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ISLAMIC TEACHERS' PERCEPTIONS OF IMPROVING CRITICAL THINKING SKILLS IN SAUDI ARABIAN ELEMENTARY SCHOOLS

By

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A Dissertation
Submitted in Partial Fulfillment of the Requirements for the
Doctor of Philosophy in Curriculum & Instruction

Department of Curriculum & Instruction
In the Graduate School
Southern Illinois University Carbondale
May 2014

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Submitted in Partial Fulfillment of the Requirements for the

Doctor of Philosophy in Curriculum & Instruction

Approved by:

Prof. John McIntyre, Chair

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March 2014

ABSTRACT OF THE DISSERTATION OF

Mesfer Alwadai, for the Doctor of Philosophy degree in Curriculum and Instruction, presented on February 21, 2014, at Southern Illinois University Carbondale.

TITLE: ISLAMIC TEACHERS' PERCEPTIONS OF IMPROVING CRITICAL THINKING SKILLS IN SAUDI ARABIAN ELEMENTARY SCHOOLS

MAJOR PROFESSOR: DR. John McIntyre, A Professor of Curriculum and instruction, Ed.D. , Southern Illinois University Carbondale, Chair, Department of Curriculum and Instruction

The intent of this explanatory sequential mixed-method study is to examine Islamic teachers' thoughts on improving critical thinking skills in elementary schools in the Southwestern province of Saudi Arabia. This study involves the collection of quantitative data and an explanation of the quantitative results with qualitative data. In the first phase, a survey was administered to Islamic teachers in Saudi elementary schools to assess their opinions on improving students' critical thinking skills and to identify the factors that influence or hinder their implementation of critical thinking instruction. In the second phase, qualitative data was collected using semi-structured interviews with a number of Islamic teachers in order to explore more fully their perceptions toward improving students' critical thinking skills in Saudi elementary schools. The reason for collecting both quantitative and qualitative data was to obtain a better understanding of the gathered information than would be possible using only one of these methods.

In regard to the barriers for improving the critical thinking ability of elementary education students, the participants reported seven major obstacles, which are student ability,

teaching methods, classroom structure, Saudi society and the school community, pre-service teachers preparation programs and in-service teacher professional developmental programs, and the Islamic studies curriculum. The highest ranked obstacle was student ability, with an overall mean of 4.31on a 5-point scale. Teaching methods, with a total mean of 4.29, was the second most cited barrier. The third was classroom structure, with a total mean of 3.72. The study participants ranked society and school community as the fourth obstacle, with a total mean of 3.70, and pre-service teachers preparation programs and in-service teacher professional developmental programs with a total mean of 2.69. The Islamic studies curriculum was ranked sixth in obstacles to improving critical thinking for elementary education students, with a total mean of 2.57.

These findings suggest there is a need to also examine female Islamic teachers' perceptions toward critical thinking in the Southwestern region of Saudi Arabia in order to identify the similarities and differences between the perceptions of male and female teachers. It is vital to investigate perceptions of teacher of other disciplines, such as language art, social science, English, and math, in an effort to provide policy makers in the Ministry of Education with a holistic picture of the Saudi educational system. Qualitative studies, interviews with students, and classroom observations can be carried out to investigate students' perceptions as to how critical thinking is taught in the classroom and whether teaching style is a primary obstacle to it being taught. There is an urgent need for an in depth examination of the influence society and the school community has on teaching students' thinking in general and critical thinking in particular. Finally, more research is needed on the pre-service education programs and in-service professional training programs in terms of building teaching programs on critical thinking skills.

Key words:

Critical thinking ability, critical thinking skills, Islamic teacher, Teachers' perceptions, Saudi Arabian, elementary schools

ACKNOWLEDGEMENTS

I wish to acknowledge the help and guidance of my adviser, Prof. John McIntyre, without whose valuable assistance the study could not have completed this study. His support, encouragement, and patience throughout the years of coursework, examination, and writing of this dissertation are greatly appreciated. He truly modeled the characteristics of an educator.

I also want to thank Dr. Grant Miller, a friend and mentor who has guided me over the years and who has shaped my thinking on many questions. Additionally, I would like to thank Dr. Christie McIntyre for her support and advice. Heartfelt thanks also are given to Dr. Barbara Hagler and Prof. Carey Krajewski for serving on the doctoral committee.

My greatest thanks and love go to my parents, Ahmad Alwadai and Mogtah Farhan, my loving wife, Hailah Alqahtani, and my children Leena, Ahmad, and Wassan. Their support and patience made the completion of this study possible. They gave me unfailing and unconditional love and support through years of bizarre schedules, unpleasant moods, and frequent absences from many of their life events. Never once did they doubt that my achieving a doctoral degree would become a reality, and a part of it will always belong to them.

TABLE OF CONTENTS

ABSTRACT OF THE DISSERTATION OF I

ACKNOWLEDGEMENTS IV

TABLE OF CONTENTS V

LIST OF TABLES X

LIST OF FIGURES XI

CHAPTER 1 1

INTRODUCTION 1

DEFINING CRITICAL THINKING SKILLS 6

TEACHING METHODS TO IMPROVING CRITICAL THINKING SKILLS 8

OBSTACLES OF TO IMPROVING CRITICAL THINKING SKILLS 9

PROBLEM STATEMENT 11

PURPOSE STATEMENT 11

SIGNIFICANCE OF THE PROBLEM 12

LIMITATIONS 14

DEFINITIONS OF TERMS 14

SUMMARY 16

CHAPTER TWO 18

REVIEW OF THE RELATED LITERATURE 18

TOWARD A DEFINITION OF CRITICAL THINKING 18

IMPORTANCE OF DEVELOPING CRITICAL THINKING 19

IMPROVING CRITICAL THINKING IN SAUDI ARABIA 20

Defining Critical Thinking Skills 22
Similarities and Differences among the Types of Thinking Skills 28
Problem Solving vs. Critical Thinking 30
Creative Thinking vs. Critical Thinking 31
Teaching Methods for Improving Critical Thinking Skills 32
Teacher Perceptions 38
Addressing Obstacles to Improving Critical Thinking Skills 40
Teacher Perceptions of Society and School Community Constrain Improvement of Critical Thinking Skills 41
Teacher Perceptions of Pre-Service Candidate Teacher Preparation Program and In-service Teacher Professional Developmental Program Constrain Improvement of Critical Thinking Skills 43
Teacher Perceptions of School Curriculum Constrains Improvement of Critical Thinking Skills 46
Teacher Perceptions of Teaching Methods Constrains Improvement of Critical Thinking Skills 49
Teacher Perceptions of Student Ability Constrains Improvement of Critical Thinking Skills 52
Teacher Perceptions of Classroom Structure Constrains Improvement to Critical Thinking Skills 54
Summary 55
CHAPTER THREE 56
METHODOLOGY 56

Research Questions 56
Design of Study 57
Population and Sample 64
Instrumentation 66
Data Collection Procedures 69
Data Analysis 71
Timeline of the Study 72
Limitations of the Study 73
Summary 73
CHAPTER FOUR 74
FINDINGS AND DISCUSSION 74
Demographics 76
Research Questions One and Two 80
The first section presents Islamic teachers' perceptions –and even misperceptions- about the improvement of critical thinking skills in the Saudi elementary schools. 80
Research Question Three 91
The second section focuses on teachers' perceptions of whether students' ability is a constraint to improving critical thinking in Saudi elementary schools. 92
The third section concentrates on teacher's perceptions of whether teaching methods constrain the improvement of critical thinking skills in Saudi elementary schools. 98

