Azhari and Somakim(2014) selection of teaching methods that put learners at the center of learning and provide them with personal experiences will enhance the acquisition of CTS. This is supported by Jeng, Hsu, Xie and Lin (2010), whose view is that effective teaching methods and personal experiences can improve learners' creative thinking skills.

Colangelo and Davis (2011) propose role-play and brainstorming as learning activities that promote learners' creative thinking ability and imagination. They explain that a brainstorming strategy can enhance creative thinking skills because learners are required to practice thinking creatively through brainstorming. Further, the development of CTS require working conditions that enable a convenient learning atmosphere which enables the development of learners' creative thinking skills and that take into account the different learning styles and abilities of these learners (Yusnaeni et al., 2017). Training of teachers to think creatively for classroom activities is also important for developing CTS (Hosseini & Watt, 2010). According to Colangelo and Davis (2011) teachers need to practise creative motivation, awareness, attitudes and practice, and consistently involve learners in activities that require them to think creatively.

## 2.5 STUDIES ON TEACHING CREATIVE THINKING SKILLS

Even though the importance of teaching creative thinking skills in the classroom has long been established, studies investigating teachers' experiences of teaching creative thinking skills are scarce. Those that could be located and reviewed for this study are, Akyol and Garrison (2011), Eshet and Margaliot (2022), Larraz-Rabanos (2021), Gregory, Hardiman, Yamolinskaya, Rinne and Limb (2013), and Margaliot and Magid (2020).

In the study conducted by Akyol and Garrison (2011) it has been found that teachers should have the ability to understand CTS in order to assist in learner development on creative thinking skills in the learning, to have the ability to develop learner perspective, to provide comfort, make the question based on developing CTS and give response to learners and to master problem-solving skills. The study further revealed that teachers should be constantly studying and developing themselves through various strategies.

The study by Eshet and Margaliot (2022) proposed that creative thinking contributes to the academic integrity of education to learners and is viewed as a creative potential skill to produce innovation and valuable solutions, therefore, teachers way of enhancing CTS in the classroom needs to be reinforced. It was also revealed that in order to improve teachers practices on developing CTS, there should be provision of educational training programs to improve creative thinking level.

Larraz-Rabanos (2021) also conducted a study and found that developing creative thinking skills in the teaching and learning process is a vital component for learners. The study focused on the development of CTS from an educational approach on how teachers apply creative strategies in the teaching and learning process. The results of this study revealed that there are relevant strategies like brainstorming, storywriting and others that were found to be appropriate for the development of CTS.

Gregory et al. (2013) study established that there is a challenge for teachers in developing CTS in the classroom as the strategies employed for classroom instruction often overlooks the importance of building creative thinking skills. However, the findings of this study show that classroom learning should offer an ideal opportunity for learners to master content knowledge and creatively apply that knowledge to indicate that CTS is crucial for success in any environment.

In the study conducted by Margaliot and Magid (2020), it was revealed that the teaching of creative thinking skills requires extra effort from teachers. The study viewed that a conducive learning environment is necessary for the support of the subject matter. The findings also show that teamwork contributes to the development of CTS in the classroom as it will help teachers to understand the challenges they are likely to encounter.

Bacangallo et al. (2022) also conducted the study and found that in order to enhance creative thinking skills, teachers need to be prepared for the classroom as this will help them be innovative when developing learning activities that can be adaptive to learners' needs. It was further emphasized in the study that teachers' contribution to the effectiveness of their creative ability will help them to overcome the challenges they encounter in the classroom.

Although considerable research has been conducted on creative thinking skills, the findings in this study revealed that teaching creative thinking skills is important in the classroom and should be taught for various reasons established. As it is, the information about how these skills are taught in Lesotho schools is limited. Therefore, this study investigated teachers' experiences of teaching creative thinking skills in Lesotho classrooms.

## **2.6 SUMMARY**

This chapter reported on the literature reviewed. The chapter had five main sections; the introduction, theoretical framework, conceptual framework, existing studies on creative thinking skills and the summary. Under the reviewed literature, the study presented the following; the benefits of teaching creative thinking skills in the classroom, teachers' practices of teaching creative thinking skills, the factors leading to the challenges that teachers experience in teaching creative thinking, the strategies for developing creative thinking skills, and the studies on teaching creative thinking skills. The next chapter (Chapter 3) describes the methodology adopted in this study.

# **CHAPTER 3: RESEARCH METHODOLOGY**

## **3.1 INTRODUCTION**

This study investigated teachers' experiences of teaching creative thinking skills in Lesotho classrooms. Chapter 2, the previous chapter, reported on the literature reviewed for this study. This chapter describes the methodology used to collect and analyze data in this study. The chapter is structured in the following sections: Introduction (this section), Methodology, which includes; Research paradigm, Research design, Research methods, Selection of population for the study, Data collection methods and Data analysis methods. This study's ethical considerations and trustworthiness are also discussed and summarised.

## **3.2 METHODOLOGY**

This section describes the methodological issues related to this study. The information is presented and discussed in the following sub-sections, research epistemology, research paradigm, research approach, research design, population and participants' selection, data collection methods and instruments, and, research ethical considerations and trustworthiness.

### **3.2.1 Research Epistemology: Interpretivism**

This study has been framed by interpretivist epistemology. According to Alharahshel and Pius (2020) and Bhattacharjee (2012), interpretivist epistemology is the approach to social science that states comprehending individuals' beliefs, motivations, and reasoning in a social situation is critical to interpreting the meaning of the data that can be collected around the phenomenon. The interpretive further believes that the researcher is part of the research and cannot be entirely objective and removed from the research (Gray, 2014). The interpretivist believes that it is essential for researchers as social participants to understand the differences that exist among people (Saunders, Lewis & Thornhill, 2012). Similarly, different people in a society experience and understand the same reality differently and have individual reasons for their actions. Therefore, the study was guided by this interpretivism epistemology with the view that the participants were likely to exhibit different views on what is being studied.



### **3.2.2 Research Paradigm: Constructivism**

This study adopted the constructivism paradigm. Constructivism is a philosophical paradigm that reality is not absolute because individual people construct their own ideas of reality resulting in the existence of multiple realities (Shannon-Baker, 2023). This paradigm suggests that individuals construct their own reality through their descriptions and narrations of their lived experiences. Further constructivism beliefs are that knowledge is co-constructed between researcher and participant (Tashakkori et al., 2021). For example, when a researcher and a participant engage in research activities they both generate data with the purpose to use to explain reality as it is experienced by the participant. Therefore, the study investigated the views of teachers about teaching creative thinking skills and how teachers understand the practices involved in the teaching of CTS. The views and the experiences of these teachers were explored through semi-structured interviews which allowed teachers to describe their own views and experiences relating to the teaching of creative thinking skills.

### **3.2.3 Research Approach: Qualitative**

A qualitative research approach was used for this study. According to Merriam and Tisdell (2015), the qualitative approach is significantly helpful for a researcher who intends to collect a broader range of data from a diverse population. In a qualitative research approach, the researcher must understand the meanings and interpretations of the responses obtained during data collection. The participants' behaviour events or objects become essential during the analysis of the collected data (Bowling, 2014). Thus, as Babbie (2010) observed, qualitative research concerns describing and understanding rather than explaining and predicting behaviour. In addition, qualitative research approaches enable the researcher to thoroughly and appropriately analyze an issue produced by utilizing qualitative methods, and thus the participants have sufficient freedom to determine consistency (Flick, 2011).

This study was interested in understanding teachers' experiences of teaching creative thinking skills. As such, the qualitative approach was found appropriate in this study for collecting, analysing, and interpreting these experiences. Basically, the approach was advantageous in this study by providing continuous interaction between the researcher and the participants to understand their perceptions. The qualitative research in this study was beneficial for the researcher to analyze subjective meaning, events, and practices by analyzing texts and images

rather than focusing on numbers and statistics (Flick, 2014). This approach has a flexible structure, as the design can be constructed and reconstructed more (Maxwell, 2012).

Even though the qualitative approach is found appropriate for this study, it has some weaknesses. For example, it sometimes leaves out contextual sensitivities and focuses more on the meanings and experiences (Silverman, 2016); it uses a smaller sample size, and as a result, it raises the issue of generalizability to the whole population of the research (Harry & Lipsky, 2014; Thompson, 2011). Even Lam (2015) states that the small sample size results cannot be applied in other contexts. Berg and Lune (2012) also commented that qualitative research is a long, hard road with elusive data on one side.

