

**TEACHERS' PERCEPTIONS ON INTEGRATION OF
CREATIVITY IN SAUDI SCHOOLS**

by

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ABSTRACT

This qualitative study explores how creativity is currently integrated into the Saudi Arabian school system, and how this integration could be further enhanced, from the point of view of seven school teachers in Taif. The main finding of the study indicates that the Ministry of Education has begun to emphasize more creativity in Saudi schools, by promoting pedagogical strategies to foster creativity, allocate programs for gifted students, and develop the curriculum to include higher-level thinking and creativity. However, the efforts are believed to be inadequate and ineffective. The second key finding relates to the identification of a number of strategies and practices that teachers believe stimulate creativity in their classrooms. The third finding relates to teacher training on creativity, which is insufficient. Finally, several obstacles to promoting creativity in the schools were identified, including intensive curriculum, time constraints, massive workload, inappropriate physical school environment and lack of material support. The teachers interviewed offered suggestions on improvements to address some of these issues.

DEDICATION

This work is dedicated to

My parents for their endless love, support, and prayers.

My sister and best friend, Lamia, for all the happy moments
that we shared and the difficulties that we overcame together
throughout our years abroad.

My siblings and my friends for their love and continuous
support.

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CHAPTER ONE

Introduction

Background

Throughout my public schooling in Saudi Arabia, I was always an obedient and hardworking student. I was educated in traditional fact-memorization-based schools. I knew how to do homework, take exams, and get good grades. School to me was about conformity, following the rules, and fulfilling teachers' exact specifications. It had little personal meaning and opportunity for self-expression. After graduation, I experienced feelings of confusion; I did not know what I wanted to do next. For me, mastering real life challenges was not as easy as mastering school. This struggle has shaped my interest in education. During my master's program, I had the chance to rethink the real meaning and purpose of education. I was interested in understanding education for real-life skills such as critical thinking, problem solving, communication, and, above all, creativity. This background has influenced my decision to choose a topic relating to creativity for my study. As a result, the focus of my topic is the integration of creativity in Saudi schools.

It seems that creative thinking has become a required skill for the development and success of various economic, scientific, and social domains in the 21st century. Creativity is not a gift or talent that only a few people have; creative capacities exist in every human being, it is part of human nature. Of course, there are individual differences between people's creative abilities based on different factors, for example, the environmental conditions (Robinson, 2011; Torrance,

1970). Creativity can be developed and nurtured in the right conditions. If the conditions are 'right' or 'favorable', everyone can be creative (Hayes, 2004; Robinson, 2012). I believe it is imperative that creativity is included within the skills necessary in the 21st Century. In recognizing that creativity is a long-term process of successes and mistakes, Piirto (2011) outlines a comprehensive skills framework that includes skills for thinking and working creatively. She suggests that creativity skills involve using a wide range of idea creation techniques. Piirto (2011) believes that students should learn to consider their own ideas to improve their creativity, that they are able to develop, implement and communicate these ideas. Openness and responsiveness to other perspectives is important, as is "viewing failure as an opportunity to learn" (Piirto, 2011, p.1).

Although creativity in education has been given a lot of consideration both in research and in practice, and has increasingly become the center of educational development in different countries, this is not necessarily the case in Saudi Arabia where there has not been much publicized research on this topic. The literature in North America shows an emphasis on the importance of generating an educational environment in which students' creativity can be promoted. Embedding creativity in education not only supports students' creative growth, but also assists their academic achievement. Research identified in the literature review, focused on grades 1-12, reveals that involvement in a creative learning environment helps in improving students' academic attainment and progress, increasing their motivation, engagement, enthusiasm, and enjoyment, and supporting their social and emotional development (Davies et al., 2013).

In this paper, I embrace the view that every student has creative potential.

Further, I believe the role of education is to help students discover their potential, facilitate their creative needs, value the creative process and work that they engage in, as well as focus on the final product or result.

Further to the literature review, my work aims to investigate the conditions that contribute to promoting the development of creativity in the Saudi public school system, Grades 1-12. The main question I am exploring is how creativity can be effectively integrated into the school system in Saudi Arabia. Working with schools in Taif, Saudi Arabia, I focus on Saudi teachers' perspectives and reflections on the current situations of creativity and how they see that these can be enhanced and used. As this is an area that has not been fully explored, I research questions aimed to examine teachers' thoughts on the creative learning environment, integrating creativity in the curriculum, and teachers' needs to be able to teach for creativity. In my opinion, every teacher has a unique way of teaching for creativity, and sharing their experiences is important for other teachers, stakeholders, and researchers to learn and develop more strategies that will help to improve education for creativity in the country. The findings of my research will impact on several aspects of the school learning environment, not only for students in the classroom, but also for teachers, principals, and the Ministry of Education with regards to teacher training programs.

Context of the study (schools)

- The all-female schools included in the study were different in size and design, ranging from 150 students across three high school grades to almost 300 in 15 high school classes.
- Classrooms of some schools were very spacious, and were designed with corners

that can be used for different purposes: a corner for group-work, another one for independent learning, and so on.

- The style and arrangement of the classroom tables and chairs were different between the schools. In some schools it was arranged in rows, while in others they were in circles. Some schools had heavy tables that were difficult to move.
- One school was fully equipped with Smart-boards, display devices, computers for the students, and Internet connection. It also has an outdoor area that is used for learning and teaching with a nice yard set up for reading and drawing activities. Students' graffiti adorns the walls.
- Some school classrooms were more traditional, with plain walls, tables arranged in rows, and no technology equipment.

To explore this research area, I have undertaken a general literature review, and interviewed seven teachers in Taif, Saudi Arabia to determine how creativity is currently integrated into the education system, and how it could be more effectively incorporated.

CHAPTER TWO

Literature Review

In this chapter, I summarize my review of the literature that deals with creativity in education around the world. I start with the definition of creativity; then I continue to present a brief review of the literature that addresses the conditions that contribute to the development of creativity in education. In my efforts to identify how creativity can be effectively integrated in schools, I looked for information on educating for creativity, conditions for nurturing creativity, as well as curriculum and creativity. The topics I explored include: embedding creativity into the curriculum, the influence of integrating creative arts in teaching, features of learning environment and pedagogical strategies that foster creativity, the role of teacher training and professional development, as well as the importance of education reform and policy making in the development of creativity. The final part of my literature review focuses on Saudi studies about creativity in education.

Definition of Creativity

Many definitions of creativity describe creativity as a process or activity that happens in a certain context or environmental conditions, and results in producing original and valuable outcomes. According to Lassig (2009), creativity happens through optimal interaction between personal, process, and social and environmental factors, which enables individuals to produce novel ideas or products. Kamyliis, Berki, & Saariluoma (2009) define creativity as “the activity (both mental and physical) that occurs in a specific time-space, social and cultural framework and leads to tangible or intangible outcomes that are original, useful,

ethical and desirable, at least to the creator(s)” (p. 18).

Some of the definitions encompass critical thinking and problem-solving as skills related to creativity. For example, Kampylis & Valtanen (2010) quote Torrance’s description of creativity:

A process of becoming sensitive to problems, deficiencies, gaps in knowledge, missing elements, disharmonies, and so on; identifying the difficult; searching for solutions, making guesses or formulating hypotheses about the deficiencies, testing and retesting these hypotheses and possibly modifying and retesting them, and finally communicating the results. (p. 199)

Other concepts, such as innovation and imagination, appear to be overlapped and associated with creativity. For example, Piirto (2011) believes that creativity is a prerequisite to innovation. Robinson (2011) distinguishes between the three related ideas:

Imagination, which is the process of bringing to mind things that are not present to our senses; *creativity*, which is the process of developing original ideas that have value, and *innovation*, which is the process of putting new ideas into practice. (pp. 2-3)

In his overview to the creative development process, from intuitive/adaptive creativity to sustained creativity, Kelly (2012) includes seven creative development strands: "collaborative development, research/investigative development, self-investigative development, generative development, experimental development, analytical development, and creative sustain development" (pp. 16-19). All of these elements contribute to an environment in which creativity is sustainable. Kelly (2012) illustrates that these elements lead to a creative maturity in order to have sustained creativity.

My research is guided by the definition that creativity is a process that happens in favorable environmental conditions and leads to producing original and valuable outcomes. It is influenced by the belief that encouraging creativity in schools requires the generation of a learning environment that is conducive to creativity, facilitating the individual creative process, and encouraging students to produce something new and original.

Embedding Creativity into The Curriculum

Many authors suggest embedding creativity in the curriculum through teaching it as a process in which students experience going through the several stages of creative thinking. Crockett, Jukes, and Churches (2011) affirm that creative ability should not be viewed as an instinct, but rather as a process that everyone can develop with practice over time. They claim that creativity, like technical proficiency, comes with practice and can be taught and learned.

The creative process that a person goes through when creating is unique; however, there are common practices and similarities between the creative processes that different people engage in (Piiro, 2011). There are several proposed models for the creative process; some of them include practices such as preparation, identification, inspiration, imagery, imagination, intuition, insight, incubation, improvisation, interpolation, inspection, verification, and reflection (Crockett, Jukes, & Churches, 2011; Mendel, 2001; Piiro, 2011). Zimmerman (2014) emphasizes that although there is no one teaching model that ensures positive influence on students' creativity, supportive teaching and instructional strategies help in providing students with opportunities to develop their own creativity.