THE FOURTH SECTION FOCUSES ON TEACHERS' PERCEPTIONS OF WHETHER CLASSROOM STRUCTURE HINDERS THE IMPROVEMENT OF CRITICAL THINKING SKILLS. 102
THE FIFTH SECTION CONCENTRATES ON ISLAMIC TEACHERS' PERCEPTIONS OF WHETHER SAUDI SOCIETY AND SCHOOL COMMUNITY CONSTRAIN THE IMPROVEMENT OF CRITICAL THINKING SKILLS IN SAUDI ELEMENTARY SCHOOLS..... 106
THE SIXTH SECTION FOCUSES ON TEACHERS' PERCEPTIONS OF PRE-SERVICE ISLAMIC TEACHERS' PREPARATIONS PROGRAMS AND IN-SERVICE PROFESSIONAL DEVELOPMENTAL PROGRAMS HINDERING THE IMPROVEMENT OF CRITICAL THINKING SKILLS IN SAUDI ELEMENTARY SCHOOLS. 115
THE SEVENTH SECTION FOCUSES ON ISLAMIC TEACHER'S PERCEPTIONS OF WHETHER ISLAMIC STUDIES CURRICULUM HINDERS THE IMPROVEMENT OF CRITICAL THINKING IN SAUDI ELEMENTARY SCHOOL. 122
SUMMARY 127
CHAPTER FIVE.....129
CONCLSUIONS, IMPLICATIONS, AND RECOMMENDATIONS 129
CONCLUSION AND DISCUSSION 130
IMPLICATIONS FOR PRACTICE..... 138
IMPLICATIONS FOR RESEARCH 140
SUMMARY 141
REFERENCES.....142
APPENDICES.....1
APPENDIX A 158
APPENDIX B 165

APPENDIX C 167

APPENDIX D 169

APPENDIX E 172

APPENDIX F 175

APPENDIX G 178

VITA 197

LIST OF TABLES

TABLE	PAGE
Table 1	66
Table 2	75
Table 3	78
Table 4	79
Table 5	81
Table 6	88
Table 7	91
Table 8	97
Table 9	101
Table 10	105
Table 11	107
Table 12	114
Table 13	117
Table 14	121
Table 15	126

LIST OF FIGURES

FIGURE PAGE

Figure 1. The Explanatory Sequential Design (Creswell & Plano Clark, 2011, p. 69)..... 59

Figure 2. Data Collection Procedures of Study..... 71

CHAPTER 1

INTRODUCTION

Critical thinking is the highest level of mental activity with regard to daily human interaction. It enables people to engage in the processes of making decisions and planning work (Howie, 2011). Throughout the last decades of the 20th century, the importance of developing children's critical thinking skills has increased. This is due to increasing complexity and shifting realities of modern life that have increased the need for generating new knowledge, comprehension, judgment, and evaluation skills in order to deal with job market requirements.

G. F. Smith (2002) contended that the importance of developing the learner's critical thinking skills has increased in the past decade because these skills are core life skills. Accordingly, it is essential to improve cognitive skills during childhood, to help students succeed in their future lives in several key areas such as meeting marketplace demands and solving societal problems. McGuinness (2005) stressed the importance of improving critical thinking skills inside and outside of the classroom environment. In fact, developing cognitive skills at an early age would enable students to become higher-level thinkers allowing them to make rational and wise judgments, and able to justify their personal decisions and behaviors. Critical thinking encourages children to shape their personal opinions and attitudes instead of simply restating those of other's by investigating issues from different perspectives and viewpoints with logically -reasoned arguments in order to persuade others. McGuinness (2005) pointed out that critical thinkers are able to think and pursue truth by controlling their emotions and beliefs.

The need for improving students' cognitive abilities within the school environment is explicitly suggested for several reasons. First of all, Ozkan-Akan (2003) stated that the improvement of critical thinking skills in schools has become one of the main goals of the

school curriculum and higher education programs in terms of creating citizens who are skilled at attempting to discover new things instead of restating what other people have already accomplished. Moreover, the improvement of thinking skills aims to inform and challenge people's thinking skills in terms of critiquing and verifying knowledge in general and school curriculum in particular. The results of critical thinking studies show that education and critical thinking must be parallel to achieve these goals (Ozkan-Akan, 2003).

Another important reason for improving learners' mental abilities through the school context is to enhance children's mental growth by providing them with opportunities that challenge their thinking processes. For instance, John Dewey (as cited in Kelly, 2009) was concerned with the importance of children's developmental stages and acknowledged that children are born with the ability to think. Therefore, Fisher (in press) justified that "most of the growth of the human brain occurs in early childhood: by the age of six, the brain in most children is approximately 90% of its adult size" (p. 1). It is the educator's responsibility to train children to think well because their brains are "still growing, [teaching thinking skills] may be more effective than waiting until the brain is fully developed. Cognitive challenge is important at all stages, but especially in the early years of education" (Fisher, in press, p. 1).

Howie (2011) mentioned that there are a number of children's organizations and educational conferences that have addressed the importance of improving children's cognitive abilities at an early age. These organizations have recommended teachers use multiple teaching strategies and application opportunities to produce critical thinkers. For instance, the Convention on the Rights of the Child (1989) and the UN Convention on the Rights of Persons with Disabilities and Council of Europe Disability Action Plan (2006) made recommendations

regarding developing students' cognitive abilities, talents, and creativity in the classroom environment through complex learning activities in order to prepare them for the future.

As a result, a number of schools across the world (Burke, Williams, & Skinner, 2007) recently reformed their elementary school curriculum in an attempt to develop the students' cognitive abilities using different teaching strategies and learning techniques. This was achieved by switching the emphasis from imparting information and content to the students to improving the students' thinking skills in terms of elevating what they have already learned and what should be learned. Therefore, countries such as Saudi Arabia have developed rigorous education standards (Alwehaibi, 2012; Thibeault, 2004) and school curricula (Sa-U & Abdurrahman, 2008; Tengku, 1994) in order to produce capable, creative, and critical school graduates. These school graduates should be able to critique, verify, and deliberate with other people in a meaningful way on issues that affect society.

As an example, the Saudi educational system recently made remarkable progress in both higher and elementary education levels in terms of focusing on developing students' thinking skills through different techniques and strategies (Al-Miziny, 2010). In addition, improving cognitive abilities has become a primary, fundamental, and valued educational goal because education and accelerating pupils thinking are inseparable. For that, the Saudi Ministry of Education recently reformed its educational system's components, i.e. curriculum, teacher training programs, research, school structure, and technology equipment, for creating a useful learning environment that leads to developing students' thinking skills overall and critical thinking specifically. It mainly attempts to meet the children's mental growth and to apply the recommendations of recent children's education conferences, such as the Convention on the Rights of the Child (Ministry of Education - Saudi Arabia - Strategic Plan, 1974).

Furthermore, Stedman and Adams (2012) mentioned that in in 2004, numerous leaders of colleges and universities determined that critical thinking is a primary core life skill and central to mental and practical skills. They determined that teachers and school curricula must work together to foster students' thinking.

Allamnakrah (2013) mentioned that the Saudi educational system must be reformed and redesigned toward core life skills. This improvement is essential as Saudi Arabia moves toward advanced global technology and business competition. Also, he stated that global competition requires analytical and critical thinkers who are able to make effective, profitable, and wise decisions based on a variety of information. Therefore, teachers may escalate students' learning from the lower to higher levels by providing challenging ideas and supporting evidence. Alwehaibi (2012) addressed the priorities of the Saudi educational system that are "to equip pupils with the foundation skills, attitudes and expectations necessary to prosper in a changing society and to encourage creativity and ambitions" (Alwehaibi, 2012, p. 1).