#### **3.2.4 Research Design: Case Study**

This study used a case study design. A case study design is associated with a qualitative research approach. Cronin (2014) confirms that case study research is appropriate for qualitative research as its purpose mainly focuses on understanding complexities associated with interpersonal processes that emerge in a broader social context. Cope (2015) observes that a case study is a flexible but challenging research design commonly used in social science targeting the reader's shared understanding of everyday experience in a complex real-life situation. This is supported by Hyett, Kenny and Dickson-Swift (2014), who affirm that a case study is a research strategy that utilizes naturally existing information sources such as people and interactions between people within the scope of the case. Bless and Higson-Smith (1995) point out that case studies provide both descriptive and explanatory information and are appropriate for an in-depth investigation that focuses on one organization. Interview is data collection method often associated with case studies and were used as a source of data collection. Therefore, this study used a case study design to enable the participants to answer the research questions and provide the details of the appropriate information for an in-depth investigation of teachers' experiences of teaching creative thinking skills in the Lesotho classroom.

#### **3.2.5 Population and Participants' Selection**

The views of fifteen teachers from Hloahloeng High School were investigated in this study. According to Sugiyono (2010), the population is characterized by different features that the researcher sets to obtain specific information as such, the population targeted for this study were teachers who teach different subjects at high school level, with different teaching experience

and who differs in age. All the participants selected in this study had different qualifications obtained from different institutions. Therefore, the researcher found it ideal to use this population in this study to address the phenomenon and also as the teaching of creative thinking skills is found across all the subjects. Further, the study used a purposeful sampling technique to select the teachers who participated in this study. Johnson and Christensen (2008) describe sampling as drawing a sample from a population. As such, Arikunto (2010) defines purposive sampling as strategically selecting the participants. In this study, participants were purposefully selected and targeted to recruit teachers whose characteristics would fit the purpose of this study. The selection of the participants represented this study's population, particularly in Lesotho schools. Participants were interviewed to obtain narrative data as teachers were the relevant participants in teaching and integrating creative thinking skills in their subjects.

### **3.2.6 Research Methods and Instruments**

This section displayed the methods and instruments that the researcher used to collect data, and the method used in this study was semi-structured interviews. Interviews are defined as asking questions to gain knowledge and collect data from individuals (Taherdoost, 2016). In this study, the researcher preferred to use semi-structured interviews to discuss a topic of mutual interest between two or more people. Further, to obtain in-depth information about the participants' experiences by interpreting them (Doody, 2013; Bolderson, 2012). Also, these interviews helped the researcher better understand and explore the research subjects' opinions. In addition, the interview questions were open-ended so that in-depth information was collected. Therefore, this study used the semi-structured-interview method for generating data and to allow the participants to talk in any way with no restrictions.

#### **Data Collection Methods and Instruments**

According to Chiumento, Rahman, Machin, and Frith (2017), research data collection methods are activities or tools designed to gather information in research undertaken. Cresswell (2014) further attests that data collection research methods are the strategies or techniques used to collect information in the study. Thus, the methods used in this study were semi-structured interviews which the researcher found most suitable for investigating the phenomenon. At the same time, the study aimed at identifying the activities or tasks that teachers give learners to

develop creative thinking skills, and examine the challenges that teachers experience in developing creative thinking skills to the learners. As well as identify ways to equip teachers on how to deal with such challenges through the semi-structured interviews.

**Semi-structured interviews.** The data instrument used in this study to collect data was semi-structured interviews. This type of interview is flexible and allows the researcher to probe and seek knowledge from the participants responses. A semi-structured interview is a data collection technique that asks participants open-ended questions to explore their responses and the topic of interest (David & Sutton, 2004; Doody, 2013). In addition, since semi-structured interviews are considered open-ended, they are flexible and allow supplementary questions to be asked to guide the discussions and allow participants to speak liberally about what is in their hearts (Taylor, 2015). Therefore, in this study, the semi-structured interviews provided the interviewer and interviewee with opportunities to discuss and explore the topic areas in more detail (Magald and Berler, 2020). The method also provided the researcher an opportunity to explore responses, which were significant and beneficial for the focus of the study.

### **Data collection**

Before the study was conducted, the Faculty of Education in the National University of Lesotho granted the researcher permission to conduct the research. A letter of introduction was given to the principal of the selected school. Since data was collected in the school where the researcher works, the principal just informed the teachers about the purpose of the research allowed the researcher to select the potential participants for the study. All the participants were recruited after school and the researcher made arrangements for the interviews.

Before the interview was carried out, the researcher explained the purpose of the study to each participant and informed them about their freedom to withdraw at any time during the interview if they wished to. Then the participants were asked to sign a letter of consent as an indication that they were willing to participate in the study. During the day of interview, the participants were given the forms to fill in the provided spaces for answers. All the participants were given an hour to answer all the questions which were asked in English.

### **Data analysis methods and instruments**

Data analysis is preparing and organizing data collected for a study (Cresswell, 2013 & Rakotsoane, 2012). According to Cresswell (2012) and Rakotsoane (2012), the process can start with moving from particular pieces of information to more detailed information. For data analysis in this study, the researcher used a thematic analysis approach as an appropriate and powerful method to seek and understand a set of experiences, thoughts, or behaviours across data (Braun & Clarke, 2012). According to Clarke and Braun (2017), thematic analysis consists of six steps, and as such, in this study, the researcher used this approach to analyze data. The researcher used this approach to analyze data. The following were the steps that the researcher followed when analyzing data:

#### *Step 1: Becoming Familiar with the Data*

The researcher familiarized herself with the data set, which encompasses interviews. At this stage, it was helpful for the researcher to make notes and jot down early impressions.

#### *Step 2: Generating Initial Codes*

In this study, the researcher collected raw data and transcribed it to generate codes. In this regard, the data was organized meaningfully and systematically to generate themes by combining familiar responses. The researcher first made codes from the participants' responses by grouping the common responses and naming them. The researcher further classified the common responses with similar issues together.

#### *Step 3: Searching for Themes*

As this step involves examining the coded data, the researcher extracted the information from the responses to look for potential themes of broader significance. The researcher constructed themes through analysis, and the themes that were generated were as follows:

1. Teachers' interpretation of creative thinking skills (CTS)
2. Teachers' practices of teaching CTS in the classroom
3. Factors leading to the challenges that teachers experience in teaching CTS.
4. How teachers are supported to teach CTS
5. Teachers' general views about teaching CTS in Lesotho classrooms

#### *Step 4: Review Themes*

In this phase, the researcher reviewed, amended, and developed the initial themes identified in step 3.

#### *Step 5: Defining and Naming Themes*

This is the final modification of the themes aimed at identifying the core of each theme. In this step, the researcher engaged in deep analytic work involved in thematic analysis, the crucial shaping of analysis into its fine smooth detail. Then selected extracts to present or analyze themes then set out each theme's story.

#### *Step 6: Producing the Report*

The researcher produced a report on the findings in the final analysis phase. That is, the findings from the analysis of the results were transcribed in line with the major research questions.

### **3.2.7 Ethical Considerations and Trustworthiness**

This section addresses the ethical considerations and trustworthiness of the participants. However, the study was conducted at Hloahleng High School (pseudonym), and through communication with the researcher and the school's principal; the permission to collect data was granted.

**Ethical Considerations.** To ensure that a study adheres to basic ethical requirements and that no harm was done during the research process, and there was adherence to certain principles. Furthermore, these include doing no harm to the participants and ensuring that the rights of the participants are respected during research (Creswell, 2012; Louw et al., 2014 & Rakotsoane, 2012). To ensure that this study was ethical, the researcher initially asked for permission from the National University of Lesotho and from the principal of the selected school. Also, before the participants for this study were recruited, the teachers were informed about the purpose of the study and how their information is going to be used in the study. The participants were also informed that they may withdraw if they wished.

**Doing no harm.** All the participants were ensured that nothing would cause physical or emotional harm. Their preconceptions or opinions would not be interfered with during the collection process. The participants were also ensured that the information provided was confidential and that the findings would be anonymous.

**Respecting the rights of the participants.** The research protocol was followed to ensure that all the participants were informed about the study and their participation. They were also informed that their dignity, privacy, and interests would be respected. With this information, the participants were asked to fill in a consent form indicating their participation decision was voluntary, ensuring that their rights and time were respected.