An alternative idea that has emerged from the literature that I reviewed

indicates although creativity is a process, it is not restricted to a fixed sequence of steps or stages for all people. For instance, Piirto (2011) indicates that most creative people describe their creative process "in what could be called holistic, or organic terms, rather than in step-by-step linear progression" (p. 4). It is important for teachers to understand this distinction, and be aware of the different ways that individuals experience the creative process. Understanding the students' need for time, as well as developing an awareness of the roles of intuition and aesthetic processes, is important for teachers to be able to facilitate their students' creativity (Robinson, 2011). "In all phases of teaching for creativity, from ideation through art making, focus always should be on the student" (Zimmerman, 2014, p. 11).

The Influence of Integrating Creative Arts in Teaching

In his review of the literature, Torrance (1987) found support for the effectiveness of involving one or more of the creative arts as a vehicle for teaching creative thinking, either as an extracurricular or out-of-school activity, or where the curriculum is built upon the creative arts. Much research indicates that involving students in creative activities improves their academic achievements and performance (Bull, 2013). Bull (2013) advocates that creativity should be embedded into every aspect of the curriculum, and she further suggests linking the arts to all different subjects.

There are several studies supporting the view that creative arts improve students' learning and achievements. For example, two studies (Arieli, 2007; Comia, 2006) found that creative movement was an effective instructional method for teaching science to elementary and middle school students. Results of the two studies show that teaching science through creative movement increases students'

learning of science content and improves their attitudes towards science. Involving students in creative drama activities in science classes enhances their understanding of abstract scientific concepts. Creative drama creates a positive classroom environment, and improves students' self-esteem, engagement, and interaction (Arieli, 2007; Comia, 2006).

In addition, creative arts are believed to be powerful in creating transformational learning experiences. Mendel (2001) points out that an important element of creative arts' support for learning experience is "the experience of embodiment, engaging the full self and therefore connecting with the non-cognitive realm" (p. 40). To provide potential for transformational learning opportunities, Mendel (2001) suggests structuring creative art activities that encompasses embodiment experiences within a supportive and reflective context. Zimmerman (2014) emphasizes that creativity can be considered as an inner, authentic, transformational experience, and therefore, every student needs to be provided experiences that involve self-expression where they can create a body of their own work based on their abilities and interests.

Creative Learning Environment and Pedagogical Strategies

The learning environment and the instructional strategies used in the classroom have a powerful and influential role on the development of creativity in education. The literature shows that creating a responsive and risk-free learning environment is significant for the development of students' creative abilities. Torrance (1970) suggests that teachers should create a "responsive environment" through identifying, understanding, and responding to the creative needs of their students. Some of the creative needs Torrance has identified are: the need for

curiosity, the need to be challenged, and the need to give oneself completely to a task. To nurture creativity in the classroom, it is important to respond to students' creative needs, respect and value their questions and ideas, provide opportunities for experimentation, and encourage self-directed learning. According to Torrance (1970), incompleteness/openness, producing something and making use of it, and encouraging students to ask questions are three substantial characteristics of creative and problem-solving activities that motivate the learning process. To be able to develop students' creativity, teachers need to be aware of their students' needs, especially those that are related to multiple intelligences and different learning styles (Davies et al., 2013).

Robinson (2011) emphasizes that teaching for creativity is about facilitating students' creative work. It involves three tasks: encouraging students to believe in their creative abilities and enhance their self-confidence to try, helping them to identify their creative strengths, and fostering their creative skills. According to Robinson (2011), teaching for creativity requires promoting experiment and inquiry, and a willingness to try, and to make mistakes, encouraging idea generation, and stimulating critical evaluation of thoughts.

In a study about teachers' classroom behaviors that foster creativity, Pelfrey (2011) observed and interviewed three language arts teachers who were believed to employ teaching strategies and practices that foster students' creativity. Pelfrey (2011) identified several common practices among those teachers that are considered to be effective in nurturing creativity in their classrooms. These practices include: promoting exploration, self-discovery, using imagination, creating something of value, and encouraging multiple perspectives from students.

Providing students with opportunities for exploration is recognized as an effective practice that enhances creative thinking. Pelfrey (2011) believes that creativity emerges in an environment that stimulates students' engagement and supports the free flow of ideas. He demonstrates that exploring allows for promoting skills related to research, critical thinking, and personalized and independent learning. Promoting self-discovery appears to be successful in fostering students' creativity as they connect what they learn to their own lives, reflect on their learning, and discover more about themselves. Encouraging students to use their imagination, visualize, and express their thoughts through different means, such as drawings or writing, helps to foster their creative thinking ability (Pelfrey, 2011).

Creating a product of originality and value is also substantial for the enhancement of students' creativity, according to Pelfrey (2011). It is important that, during the creation process, students develop their own ideas and take personal responsibility for their work. Additionally, a teacher's behavior that is believed to enhance the creative learning environment is to encourage multiple perspectives from the students. This is promoted through asking multiple questions during discussions, allowing students to freely express their ideas, prompting further thought-generation, accepting and valuing all answers, thoughts, and opinions, and not stifling any attempt a student makes to engage (Pelfrey, 2011).

Zimmerman (2014) indicates a number of strategies to promote creativity in art classes that I found applicable to all subjects. He suggests encouraging students to become active investigators who search for information, make connections, explore unfamiliar materials, build their own knowledge, develop a body of their

own work while deeply exploring personal themes, and focus on the creation process as well as the final outcome. He also points out the importance of creating a supportive learning environment that encourages playfulness without restrictions, promoting exploration and experimentation with materials and ideas, facilitating self-directed learning, focusing on deepening confidence in students' creative capacities, and supporting individualized and cooperative learning.

Promoting students' choice is considered to be a feature of a creative learning environment (Davies et al., 2013; Pelfrey, 2011; Robinson, 2011; Zimmerman, 2014). However, balance is an influential factor in this regard (Davies et al., 2013; Chua & Iyengar, 2008; Zimmerman, 2014). According to Davies et al. (2013), evidence from a number of studies suggests that giving students some control over their learning and encouraging them to take risks and make choices enhances their creativity. Providing students with multiple opportunities to make choices when addressing challenges and freely initiating their own learning activities motivates their creative thinking. Pelfrey (2011) also emphasizes that giving students choice helps them to become more actively engaged, regardless of whether they are involved in individual or group tasks. In regards to art classes, Zimmerman (2014) indicates that in order to make the art become cognitively stimulating and significant in students' lives, it is important to provide them opportunities to make meaningful choices.

Although promoting choice in approaching a task is believed to be a creativity-enhancing factor, a study by Chua & Iyengar (2008) suggests that this view is not always valid. They conclude that giving people more choice of initial resources can result in creative outcomes only if they have prior experience in the

given task domain or if they are given explicit instructions. Davies et al. (2013) found that research emphasizes the importance and effectiveness of balancing between structured and unstructured learning activities. Zimmerman (2014) suggests promoting "structured tasks for skill-building and open-ended, unstructured tasks for self-expression" (p. 11).

Fisher (2002) suggests that there are four keys to creativity: motivation (including internal and external encouragement), inspiration (which comes from exposure to fresh input and involvement in creative activities), gestation (allowing time for creative ideas to emerge), and collaboration.

Other suggested characteristics of a learning environment that supports the development of creativity include: appropriate use of space and time, organized class structure, outdoor and playful learning, encouraging collaboration, holding high expectations for all students, and encouraging enthusiasm and passion to learn (Davies et al., 2013; Pelfrey, 2011; Sahlberg, 2009; Zimmerman, 2014). Davies et al. (2013) found several studies emphasizing that flexible use of space and time is significant in enhancing students' creativity. An open and spacious classroom that enables students to move around, and allows for flexible use of different areas, is important to support the growth of ideas. Providing students sufficient time to immerse in creative activities, and allowing them to work at their own pace is similarly important for developing their creative skills. Davies et al (2013) also found that during learning activities, especially art-making activities, availability of sufficient tools, materials, and resources is significant in stimulating creativity.

In addition, Davies et al. (2013) indicate that research evidence shows that

working in an outdoor learning environment enhances a sense of learning ownership and collaboration and fosters creativity. “Playful” or “games-based” learning approaches appear to have an effective role in the development of students' creativity, according to Davies et al. (2013). Also, supportive and respectful teacher-student relationships, along with peer collaborative activities, are found to be significant features of a creative learning environment. Promoting creativity also involves encouraging students to share their creative processes and experiences with their peers (Zimmerman, 2014).

Expanding students' involvement with out-of-school learning environments and experiences contributes to strengthening their creative skills. According to the Davies et al. report (2013), studies found that schools' collaborations and partnerships with external associations, such as local art, business, and sport communities, contribute to an engaging, stimulating, and creative learning environment. Such partnerships must be organized and managed carefully to ensure effective involvement and long-term impact (Davies et al., 2013).

Creativity and Teacher Training/ Professional Development

The reviewed literature emphasizes the importance of teachers' knowledge, awareness, and experience with creativity as an essential factor to enable them to support their students' creativity. Teachers need opportunities to practice creativity themselves in order for them to be able to establish a creative classroom environment and to facilitate their students' creativity (Bull, 2013; Piirto, 2011). In a Saudi study on teachers' perceptions of creativity, Aljughaiman (2002) states that teachers have positive attitudes and perceptions about creativity, and want to

encourage creativity in their classrooms, but they pointed out that they lack the knowledge on how to do so.