Although the importance of improving students' critical thinking through the school environment has become evident, numerous studies examined Saudi students' critical thinking ability in secondary schools (Al-Miziny, 2010; Al Gamdi, 2008), high schools (Al-Essa, 2009; Al-Qahtani, 1995), and at the university level (Alwehaibi, 2012; Allamnakrah, 2013). They reported that Saudi students lack the ability to think critically and any educational reforms must include critical thinking in the school curriculum. These studies attributed this problem to several factors such as school curricula, learning activities, and teacher preparation programs. Similarly, Al-Qahtani (1995) found that the majority of Saudi students lacked critical thinking skills due to the deficiency of critical thinking skills taught in school courses and the failure of instructors to teach critical thinking skills to students.

In response to the deficiency of critical thinking among students, researchers acknowledge that improving learners' critical thinking skills depends primarily on the teachers (e.g., Dunn, 1988; Smith, L., 2002; Sa-U & Abdurrahman, 2008; Tengku, 1994; Thibeault, 2004). Furthermore, Ozkan-Akan (2003) asserted that teachers' perceptions affect the enhancement of students' critical thinking abilities either positively or negatively. Similarly, teachers' lack of sufficient theoretical and practical knowledge of critical thinking skills is probably hindering their professional ability to facilitate the development of critical thinking skills among learners (Kowalczyk, Hackworth & Case-smith, 2012). Therefore, studies have investigated the relationship among teacher perceptions of improving critical thinking skills and implementing critical thinking strategies in the classroom setting (Ozkan-Akan, 2003).

In general, these studies have shown that teachers influence improvement in students' critical thinking across all education disciplines. These studies also identified the obstacles of teaching critical thinking skills and the relationships between the teachers' educational background and attitudes toward improving cognitive abilities. For example, teachers' perceptions are influenced by a number of factors when it comes to improving thinking skills in US, Jordan and Turkey secondary schools and high schools. These include teaching methods, appreciation of teaching thinking, teacher's educational background, teaching experiences, teaching methods, classroom equipment, the learning materials, and the societal and school communities.

This study aimed to examine Islamic teachers' perceptions toward improving students' critical thinking skills and to identify the factors that encourage or hinder Islamic teachers' implementation of critical thinking instruction in Saudi Arabian elementary schools.

Defining Critical Thinking Skills

It is essential to specify, define, and characterize the meaning of improving critical thinking in order to understand the study's concepts. As research indicates, common confusion occurs when researchers use "critical thinking" interchangeably with others mental skills, such as decision-making, creative thinking, problem solving, and metacognition. It is often assumed these terms are synonyms for critical thinking. However, critical thinking has a different meaning from creative thinking, analytic thinking, and metacognition.

Literature devoted to critical thinking has offered a number of explanations of critical thinking and its categories. Klein (2011) stated that critical thinking is a major element of human mental abilities, which is accountable for many task achievements because it is more evaluation and synthesis than application or analysis.

David defined critical thinking skills as "problem solving, decision making, reading, and reflecting, and making predictions about what might happen" (as cited in Moore, 2009, p. 222). Matthew added that critical thinking skills are the processing and integration of knowledge and experience through different methods, such as editing, reorganizing, and evaluating information (as cited in Moore, 2009). Moreover, Halpern (1996) defined improving critical thinking as using strategies to improve the likelihood of desirable results; for example, one of the thinking strategies is using questioning skills to check understanding, and evaluating the viewpoints, as Maiorana (1992) mentioned. Furthermore, it

> involves teaching learners about their mental processes and how these can be used for problem solving. It requires us as teachers to intervene at the level of the mental process and teach individuals what processes to use, when to use them, and how to use them in workable strategies for task solution. (Howie, 2011, p. 11)

Additionally, Moore (2009) defined critical thinking using the *Random House College Dictionary*, which defines thinking as

> to employ one's mind rationally and objectively in evaluating or dealing with a given situation; to have certain things as the subjects of one thoughts; to consider something as a possible action, choice, etc.; to invent or conceive of something. (p. 222)

The interest of improving critical thinking has increased rapidly since the 21st century and has become the most important criterion for evaluating school curriculum outcomes (Klein, 2011). Similarly, Beyth-Marom (as cited in Cotton 1991) drew attention to the importance of teaching critical thinking skills to students in early stages of their education for making good and rewarding decisions by stating that "teaching skills are necessary tools in a society characterized by rapid change and numerous and collective choices and decisions" (p. 2).

In addition, Costa (1998) and Howie (2011) emphasized the importance of improving student critical thinking skills inside the school curriculum to enable students to solve personal and societal problems, thereby becoming more productive and effective citizens. Improving critical thinking is being increasingly recognized by many experts as one of the fundamental goals of education; especially with the need of students to be furnished with lifelong critical thinking skills and permanent knowledge in a constantly morphing society (Robinson, 1987).

Additionally, Bloom's taxonomy used a hierarchy to organize thinking skills levels from the simplest level, which is memorization and recall of facts (knowledge), to the most complex level, which is the evaluating and judging knowledge in order to shape and construct personal realm knowledge (evaluation). Educators should accelerate students' thinking skills using the Bloom classification in order to escalate them from the lowest cognitive level to the highest.

It is important to distinguish critical thinking from other thinking terms, such as creative thinking, which means the process wherein new ideas and concepts are developed, which is the result of gathering information by questioning. Moore (2009) illustrated that the human brain consists of two hemispheres: "the right hemisphere is responsible for generating ideas and images and the left hemisphere is specifically for critiques and evaluations" (p. 120). Metacognition is defined as "thinking about thinking" that contains "the invisible thinking skills such as self-interrogation, self-checking, self-monitoring, and analyzing, as well as memory aids" (Moore, 2009, p. 228). Metacognition gives students a chance to examine their understanding of what they have already learned through effective strategies and gives them the ability to predict what will happen based upon their background knowledge. Moreover, it helps students to assess their thinking processes by using and applying different approaches from the easiest way to the most complex. In addition, metacognition shapes students' minds and enables them to become more confident and independent learners.

Finally, problem solving focuses on identifying the cause and effect of a problem in order to resolve it. In studying a specific problem, teachers and students have to follow the scientific steps which are stating the study problem, stating the study hypothesis, testing, collecting data, testing the hypothesis, and reaching a conclusion.

Teaching Methods to Improving Critical Thinking Skills

Improving the critical thinking skills of student is a major school task. Promoting students' abilities to solve the complex issues and to think critically is often a criterion for school accreditation, but it is also a major school problem related to teaching methods and assessment tools as mentioned by Green (1993). As evidence, Bissell and Lemons (as cited in Scott, 2008)

found that the average U.S. undergraduate student rarely practices critical thinking in their courses, which affects their critical thinking skills in the long term.

For accelerated student critical thinking, Howie (2011) stated that approaches in teaching thinking skills are categorized based upon Harpaz's three classifications:

> The skills type of approach (teaching various thinking means, such as strategies, that render thinking process more effective, fast and precise; the disposition types of approach (a thinking disposition being in Harpaz terms, a reasoned motivation for a certain thinking pattern, a thinking quality such as open-mindedness, depth, systematic thinking); and the understanding type of approach (Harpaz considers that knowledge and thinking are interconnected and this type of approach makes clear the conditions under which knowledge becomes understanding). (p. 11)

Obstacles of to Improving Critical Thinking Skills

Although the significance of developing students thinking skills is becoming understood, there are several factors that hinder and impede the progression of critical thinking abilities such as society, parents' educational background, parents' social class (Bataineh & Alazzi, 2009), parental involvement with schools teaching methods (Beyer, 1984; Brookfield, 1987), learning materials that depends on the factual knowledge that limits using judgment and evaluation skills (Lauer, 2005; Maiorana, 1992), classroom environment, and teachers (Alazzi, 2008; Bataineh & Alazzi, 2009; Fisher, 2007; Ozkan-Akan, 2003).