**Trustworthiness.** Trustworthiness of the study refers to the level of trust in data, interpretation, and methods used to ensure data quality in a study (Polit & Beck, 2014). According to Kumar (2011) and Connelly (2016), research trustworthiness postulates that the researcher's words can be trusted as representing truthful statements. On the same note, Yin (2011) indicates that truthfulness is vital in qualitative research. The aspects of trustworthiness include credibility, transferability, dependability and confirmability. As a result, the study had followed the following strategies:

*Credibility:* The credibility of a study is about whether the study's findings are accurate and could be trusted and believed in (Polit & Beck, 2014). In this study, the study credibility was ensured by using a technique called member check for members to check and certify information before analysis. As such, the collected data was sent back to the participants to verify and confirm that the transcribed data reflected their experiences. This was also ensured through a prolonged engagement with data to identify the overlapping themes and to eliminate the contradictions (Stahl & King, 2020). All the participants were satisfied that the interviews represented enough content that was presented in the interviews.

*Transferability:* Transferability is how the researcher can demonstrate that the study's findings apply to the contexts (Kumar, 2011; Thomas & Magilvy, 2011). To ensure transferability in this study, the researcher provided sufficient information about how data was collected and analyzed. Also, the researcher provided a detailed description that clarifies all the processes that were taken during data collection. The interview method has been tried and used before and have been found reliable to produce information intended if applied in contexts similar to the one in which this study was conducted.

*Dependability:* Dependability refers to the extent to which a study can be repeated by other researchers and yield the same results (Kumar, 2011 & Merriam, 2009). In this regard, Ary (2010)

advocates that the researchers can divide data, independently analyze it, and then compare the results. To ensure dependability in this study, the researcher connected the results and data provided to observe if they gave the same results.

*Confirmability:* Confirmability concerns whether the research findings could be repeated with the same participants to confirm neutrality and avoid bias (Anney, 2014). The study paid attention to coherence in terms of the information gathered and the interpretation of data (Trochim & Donnelly, 2008). In this study, the researcher documented the procedures by conducting a data review for checking and re-checking data throughout the study. Additionally, the researcher achieved confirmability by ensuring transparency by using colleagues as critical readers.

### **3.3 SUMMARY**

This chapter presented the methodology that was used in this study. The chapter begins with an introduction, research epistemology, constructivism research paradigm, qualitative research approach and case study as research design. The study further explained methods of data collection and instruments, data analysis methods and instruments, ethical considerations and trustworthiness. The next chapter (Chapter 4) presents the findings of this study through the data collection methods used in this study.



## **CHAPTER 4: FINDINGS**

### **4.1 INTRODUCTION**

This study aimed to investigate teachers' experiences of teaching creative thinking skills in Lesotho classrooms. Data that was collected for this study was about (1) how teachers in Lesotho classrooms interpret creative thinking skills and their views on the benefits of developing learners' creative thinking skills; (2) teachers' practices of teaching creative thinking skills; (3) factors leading to the challenges that teachers experience in teaching CTS; (4) how teachers are supported to teach CTS; and (5) teachers' general views about teaching these skills in Lesotho classrooms. In the previous chapter (Chapter 3), the methods that were used to collect data were described. This study's data was gathered through semi-structured interviews and analyzed using a thematic approach. This chapter presents the findings of this study. The chapter is structured as follows: Introduction (this section), The participants' profile, Presentation of results, and Summary.

### **4.2 THE PARTICIPANTS' PROFILE**

The participants in this study were selected from one high school in Lesotho. How these participants were selected is detailed in Chapter 3. For confidentiality purposes, the identities of the school and the teachers have been pseudonym, the school as Hloahloeng High School (pseudonym) and teachers as Teacher (1) to Teacher (15). The profiles of these teachers are provided in Table 4.1. As indicated in this table, the participants in this study were males (08) and females (07). All the participants were from one school Hloahloeng High School (pseudonym). The participants' ages ranged from 40 to 65 years, with seven females between 40 to 59 years old and eight males between 42 and 65 years old. Their years of teaching experience ranged from eight to 38 years. As reflected in the table, the participants had different levels of highest teaching qualifications, which were Secondary Teacher Certificate (STC) from Lesotho College of Education (LCE), which was formerly known as National Teachers' Training College (NTTC); a Diploma in Education Secondary (DES) from LCE; a Diploma in Computer Studies from Bethel College; Bachelor's degree in Education (B.ED) from the National University of Lesotho (NUL). Only one

participant had less than 10 years of teaching experience. The rest of the participants had 15 years and more than 15 years of teaching experience. All the participants were teaching from Grade 8 to Grade 11.

*Table 4.1: Summary of participants' professional profile*

Profile	Age	Gen.	Highest Qual.	Institution	Special.	Exp.	Teaching Grades
Teacher 1	44	F	STC/BED	NTTC/NUL	Dev. Studies & Eng. Lang.	20	8-11
Teacher 2	43	M	DES/BED	LCE/NUL	Commercials	15	8-11
Teacher 3	42	M	BED	NUL	Eng. Lang.& Dev.Studies	16	8-11
Teacher 4	46	F	DES/BED	LCE/NUL	Maths.& Chemistry	16	9-11
Teacher 5	59	F	DIP. EDU	NUL	Agriculture & Science	33	9-11
Teacher 6	43	M	BED	NUL	English Lang.& Dev. Studies	15	9-10
Teacher 7	40	F	BED	NUL	Accounting, Econ.& Bus. Studies	08	9-10
Teacher 8	51	M	BSC/PGDE	NUL	Biology, Chemistry & Maths	29	8-11
Teacher 9	65	M	DIP/ BSC	NUL	Science & Agriculture	38	9-10
Teacher 10	58	M	DIP/ICDL	BETHEL	Computer Studies	20	8-11
Teacher 11	47	F	BED HON.	NUL	Eng. Literature & Dev. Studies	25	8-11
Teacher 12	40	M	DIP in AGRIC ED	NUL	Agric & Junior Science	13	8-11
Teacher 13	47	M	BED	NUL	Physics and Maths	22	8-11
Teacher 14	42	F	BED	NUL	Eng. & Dev. Studies	16	9-11
Teacher 15	36	F	BED	NUL	Accounting & Bus. Studies	10	9-11

### 4.3 PRESENTATION OF THE RESULTS

This section presents the data collected from the interviews of eight teachers described in the previous section. These teachers were asked about their (1) interpretation of creative thinking skills (CTS) and their views on the benefits of developing CTS; (2) teachers' practices of teaching CTS, (3) factors leading to the challenges that teachers experience in teaching CTS; (4) how teachers are supported to teach CTS, and (5) views about teaching CTS in Lesotho classrooms. A

thematic approach was used for the analysis of this information. Five themes emerged from this analysis. The findings from the analysis are presented in line with these themes.

#### **4.3.1 Teachers' Interpretation of Creative Thinking Skills**

Teachers were asked to define creative thinking skills and to outline the benefits of developing learners' creative thinking skills. This information is presented in two sub-sections: the definition and the benefits.

**Definition of creative thinking skills.** The participants in this study understood creative thinking skills as the ability to bring new ideas to generate and provide innovative solutions to the current problem. For example, Teacher 2 described creative thinking skills as:

The ability to think critically and analyze the information presented to come up with a solution to the problem. In simple terms, I consider it to be the ability to think outside the box.

Only one participant interpreted CTS differently. Her interpretation linked creative thinking skills with creative art and described it as an activity that engages learners in visual arts. Teacher 7 explained this by saying, "Creative thinking skill is the work of art whereby learners create a new product out of their imaginations." Apart from this participant, all seven participants in this study had the same interpretation of CTS.

The participants' way of thinking about creative thinking skills appeared to be in-line with other scholars such as Daud et al. (2012), Gregory et al. (2013), Scott (2015), and Khoiri (2019), who view creative thinking skills as an ability to make or bring to existence something new or bring a solution to a new problem. These scholars also observe that creative thinking skills are part of cognitive learning that aims to solve problems. They believe creative thinking is needed in the teaching and learning processes to help learners learn skills that will help them deal with and find solutions for the complex problems they encounter in their different learning subjects and everyday life situations.

**Benefits of developing learners' CTS.** When the participants were asked about their views on the benefits of developing learners' creative thinking skills in teaching and learning, they indicated that it is vital for learners to be taught CTS in the classroom for various reasons that include these skills:

*Contribute to learners' humanity.* The participants established that it is essential for learners to be equipped with this 21st century skill as it contributes to their humanity by promoting individual well-being in personal and professional achievements.