Similarly, in a study of teachers' perceptions of the role of creativity in a high-stakes testing environment in the U.S., Olivant (2009) found that teachers value the role of creativity in contributing to students' learning and growth, and believe in the importance of fostering creativity and creative thinking in the classroom environment to enable students to realize their creative potential. The study also found that teachers perceive college and university teacher education programs as void in terms of preparing them to promote creativity in the classroom. They believe that there is disconnection between their preparation programs and the realities of the classroom. They also believe that the time for pre-service hands-on experience is insufficient (Olivant, 2009).

Kelly (2012) identifies that creative development has to be embraced in teacher education, and teachers need to engage in first-hand creative practice to deeply understand creative development. Further, Lassig (2009) believes that “teachers need to be trained in teaching and learning practices for creativity that are based on empirical research” (p. 236). In a study on the impact of teacher training in creativity, Maloney (1992) found that participating in coursework around creativity enhanced the teachers' own self-esteem and creativity. Teachers enjoyed facilitating creativity in themselves and their students, they valued and implemented creative practices in their classroom environments, and were willing to try new methods and to take risks (Maloney, 1992).

Creativity and Education Reform and Policy

Robinson (2011) points out that governments around the world allocate massive resources to educational reforms that stifle creativity. "Policy makers typically narrow the curriculum to emphasize a small group of subjects, tie schools up in a culture of standardized testing and limit the discretion of educators to make professional judgments about how and what to teach" (p. 15). He argues that what is needed is a transformation to an educational culture that focuses on the real needs of the 21st century, such as creativity, cultural understanding, communication, collaboration, and problem-solving. He suggests that transformation from an educational system that concentrates on standardized testing to one that values creativity has to be built on school-based innovation supported by political decisions.

In their book *Straitjacket: How Overregulation Stifles Creativity and Innovation in Education*, Goens & Streifer (2013) propose that teachers and schools should be given more autonomy and authority to make decisions and create innovative solutions to their daily instructional problems. They argue that creativity cannot be mandated from the government level, but is accomplished by teachers within schools that encourage collaborative working every day: "School improvement is accomplished at the classroom level. It is practiced within the instruction core, where dynamic teachers experiment with interesting and challenging curricula, engaging students to enhance their motivation, self-regulation, and thus their own learning" (Goens & Streifer, 2013, p. 139).

Lassig (2009) suggests that in order to build a solid foundation for creativity

in schools, there are three essential building blocks. First, a shared language about creativity needs to be established and understood by stakeholders. "It is not enough to know that creativity is important and have a desire to promote it. All stakeholders, including governments, education systems, and schools (staff, students, parents), need to have a shared understanding of creativity" (p. 235). Secondly, informed policy is developed based on recognition and discussions about creativity and its importance. "For action to occur, discussion must filter into political agendas and inform government policy documents" (p. 235). Thirdly, there needs to be movement from discussion and policy to effective implementation of educational practices that enhance students' creativity.

Robinson (2011) points out that changing the conditions for creativity is not restricted to political decisions. In fact, there is a lot that the school's community and leadership can do to undertake change for the enhancement of creativity conditions in their schools. "Schools often have more freedom to innovate than they commonly think. Creativity is not about a lack of constraints; often it is about working within them and overcoming them" (Robinson, 2011, p. 266). Bull (2013) also emphasizes the role of the school leader in placing creativity at the heart of school educational agendas.

Saudi-Related Studies

Although there is very little published information about creativity in Saudi education, I did find two relevant studies. In his qualitative study on teachers' perceptions of creativity, Aljughaiman (2002) found that teachers have positive attitudes and perceptions of creativity, and are able to identify many characteristics

of creativity. In addition, he found that teachers "only appreciate the creative students who exhibit positive attitudes and are average and above average academic achievers" (p. iii). His findings also indicate a number of fundamental barriers that teachers have emphasized in regards to promoting creativity in the classroom, including: a great deal of responsibility, time limitations, the burden of teaching basic skills, a lack of knowledge, and a fear of problems with discipline.

In the second article, Alkhenaini (2013) postulates that art education in Saudi Arabia is mostly focused on beauty and harmony, with little concentration on promoting personal expression and creativity. In order to support the development of elementary students' creativity and self-expression, Alkhenaini suggests utilizing art therapy processes and techniques in the Saudi art curriculum. She concludes that art therapy techniques, such as expressive painting, expressive collage, and visual journaling, can be beneficial for art teachers to assist their students' creativity and expression of inner feelings, thoughts, and imagination. Expressive painting helps students learn how to articulate their emotions and thoughts through the use of different kinds of material, forms, colors, and textures. Likewise, expressive collage artwork allows students to combine images and objects that represent their ideas and feelings. Expressive collage is particularly helpful with early elementary students who have not yet developed drawing skills. According to Alkhenaini (2013), visual journaling is an effective method not only for helping students explore and express themselves, but also for assisting teachers to compile a portfolio of students' artistic skills progress.

Conclusion

In the previous section, I provided a brief overview of the literature published on creativity in education. The literature that I found reveals a positive impact of embedding creativity into the curriculum through integrating the arts and teaching creative thinking as a process (Arieli, 2007; Comia, 2006; Crockett, Jukes, & Churches, 2011; Mendel, 2001; Piirto, 2011; Torrance, 1987). In addition, the literature sheds strong light on the role of established learning environments and pedagogical classroom strategies employed in the development of students' creativity. According to the literature, general features of a creative learning environment include: creating a responsive, supportive, and risk-free classroom atmosphere; promoting exploration, self-discovery, imagination, outdoor and playful learning, and collaboration; creating valuable products; and promoting students' choice with an amount of balance (Chua & Iyengar, 2008; Davies et al., 2013; Piirto, 2011; Torrance, 1987). The literature also refers to the importance of embedding creativity practice in the preparation and professional development of teachers in order to enable them to teach for creativity (Aljughaiman, 2002; Maloney, 1992; Olivant, 2009). Furthermore, the available literature addresses the role of educational reform and policy formation on enhancing a school system that fosters development of students' creativity (Goens & Streifer, 2013; Lassig, 2009; Robinson, 2011). In regards to the Saudi Arabia research on creativity in education, I found two significant studies: one explored Saudi teachers' perceptions on creativity (Aljughaiman, 2002) and the other one dealt with integrating art therapy techniques in teaching art to elementary level students (Alkhenaini, 2013).

One topic that has been of interest to me, which was not addressed in the

literature I reviewed, is Saudi teachers' views on how creativity can effectively be integrated into the school system. In the following chapter, I present the methodology that I am going to use to conduct this study.

CHAPTER THREE

Research Design

The aim of my research is to investigate Saudi teachers' views on creativity in schools today, and how it can effectively be integrated into the school system. The main questions of the research focus on teachers' perspectives on the creative learning environment, integrating creativity in the curriculum, and teachers' needs to be able to teach for creativity.

This chapter outlines the process followed in the research design. After submitting the Ethics application for this research to the Research Ethics Board (REB), I received approval and clearance to start the research in October 2014. This chapter includes an explanation of the qualitative methodology I utilized to conduct my study, and the selection process I undertook to identify the participants. The process for data collection through semi-structured interviews is then outlined, followed by an explanation of how the data was analyzed. Finally, I address the ethical considerations and the limitations of my study.

Qualitative Research

According to Gay et al. (2009), "qualitative research is the collection, analysis, and interpretation of comprehensive narrative and visual data to gain insights into a particular phenomenon of interest" (p. 7). Gay et al. (2009) point out that an understanding of participants' perspectives is gained through qualitative research methodology using time-intensive data collection strategies, such as interviews and observations. The qualitative research method is used to obtain in-depth understanding of the participants' views without the researcher making

generalizations or engaging in wishful thinking. The objective of using this method is to develop themes and theories through investigating teachers' perceptions regarding the integration of creativity in the school system. I used semi-structured interviews to collect the data to explore the feelings, beliefs and thoughts of teachers in the field in Taif, Saudi Arabia, by asking key questions and following up with questions that prompted for more detail to gain further insight.

According to Seidman (2013), interviewing is a powerful way of investigating educational systems. Seidman (2013) states that insight into educational issues is best gained through understanding the perspective of individuals whose experience constitutes schooling, such as teachers, administrators, students, etc. The benefits of the insight that the researcher brings to the research process are outlined by Bodgan and Biklen (1982) in a book that explores qualitative research for educational purposes. They indicate that the researcher is the key instrument to gain information from the field, and also to analyze this information.

As a qualitative researcher, I conducted interviews in the field in order to examine variables concerning my topic. I have sought to identify patterns and categories in the qualitative data that has been collected through verbal interviews in order to develop my themes.

Participants

After I received initial permission from the Educational Administration, the local office of the Ministry of Education in Taif, Saudi Arabia, I traveled to the city of Taif to identify and meet with the participants and to conduct the interviews in person in their school environment. “Snowball sampling” technique was used to

identify seven participants for this research. “Snowball sampling” refers to “selecting a few people who fit the researcher’s needs, then using those participants to identify additional participants, and so on, until the researcher has a sufficient number of participants” (Gay et al., 2009, p. 137). The participants were Saudi public school teachers of Grades 1-12, all from the city of Taif.