Alazzi (2008) asserted that society and community culture are considered the most common obstacle to improving critical thinking because they favor harmony and security. Therefore, "questioning authority figures such as parents, teachers, school administrators, and politicians is interpreted as disrespectful behavior and opposing the accepted ways of doing

things so that critiquing and questioning knowledge and authorities is not promoted in their societies" (p. 10).

There are several factors influencing the teacher's implementation of critical thinking among students such as teaching methods, appreciation of teaching thinking, teacher's educational background, teaching experiences, teaching methods, classroom equipment, and the learning materials (Bensley, Crowe, Bernhardt, Buckner, & Allman 2010; & L. Smith, 2002).

Tengku (1994) and Sa-U and Abdurrahman (2008) pointed out that educators play a heavy and active role in the successful development or hampering of critical thinking abilities across all educational levels based on their positive or negative perceptions. Research is needed to reveal whether or not critical thinking skills are currently being taught in Saudi elementary schools.

As a result, some Saudi researchers, such as Alwehaibi (2012) argued for inclusion of critical thinking skills in schools across all educational disciplines in order to meet global business demands. They recommended future studies to identify the obstacles to improving critical thinking skills across all the educational disciplines and for elementary school students. The study aimed to examine Islamic teachers' perceptions of teaching thinking skills in the elementary schools in the Southwestern region of Saudi Arabia. It sought to examine the factors influencing Islamic educators' perceptions of developing critical thinking skills, to identify the obstacles to improving critical thinking skills in Saudi elementary school, to recognize the benefits of teaching thinking skills, and to persuade teachers to employ critical thinking frequently-- all in an effort to improve the students' thinking skills.

Problem Statement

The goal of this research study was to examine the perceptions of male Islamic teachers toward the teaching of critical thinking skills at the elementary school level in Saudi Arabia. Improving critical thinking skills depends mainly on the teachers who play an essential role in the development of thinking skills in elementary-age school children. Dunn (1988), G. F. Smith (2002), Tengku (1994), Thibeault (2004) and Sa-U and Abdurrahman (2008) asserted that teachers have a positive influence on the academic learning and personal skills of their students.

Teachers can greatly bolster student thinking abilities; however, their perceptions toward teaching thinking skills and their lack of sufficient theoretical and practical knowledge of thinking skills can also be a hindrance to their ability to facilitate the learning process (Kowalczyk et al., 2012). Rosanai and Suhailah (as cited in Sa-U & Abdurrahman, 2008) found "the teachers' senses of efficacy and value of teaching thinking influenced their perception on teaching students thinking" (p. 146).

However, Tengku (1994) argued that there are several factors other than teachers that can impede the development of thinking skills such as learning materials, classroom environment, and teaching methods. Similarly, Salem (as cited in Sa-U & Abdurrahman, 2008) stated that a number of "factors affecting thinking skills included the teachers' role in promoting students' use of teaching skills, the participation of students, educational methodology, text and extra-textual materials, educational media, and educational setting" (p. 67).

Purpose Statement

Teachers play a significant role in successfully improving the critical thinking abilities of elementary school students (e.g., Alwehaibi, 2012; Sa-U & Abdurrahman, 2008). However,

research is needed to reveal whether or not Islamic teachers are aware of the significance of improving children's critical thinking skills by using them in the real world.

The intent of this explanatory sequential mixed-method study was to examine Islamic teachers' thoughts on improving critical thinking skills in elementary schools in the Southwestern province of Saudi Arabia. This study involved the collection of quantitative data and used qualitative data to explain the quantitative findings. In the first phase, a survey was administered to male Islamic teachers in Saudi elementary schools to assess their opinions on improving students' critical thinking skills and to investigate the factors that influence or hinder Islamic teachers' implementation of critical thinking instruction in elementary schools. In the second phase, qualitative data was gathered through using semi-structured interviews with Islamic teachers in order to explore more fully their perceptions toward improving students' critical thinking skills in Saudi elementary schools. The reason for collecting both quantitative and qualitative data was to get a better understanding of information than would be obtained by either type of method alone. This study attempted to answer the following research questions:

1- How do male Islamic elementary school teachers define critical thinking?

2- What are the perceptions of male Islamic elementary school teachers on improving critical thinking skills among students in Saudi Arabian elementary schools?

3- What are the factors that influence the implementation of critical thinking instruction by male Islamic elementary school teachers in Saudi Arabian elementary schools?

Significance of the Problem

In response to the lack of critical thinking among students, researchers (Dunn, 1988; Sa-U & Abdrahman, 2008; G. F. Smith, 2002; Tengku, 1994; & Thibeault, 2004) acknowledged

that improving learner critical thinking skills largely depends on the teacher. As such, these studies identified the obstacles in teaching critical thinking skills and the relationships between the teachers' educational background and attitudes toward improving cognitive abilities.

Al-Qahtani (1995) mentioned there have been a number of previous studies devoted exclusively to the development of thinking skills generally in Saudi Arabia, but these studies revealed the significance of inclusion of thinking skills into school curriculum and programs. Alwehaibi (2012) called for more studies to examine Saudi teachers' perceptions toward improving thinking skills among students and their influence on students' thinking skills progress across all the educational levels. To date, no study has examined Saudi Arabian teachers' perceptions toward improving critical thinking skills among elementary education students. Furthermore, Alwehaibi (2012) suggested that the results from such studies should be integrated into teacher education programs in order to train pre-service and in-service teachers in how to improve Saudi Arabian students' critical thinking skills. Additionally, she stated a need also exists for the use of a mixed-methods research design in order to understand the teachers' views on improving critical thinking in the elementary school.

This study attempted to contribute to the process of improving the Saudi educational system by examining the Islamic teacher's perceptions with the goal of improving critical thinking skills in elementary schools. This research may help the decision makers think about the teacher candidate preparation programs in terms of pre-service and in-service teachers' training programs. Therefore, examining prospective teachers' beliefs and opinions could offer the decision makers in teacher educational colleges and universities with essential focus on critical thinking skills. The new focus might help administrators of teacher education programs design useful thinking and learning courses delivered through effective teaching methods (Tarman,

2012). Eventually, the current study would reflect the students' learning quality by producing productive and effective students in the classroom environment.

Assumption

This study made the assumption that Islamic teachers would honestly and impartially report their perceptions toward teaching thinking skills in the elementary school level in an effort to help researchers produce accurate and precise findings for teacher preparation programs.

Limitations

This study incorporated the following limitations:

1. The study's population was limited to examining male Islamic teachers' perceptions of thinking skills in the public elementary schools within the Southwestern region of Saudi Arabia due to the Saudi Ministry of Education regulations.
2. The in-service teachers who were selected for the study have backgrounds in thinking skills, either through their university preparation or professional teaching training programs based on the national report on education development in the Kingdom of Saudi Arabia (2013).
3. The results of this study were generalized only to Islamic teachers' perceptions of critical thinking skills in Saudi elementary schools.

Definitions of Terms

Certain terms require a clear definition so that the reader may understand the study concepts.

Critical thinking: I used Facione's definition of critical thinking, which is the "purposeful, self-regulatory judgment which results in interpretation, analysis, evaluation, and inference, as well as explanation of the evidential, conceptual, methodological, criteriological, or

contextual considerations upon which that judgment is based" (as cited in Smith & Stitts, 2013, p. 75).