*Increase emotional intelligence.* The teachers who participated in this study further highlighted that learning CTS increases emotional intelligence, which helps learners to deal with stressful situations. The participants' views in this study align with that of Adams (2019), who established that teaching creative thinking skills responds to the needs of the learner's personality to find new ways of addressing issues like stress. This view was reflected in Teacher 6's response:

Creative thinking skills should be promoted in our classrooms as valuable because they are essential for promoting individual well-being in personal and skilled achievements. It also enables learners to resolve challenges that may emerge, like stress.

*Provide a learner with resilience at the workplace and in the community.* The participants also expressed that learners are affected every day by the demands of rapid change in the workplace and the community. Accordingly, these participants confirmed that thinking creatively could improve working practices and help develop and implement innovative solutions. They further expanded that learning this skill in a community brings about different perspectives that lead to acceptance of individual differences. This view has been confirmed by Nuzliah (2015), who stated that it is often difficult to solve problems and create new ideas to overcome community and workplace challenges without creative thinking ability. This is how Teacher 8 explained this view:

After dropping out of school, most of my learners encounter challenges in their communities. They cannot survive their everyday life obstacles like accepting individuals' characters. For those who have been lucky to finish school, when they are at their workplaces, they are not productive in providing businesses with new ideas, which becomes the worst challenge.

Some participants further expanded that CTS provide learners with the opportunity to develop skills that make them productive in their workplace and their communities. For example, this is how Teacher 5 expressed this view:

The opportunities provided to learners when they are taught creative thinking prepare them to be more productive in their future workplace and be better positioned for success. In addition, in the community, they can interact with other community members to resolve conflicts.

*Provide learners with opportunities to gain knowledge and experience needed to solve their Problems.* This view is reflected in Teacher 6's response:

Creative thinking skills allow learners to extend their imaginations and think ahead of their present to solve a problem. It further helps learners to bring different perspectives and new ideas into the classroom.

Thus, this view about the learners' opportunity to gain knowledge from being taught CTS in the classroom appeared to be in line with the views of Hobbs (2010), who affirms that creative thinking skills help learners to learn independently and with minimal assistance to critically think about their problems and gain knowledge and experience to solve problems.

*Promote Learners' Problem-Solving and Interpersonal Skills.* This was particularly mentioned by Teacher 2 when she said, "It promotes problem-solving, develops interpersonal skills and motivates learners." Teacher 1, who said, "Teaching creative thinking skills in the classroom helps learners to solve problems and create interpersonal relations among themselves", supported Teacher 2

*Assist Learners to Develop Innovative Ideas.* Teacher 5 elaborated on how important it is for learners to develop innovative ideas that bring new perspectives and how CTS effectively assist learners with this. This is how she responded:

Learners need to develop creative thinking skills because it will help them to perceive patterns that are not obvious and bring new perspectives into the classroom. They will also become innovative in their approach to solving problems.

*Enable learners to expand their knowledge.* This is how Teacher 3 expressed this view:

Teaching creative thinking skills in the classroom enables learners to discover unknown concepts from the known. Learners with creative thinking skills can apply any concept to the relevant situation.

Generally, these results show that the teachers who participated in this study discovered that it is essential for learners in Lesotho classrooms to be taught CTS for various reasons. This participant's view coincides with the views of Zarkasyi (2015), who indicated that the learning of creative thinking allows learners to gain knowledge and experiences and to discover, recognize, and solve problems with multiple techniques. The participants further pointed out that teaching CTS can apply to all different school subjects. (in what ways, an elaboration would be interesting to know. Please include more information).

### **4.3.2 Teachers' Practices of Teaching Creative Thinking Skills**

The participants in this study claimed that they employ or utilize different teaching methods to develop CTS in the classroom. Teachers indicated that they use discovery, brainstorming, experiential learning, group discussion, games, and puzzles for teaching CTS.

**Discovery method.** The participants suggested that a discovery method was one of the methods they used to promote learners' CTS in the classroom. They claimed that the reason they preferred this method is that it can effectively develop the learners' CTS. For example, Teacher 4 justified this method by saying:

I design lessons that require learners to discover things for themselves by giving them concepts that require them to think creatively. I also employ practical strategies to enhance the effectiveness of learners' creative thinking skills.

**Brainstorming method.** The participants in this study highlighted that they engage learners in brainstorming activities as a way of developing their CTS. They indicated that this activity allows the learners to exercise their imaginations. For example, Teacher 3 response was that she uses brainstorming because it is a strategy that can enhance creative thinking ability. This teacher explained that this method requires learners to think creatively. For example, this is how this teacher explained:

In my English Language class, I provide learners with stories and ask them to create their own stories similar to the story narrated. In the process, I allow them to brainstorm ideas and debate them.

Teacher 6, who described how she engages learners in the brainstorming activity, supported this view. This is how this participant explained:

I always give learners a couple of tasks to conduct research and organize brainstorming sessions relating to their research. Sometimes I even ask them to present their findings to others.

How teachers use the brainstorming method to promote CTS appeared to be in line with Anco and Unluer (2010), whose view is that brainstorming is one of the learning activities that can promote the creative thinking ability and imagination of learners.

**Experiential learning.** The participants designed experiments in their subjects as a means of developing CTS. This helps learners bring as many solutions as possible to a given question and promote their thinking ability. These findings are aligned with the views of Lucas and Spencer (2017), who observed that experiential learning promotes learners' creative thinking skills because they are practical and motivate learners to think creatively. They further expanded on experiential learning as a method that helps learners to make informed decisions. Teacher 8 explained this by saying:

I design experiments that allow learners to carry out steps based on the guided concept. After they are given a chance to design their experiments, they are given a set of conditions to follow in coming up with possible answers to a given question, and these help my learners to move from a problem to a solution and to make informed decisions.

**Games and puzzles learning.** The participants indicated that they engage their learners in instructional games and puzzles to promote CTS in the classroom. They further explained that through games and puzzles learning, learners cultivate their thinking ability, so their learning of CTS grows naturally. This view is reflected in Teacher 8's response who said:

The methods that I normally use involve playing puzzles and games to enhance creative thinking skills in my class. As I teach Mathematics, I engage learners in crossword puzzles to teach concepts like addition, subtraction and multiplication. In this activity, learners apply their creative ability to solve problems. In addition, learning Mathematics using puzzles encourages learners' interest in the subject.

Gao (2015), who established that games and puzzles encourage learners to think creatively and help them absorb details from concrete imaginations, confirmed this view.

Some participants further established that games and puzzles provide a mental challenge that helps learners to develop their CTS. These games and puzzles allow for trial and error so learners can learn from their mistakes and develop new ideas to solve complex problems. This is how Teacher 2 clarified this point:

I give learners tasks that involve them applying their creative ability. I request them to make a picture using a puzzle, and then they will put together different pieces together to complete it. This type of game promotes creative thinking since learners need to pay attention to small details to complete the puzzle.

**Discussion method.** The participants used the discussion method to develop CTS in their classrooms because it pushes learners to build creative thinking as they continually keep incorporating one another's ideas into the solution. For example, this is how Teacher 4 explained:

I usually use the discussion method in the classroom to develop creative thinking. I give learners a task that forces them to listen to one another's ideas and suggest their ideas to build on them. This helps them to get experience in developing creative thinking.

This view of the participants aligns with Huang, Wang, Chen, Yu and Chou (2017), who observed that learners work cooperatively during discussions and acquire experience, and creative skills to cope with complex problems. The participants in this study further claimed that they engage learners in the group discussions as a way of promoting their CTS. For example, this is how Teacher 1 expressed this view:

I usually assign learners to research a concept and present it in groups so that everyone in the group is given a chance to engage in the discussion to come up with ideas and present them.

### **4.3.3 Factors Leading to the Challenges that Teachers Experience in Teaching CTS**

The findings in this study indicated that many teachers encounter challenges when teaching CTS in their classrooms. Many of them claimed that their way of teaching CTS in the classroom is not as successfully as they wanted. Others pointed out that they do not teach these skills at all. They mentioned factors such as: lack of skills and knowledge, lack of resources, the calibre



of learners, and limited time being responsible for the challenges they encounter in the classroom.

**Teachers' lack of knowledge and skills.** Six of the participants explained that they are not well informed on how to teach creative thinking skills in their subjects. As a result, they hardly give their learners activities that require them to think creatively. They explained that they do not possess adequate skills needed to implement this skill. This is how Teacher 5 explained:

I do not give learners activities that promote creative skills. Also, I do not prepare my lessons to incorporate creative thinking skills in my subject. This is because I am not familiar with creative thinking skills. In short, I do not know anything about these skills.