The purpose of my study was to examine teachers’ views on integrating creativity into the school system, with a focus on the learning environment, the curriculum, and programs for teacher development.

Pseudonyms have been used to refer to the participants throughout this report. Aisha is a high school Psychological and Sociological Studies teacher; she has been teaching for fourteen years. Lama is a high school Math teacher; she has over seventeen years of experience in schools. Fatima is also a high school Math teacher; this is her twentieth year of teaching. Sara is an elementary Math teacher, and for seven years has experienced teaching various grades between 1-12. Dana is a high school Computer and Information Technology teacher who has been teaching for two years. Nora is an elementary school Science teacher with seven years of experience in teaching in elementary, middle and high schools. Finally, Lina is a high school Language Arts teacher who has been teaching for fifteen years.

There are currently two types of public high schools in Taif, progressive level-based, the most common, and course-based, which is currently limited as the approach is being tested. All the three high school teachers in this research work in progressive level-based schools. The level-based program includes up to fourteen subjects in a semester, while in course-based schools the number of subjects does

not exceed seven. The workload is higher in the level-based schools, and all subjects are mandatory, whereas in course-based schools, the workload is less, and students have a number of electives.

Data Collection

Using semi-structured interviews, I started with primary interview questions that focused on participants' insights on current situations. These related to current learning environments, curriculum, and teachers' needs. The questions also addressed how these could be improved to enhance creativity. The questions were primarily open-ended to allow the participants to give detailed responses and elaborate on them. The reason for my use of this method was to allow for follow-up prompt questions during the interviews to help elicit further information or explanations.

After I gained the identified teacher's agreement to participate and permission to record the interviews, I conducted face-to-face interviews in Arabic, the participants' native language. I audio-recorded the interviews, transcribed them, and translated the transcripts into English. As part of the process of translating, I asked the participants to clarify my interpretation of what they had said, either during the interview or afterwards through email or phone messages. Also, I sent the original transcripts along with the translation to an authoritative translation office in Taif for checking to ensure the accuracy of my English translation in order to avoid any misunderstanding or misinterpretation of the collected data.

Primary Interview Questions

1)- Current situation:

- Do you think the Saudi school system today supports creativity? How?

2)- Learning environment:

- How do you think your classroom environment supports creativity?

- What do you think is needed to develop and sustain a creative learning environment in your classroom?

3)- Curriculum:

- How does the current curriculum allow for creativity? And conversely, how does it inhibit creativity?

- What would be required to effectively integrate creativity into the curriculum?

- What do you believe are barriers to effectively integrating creativity into your classroom practice?

4)- Teacher's needs:

- Do you think that teachers get adequate preparation to teach for creativity?

- What do you think teachers need in order to be able to foster creativity?

5)- Final thoughts:

- What are your other thoughts on how creativity can be effectively integrated into the school system? What do you think is needed, whether on a classroom level, school level, or governmental level?

Data Analysis

After the data was collected through face-to-face interviews, I used coding techniques to organize, categorize, and analyze it. Themes emerge during the process of coding interview transcripts, which involve "marking units of text with codes or labels as a way to indicate patterns and meaning in data" (Gay et al., 2009, p. 458). In the process of analyzing the data, I identified themes that emerged during and after the data collection. In undertaking the process I found common aspects and patterns among participants' experiences, and made comparisons between their

responses, which led to the development of themes and conclusions.

Ethical Considerations

Prior to conducting the interviews, all participating teachers in this research were provided with an information letter indicating that becoming part of this study is completely voluntary (see Appendix A). This letter guarantees their rights, and explains that they are not at risk in any way. The letter first provides a brief introduction about the research and its main focus, and explains how the information and data collected will be used in the research. The letter ensures for privacy, and the participants' right to check accuracy of the data collected. Participants are offered the opportunity to have a copy of the final report.

Limitations

There are some limitations to this study. First, the results of this research cannot be generalized to all Saudi public school teachers because the number of participants is small, and all the participants were from one city. Secondly, the research technology was limited to one data-collection instrument, interviewing teachers. However, the limitations of my research do not restrict the value of the findings. This research was mainly based on examining the participants' views on integrating creativity into the school system. It is meant to provide a simplified overview of how creativity is currently incorporated in the Saudi education system, and contribute to the development of creativity in education within the country.

Conclusion

In summary, the methodology used for my study involved qualitative interviewing to gather data on teachers' views on how creativity is currently integrated in the Saudi public school system, Grades 1-12, and how this integration could be improved. Seven participants were selected using snowball sampling. They were provided with a summary of my study and the process, and an information letter to obtain their agreement. Coding techniques was used to analyze the gathered information, which led to the development of themes and conclusions.

CHAPTER FOUR

Results and Discussions

In this chapter, I present the results and analysis of the data collected in response to the research questions addressed in interviews with seven teachers. Information from interview transcripts was the basic source of the data analysis process. Following grounded theory, I have identified five main themes that emerged during and after the data collection process. I present each theme with its subordinate themes, and support them with quotes from the participants. I then provide a summary, including discussion of the findings and comparison with previous studies, draw conclusions, address the implications, and offer suggestions for further research.

Findings

The research questions were:

- 1- Do you think the Saudi school system today supports creativity? How?
- 2- How do you think your classroom environment supports creativity? What do you think is needed to develop and sustain a creative learning environment in your classroom?
- 3- How does the current curriculum allow for creativity? Conversely, how does it inhibit creativity?
- 4- What would be required to effectively integrate creativity into the curriculum?
- 5- Do you think that teachers get adequate preparation to teach for creativity? What do you think teachers need in order to be able to foster creativity?

Themes that have emerged from the teachers' responses are as follows.

Theme one: the role of the Ministry of Education with regards to promoting creativity

Data collected from participating teachers showed that currently there is movement towards giving creativity more importance and attention in Saudi schools from the Ministry of Education. Lama stated: "generally, there are some beginning steps towards fostering creativity in education." However, this effort from the Ministry is sometimes considered as inadequate. The role that the Ministry of Education plays with regards to creativity can be summarized in three main points: applying pedagogical strategies that are believed to foster creativity, allocating programs for gifted students, and developing the curriculum to include higher-level thinking skills. Aisha said "several years ago, there was not much attention paid to enhancing students' creativity, but now we have programs for talented students, we focus more on exploration, learning-by-doing activities, experimentation, and research."

Pedagogical strategies

Teachers are obligated to apply various pedagogical strategies in their classrooms, believed to help in developing students' higher-level thinking skills, including creative thinking. Teachers are provided with the book '101 Active Learning Strategies' at the beginning of the year to apply in their classrooms. Lama said, "the strategies are really good, they help students to understand, analyze, come to their own conclusions, and produce their own work." Nevertheless, there are some problems, as outlined later under "Obstacles."

Mawhibah program and other talent programs and competitions

When teachers were asked about creativity, most of them linked their answers to 'Mawhibah', a national program designed by the Ministry of Education for talented students. This program is useful for students who think they have creative ideas or talents. They apply for the program and undergo testing and evaluation of their work in order to be able to participate. This is additional to the school curriculum and is both extra- and intra-curricular. Lina said:

I think, today, education strongly supports creativity. That is obvious through what the Ministry provides to talented students. Also, teachers who are nominated to lead these kinds of programs in their schools are getting special workshops on how to work with talented students.

However, teachers were sometimes skeptical about the effectiveness of this program and similar programs and competitions in enhancing student's creativity. In fact, most teachers noted some disadvantages such as limitedness for application to certain areas and certain students, difficulty related to access, and additional pressure on students.

Teachers complained that Mawhibah and other similar programs are limited in their ability to enhance creativity in all subject areas, and do not benefit all students. Sara explained what she thinks of these programs and about creativity in the educational system in general:

I don't think that our education today supports students' creative development. Maybe there is a focus on only a few aspects of it... We know that there are programs such as "Mawhibah," and "The Project of Discovering and Supporting Talented Students," another new project, but the access to these programs is difficult.

Sara said:

Mawhibah and all these programs are huge, and enormous budgets are assigned to them, but the problem is that they do not serve all students and groups. Only a few students can join these programs

and participate in their associated exhibitions and events.

Sara disagreed with the program's approach to identify talented students after being nominated. She stated:

A student now cannot participate in Mawhibah unless she/he passes a standardized test that is intended to measure their talent. The student who achieves the required average is judged to be talented. I don't believe talent and creativity can be measured this way.

Some teachers indicated that these programs add more pressure and burden on the participating students, especially since these students are already under the pressure of an intense syllabus with frequent tests and exams. Fatima, for example, said, "creativity is kind of separated from the curriculum, students who have talents are directed to the national program for talents. In fact, the curriculum became a burden for those students." Lama talked about her experience when she was assigned to lead the program at her school. She said that although 29 students joined the program only six continued to participate. She explained, "Why did these students withdraw? Tests. Stress. No time. Even those six students who stayed in the program after they saw their classmates withdrawing to study for exams, they became under more pressure and anxiety."

Teachers claimed that creativity needs to be embedded more into the curriculum, and accommodate all students. Fatima said, "Enhancing creativity should not be separated from the curriculum." She added:

I think it is okay to keep programs such as "Mawhibah" to support gifted students and foster their talents, but also we have other students in our classrooms that definitely have talents and abilities that need to be discovered and supported as well.