In this study, critical thinking is a different learning method from memorizing knowledge and facts. It involves differentiating one thing from another based on observation and collecting real evidence. By implementing critical thinking strategies, educators improve students' abilities in terms of comparison, contrast, classification, making assumptions, and applying knowledge in new situations. In this study, the term critical thinking refers to how a student shows that he or she is able to think. The following section identifies the similarities and differences among critical thinking, problem solving, and creative thinking.

Teacher perceptions: Susuwele-Banda (2005) defined perceptions as personal understanding and opinions about a specific topic believed by an individual that are generated from life experience, educational practice, or external influential factors.

In this study, I defined the teacher's perceptions as beliefs, thoughts, insights, opinions, and awareness toward specific educational concerns such as thinking, student academic performance, social problems and changing behaviors.

Islamic studies: Jamjoom (2010) identified Islamic studies as subjects considered primary courses across all Saudi educational system levels. Islamic studies include "Quran, Tajwid (conventions of Quranic recitation), Tafisr (Quranic interpretation), Hadith (sayings of Prophet Mohammad [peace be upon him], Figh (Islamic jurisprudence), and Tawheed (the Oneness of God)" (p. 547). These subjects are critical in terms of students passing to the next level or repeating an academic year. Islamic studies carry a weight of 30% of the student grade point average at the middle (intermediate) and high schools levels (Jamjoom, 2010).

Islamic teachers: A teacher who holds an undergraduate degree (either bachelor or associate degree) in Islamic studies and teaches several subjects in morals, manners, and ethics in the formal education system.

Society and school communities: In this study, society is defined as group of people who live in a certain place, share diversity of experience, and have similar characteristics regardless of their social-class or economic status. The school community includes all the school staff, teachers, and students.

Saudi elementary school:

> Children enter elementary education at the age of 6; the duration of studies is six years. Exceptions can be made for children three months under 6 years, especially for those who have followed the pre-elementary stage. All elementary schools are day schools. Schools are not co-educational. Pupils who pass the examination at the end of Grade VI are awarded the Elementary Education Certificate, qualifying them for study in the intermediate school. (UNESCO, n.d,)

Essentially, elementary schools are described as primary schools in the constitution of the Saudi Ministry of Education.

Saudi Ministry of Education: The Saudi Ministry of Education governs the formal education system that consists of the primary (elementary), intermediate (middle), and the high school, totaling 12 years of schooling.

Summary

Chapter one illustrated the need for this study based on research from different perspectives. Chapter one also addressed the importance of improving thinking skills in the early childhood stage because of the benefits to students, teachers, and societies. This chapter

presented the purpose of the study, which is examining Islamic teachers' perceptions on improving thinking skills in Saudi elementary schools. Chapter two presented the study literature review and explanation of the study's contributions to the body of thinking knowledge. Chapter three presented the procedures for collecting the study data, the study population, etc. Chapter four addressed the study data analysis. Chapter five summarized the study findings and provided recommendations that would benefit the stakeholders of the study.

CHAPTER TWO

REVIEW OF THE RELATED LITERATURE

This chapter presents a reviewing literature on critical thinking, the importance of developing critical thinking in general and in Saudi Arabia in particular, teaching methods to improving critical thinking, the definition of teacher perceptions, the obstacles to improving critical thinking, and a summary of the literature review.

Toward a Definition of Critical Thinking

Critical thinking is considered the highest intellectual activity in human interactions and enables people to engage in the process of making meaningful decisions (Howie, 2011). Additionally, it is considered a central component of human cognitive abilities.

Teaching students' thinking skills in general, and critical thinking specifically, has a long history throughout the plethora of educational philosophy movements from Socrates to modern-day theorists. However, "it was not until the 1950's that critical thinking began being officially taught in the schools as an essential life skill by encompassing these skills within the school curriculum" (Bataineh & Alazzi, 2009, p. 57). "The need for an educated citizenry and quality workforce and citizens' ability to think critically and reason well has been regarded as important and necessary outcomes of education" (Alazzi, 2008, p. 243) and was viewed as the main reason for emphasizing the teaching of critical thinking skills.

John Dewey, who is widely known as a father of democratic education, underscored the crucial role of improving young learners' intellectual abilities through their environment and sharing experiences with others because people are born with the aptitude and capability to think critically. Jean Piaget, an educational theorist known for his epistemological investigation of children's cognitive development, highlighted the considerable roles teachers play in

preparing children to examine the value of knowledge and to think critically, in order to reconstruct and invent new things in order to succeed in life (Ozkan-Akan, 2003).

Importance of Developing Critical Thinking

During the last decades of the 20th century, the importance of developing children's thinking skills has increased because the increasing complexity and shifting realities of modern life increased the need for generating new knowledge, comprehension, judgment, and evaluation skills in order to deal with job market requirements. Furthermore, critical thinking has recently become an essential qualification demanded by employers seeking solutions to unexpected problems and strategies for successfully competing on the global business market (Alazzi, 2008; Bataineh & Alazzi, 2009). Therefore, improving critical thinking has become a significant school task in the 21st century. G. F. Smith (2002) contended that the importance of developing learner critical thinking skills has been increased in the past decade because they are essential core life skills.

Throughout the 20th century, studies have emphasized the importance of improving cognitive skills in young children because of their high capability of learning basic knowledge, values, aptitudes, and general competencies. Fisher (in press) stated, "most of the growth of the human brain occurs in early childhood: by the age of six, the brain in most children is approximately 90% of its adult size" (p. 1). McGuinness (2005) stressed the importance of teaching critical thinking skills to children to enable them to become higher-level thinkers, thereby producing creative thoughts that prepare them to become tomorrow's leaders. Similarly, Fisher (in press) insisted that teachers should take children's mental development into account at an early age because it "may be more effective than waiting until the brain is fully

developed. Cognitive challenge is important at all stages, but especially in the early years of education" (p.1).

It is essential to improve thinking skills in general (Burke et al., 2007; Kowalczyk, Hackworth & Case-smith, 2012; Marlow & Inman, 1992) and critical thinking skills in particular in elementary school students (Ozkan-Akan, 2003; Sa-U & Abdurrahman, 2008; Stedman & Adams, 2012) and secondary school levels students (Alazzi, 2008; Bataineh & Alazzi, 2009; Furtado, 2010; Zeteroglu, Dogan, & Derman, 2011). Several studies have stressed the importance of improving students' thinking skills in higher education such as high schools, colleges, and universities (Alwehaibi, 2012; Bensley et al., 2010; Innabi & El Sheikh, 2007). Moreover, Peterson, Kromrey, Borg, and Lewis (1990) stressed the importance of developing students' critical thinking skills within the healthcare discipline and as a general interdisciplinary skill as addressed in Hudgins and Edelman's study.

As mentioned above, all these studies advocated improving students' thinking skills for several reasons. The most important of which is the how the students will benefit in the future.

> Developing individuals [critical thinking] from childhood is considered an important objective of education in order to solve problems in today's already complicated physical and social environment and thus to adapt. On the other hand, one of the reasons why [critical development] should gain importance in education is the need of the child to reach original solutions and realize his/her full potential. (Zeteroglu et al., 2012, p. 3137)

Improving Critical Thinking in Saudi Arabia

Many schools around the world, particularly in Middle Eastern countries, have reformed elementary school curricula because the educational stakeholders (i.e. parents and administers)-

think the school curriculum restrains and inhibits the development of the students' analytical and critical thinking skills. Reforming education consists of improving teaching methods by switching the emphasis from imparting information to the students to examining and evaluating knowledge in order to improve the students' cognitive abilities. This allows students to achieve their potential goals and to play an active role in their countries' reformist developments (Alazzi, 2008; Alwehaibi, 2012; Bataineh & Alazzi, 2009).