Teacher 7 had the same view as Teacher 5. He indicated this by saying, "I am not a critical thinker myself. Therefore, I have a problem to instill the skill to learners. I also lack knowledge of the skill."

Teacher 1's view was also the same as the views of Teacher 5, and Teacher 7, that teachers lacked sufficient skills to teach CTS. This teacher said:

As a teacher, I lack knowledge and adequate skills; at times, I just research and give learners the findings without demystifying the concepts to them. I need to acquire sufficient skills to teach creative thinking first before I can attempt to teach them in my class.

Some participants indicated that because of the limited knowledge they have about CTS, they have low self-esteem about teaching these skills. They explained that they find it challenging to engage learners in creative thinking activities because of their low confidence. Suciawati (2019) has reported the same finding that the main challenge that many teachers face in teaching CTS is poor self-confidence, low self-esteem, and a feeling of helplessness, which are caused by these teachers' limited knowledge. This is how Teacher 7 expressed this view:

I am not a critical thinker myself, so I have a problem to instill this skill to learners. In addition, I have low self-esteem, which might affect my learners' creative behaviors and their potential to produce creative outcomes.

As established in this study, some teachers cannot even identify strategies that can effectively develop learners' CTS due to lack of knowledge. This was particularly pointed out by Teacher 6

who said, "I do not employ creative teaching strategies in my subject because I am not very conversant with them." In support of this claim, Teacher 2 said:

As a teacher, I do not utilize strategies that promote creative thinking because I do not know them. I normally teach content without giving learners chance to think for themselves, for example, most of the time my teaching is teacher- centered.

**Lack of resources.**The participants further indicated that lack of resources is another factor that influences how they develop CTS in the classrooms and this factor makes it difficult for themes to teach the skill. For example, this is how Teacher 4 expressed this view:

Schools' lack of resources that are required to make creative teaching skills easy to be taught and developed is a problem. Some learners are too slow to think and they need resources that can assist in developing of creative thinking skills.

Teacher 5 had the same view as Teacher 4 by indicating that the teaching of CTS is not practiced because schools lack creative teaching materials. This was reflected in the Teacher 4 response, which was, 'I am not able to teach learners about creative thinking skills because there are no materials that would assist me to develop and promote this skill in my classroom.'

In this case, established that lack of resources in schools influence the way they teach CTS in the classroom and that makes it difficult for them to develop this skill in the classroom. This view of the participants is in-line with those of Eragamreddy (2013) and Saadi (2016), who observed that schools' lack of facilities for learners to develop the ability to think creatively and independently hinders the promotion of creative thinking in the classroom.

**Calibre of learners.**Teachers stated that learners' lack of exposure is another factor that influences how they teach CTS. This factor makes it difficult for teachers to promote and develop this skill in their classrooms because, in other classes, learners are not exposed to situations that could make them to use their imaginations and think creatively. For example, this is how Teacher 2 clarified this point:

Most learners in my classroom are too slow to think out of the box. Whenever they are given task or activity to think about or stretch their minds, they provide the same

responses of the things they are familiar or of things happening around them and in that case I become a dictator and think for them

Teacher 3 supported this point by saying, “Learners lack exposure to different things especially concept based ideas.” In addition, Teacher 5 also believed that:

Learners are lazy to think and they are not interested to learn new things due to lack of exposure. What I mean is they are not exposed to situations in which they may be obliged to practice to use their imaginations and think creatively.

Generally, the participants pointed out that their learners cannot think creatively because they lack exposure to different situations and it becomes difficult for them to extend their imaginations. They are too slow to think, a result they cannot think creatively. The view of these teachers is aligned with the views of Chang (2013) who established that teachers find it difficult to develop CTS in the classroom as learners have limited knowledge and exposure.

**Time factor.** The participants expressed that limited time is another factor that influences the way they teach CTS. They highlighted that the teaching of CTS is time-consuming as a result, they are not teaching this skill in their classrooms. . For example, this view is reflected in for Teacher 3 who said:

I am overloaded with work and I do not have time to prepare for teaching creative thinking skills since I have to prepare for other subjects that I teach. I am also overloaded with the classes that I teach, therefore the time to prepare for creative thinking would consume a lot of time, which I don't have hence I don't teach creative thinking at all.

Some participants complained about the strategies that are used for promoting CTS in the classroom. Their view is that these strategies require a lot of time and effort for planning and preparation. They explained that this makes it impossible for them to teach CTS in their subjects as it requires a thoughtful planning and preparation. This point has been expressed by Teacher 6 who said:

I am overloaded with the classes that I teach therefore, the time to prepare for creative thinking would consume a lot of my time. Further, my workload will not allow me to have

enough time to design activities that would engage learners in developing creative thinking.

This has been affirmed by Beghetto and Kaufman (2012) that teaching creative thinking skills requires intensive planning and design of learning tasks that foster learners' creative thinking. Hence, this puts a lot of pressure on teachers, as it requires a lot of time for preparation. Tangaard (2011) also established that time is one of the factors that influence teachers' reluctance to engage learners in creative thinking.

#### **4.3.5 Teachers Views on how they are supported to Teach CTS**

The participants in this study expressed their views on the existing situation in their schools in relation to how they are supported to teach CTS in their classrooms. They also showed their concerns that the current conditions in their schools do not allow them to teach this skill.

In view of how they are supported, the participants indicated that, currently they are not teaching CTS in their classrooms either by their schools or the Ministry of Education and Training. From their point of view, neither the schools or the Ministry of Education and Training provide teaching resources and training workshops that can assist them in anyway. The view of these participants is that both the Ministry and the schools are silent about the teaching of CTS and, as a result, CTS is not taken into consideration across all the subjects. These teachers explained how this frustrates and demotivate them to teach these important skills. For example, Teacher 4 explained this by saying:

In my school, teaching of creative thinking skills frustrates us because the school does not provide us with resources, let alone holding mini seminars to equip us with the skills that develop creative thinking. Further, the Ministry of Education has not offered any training on the teaching of this strategy. This says that to us no one remains accountable for implementing this skill in schools.

Teacher 6 who had the same view as Teacher 4 also explained:

As teachers, currently we are not teaching creative thinking skills because the management in our school has not made any effort to assist us to teach this skill. In this case, creative thinking is not taught at all. In addition, the Ministry also has never met

schools halfway by providing resources or a resource person to help in the teaching of creative thinking skills.

The participants also complained that even the management in their school is not taking any responsibility to guide them on how they can teach and develop CTS in their classrooms. In support of this complain, Teacher 3 said:

I do not feel happy to teach creative thinking in my classroom because no one is giving me guidance on how to develop this skill during my teaching. Even my Head of Department who is responsible for classroom instruction is not helping me when the need arises, hence I do not teach this skill.

Some views that have been expressed by the participants in this align with Adams's (2019) finding that teachers are not sufficiently supported by professional education organizations.

#### **4.3.6 Teachers' General Views about Teaching CTS in Lesotho classrooms**

When teachers were asked to give their general views about teaching CTS in Lesotho classrooms, they believed that CTS are important skills and they need to be taught to every learner. They further suggested that this skill could be implementable in the classrooms when teachers have necessary skills and when the resources are available. They also indicated even in Lesotho classrooms, the teaching of CTS can be effectively implemented if the Ministry of Education and the schools could assist with the following; training workshops, teaching resources and resource teachers and facilitators, and conducive learning environment.

**Training workshops.** The participants in this study indicated that they teach (or do not teach) CTS in their classrooms in a limited way because they lack knowledge and adequate skills necessary to teach the skill. They suggested that if they could be exposed to the training workshops organized by the Ministry of Education or other stakeholders in the system they will be able to develop the necessary skills and will be motivated to teach CTS. Hosseini and Watt (2010) support the view that teachers need to be trained with the intention to equip them with skills that would enable them to think creatively and to promote CTS among their learners. For example, this is how Teacher 2 showed this view:

I teach creative thinking skills in the classroom but in a limited way because I lack knowledge and the necessary skills that can help me to develop this skill in the classroom.

Therefore, I need training workshops that will equip me with the techniques to think creatively and teach the skill

The participants further explained that the training workshops would effectively expose them to different teaching methods that are associated with the teaching of CTS. This is how Teacher 8 expounded on this point:

The schools and the Ministry of Education should provide us with regular training workshops whereby we can be taught and be exposed to different teaching methods that would help us to develop creative thinking in learners.