Sara agreed, saying, "I think programs for creativity should be more integrated into schools and accessible to all students."

Curriculum

One of the greatest efforts that the Ministry of Education is making is the ongoing development of the curriculum. Teachers praised the recent development of the curriculum, which they confirmed involves higher-level thinking skills, including creativity. The curriculum allows for creativity, primarily through emphasizing higher-level thinking skills, relevance to life, and promoting small learning projects. Lina said:

It is obvious that the curriculum was developed to include stimulating creative thinking as a basic objective. In each unit, there is space for free thinking, imagination, and creativity. There are a lot of activities that say 'analyze the image', 'draw', 'create'.

Sara said, "I like the current curriculum. I think it supports creativity. For example, in each lesson of the textbook we have an open-ended question, analytical question, and other activities that promote higher-level thinking and creativity."

Another teacher found the curriculum to be appropriate and relevant to students. Dana said, "Talking about the new curriculum of my area 'Computer and Information Technology' I found it really good. It reaches higher-level thinking, it is appropriate to students' age and needs." The curriculum also emphasizes making connections between subjects and using various sources. Aisha stated, "We are urged to add to the curriculum, look for other sources, and connect our subject to other subjects and areas. These connections help students to open up to creativity."

Learning projects are part of the curriculum, which are believed to allow for enhancing creativity. Aisha said, "Learning projects were not that important, but with the new curriculum, there are now ten marks for unit learning projects." Dana explained, "These projects are great opportunities for students to be creative, make connections, and to re-construct what they have learned in new and creative ways"

although she believes the value assigned to the projects should reflect the amount of time and effort required. Sara praised the practice: "I love small learning projects, they benefit students a lot. They do a lot of independent learning, self-expression, and discussions. Students seem to love and enjoy working on projects." Sara also emphasized the importance of careful planning for learning projects, and the need to "design clear evaluation criteria for students to know what is expected from them. It should include a clear description of what a creative outcome means and looks like."

In spite of the fact that most teachers complimented the new curriculum provided by the Ministry of Education, as mentioned above, they criticized the intensity of the mandatory syllabus, which includes integrating creativity. As Lama pointed out:

There is something wrong with the way it is applied. For example, the curriculum (mathematics), it is really good, it aims to reach higher-level thinking and everything, but it is too intense. There is too much to teach in a short period of time... there is an interest to enhance creativity, but I think the way it is applied needs to be reviewed.

**Theme two: teachers' approach: fostering creativity in the classroom
from teachers' points of view**

Creativity starts with the teacher

Teachers affirmed the role of a classroom teacher in stimulating students to think and work creatively. Dana said, "I think creativity in the classroom depends primarily on the teacher, and her/his ability to recognize and stimulate students' creative capacities." Sara said, "The teacher is the main supporter and provoker of students' creativity." Aisha, who teaches Psychological Studies, agreed: "I feel

creativity starts with the teacher, if the teacher is creative, students will get inspired to be creative." She further values the teacher's role in adding to the curriculum to achieve more creative outcomes. Aisha said, "I don't feel curriculum is the barrier. I mean a teacher can make creative outcomes out of any curriculum. I think it depends mostly on the individual teacher and their knowledge, constant search and ability to add to the curriculum." Sara commented on the change of the teacher's mission in the 21st Century: "The teacher's role has become more centered on planning and designing the instructional process to include 21st Century skills including creativity."

Teachers' approaches for effective enhancement of students' creativity

Teachers indicated several teaching strategies and attitudes that are believed to foster creativity. Aisha and Dana pointed out that they promote collaborative work, performance, and use of open questions. Aisha said:

I like to encourage group work and collaboration in my classroom for two reasons: first, it helps in distributing effort and material cost between students. Second, students help and inspire each other in group work which leads to more creative outcomes.

Aisha pointed out, "I encourage collaborative learning as well as independent learning and research."

Some participants believe that utilizing strategies such as drawing, play and acting helps in fostering creativity. Dana uses different methods such as collaborative learning, discussions and provoking questions that are relevant. She explained, "I like to start up the unit with a problem that students might encounter in their real life to provoke them to think, imagine themselves in that situation and come up with appropriate solutions." Dana encourages group work activities where students teach and learn from each other through using different mediums such as

plays and discussions. She indicated that she favors these strategies because they help her students express themselves and acquire independent learning and life-long learning skills. She emphasized the role of discussion in promoting creative thinking, by allocating a lot of time for discussion and occasionally devoting a whole class to project discussion.

Aisha said, "I use different strategies like drawing, composition and performance to foster students' creative thinking." Sara gives her elementary students space for free play and moving around, as she believes that play enhances students' imagination, creativity and ability to solve problems. She encourages learning through plays and acting, and uses real-life problems to get her students to find solutions. They discuss the suggestions that have been made, which would work better and why. Sara said it is also fun and engaging for students. Participating teachers also indicated that exploration, investigation and involvement in real situations help creativity and learning.

Other aspects that teachers identified to enhance creativity include soft skills and attitudes. The soft skills and attitudes that teachers require include the ability to explain themselves, to encourage learning and exploring, and to recognize opportunities for creativity. Aisha pointed out that she emphasizes using one's initiative, trying their best, and showing respect for one another in her classroom, because she believes these elements are important to establish an environment that enables free and creative thinking. Similarly, Fatima emphasized flexibility, respect and understanding in a creativity-enhancing classroom environment. She said, "I think it is important to build a flexible and respectful relationship with students, and to not be too picky on students' work."

Teachers emphasized having high expectations of students, appreciating

their efforts, allowing them to make mistakes, and encouraging freethinking in their endeavor to establish a classroom environment that enhances creativity. Aisha said, "I always have high expectations of my students, and always appreciate any effort they give to be creative." Lama said:

I try to instill in my students a belief that nothing is impossible, failure is not the end of life. Instead, it is an opportunity to learn and improve. I try to make them feel it is okay to make mistakes.

Lina, the high school Language Arts teacher, said that she encourages her students to think like children. She states "I believe in the saying, 'we can come up with creative ideas if we thought like children and applied these thoughts as adults.'” She tries to apply this theory in her classroom by encouraging her students to think spontaneously, speak freely, and take their time to express their ideas. She accepts all students' attempts to answer or participate. Lina tells her students that there are no wrong answers because everyone sees a problem from her own perspective.

Participants highlighted the importance of encouragement and recognition of students' creative work. Sara celebrates creativity in her classroom through displaying her students' work, by allocating one corner of the classroom to display students' work. Lina believes that creativity is encouraged through competition, workshops, gaming, voting, and awards.

Theme three: continuing and professional development for teachers

Teachers emphasized the continuing and professional development of teachers, and its relationship in educating teachers and helping them gain a better knowledge of creativity and its role and importance in today's education. There were two paths that the teachers considered for teacher education and development.

The first is the unofficial path, which mainly follows interaction with other educationalists and exchanging knowledge with them about creativity. The second, the official and professional path, takes the form of workshops and seminars about creativity; this is assigned by the Ministry of Education and conducted through the Teachers Development and Training Center.

Interaction with other educationalists

Some teachers mentioned communication, discussion and experience exchange with co-workers and other teachers as important in developing teachers' knowledge and ability to incorporate creativity in their work. Lina emphasized the importance of interaction with colleagues in building better understanding and knowledge of fostering creativity. She said, "Teachers should always look for opportunities to learn from each other and continuously exchange new knowledge." Dana described teachers at her school having discussions about what they have recently tried and found successful in engaging students. In her school, as in other schools, teachers occasionally have workshops, seminars, and discussions according to their needs or if there is something to share. Nora asserted that "communication and harmony" between school teachers and district teachers is important. She finds meetings and lessons that other teachers sit in on to be "a very effective and helpful way to learn from each other's experiences and thoughts."

Official teacher development

Interviewed teachers reported that they constantly attend workshops and training programs at the Teachers Development and Training Center. According to them, most of the workshops are around new regulations, how to teach the new curriculum, how to apply different teaching strategies. In fact, teachers were

controversial about these workshops and seminars. While most of the teachers found them useful at times, they expressed some resentment about them; moreover, some teachers declared that they have never taken any workshops on creativity.

Teachers who found the workshops beneficial explained why. Lama, for example, found them to be helpful in developing teachers' knowledge on strategies that support creativity. She said, "We get very good workshops around active learning and exploratory learning, which helps us understand and facilitate students' creativity." She continued, "during these workshops, we teachers work in groups and try those strategies by ourselves, and discuss the challenges of applying them." Fatima pointed out the positive effect of a hands-on workshop she took around understanding creativity and creative processes. She reflected on the workshop held at the Development and Training Center, saying:

Although it was a very short workshop, it was very beneficial for me. It opened my mind to a lot of things related to enhancing creativity. It just opens up your mind to a lot of things that you may have not realized before.

She added:

I knew a little bit about creativity and stuff before that workshop, but by being involved in the workshop's creative activities we were able to understand a little bit more about what happens when we try to solve a problem creatively, how we make connections and generate more ideas.