For example, the Saudi educational system recently made remarkable progress in both higher and elementary education levels in focusing on developing students' thinking skills through different techniques and strategies. This is because "Saudi education has been subject to a great deal of criticism for its lack of focus on critical thinking and problem solving and overemphasis on memorization" (Al Ghamdi, Hamdan & Deraney, 2013, p. 178). Improving cognitive abilities has become a primary, fundamental, and valued educational goal because education and accelerating pupils' thinking are inseparable. Therefore, the Saudi Ministry of Education's efforts of reforming its educational system and the industrial movement in the Saudi society create a need for developing students' thinking skills overall, and critical thinking skills in particular, using a professional approach. Saudi educators have argued for the inclusion of critical thinking skills in schools across all educational disciplines in order to be globally competitive in the business world (Alwehaibi, 2012).

In addition, they called for instruction in critical thinking in elementary schools, specifically in order to advance the students' skills and attitudes toward effective thinking by applying them in different subjects. However, the issue of how to improve students' critical thinking skills still remains a widely controversial topic among all the Saudi education stakeholders such as parents, educators, and policy makers.

Although the importance of improving students' critical thinking through the school environment has become evident, Alwehaibi (2012) reported that Saudi students lacked the ability to think critically. Likewise, Cameron (2011), an English teacher in the Saudi Technical and Vocational Training Corporation-- Riyadh College of Technology-- stated "the majority of youth in the Saudi Arabia are not equipped with critical thought skills or provided the opportunities to display dissatisfaction" (p. 1). Alwehaibi (2012) attributed this problem to several factors such as school curricula, learning activities, teacher preparation programs, and teacher perceptions toward teaching thinking skills.

Thus, Alwehaibi (2012) pointed out there is a need for examining teachers' perceptions toward improving thinking skills and how educators influence the progress of pupils' thinking skills across all educational levels with the purpose of increasing the quality of teacher candidate programs for pre-service teachers and training programs for in-service teachers. Alwehaibi (2012) called for further studies to examine Saudi teachers' perceptions toward improving thinking skills among students and their influence on the progress of students' thinking skills across all the educational levels. Furthermore, Alwehaibi (2012) suggested that results from such studies should be integrated into teacher education programs in order to train pre-service and in-service teachers on how to improve Saudi learners' critical thinking abilities.

Defining Critical Thinking Skills

There is an ongoing theoretical debate among researchers as to the definition of critical thinking. Influencing this debate are issues related to individual understandings of terms, research needs and interests, researchers' cultural backgrounds, and educational philosophies of the researchers (Alazzi, 2008, Ozkan-Akan, 2003; Sa-U & Abdrahman, 2008). Therefore, it is necessary to define what this study means by critical thinking because "if educators and

psychologists do not know the meaning of critical thinking, how can researchers improve it. Considerations of critical thinking have remained largely in the realm of theoretical speculation, working assumptions, anecdotal observation and pedagogical discussion" (Robinson, 2005, p. 26).

It is also necessary to define critical thinking to help the reader understand the study's concepts. Literature devoted to thinking skills overall and critical thinking exclusively has offered a variety of explanations of critical thinking and its categories. Scholars have defined critical thinking from different perspectives. For example, Facione (as cited in Smith & Stitts, 2013) who has made major contributions to the subject of the philosophy of critical thinking, defined critical thinking as "habitually inquisitive, flexible, orderly in complex matters, and diligent in seeking relevant information" (p. 75). He also found "that the interpretation, analysis, evaluation, inference, explanation and self-regulation were the cognitive skills at the core of critical thinking" (as cited in Smith & Stitts, 2013, p. 75).

Halpern's (1996) and Paul and Elder's (2008) definitions were essentially consistent with Facione (as cited in Klein, 2011). They defined critical thinking based on the analytical process, either theoretically or practically. Halpern (as cited in Klein, 2011) defined critical thinking as "purposeful, reasoned, and goal directed - - the kind of thinking involved in solving problems, formulating inferences, calculating likelihoods, and making decisions" (p. 1). However, he pointed out the word

> critical is not meant to imply finding fault, as it might be used in a pejorative way to describe someone who is always making negative comments. It is used instead in the sense of 'critical' that involves evaluation or judgment, ideally with the

> goal of providing useful and accurate feedback that serves to improve the thinking process. (Halpern, 1996, p. 451)

Paul and Elder (2007) described critical thinking as "the art of analyzing and evaluating thinking with a view to improving it" (p. 2). Additionally, Innabi and El Sheikh (2007) identified critical thinking as "the art of taking charge of one's own mind" (p. 47). This addresses a number of essential critical thinking skills such as questioning, supposition, hypothesis, inference, and supporting evidence. However, they emphasized implementing rather than theorizing the critical thinking skills saying, "if someone [acquires] the critical thinking skills, it is not necessary to think critically, but it depends upon the degree of applying these skills in different situations" (Innabi & El Shelkh, 2007, p. 47).

Interestingly, Smith and Stitts (2013) further expanded the definition of critical thinking to include "quick thinking (practice thinking on one's feet); creative thinking (thinking "outside the box"-- boundaries stated parameters); and analytical thinking (solving problems logically, using a scientific approach of defining problem, generating a list of possible solutions, selecting solution, implementing, evaluating and making adjustments" (p. 75).

Additionally, Dewey used reflective thinking synonymously with critical thinking, which means "the active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of grounds that support it and the further conclusions to which it tends constitutes reflective thoughts" (Al-Qahtani, 1995, p. 156). Bensley et al. (2010) illustrated reflective thinking that aims to draw a meaningful conclusion from concrete evidence. Moreover, Ennis (1987) identified critical thinking as "reasonable reflective thinking that is focused on deciding what to believe or do" (p. 10). Critical thinking is similar to reflective thinking in terms

of applying reasoning and introspective methods using relevant evidence in order to solve problems or to reach the right and thoughtful conclusion through correct premises.

From another perspective, Moore (as cited in Klein, 2011) identified critical thinking through a metacognitive lens as "a deliberate meta-cognitive and cognitive act whereby a person reflects on the quality of the reasoning process simultaneously while reasoning to a conclusion. Thinkers have two equally important goals:coming to a solution and improving the way she or he reasons" (p. 1). To illustrate this definition, he noted that critical thinking encourages the learner to employ their cognitive skills to evaluate in order to deal with a certain situation (Moore, 2009).

As research indicates, some researchers often define critical thinking as the process of analysis, integration, reconstruction, and evaluation of knowledge and experience using several methods in different learning situations and settings. For example, Maiorana (1992), Kowalczyk et al. (2012), and Stedman and Adams (2012) defined critical thinking as the process of evaluating knowledge to determine its worth, value, and merit for making effective and good decisions. In fact, this process helps individuals make purposeful, meaningful, and unbiased decisions or judgments based upon the use of a variety of critical thinking skills such as interpretation, reflection, and applying the available evidence to a particular discipline (Halpern, 1996; Maiorana, 1992; Kowalczyk et al., 2012; Stedman & Adams, 2012).

Likewise, Alazzi (2008) pointed out that critical thinking researchers often depend on Edward Glaser's definition, which includes "(1) an attitude of being disposed to consider in a thoughtful way the problems and subjects that come within the range of one's experience (2) knowledge of methods of logical inquiry and reasoning (3) some skills in applying those methods" (p. 244). As a result, Alazzi (2008) summarized the resemblances and similarities in

the definitions of critical thinking that include all the mental and intellectual processes, approaches, techniques, and personal attitude and perspective involved in interpretation of data, making predictions, reflection, decision-making, and problem solving. In other words, critical thinkers should effectively investigate the problems through scientific steps starting with stating the problem to testing the experiment's outcomes.