**Teaching resources.** According to the participants, for CTS to be successfully taught in Lesotho classrooms, there should be appropriate teaching resources that will make this strategy effective. From their viewpoint, as indicated earlier in this chapter, schools' lack of resources hinders the promotion of CTS in the classroom. This was particularly emphasised by Teacher 7 who said:

If the appropriate teaching resources were there, teachers would not overlook the teaching of creative thinking skills in classroom because the availability of resources would limit no excuse for teachers in not teaching and developing the skill.

Supporting this argument, Teacher 1 pointed out that:

It is difficult to teach creative thinking skills in my subject. As an English teacher, I sometimes teach stories that I want my learners to visualize on screen, I need my school to assist me with computers and Wi-Fi so that learners may have access to the internet to watch video clips that are relevant to the development of creative thinking skill.

**Resource teachers or facilitators.** The participants in this study believed that the Ministry of Education or the schools should employ resource teachers or facilitators who are knowledgeable in teaching this strategy. Their view is that through the guidance of this human resource, teachers could acquire relevant knowledge and skills. According to these participants, the Ministry of Education's engagement in providing schools with resource teachers who have expertise in teaching creative thinking skills should be mandatory.

**Conducive learning environment.** The findings in this study indicated that the participants believed that schools' creation of a conducive learning environment could also make it easy for teachers to teach CTS in Lesotho classrooms. Their argument was that a conducive learning environment supports intrinsic motivation for both teachers and learners. According to these teachers, such environment can help teachers and learners to explore the idea of creative competence. This is how Teacher 1 explained:

Our schools should create a conducive learning environment for both teachers and learners. This can help them to be creative and develop a vision of how ideas could be applied in different contexts, resulting in intrinsic motivation.

Few participants in this study believed that the government should be fully involved to see that the teaching of CTS is possible in Lesotho classrooms. Their argument was that despite its benefits, the teaching of CTS is time-consuming and requires a lot of time for preparation even where resources could be easily available. Teacher 5 explained this by saying:

I do not encourage schools to implement creative thinking skills in classrooms because it consumes a lot of our time for preparation and implementation.

They advanced their argument that, if there is an insistence that this skill should be taught, then the Ministry of Education should start by piloting it first in some schools in order to gauge the materials and the equipment needed for teaching it. For example, this is how Teacher 6 clarified this point:

In order for us to teach creative thinking skills in our school, the ministry should select a few schools that would be used as pioneers in the development of creative thinking in the classroom. This will make it easy for the ministry to design appropriate teaching resources for teaching this skill.

The general observation about these findings is that, the participants believed that CTS could be practiced in Lesotho classrooms if they could receive support from the Ministry of Education and their schools. From their point of view, training teachers and employing resource teachers could help in equipping teachers with necessary skills to teach and develop CTS in the classroom. They further observed that the schools should create a conducive learning environment for both

teachers and learners to develop this skill. These views appeared to be in-line with the views of Yusnaeni et al. (2017) who observed that learners' unique creative thinking abilities require conditions that pay attention and involve each individual learner in the learning experiences that suit their abilities and learning styles, and the well-informed teachers who are supported in all areas of teaching creative thinking.

#### **4.4 SUMMARY**

This chapter presented the findings of teachers' experiences of teaching creative thinking skills in Lesotho classrooms. This information was presented into five main sections: interpretation of creative thinking skills students' creative thinking skills; teachers 'practices of teaching creative thinking skills; factors that influence the challenges that teachers experience in teaching creative thinking skills; how teachers are supported to teach creative thinking skills; and teachers' views about teaching these skills in Lesotho classrooms. About their interpretations, the results revealed that teachers have common understanding of creative thinking skills except for one who linked it to creative art. These further expressed their views on the benefits of developing CTS. The results show that some teachers claimed to teach this skill but in a limited manner. The factors that lead to the challenges that make it difficult for teachers to teach CTS were revealed in this chapter, such as (provide one example from the chapter). The findings also indicate how teachers are supported to teach this skill. The views of these teachers about teaching this skill in Lesotho classroom have also been revealed in this chapter. In the next chapter (Chapter 5), the discussions, conclusions and recommendations made by this study are presented.



# **CHAPTER 5: DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS**

## **5.1 INTRODUCTION**

This study investigated teachers' experiences of teaching creative thinking skills (CTS) in Lesotho classrooms. This qualitative study collected information using semi-structured interviews and analyzed using a thematic analysis approach that included:

1. Teachers' interpretations of creative thinking skills
2. Teachers' practices of teaching creative thinking skills
3. Factors leading to the challenges that teachers experience in teaching CTS
4. How teachers are supported to teach CTS in the classroom
5. Teachers' general views about teaching creative thinking skills in Lesotho classrooms

The previous chapter (Chapter 4) presented the findings of this study. This chapter (Chapter 5) presents the major findings of this study and discusses the results, draws conclusions, highlights the study's limitations, and finally outlines the recommendations made by this study. Thus, this information is presented as follows:

## **5.2 MAJOR FINDINGS**

The discussion of the results in this study are presented in five major themes. These discussions are structured as: 1) teachers' interpretations of and views on the benefits of developing CTS in the classrooms; 2) teachers' practices of teaching CTS in classrooms; 3) factors leading to the challenges that teachers experience in teaching CTS; 4) how teachers are supported to teach CTS in the classroom; And 5) teachers' general views about teaching these skills in Lesotho classrooms.

### **5.2.1 Teachers' Interpretation of CTS**

Teachers in this study showed their understanding of CTS. They interpreted it as the ability to bring new ideas to generate solutions to existing problems. They further expanded that it is the ability to produce something new through imagination by giving a solution to a problem. Only one teacher in this study interpreted CTS differently. Her interpretation linked creative thinking

skills with creative art, describing it as an activity that engages learners in visual arts. Thus, generally, teachers' way of thinking about creative thinking skills appeared to be in line with the views of scholars like Tendrita et al. (2016), Cintia, Kristin and Anugraheni (2018), and Maksum, Widiana, and Marini (2021) who view creative thinking skills as a thinking ability that can produce the variation of possible responses to solve problems. These scholars also believe that creative thinking is needed in the teaching and learning process to help learners develop skills that assist them in dealing with and finding solutions to complex problems.

### **5.2.2 Teachers' Views on the Benefits of CTS in the Classroom**

In this study, teachers discovered that teaching CTS in the classroom is essential for learners for many reasons. They indicated that it is vital for learners to be equipped with this 21<sup>st</sup> century skill as it contributes to their humanity by promoting individual well-being in personal and professional achievements. These teachers further expressed that learning CTS increases emotional intelligence, which helps learners deal with stressful situations. Adams (2019) and Plucker, Runcoab and Siminsen (2020) believe that teaching creative thinking skills responds to the needs of learners' personalities to find new ways of addressing complex issues and facilitates learners' personal academic growth.

Additionally, teachers are of the view that learners, because learners are affected every day by the demands of rapid changes in the workplace and the community, they need this skill. They highlighted that learners need this skill because it improves their working practices and helps them develop and implement innovative solutions. These teachers also believe that because of this skill, learners have different perspectives that lead to accepting individual differences. This view is supported by Nuzliah (2015), whose belief is that, without creative thinking ability, it is often difficult to solve problems and create new ideas to overcome community and workplace challenges.

Developing CTS in the classroom helps learners to produce innovative ideas that assist them in overcoming complex problems and bringing about innovation. According to this study, CTS enable learners to translate unknown concepts into known concepts to solve problems. This process allows them to extend their imaginations and think ahead of their present situation to solve a problem.

Because of their views of these benefits, teachers in this study believe that CTS should be taught to help learners develop abilities that will allow them to deal with challenges in everyday life situations and find solutions to them. The teachers' beliefs appear to be supported by Carson (2010), who believes that teaching this skill promotes learners' ability to cope, resolve complex problems, adjust and succeed in their personal lives, education, business, and society.

### **5.2.3 Teachers' Practices of Teaching CTS in the Classroom**

This study claims that teachers use different teaching methods that develop CTS in the classroom. Some of the methods they listed include discovery, brainstorming, experiential learning, discussion, and games and puzzles. These teachers assert that where these methods are appropriately planned, they effectively develop learners' CTS. This is because they allow learners to exercise their imaginations. Anco and Unluer (2010) have also observed that teaching methods that engage learners in activities requiring them to solve problems promote their creative thinking ability and imagination. For example, they argue that experiential learning helps learners bring about as many solutions as possible to a given problem and promote their thinking ability, as these learners have to choose the most appropriate solution. Lucas and Spencer (2017) have also established that experiential learning promotes learners' creative thinking skills since they are practical and motivate learners to think creatively. They further believe that the methods associated with CTS cultivate learners' thinking ability, and their learning of CTS grows naturally, encourages them to think creatively, absorb details from concrete imaginations, and helps them make informed decisions. This view was acknowledged by Gao (2015), who established that some teaching methods, such as games and puzzles, provide mental challenges that help learners to develop their CTS. This is because they allow learners to allow for trial and error so that learners can learn from their mistakes and come up with new ideas to solve problems.