She pointed out the impact of this workshop on her everyday teaching, saying:

Following the idea generating techniques that I have learned, I asked my students to come up with as many ideas as they could on how a triangle can be utilized in decor, interior design. The result was awesome! They came up with so many ideas that I wouldn't have thought of.

That being said, some participants showed some dissatisfaction or had complaints about these workshops and seminars. Lama, for instance, in spite of her

liking of teacher development, still pointed out that some workshops are inapplicable within her classroom. Similarly, Fatima indicated that although the Ministry now obviously devotes a lot of effort to teachers' development, she believes that the current approach is not really effective. She explained that the strategies and teaching methods that they learn in these workshops and are being asked to apply, do not take into consideration the actual circumstances that the teachers have in their classrooms. With her class of very diverse students, and a class time of 45 minutes, she knows that what she is asked to apply does not work for everyone, and may not work within the constraints of her classroom or the available time. She even suggested that the supervisor _who teaches these strategies to teachers_ come and try the things that she is suggesting be applied in her classroom, so she can see the obstacles, but this has not happened yet. The scope for using the learning from the workshops and seminars to enhance creativity is very limited. Nora agreed that mandatory workshops on new curriculum, the teacher guide, and teaching strategies, are almost impossible to apply the way they are intended.

Sara, likewise, described the professional development workshops as inapplicable and irrelevant. She said, "most of the workshops I took are theoretical, they do not include the process, or the practical implementation, and mostly they don't relate to everyday classroom reality." She said that most of the workshops provide strategies to be applied in their classrooms. However, she would like to "know more about why and how they were designed this way" because "when teachers are asked to just take and apply those fixed strategies and ideas, they end up applying something different sometimes!" She would also like the teacher development programs to include more background on the theory and philosophy

behind the curriculum that is being used in the school.

For example, we teach McGraw Hill, an American translated curriculum series. We need to know the foundation of this series. For us to understand the curriculum, accept it, and be able to teach it, we need to be aware of its foundations. (Sara)

Part of the teachers' discontent, as explained by Aisha, is that the professional development that teachers get is insufficient. She stated that superintendents are getting the most excellent and effective workshops, which she believes should be given directly to teachers. She said, "excellent workshops are given to supervisors so that they transmit it to teachers, but they can't transmit it to us with the same quality and comprehension."

Even though most teachers confirmed being trained continuously, a few of them declared that the availability of effective training on creativity is not widespread. One of the interviewed teachers stated the need for workshops on creativity. Dana said that she had never heard about a workshop on creativity and innovation. She expressed a lack of knowledge on how to promote creativity in the classroom, explaining: "sometimes I feel that lack of knowledge and experience is a barrier for me, especially on how to take an advantage of classroom sudden situations that requires fast responses and support of students' creative efforts."

Theme four: obstacles to promoting creativity and suggested solutions

In addition to issues that are mentioned before such as the intensive curriculum and the pressure on learners, teachers indicated some other obstacles as well as some suggested solutions for them.

1- Intensive curriculum, huge number of students, and short amount of time

Some teachers described the curriculum content, particularly for Math and Science, as too extensive and therefore an obstacle to enhancing creativity. They claimed that this is an obstacle to creativity because, although it is tremendous, it is expected to be taught in a short amount of time and to a large number of students. They also consider it an obstacle because it places huge pressure on both learners and teachers.

For learners:

Lama, a Math teacher articulated, "I think the tremendously stuffed curriculum is what hinders creativity." Lama pointed out the impact of intense, repetitious curriculum and time constraint on minimizing opportunities for applying various teaching strategies, which would include strategies relating to creativity. She added:

The syllabus that I am obligated to teach now is too intense, and I have to teach it with all its materials and supplements including all lessons, labs, and textbook and activity book. This huge amount of planned lessons does not leave space for creativity.

Nora, a Science teacher, agreed regarding the quantity of material necessary to fulfill the curriculum content. She added that time allocated does not match the curriculum requirements: "When we compare the amount of mandatory lessons to the time available, it is definitely not enough. We have so much to teach in a short time." Nora also indicated that large class size does not help her to work with each student. She stated, "the big numbers of students in class and the limited time of 45 minutes make it difficult to focus on individual students, and promote more

discussion, experiment, hands-on activities and other time-requiring strategies." She suggested either reducing the amount of mandatory lessons, or increasing the class duration.

One of the participating teachers commented on the fact that the school schedule, which has not changed, does not accommodate the new curriculum. Sara said:

I have so much to teach, so many supplements, and a lot of hands-on activities, but I don't have enough time! In my opinion, changing the traditional schedule is imperative for effective implementation of the curriculum, and I expect it to be changed soon.

Having such an extended curriculum and a short time for it puts a great deal of pressure and constraint on both students and teachers; and according to the interviewees, it diminishes creative possibilities. Lama explained, "I believe our students have very creative potential, but we put them under a lot of pressure. They have a lot to focus on, paper exams, lab exams, projects, and above all, standardized tests." Dana affirmed that teachers in her school are now concerned about the amount of work and projects that students are required to accomplish. For example, there are 12 subjects in Grade Ten, and the students are required to complete unit projects and achievement portfolios for each subject. Lama added, "when students are stressed, they don't care about being creative, they just want to be done from school."

As a solution to this problem, Dana stated, "We are discussing ways to reduce strain on students with stimulating more thorough and creative outcomes." She added

Instead of asking students to work on three or four projects, I am now designing one big project that students will be working on gradually throughout the next semester, the work will progress

based on what they learn in each unit.

The idea of combining projects appears to be favored not only because it reduces the work and pressure on students, but also because it leads to more creative outcomes. According to Fatima, after she saw her students exhausted and confused about working on so many projects at the same time, she suggested integrating as many subjects as possible in one big project. Fatima described a project students did with a train sculpture that integrated math, science, chemistry, and history. "It was amazing. This was only one idea, there were a lot of spectacular, very creative group projects" (Fatima). She reflected on the experience:

I think the idea was successful because students were able to direct all their efforts on one comprehensive, real-life project. All the material used in the projects were reusable items that students and teachers brought from their homes, so that also contributed in adopting recycling concept.

For teachers:

Due to the massive curriculum, large number of pupils, and limited time, shortage of teachers, altogether with the responsibilities that teachers carry, the workload of the teachers has become hardly bearable. Hence, teachers' ability to focus on creativity in their classes has been impacted. Nora denoted that teachers at her school have a heavy workload, as well as many classes and responsibilities. She pointed out a shortage in the number of teachers at the school. She proclaimed that they had to combine classrooms so that teachers can get a reasonable number of classes a day.

Teachers identified time constraint and intensity of the curriculum as hindering the promotion of creativity. Lama said "the 45 minutes that they are restricted to, along with the curriculum intensity keeps creativity away from our

classrooms.” Fatima agreed, wondering how she can help her students discover their creative potential when she is required to ensure they learn a significant amount of information in a short period of time. Dana said that some teachers at her school have so many classes that they worry about forgetting, losing focus or mixing up what they have to say in each class. She said, "Most teachers worry about how to teach all this amount of information, they worry about time being insufficient to cover all the syllabus. Creativity comes last for them."

Another obstacle is the amount of paperwork that is required for some of the teachers. Every morning, they have to write the instructional strategies that they are going to use that day when they register their attendance at the principal's office. These strategies have to match what is written in their preparation notebook, which have to meet Ministry requirements.

Workload is indicated as a barrier for promoting creativity in the classroom. To overcome this obstacle, participants suggested reducing teachers' minimum workload as well as employing a sufficient number of teachers. Dana clarified, "I think the current average of 24-classes workweek needs to be reduced to 15-classes or so." She believes “the more school teachers, the less pressure they have, and the more creative they get."

Furthermore, one of the issues that teachers have about professional development or other training opportunities is about the timing. When mandatory training is held at times when teachers have to miss class time, it is not helpful to them. Some weeks are less pressured in terms of classroom demands. It was also felt that it would be helpful to have trainers from the Development and Training Center come to schools and deliver workshops. Lama said “It would be great if a team of supervisors come to schools and work with the teachers at their

convenience.” Aisha also suggested that more coordination inside the school would save teachers from missing class time.

2- Adaptation of new methods of teaching and learning creatively is still limited

Teachers and students are not ready to adopt new process of teaching and learning to enhance creativity for two reasons. First, teachers are neither educated nor trained enough for this purpose. Second, students are not willing to give up traditional schooling and embrace new ways of learning where they are intelligently challenged.

Some teachers expressed some concern and confusion in understanding and applying the strategies outlined in the Ministry publication ‘101 Learning Strategies’ which is meant to help teachers improve their teaching by including higher-thinking skills such as creativity. For example, the use of learning projects, mandatory for all subjects, is a barrier according to the participants. As one Math teacher described "I think of the project as a barrier, it has become a huge burden for students. Is it that we did not understand it? Maybe" (Fatima). Sara spoke for others when she said that a few teachers questioned both the purpose and how they could apply the strategies.

One teacher in particular has struggled with implementing the new learning strategies, saying that the students are not happy with the new methods and curriculum, and would prefer the traditional teaching and dictating information rather than student search, explore, and think creatively. She stated: "Honestly, I encounter rejection from students since we started with the new learning strategies." (Fatima). Similarly, Dana agreed that students prefer learning in easy and traditional

ways rather than what they see as a complex method of teaching. She added, "So, one day I did that deliberately, and they said it was the best class I have ever given them (laughter). I told them it is the most comfortable for you, not the best."