According to Simpson and Courtney (2002), cognitivists support the view that critical thinking is a learning philosophy that teachers translate inside the classroom rather than a number of mental skills. To accomplish the goal of this philosophy, teachers use a variety of techniques and strategies in order to encourage students to justify their daily actions. Therefore, they suggested that knowledge acquisition is the mental activity that entails internal coding of information and the structuring of the body of personal knowledge by learners.

The Strategic Plan of the Saudi Ministry of Education (1974) identified the critical thinking skills that include observation, analysis, synthesis, evaluation, evidence collecting, comparison, contrast, innovation, invention, abstraction, and construction. This plan encourages educators to use the different kinds of teaching methods for developing students' abilities to evaluate and organize their thoughts and ideas.

Maiorana (1992) summarized the purpose of critical thinking as using the questioning and examination techniques in order to explore the surrounding environment to evaluate others' viewpoints and assumptions, and to solve real world problems. In fact, critical thinking "requires both skills in using rules and criteria for making reasoned judgments and the disposition to use those skills" (Bensley et al., 2010, p. 91). Furthermore, Halpern (1996) pointed out that critical thinking refers to "the use of those cognitive skills or strategies that increase the probability of a desirable outcome - in the long run, critical thinkers will have more desirable outcomes than

'noncritical' thinkers (where 'desirable' is defined by the individual, such as making good career choices or wise financial investments)" (p. 450). Similarly, Broadbear (as cited in Smith & Stitts, 2013) argued that critical thinking activities should include four critical elements: " (1) ill-structured problem; (2) criteria for assessing thinking, (3) students assessment of thinking; and (4) improvement of thinking" (p. 76).

In extending the view of critical thinking, Halpern (2002) and Kenney (2013) emphasized that critical thinking is not an inherent skill, but a skill that must be improved upon in education settings such as schools, colleges, and universities. Similarly, Zeteroglu et al. (2012) acknowledged that critical thinking "is not a skill that comes with birth and is not a skill peculiar to artists, to develop and progress [thinking skills] fertile environments and conditions should be provided" (Zeteroglu, et al., 2012, p. 3137)

Also, critical thinking "is a habit of mind that people should have all the time to be in charge of their minds. It is more than a list of steps that are applied to specific situations" (Innabi & El Sheikh, 2007, p 47), but it can be developed in certain circumstances and with rich guidance with adequate applications related to the real world. Finally, there are a number of strategies to develop critical thinking such as education, practice, and experience.

Education plays a significant role in the improvement of critical thinking skills when using a learner-centered approach in order to foster and accelerate the students' learning capacities. Furthermore, Moore (2009) pointed out that critical thinking is an inherent skill, which means it can be improved in every one by practicing thinking activities. Klein (2011) concurred with Moore (2009) stating, "critical thinking seems to be a trainable skill" (p. 1).

Ozkan-Akan (2003) stressed the importance of improving learner's cognitive abilities in terms of applying knowledge in the real world rather than merely recalling and memorizing

knowledge. Moreover, he noted that critical thinking is the crucial tool for dealing with life's problems and performing productively in a complex and rapidly changing life. Training for critical thinking skills in the classroom setting produces critical thinkers who are liberal and capable of posing critical and meaningful inquiry by analyzing of others' ideas (Kenney, 2013). However, Foley (2008) pointed out teachers sometimes face difficulties in training their students in the practice of critical thinking skills. Essentially, teachers must understand that improving a student's critical thinking skills "takes time and a lot of coaching and on-going development" (Foley, 2008, p. 775).

In summary, critical thinking is a different learning method from memorizing knowledge and facts. It involves differentiating one thing from another based on observation and collecting real evidence. By implementing critical thinking strategies, educators improve students' abilities in terms of comparison, contrast, classification, making assumptions, and applying knowledge in new situations. In this study, the term critical thinking refers to how a student shows that he or she is able to think. The following section identifies the similarities and differences among critical thinking, problem solving, and creative thinking.

Similarities and Differences among the Types of Thinking Skills

Until now, critical thinking literature has highlighted the importance of critical thinking for learners regardless of their educational levels. But there is confusion when researchers use "critical thinking" interchangeably with other terms, such as reflective thinking, problem solving, metacognition, and creative thinking for illustrating and prioritizing thinking skills because they often assume these terms to be synonymous. It is necessary to illustrate briefly the similarities and differences of the types of thinking skills in order to help the reader understand the concepts of the study.

At the beginning, Burke et al. (2007) proposed that cognitivists have attempted to categorize and classify thinking skills by "using hierarchal frameworks. These frameworks differ in terms of terminology and in whether they are purely cognitive skill frameworks or include metacognitive and effective skills and dispositions whilst research on thinking would benefit from further conceptual clarification" (p. 2). Psychologists have addressed thinking skills in terms of general types of thinking such as creative thinking, critical thinking, problem solving, metacognitive skills, analytical skills, and decision-making (Walsh & Paul, 1988).

In addition, Sternberg (as cited in Klein, 2011) stated that thinking skills include three major components: critical thinking, creative thinking, and practical thinking. However, he insisted that critical thinking is the central cognitive skill. Ennis stated an alternative view (as cited in Innabi & El Sheikh, 2007) by mentioning that critical thinking is the major thinking skill that includes three type of thinking skills:

> 1) Critical thinking starts as a problem-solving process in the context of interacting with the world and other people; 2) it continues as reasoning process, informed by background knowledge and previously acceptable conclusions, and it results in drawing a number of inferences through induction, deduction, and value judging; and 3) the critical thinking process ends in a decision about what to do or believe. Even though critical thinking and other types of thinking such as problem solving, creative thinking, and making decision processes are interrelated, they still differ from each other as each one of them serves a specific purpose. (pp. 47-48)

Similarly, Robinson (2005) agreed with Ennis' classification, but pointed out that "critical thinking has a cognitive abilities dimension and another dimension that is attitudinal in

nature. Variation in cognitive abilities refers to individual differences in the efficiency of processing information. The information-processing schema includes memory, storage, search and retrieval of information" (p. 27). As mentioned above, critical thinking is the large umbrella over the cognitive skills that range from recall skills to judgment and evaluation, and the application of using these skills.

However, numerous researchers differentiate among critical thinking, creative thinking, problem solving, decision-making, and metacognition (e.g., Simpson & Courtney, 2002). It is necessary to identify these differences in order to help educators understand how teachers can improve a variety of thinking skills in the learning environment.

Problem Solving vs. Critical Thinking

According to Simpson and Courtney (2002), problem solving differs from critical thinking in some respects. Problem solving is an operational skill that focuses on a problem by identifying its causes and effects in order to find appropriate solutions. Dereli-IMan (2013) pointed out that problem solving is the cognitive process that occurs when people in general, and students in particular, face daily problems, whether social, economic, or political.

Britz and Richard (as cited in Pitri, 2013) defined problem solving as "decision making through spontaneous investigation, exploration, and experimentation. It means pursuing understanding, looking for answers, trying out some possibilities, and finding out whether or not they work" (p. 42). Problem solving follows the series of scientific steps of recognizing the problem, identifying its causes and effects, generating alternative solutions, testing these solutions, and choosing applicable and suitable solutions. These steps rely on the employment of critical thinking skills, such as reframing questions, critiquing resolutions, and evaluating the

outcome of solutions (Pitri, 2013). “Deficiency in any steps of [problem] solving leads to antisocial solution” (Ireland as cited in Dereli-IMan, 2013, p. 492).