The teachers in this study also believe that the methods associated with promoting CTS, such as discussion, push learners to build creative thinking ability and continually keep joining others' ideas in problem solving. In this case, learners process information to find or create solutions for the problem, rather than information from a teacher or others dictating how they should solve it. Huang et al. (2017) believe that learners work cooperatively in the methods such as discussions and acquire experience in creative thinking skills that help them to cope in dealing with complex problems.

#### **5.2.4 Factors Leading to the Challenges that Teachers Experience in Teaching CTS**

Teachers in this study claimed that they encounter challenges in practising CTS in the classroom. They claim that their efforts are dwarfed by their lack of skills and knowledge, the limited time needed for teaching CTS, the lack of resources required, and the calibre of learners they have.

Teachers' lack of knowledge and adequate skills for teaching CTS makes it difficult to develop and promote this skill in the classroom. Because they are not adequately equipped with the knowledge and skills necessary to develop CTS, they are unable to identify and use effectively the strategies that may enhance learners' development of creative thinking abilities. Subsequently, many teachers do not engage learners in CTS learning activities. Chang (2013) observes that teachers find developing CTS in the classroom difficult as they have limited knowledge and lack adequate skills. In addition, teachers, lack of skills has influenced their self-esteem in teaching these skills. For example, the study has established that teachers have low self-esteem and, for that reason, do not attempt to teach learners CTS. Suciawati (2019) had a similar discovery that teachers' poor self-confidence, low self-esteem, and a feeling of helplessness create an obstacle that hinders them from teaching CTS.

Teachers' perceptions that teaching CTS is time-consuming and their workload does not allow them to spend enough time preparing and teaching CTS is another study finding. Tangaard (2011) has also established the same view, that teachers' views on how they should spend their instructional time is one factor that influences their reluctance to engage learners in creative thinking. Beghetto and Kaufman (2012) also believe that intensive planning and designing of learning tasks for teaching CTS puts much pressure on teachers, making them reluctant to teach these skills.

How teachers view the availability of resources appears to be also influential on how they teach CTS. In this study, teachers claimed that their schools lack the resources to teach learners to become creative thinkers. Eragamreddy (2013) and Saadi (2016) also observed that the schools' lack of facilities hinders teaching that makes learners think creatively and independently. Thus, teachers claim that learners could be too slow to think without these resources, resulting in slow and tedious teaching.

The teachers in this study also believe that their learners are not exposed to situations that can make them use their imaginations and think creatively. That being the case, teachers encounter difficulties influencing learners to think creatively. This view is aligned with Chang (2013), who established that teachers find it challenging to develop CTS in the classroom of learners with limited knowledge and exposure.

#### **5.2.4 How Teachers are Supported to Teach CTS**

This study has established that teachers are not happy with the way they are supported to teach CTS. They pointed out that the prevailing situation in their schools limits the support they are supposed to receive so that they can successfully teach CTS. Teachers also complained that even the management in their school is not taking any responsibility to guide them on how they can teach and develop CTS in their classrooms. The view of these teachers is that in their schools, nobody is in control to ensure that teachers teach and engage learners in developing creative thinking skills. As a result, this skill is not taught at all in schools. Where it is taught, it is done in a limited manner. Adams (2019) has the same view that where professionals do not sufficiently support teachers, they are rarely motivated to develop the required skills on their own. The teachers also complained about the non-engagement in the professional development activities relating to the teaching of CTS. Their view is that the Ministry of Education and Training also appear not to be concerned about the success of this strategy in the classroom. Thus, The Ministry has not provided training workshops to empower them.

#### **5.2.5 Teachers' General Views about Teaching CTS in Lesotho Classrooms**

Although teachers do not generally teach CTS in their classrooms, they value this skill and indicate that the skill that can be implementable in the classrooms if the conditions in the schools could be improved. They first pointed out that these conditions could be improved through the government and the schools' efforts to provide teachers with appropriate training workshops, teaching resources, resource teachers, facilitators, and a conducive learning environment. They believe regular training workshops can equip them with the necessary skills to teach CTS. This view that teachers need training workshops that will develop their understanding of creative thinking skills through practical training has been emphasized by Hosseini and Watt (2010) and Patston et al. (2018). Teachers in this study also believed that both the government and the schools should commit to teaching this strategy and provide classrooms with appropriate

teaching resources. Teachers also identified engaging experts to support teachers in improving their CTS teaching skills as imperative. They believed that through the guidance of this human resource, they were likely to acquire the knowledge and skills required. These teachers emphasized that the Ministry of Education's engagement in providing schools with resource teachers with expertise in teaching creative thinking skills should be compulsory and a long-term commitment. Cherkasov and Smigel (2016) also advocate for the engagement of experts to develop creative thinking skills.

Teachers in this study also believe that the school environment should be conducive to CTS learning. Such an environment should encourage learners' intrinsic motivation and incentivize them to explore ideas and possibilities without being judged or ridiculed. They further emphasized that a conducive learning environment in their schools should also allow learners to experience different situations that will allow them to think creatively.

Even though the majority of participants believed that improving classroom conditions in Lesotho schools could lead to the successful teaching of CTS, a few teachers had different opinions. These teachers have argued that, despite its benefits, they find teaching CTS time-consuming, as it requires much time for preparation. They believe that the Ministry of Education and Training should be highly committed to playing a significant role in influencing the success of this strategy. Thus, the Ministry should first treat this as a pilot project in a few schools to gauge the material and equipment needs, training teachers. Further, the Ministry should be prepared to meet the schools halfway with the expenses related to teaching CTS.

### **5.3 CONCLUSIONS**

This study concludes that from their interpretations, teachers understand what CTS means. They are aware of the benefits of developing learners' CTS. Such benefits include developing academic and personal growth and intelligence and finding innovative ways to solve complex problems in the community and workplace. Many teachers do not teach this skill in their classrooms. Those who do, employ different methods that can engage learners actively. These methods include discovery, experiential learning, word and puzzles, brainstorming, and discussions.

The study also concludes that teaching CTS in Lesotho classrooms poses many challenges. Factors leading to these challenges include limited time as perceived by teachers, teachers' lack of knowledge and skills, the calibre of learners, and lack of resources. These factors influence how teachers develop CTS in the classroom; as a result, it becomes difficult for them to develop this skill.

Another main challenge is the limited support to teach this skill that teachers receive from their schools or the Ministry of Education and Training. Despite these challenges, teachers firmly believe that if the conditions in Lesotho schools are improved, teaching CTS can be successful and effective.

#### **5.4 LIMITATIONS OF THE STUDY**

The limitation of this study was in the methodology. The study engaged teachers in only one high school located in the Leribe district. Thus, the number of teachers who participated in this study is too small to consider it to represent all teachers in the Leribe district. Even in the school where the study was held, only a few teachers participated in this study. Similarly, the views and experiences of these teachers do not represent the views and experiences of the teachers of that school. As a result, this study is relatively too small to represent all high schools in Lesotho. The study also used one method of data collection, which was a semi-structured interview. Other methods might have generated different data and the results established in this study.

#### **5.5 RECOMMENDATIONS**

Based on the conclusions drawn in this study, recommendations regarding policy practice and further research have been made. They are explained hereafter.

**Recommendations for practice.** The Ministry of Education and Training and other stakeholders in education should find ways of supervising and monitoring the implementation of CTS in Lesotho classrooms. The Ministry should also offer training programmes that target to develop school management and teachers' pedagogical skills relating to CTS. The curriculum designers should develop guidelines for teachers that incorporate effective strategies and methods to develop CTS in Lesotho classrooms in the curriculum. The inspectors in the Ministry should monitor and observe that the teaching and promotion of CTS is achieved in Lesotho classrooms.

**Recommendation for policy.** There should be a detailed policy document by the Ministry of Education and Training in Lesotho that explains how the teaching of creative thinking skills should be integrated into different subjects across the curriculum. The policy should further emphasize the effectiveness of teaching this skill in the classroom to enhance learner thinking ability.