3- Inappropriate physical school environment

Some of the teachers interviewed think that their schools are neither properly designed nor adequately equipped to provide teachers and students with better environment to boost creativity. For example, teachers believe that having to move around the school and from one classroom to another carrying all the materials and devices that are required for creativity exercises to be disruptive and exhaustive. Teachers indicated that this causes problems for the teachers who have to remember to take all of their materials and books to their next class. It is also difficult because equipment is not readily available, and cannot be moved, such as electronics.

Lama remarked on the physical classroom environment as being inappropriate for students either. She stated, "I have at least 28 students in each class, the chairs they sit on for hours are uncomfortable and hard to move. How to expect them to engage and to be creative in an uncomfortable dismal room!" She continued, "we are encouraged to use strategies that require students to move around, but we are not provided with the appropriate classrooms to apply these strategies."

To solve this problem, Aisha, Lama, and Sara suggested that it would be more conducive to learning and creativity if they had their own classrooms, sufficiently equipped to meet curriculum requirements. This would enhance the opportunities for fully meeting some of the new strategies and methods for teaching. Sara said:

I wish we had a classroom for each teacher, like the course-based schools, because now I lose a lot of time going from one class to another, and sometimes I forget to pick up worksheets or other stuff for the lesson from my office so I have to carry on my lesson without it.

Although most teachers considered the physical condition of schools and classrooms to be a barrier to encourage creativity, Aisha felt that the physical condition of the classroom should not be a barrier for applying creativity. She said, "We can't say that a teacher can't be creative unless they have a certain type of a classroom. No, I think a teacher should always try to change and improve the physical status of the classrooms available to her."

4- Lack of material support

Interviewed teachers reported a lack of supplies, which limits application of curriculum activities, along with a lack of sufficient funding that they occasionally need to do any activities with their students. In fact, sometimes teachers find themselves compelled to use their own money or ask the students to help. Or at least, this is the case in some schools as teachers indicated.

Aisha declared, "We don't get sufficient curriculum supplies, I mean the material needed for curriculum activities." Similarly, Nora, a Science teacher notified "there is a great deal of creative ideas and activities in our textbooks, but we do not have the requirements to apply them in our school." She also stated:

Our science laboratory lacks a lot of supplies. I have a lot of experimentation and exploration activities that are supposed to be done by students in the lab, and sometimes I don't have enough supplies to let all students try them by themselves. So, they miss a great chance.

Nora, furthermore, commented on the resource room by saying "the resources room at our school is not fully equipped with all the tools and materials

that a teacher might need." Dana, a Computer Teacher, said: "I don't have a computer lab at my school, I ask my students to bring their own laptops."

Some participants pointed out that they provide materials for classroom activities themselves. Sara provides all the materials students need for the lesson, including printing many worksheets and test papers for a large number of students. Fatima buys everything she needs in the class, including the paper to print exams on. Nora asks her students to bring the materials needed for classroom activities, after she gives a sample of what she is going to use in a classroom activity.

To remediate this situation, Sara recommended that the Ministry provide all the curriculum supplies required at the beginning of the year. She explained "they distribute the textbooks, I wish they would supplement them with all the needed material and tools for better application of the curriculum."

Suggestions to enhance the environment and opportunities for creativity

The teachers interviewed believe creativity can be additionally promoted in schools through cooperative school administration, communication and collaboration between everyone involved in the school. One participant pointed to the role of the school principal in enhancing and appreciating school members' creativity. Dana talked about her school principal as an example of someone who is "wonderful and supportive for creativity." She said, "Our principal is always open up to new ideas and suggestions from everyone at the school. She tries to involve and encourage both teachers and students to find solutions to our school problems together" for the benefit of students and teachers. For example, if someone brings her a suggestion or idea, the principal tries to figure out how to apply it. This example of good practice could be shared with others to encourage them to find

solutions and work together creatively.

In addition to identifying and overcoming obstacles to physical and environmental constraints for fostering creativity in the classroom, some participants offered further ideas that may be tried. For example, Aisha suggested having students work with professionals and experts from different areas to get inspired and motivated for more creativity-oriented process of learning. She said "one of the things that I wish to do is inviting professionals and experts of different areas from time to time to work with students. And maybe parents as well." Another idea some participants mentioned is about learning and borrowing from different countries and cultures in the field of creativity and education. Lina illustrated:

We need to open up to other cultures and look at their notion of creativity and creative work, and the role of creativity in their life. We need to encourage our student to see the beauty and creativity of people around the world.

Summary and Discussion of Findings

In this section, I summarize the main findings of this research and compare them to previous studies and published literature. This work aims to gain an overview of creativity in Saudi schools today. The research questions focus on creativity in the curriculum, creativity within the classroom environment, and the role of teachers' professional development in improving understanding and promotion of creativity in their classrooms. The main questions are as follows:

1)- Do you think the Saudi school system today supports creativity? How?

According to the teachers who were interviewed, creativity is integrated in schools today through the Ministry's effort to apply learning strategies and

approaches that foster creative thinking, provide special programs for talented students, and include higher-level thinking skills in the curriculum. Teachers believe the current curriculum and pedagogical strategies, which emphasize exploration, hands-on learning, and research, are effective in enhancing students' creative thinking, analytical, and critical skills.

Participants linked their answers about creativity to the national program for gifted students. This conception of creativity contradicts the notion outlined by Torrance (1970) and Robinson (2011) that creativity should not be viewed as a gift or talent; instead, every individual student has creative potential and capacities.

Although teachers viewed the program as supporting creativity, some participants pointed out some downsides, such as the program approach of identifying 'talented students'. They also criticized the program for not benefitting all students, being separate from the curriculum, and putting a lot of pressure on participating students. Teachers called for creativity programs to be more integrated into the curriculum and accessible to all students.

2)- How do you think your classroom environment supports creativity? This included further questions: **What do you think is needed to develop and sustain a creative learning environment in your classroom?** and **What do you believe are barriers to effectively integrating creativity into your classroom practice?**

In their responses to these questions teachers emphasized the role of the classroom teacher in stimulating students' creativity and learning. They identified several strategies that they believe foster creativity in the classroom, including promoting collaborative learning, exploration, open-ended questions, discussion, use of plays and performing. These responses match the findings of Davies et al

(2013), Pelfrey (2011), and Torrance (1970).

Participating teachers also highlighted a number of practices and attitudes that contribute in establishing a classroom environment that enhances creativity. These practices include: flexibility, encouraging initiative and trying, and promoting relationships between students, as well as between students and teachers, that involve respect and understanding. The teachers further included maintaining high expectations of students, appreciating their efforts and attempts, allowing them to make mistakes, and encouraging free and spontaneous thinking and self-expression. These attitudes were highlighted in the work of Pelfrey (2011), Robinson (2011), and Zimmerman (2014).

Participants indicated some obstacles to promoting creativity in schools. Some teachers pointed that inappropriate physical classroom environment as well as lack of materials are major limitations to adequate application of creative activities within the curriculum. Davies et al (2013) indicated the importance of a classroom that enables students to move around, and allows for flexible use of different areas, as well as availability of material and resources to stimulate growth of ideas and creativity. Participants in my research proposed that having their own classrooms fully equipped in a way that helps to meet curriculum requirements would save them time and give them more opportunities to promote creativity.

Teachers also emphasized that workload, many responsibilities, and time constraints are barriers to fostering creativity in their classrooms. These barriers were also identified by Aljughaiman (2002). In addition, two of the participants mentioned a lack of understanding and concern about the inappropriate implementation of required teaching strategies. Participants in general noticed a huge amount of pressure on students due to the demands of extensive curriculum

requirements, projects, exams and standardized tests. This is exacerbated for those who participate in national programs and contests. As a way to solve this problem, teachers found that integrating projects helps to reduce work and pressure on students and leads to more creative outcomes.

3)- How does the current curriculum allow for creativity? Conversely, how does it inhibit creativity? What would be required to effectively integrate creativity into the curriculum?

Teachers viewed learning projects, mandatory in all subjects, as opportunities for fostering independent learning, self-expression, and creativity. From the participants' viewpoints, creativity is embedded into the current curriculum through placing an emphasis on higher-level thinking skills, and connecting curriculum content to students' real life. Teachers indicated that the curriculum encourages thinking freely, analyzing, thinking and producing creatively, and using imagination. However, some participants, Math and Science teachers in particular, described the curriculum content as too intense, which, in their opinion, diminishes opportunities for creativity. For more integration of creativity in the curriculum, teachers made a few suggestions: One teacher suggested reducing the number of Math lessons that focus on the same objectives. Another proposed promoting choice in the curriculum for both teachers and students to leave more space for creativity. A third suggested changing the school schedule to accommodate better implementation of the curriculum.

4)- Do you think that teachers get adequate preparation to teach for creativity? What do you think teachers need in order to be able to foster creativity?

Teachers constantly participate in workshops and training programs at the Teachers Development and Training Center. Most of the workshops focus on how to teach the new curriculum, how to apply different teaching strategies and how to incorporate new regulations. While some teachers described the workshops as helpful in developing their knowledge about creativity-enhancing strategies, other teachers pointed out that the workshops are inapplicable or irrelevant because of time constraints, classroom conditions, or a combination of these factors. One participant shed light on the need to embed rationale and philosophy relating to the curriculum in development programs for teachers. In his article 'What About Educational Philosophy?' Al-Eisa (2011) raised the same point regarding the absence of philosophy in educational reform programs for curriculum development and teacher training in Saudi Arabia.

Hands-on workshops on creativity improve teachers' understanding of creativity and creative processes, as noted by one participant. This matches the finding of Maloney (1992). However, the availability of effective training on creativity is not widespread. The participating teachers called for sufficient and more effective professional development programs that include creativity, provided at convenient times. Participants pointed to the importance of frequent discussions and communication between teachers that develop their understanding and ability to promote creativity in their everyday teaching.

Conclusions and Implications

Educating for creativity is important for successful development and achievement in the 21st Century. How much this opportunity for creativity is

incorporated within the school system is a question that should be asked. In this research, I aimed to examine Saudi teachers' perspectives and reflections on the current situation relating to creativity in schools, and how the opportunities for creativity could be enhanced. I focused on teachers' thoughts on creativity in the curriculum and the learning environment, as well as development programs for teachers, which include the ability to teach for creativity. I did not ask them for their definition or view of the meaning of “creativity,” and agree the parameters of the scope of the concept. Had I done so, it may have provided more clarity and kept their responses more aligned to the topic. Conclusions and implications of the findings of this research are outlined in this section.

Results of this study indicate that creativity is incorporated in Saudi schools through the application of learning strategies that support creative thinking, the embedding of higher-level thinking skills in the curriculum, and the organization of national and local programs and contests for students with talent. It is clear that creativity needs to be more embedded in the curriculum as well as in school extra-curricular programs in order to accommodate all students.

There is an issue that involves viewing creativity as a gift or talent, which suggests an ambiguity in understanding and differentiating between the terms creativity and talent. In addition, there appears to be an overwhelming use of words such as talent, inventiveness, and creativity in the educational milieu and media. In my opinion, it would be helpful if these interrelated concepts were clearly defined by education decision-makers and shared with everyone in order to avoid confusion, misunderstanding and undue pressure on students. Before being asked to be creative, to invent something, or show a talent, students in particular would benefit from being given the opportunity to explore and understand the meaning of these

concepts. Additionally, to help alleviate undue pressure on both talented students and those who believe they should participate, it would be beneficial for the Ministry of Education to examine the objectives of the National Program for Talented Students, 'Mawhibah', and conduct an evaluation of the outcomes of the program and the method for identifying participants.

Evidence from this research indicates that teachers have a lack of understanding and an inability to implement the curriculum and the learning strategies required by the Ministry. This suggests the necessity to provide more effective training in how and why teachers should properly apply the curriculum and the '101 Learning Strategies'. Training on creativity is not prevalent within the programs of the Teachers Development and Training Center. More hands-on workshops on creativity would help teachers develop knowledge and awareness about the different stages and practices of creativity and how to facilitate students' creative processes in their everyday teaching. Teachers' voices need to be heard, and their reflections on the curriculum and the quality of the training programs should be considered.

To overcome obstacles of promoting creativity in the schools, policy-makers are advised to review the amount of curriculum content, especially for Math and Science, to reduce the pressure on both teachers and students and to allow more space for creativity. Consideration should be given to the school schedule to allow more time for creative activities that are more time-consuming. As buildings and classrooms are not often aligned to expressing creativity, the physical status of school buildings and classrooms require examination, and more funds and materials need to be provided for the best fulfillment of the curriculum. A reduction in teachers' workload, including the amount of paperwork and the number of classes

they teach, would result in more focus on promoting creativity and utilizing student-centered instructional approaches.

Recommendations for Further Research

- This study is based on teachers' perceptions; the same topic is recommended to be researched from the students' perspective.
- The outcomes and defects of national programs that are intended to foster creativity, inventiveness, and research skills are recommended to be studied more extensively with an aim to improving the programs.
- The scope of this study did not include the participation of art teachers. It is recommended that creativity in art education in Saudi Arabia is investigated from the point of view of art teachers and their students.

In conclusion, this work is my attempt to understand creativity in education in Saudi Arabia, to investigate the conditions that contribute to promoting the development of creativity in schools, and provide a basis for further research. As success in the 21st century demands a transformation from conformity to creativity in the educational system, I hope this research will contribute to the development of education for creativity in Saudi Arabia, and serve as a starting point for further research and improvements to the educational system.

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APPENDIX A

Information Letter

Date:

Dear Participant,

Thank you for your interest in participating in my research project on “Teachers’ perceptions on integration of creativity in Saudi schools.” This research project is in partial fulfillment of my Master’s of Education degree at the University of New Brunswick in Canada.

In this study, I aim to explore Saudi teachers’ views on effective integration of creativity in education. The main question I am investigating is how creativity can be effectively integrated into the school system in Saudi Arabia, grades 1-12. I am focusing on Saudi teachers' perspectives and reflection on the current conditions of creativity and how these teachers believe those conditions could be enhanced. I will ask questions to examine participants’ thoughts on the creative learning environment, integrating creativity in the curriculum, and teachers’ needs in order to be able to teach for creativity. Your participation through sharing your experiences and insights on the topic is an important part of the qualitative research method that I am using in this work.

Permission for me to conduct this research has been granted by the Educational Administration in Taif, KSA. Your participation is completely voluntary. The time and place of the personal interview will be set at your convenience, either at your school or a place more convenient after school. The interview will take approximately one hour, and will be conversational and fairly unstructured. I will ask primarily open-ended questions to allow for detailed responses. This method will also allow for follow-up questions that might arise during the interview to help elicit further information or explanations. You may choose not to answer any question, and you may withdraw from the research at any time.

With your permission, the interview will be audio-recorded, transcribed, and translated into English (the language in which the final report will be written). The audio records along with the transcription files will be retained in a password-protected computer for no more than five years, after which time they will be deleted.

Please be assured that everything relating to the interview will be confidential. Everything relating to the interview will be retained using a pseudonym, and all names and places will be changed for identity protection. The gathered information will only be used for the purpose of research, presentations and papers based on the study. All written data and documents of this report will be saved on a password-protected computer. If you wish to check the findings or to see how any material from the interviews is incorporated into the final report, I will be happy to send you a copy after it is completed.

If you wish to participate in my research project, we will set up a meeting for the interview. If you need any further information before the interview, or have any questions, I would be happy to answer them. You may also contact my thesis supervisor, Dr. Mary Blatherwick (mlb@unb.ca), or the Associate Dean of Graduate Programs, Dr. David Wagner (dwagner@unb.ca).

* This project has been reviewed by the Research Ethics Board of the University of New Brunswick and is on file as REB 2014-115.

Sincerely, Najla
Almutairi

APPENDIX B

Consent Form

Consent Form
“Teachers’ Perceptions on Integration of Creativity in Saudi Schools”

You are being asked to indicate your willingness to participate in a research project conducted by Najla Almutairi, a Master’s of Education student at the University of New Brunswick, under the supervision of Mary Blatherwick, a professor in the Faculty of Education, University of New Brunswick, Canada. The study aims to explore Saudi teachers’ views on effective integration of creativity in education. The main question of the study is how creativity can be effectively integrated into the school system in Saudi Arabia, grades 1-12. The focus of the study is on Saudi teachers’ perspectives and reflection on the current situation of creativity and how it could be enhanced in the school system. Questions will be asked to examine participant’s thoughts on the creative learning environment, integrating creativity in the curriculum, and teachers’ needs in order to be able to teach for creativity.

In order to gather data for this research project, three to six Saudi public school teachers of any grades between 1-12 will be interviewed (in person). The interview will include a few main open-ended questions and other questions that might emerge during the conversation. With your permission, the interview will be audio-recorded.

Participation in this study is completely voluntary, and you are free to withdraw from the study at any time. You may decline to answer specific questions and, if at any time during the interview you find you are feeling uncomfortable, you may stop the interview, and ask to have any information on the audiotape deleted.

Be assured that participants’ privacy and security is preserved from any possible unfavorable consequences. All personal information will be removed, participants’ real names will not be declared and instead they will be given pseudonyms in the report. When the interview is completed and transcribed, a copy of the transcript will be sent to you to be checked for accuracy. All audiotapes and transcripts will be saved on a password-protected computer for 5-7 years, and then will be deleted. The data from all the interviews will then be analyzed and a final report written.

If you would like to receive a copy of the final research report, please fill in the box below. Once again, be assured that this contact information will not be linked to your interview data.

Please provide me with a copy of the manuscript at the following address:

Name: _____
Address: _____

E-mail: _____

If you have questions or concerns about the research, please don’t hesitate to address them to the researcher, Najla Almutairi, email: NajlaAlmutairi@unb.ca, phone: (+1) 506-259-5449; or to Supervisor Mary Blatherwick, e-mail: mlb@unb.ca, phone: (+1) 506-451-6836. I greatly appreciate your participation in this research project.

This project has been reviewed by the Research Ethics Board of the University of New Brunswick and is on file as REB 2014-115.

I hereby agree to participate in the research described above:		

Name		
_____		_____
Signature		Date

Curriculum Vitae

Candidate's full name: Najla Almutairi

Universities attended: Taif University, 2010, Bachelor of Home Economics.