**Recommendation for further research.** The study used only one method to collect data: a semi-structured interview. This method involved a small number of teachers in one school, which could not be viewed as a representative of teachers in Lesotho schools. A large number of teachers from different schools could give a broader picture of how the teaching of creative thinking skills is engaged in classrooms.

## **5.6 SUMMARY**

This study investigated teachers' experiences of teaching creative thinking skills in Lesotho classrooms. This chapter discussed the results that were presented in Chapter 4. The conclusions were made based on these discussions. In this chapter, the limitations of this study have been presented, and the recommendations for policy, practice and further research have been presented.



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# APPENDICES

## APPENDIX 1: THE LETTER TO THE PARTICIPANT

Dear Participant

I am 'Maretsepile Maureen Molete, and I am undertaking a study with Dr Julia Chere-Masopha, in the department of Educational Foundation at the National University of Lesotho. This is a self-sponsored study. We are humbly inviting you to participate in this study entitled: Teachers' Experiences of Teaching Creative Thinking Skills in Lesotho Classroom.

I am undertaking this study to investigate how teachers interpret creative thinking skills in Lesotho classroom; their practices in teaching creative thinking skills; factors leading to the challenges that teachers experience in teaching creative thinking skills, and how these teachers are supported. The study focused on eight teachers who teach different subjects with different teaching experiences.

The participants were chosen under the presumption that they would cooperate with the research and provide information that would be useful to the study. The semi-structured interviews questions will be answered on the papers and given to the participants to answer on the provided space.

Participation in this study is voluntary. If answering a question makes you uncomfortable, you are not required to. Declining at any point is completely free of consequences. If you decide to take part, you will be given a consent form to sign. Your identity in this study will be withheld to ensure that you are not put at risk in any way. This information will be confidential.

Should you need more clarification on issues regarding to this study, you are free to contact my supervisor Dr. Chere-Masopha at +266 57756658

Yours Sincerely

'Maretsepile Molete (Mrs.)

**APPENDIX 2: PARTICIPANTS' STATEMENT OF CONSENT**

I agree to participate in this study. The research study and the procedures that will be conducted have been explained to me and understood. My participation in this study is voluntary and I may choose to answer only the questions I feel comfortable with, and I can withdraw participation at any timewhen I feel like.

Name of Participant:.....

Signature: .....

Date: .....

## **APPENDIX 3:SEMI-STRUCTURED INTERVIEW PROTOCOL**

**Study Title:** Teachers' Experiences of Teaching Creative Thinking Skills in Lesotho Classrooms

**Introduction:** This information aims at obtaining the insight into how you interpret creative thinking skills in Lesotho classrooms. In this interview, you will be asked about your views on how creative thinking skills are taught in the classroom, the factors that influences how you teach this skill, how you are supported to teach this skill and the challenges that you encounter when teaching creative thinking skills. Your participation in this study is voluntary and confidential. With your permission, the interview questions will be answered on the space provided.

### **Section 1: Personal Background**

This section collects information about your personal and educational details. Please tick the appropriate option in the brackets provided.

#### **Biological Traits**

(a) Age:

From 30-39

From 40-49

From 50-59

(b) Gender:

Male

Female

#### **Educational Background**

(a) Highest teaching qualifications

Certificate

Diploma in Education

B. ED

B. ED Hons

Masters' Degree

Doctorate

**Teaching Experience(numbers of years of teaching)**

8 to 15 years

15 to 20 years

20 to 25 years

25 to 30 years

30 to 35 years

**Teaching Specialization**

English Language and Development Studies

Business Education, Accounting, and Economics

Mathematics and Chemistry

Biology and Physical Science

Commercials

Agriculture and Science



## APPENDIX 4: FACULTY LETTER

# THE NATIONAL UNIVERSITY OF LESOTHO

Telephone: +266 22340601/3631

Fax: +266 22340000

<http://www.nul.ls>



P.O. Roma 180

Lesotho

Africa

## *Postgraduate Research Studies*

## **FACULTY OF EDUCATION**

**23 November 2022**

Dear School Principal,

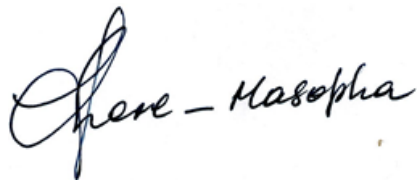
My name is 'Mathabo Julia Chere-Masopha, a Postgraduate Research Programme Coordinator and the supervisor of Ms. Maretšepile Molete (200202785) whom I would like to introduce to you. Ms. Molete is a postgraduate student who is enrolled in the Master of Education Programme in the Faculty of Education. As part of her studies, Ms. Molete is investigating '*Teachers Experiences of Teaching Creative Thinking in Lesotho classrooms.*' The Faculty has approved her research proposal and she has identified your school/schools in Leribe District as a site for possible data collection for her study. On behalf of the Faculty of Education and Ms. Molete, I am making a request that your good office gives her an opportunity to collect data for her proposed study.

Should you require additional information regarding M. Molete and her study, please contact Dr. Chere-Masopha through one of the following contacts:

**Mobile #:** 5775 6658

**Email address:** [juliachere@gmail.com](mailto:juliachere@gmail.com).

Yours Faithfully,



Julia Chere-Masopha (Ph.D)

## **APPENDIX 5: THE LETTER FROM THE RESEARCHER TO THE PRINCIPAL**

I am Maretsepile Maureen Molete, and I am doing research under the supervision of Dr. Chere-Masopha in the Educational Foundations Department at the National University of Lesotho. I therefore request the participation of your school teachers in the study entitled: Teachers' Experiences of Teaching Creative Thinking Skills in Lesotho Classrooms.

The study will help teachers to develop their learners' creative thinking skills in their subjects. It will also help the Ministry of Education and Training to implement this skill effectively in schools. Through understanding of teachers' creative thinking skills, the ministry may develop the strategies to train teachers on creative thinking skills. Therefore, I request your support to grant me permission to conduct interviews in your school.

Yours sincerely

Maretsepile Molete

(Master of Education student at NUL)

## **APPENDIX 6:GUIDING INTERVIEW QUESTIONS**

### **Research Question 1: How do teachers in Lesotho interpret creative thinking skills?**

- (a) What do you understand by creative thinking?
- (b) How important is it to you that learners in your subject area develop creative thinking skills?

### **Research Question 2: How do teachers teach creative thinking skills in their classrooms?**

- (a) How do you make sure that your learners develop creative thinking skills in your classroom?
- (b) Which teaching methods do you use to teach creative thinking skills?
- (c) Which learning activities do you normally assign the learners?
  - a. How do you support your learners to ensure that they acquire these skills?
  - b. How do the methods you use provide learners with opportunities to develop creative thinking skills?
- (d) How effective are these methods?
- (e) What influences how you teach creative thinking skills?
- (f) How do your skills and knowledge influence how you teach creative thinking skills?
- (g) How do resources influence how you teach creative thinking skills?

### **Research Question 3: Which are factors that lead to the challenges that teachers experience in teaching creative thinking skills?**

- (a) Which are factors that influence how you teach creative thinking skills?
- (b) What are the challenges that you encounter when developing creative thinking skills in your classroom?

### **Research Question 4: How are teachers supported to teach creative thinking skills?**

- (a) Are you currently supported to teach creative thinking skills in your school?

**Research Question5: What are your views about teaching creative thinking in Lesotho classrooms?**

(a) What are your general views about the teaching of creative thinking skills?

(b) Do you think this skill is implementable? Why?

## APPENDIX7: LANGUAGE EDITOR'S LETTER



National University of Lesotho  
Faculty of Education  
Department of Educational Foundations  
P O Roma 180  
Lesotho

27 July 2023

Dr. J. Chere-Masopha  
The Faculty of Education  
Department of Educational Foundations  
National University of Lesotho  
P O Roma 180  
LESOTHO

Dear Madam

**Re: Copy-editing of Mrs Maretsepile Molete's M Ed dissertation titled: *Teachers Experiences of Teaching Creative Thinking Skills in Lesotho Classrooms***

I have copy-edited the above captioned dissertation by Mrs. Molete's to the best of my ability. If there are any errors, omissions and other mistakes are solely the responsibility of the author.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Tankie Khalanyane', is written over a light yellow rectangular highlight.

Tankie Khalanyane (Mr)  
**Senior Lecturer, EDF & B Ed Honours Coordinator**

## APPENDIX 8: TURNITIN CERTIFICATE