However, critical thinking encompasses observations, comparison, contrast, explanation, analysis, and prediction based on available data. In the critical thinking literature, Walsh and Paul (1988) highlighted that critical thinking depends mainly on observation for gathering information and evidence using different mental skills levels. An alternative view expressed by Hudgins and Edelman (1986) is that critical thinking is “the disposition to provide evidence in support of one’s conclusion and to request evidence from others before accepting their conclusions” (p. 333). In addition, Beyer (as cited in Cotton, 1991) pointed out that “critical thinking has two important dimensions. It is both a frame of mind and a number of specific mental operations” (p. 3).

Of course, problem solving is the first step of the critical thinking process (Ennis as cited in Innabi & El Shelkh, 2007), but critical thinking goes a step further in terms of raising significant questions and critiquing possible solutions. Essentially, Simpson and Courtney (2002) noted that, “critical thinking does not seek an answer whereas problem solving, by its very nature, expects an answer. Perhaps a reason why confusion exists around the differences between problem solving and critical thinking is because critical thinking needs to be understood as a process” (p. 11).

Creative Thinking vs. Critical Thinking

Creative thinking is a one of the cognitive skills that offers a new perspective to come up with new ideas and concepts, to raise new questions, and to generate alternative solutions based upon available information (Newton & Newton, 2010). Moreover, it is a mixture of knowledge and imagination and thought about the knowledge. Furthermore, Simpson and Courtney (2002)

stated that “a creative thinker typically has an attitude of interest in everything, continuously exploring new ideas, options, alternatives and approaches and then trying to manipulate the understanding into new knowledge or meanings” (p. 25).

On the other hand, critical thinking skills require collecting and investigating data about the research problem in order to reach a sound conclusion and to make wise decisions while lower-ordered thinking skills include memorizing, retrieving, and storing information in the memory and comprehending the knowledge being given to the learners (Halpern, 1996).

According to Innabi and El Sheikh (2007), critical thinking consists of several elements: “purpose, question at issue, assumptions, inferences, implications, point of view, concepts and evidence. However, using these elements is not enough to think critically; it is important to assess the degree to which we are using them in accord with intellectual standards like clarity, accuracy, relevance, depth, breath, and logic” (p. 47).

Regarding the connection between critical thinking and creative thinking, educators have to know all thinking skills are interrelated. For example, Paul (as cited in Simpson & Courtney, 2002) highlighted that critical and creative thinking “have an intimate relationship for figuring things out. There is a natural marriage between them” (p. 25). Also, creative thinking is connected with the right part of the brain, which is responsible for generating ideas and images while critical thinking is associated with the left part of the brain where critiquing and evaluating take place (Moore, 2009).

Teaching Methods for Improving Critical Thinking Skills

Improving student critical thinking skills is a major school task because the school is the appropriate place for promoting and developing such skills. The promotion of students’ abilities to solve complex issues and to think critically is now often a criterion for school accreditation

(Yildirim, 1994). However, it is also a major school problem related to teaching methods and assessment tools. Green (1993) and Bissell and Lemons (as cited in Scott, 2008) asserted that "it is a sad truth that the average college student does not think critically, and not all courses include critical thinking" (p. 39) due to the fact that their courses often do not incorporate critical thinking skills. However, Stedman and Adams (2012) argued that "students are able to think critically on their own, but this skill needs to be strengthened and reinforced by teachers. Furthermore, the way material is presented has a large effect on whether or not critical thinking takes place" (p. 9).

Of course, teachers can solve this problem if they understand the nature of critical thinking, and have a basic theoretical framework of critical thinking. In fact, cognitivists have differentiated between the two theoretical views of critical thinking: the content of critical thinking and the strategies of improving critical thinking (Halpern, 2002; Ozkan-Akan, 2003; Yildirim, 1994). The first view focuses on the content of thinking through designing effective, deep, and thoughtful subject matter and creating useful learning environments. The proponents of this view contend teachers should challenge students' cognitive processes through learning content because there is a correlation between the learning content and improving the cognitive process. Additionally, Yildirim (1994) proposed that "it may not be possible to teach someone how to think directly, but it is possible to improve the way someone thinks. This can be done best in terms of knowledge structures and process interactions" (p. 28). Therefore, teachers play an important role in selecting appropriate knowledge for students and organizing it in an attractive and smart form to improve learners' critical thinking skills. One of the disadvantages of this view is teaching students certain knowledge within specific subjects may limit their abilities to explore and examine other ideas (Ozkan-Akan, 2003; Yildirim, 1994).

However, advocates of the strategies for developing and teaching critical thinking stated that critical thinking compounds specific skills such as observation, collection of evidence, comparing, classifying, and evaluation (Ozkan-Akan, 2003; Yildirim, 1994). Cognitivists with this view appreciate and value the knowledge, but focus and concentrate on training students' skills because they believe critical thinking skills are the tools for gaining benefits from knowledge in terms of applying and using the learning content in problem solving. The aim is to provide multiple applications for students that enable them to use different thinking skill levels, such as "Critical Analysis and Thinking Skills (CATS), Cognitive Research Trust (CORT)" (Ozkan-Akan, 2003, p. 18). As a result, it is the responsibility of teachers and parents to work on their pupils' skills at an early age by employing different teaching methods to enhance students thinking during their course work (Yildirim, 1994).

Regarding teaching critical thinking approaches, Ennis (1989), Plath, English, Connors and Beveridge (1999) and Halpern (2002) classified the approach to critical thinking instruction into three categories: "the general approach", "infusion approach", "and immersion approach". At the outset, the general approach is defined as "an approach that attempts to teach critical thinking abilities and dispositions separately from the presentation of the content" (Ennis, 1989, p. 4). In the infusion approach

> [S]tudents are encouraged to think critically in the subject, and in which principles of critical thinking are made explicit. The immersion approach is similar to the infusion approach expect that the principles of critical thinking are not made explicit. The mixed approach is one where a combination of the general approaches with either the infusion or the immersion approach is employed. (Plath et al., 1999, 210)

Essentially, researchers have recommended teachers use the most effective teaching methods to encourage students to think critically. For example, Halpern (2002) said, "A broad based, cross-disciplinary approach is most effective for critical thinking instruction" (p. 30). Like Halpern (2002), Ennis (1989) suggested that critical thinking, "is subject specific and will most effectively be taught in a mixed approach" (p. 50).

Dewey and Bento (2009) mentioned that teaching thinking skills could be divided into three methods: in a separate class, in specific subjects, and through infusing throughout the curriculum. Teaching thinking through a separate method focuses on improving the thinking skills-cognitive process through specific programs in a separate lesson. Developing thinking skills through specific subjects focuses on improving the students' thinking skills through a series of lessons to raise the level of thinking within that subject and to accelerate their development to the next stage of thinking. The infusion method can be used across the curriculum, and is defined as metacognition. David (as cited in Scott, 2008) stated the infusion method involves critical thinking, creative thinking, problem solving, decision-making, synthesis, and analysis of content being studied. This method plays a central role in activating student-thinking skills in an explicit manner using different types of thinking skills that they have learned.

Additionally, Howie (2011) mentioned that categorizing teaching thinking skills approaches is categorized based on Harpaz's three classifications:

> The skills approach (teaching various thinking means, such as strategies, that render the thinking process more faster and more effective and precise; the disposition approach and thinking disposition being in Harpaz's terms, a reasoned motivation for certain thinking patterns, a thinking quality such as

> open-mindedness, depth, systematic thinking); and the understanding approach (Harpaz considers that knowledge and thinking to be interconnected and a approach makes clear the conditions under which knowledge becomes understanding). (Howie, 2011, p. 11)

To foster students' critical thinking skills, teachers must discard using those direct teaching methods that make students passive recipients of knowledge. For example, "most teachers use a lecture format in their classrooms, but this popular approach does not encourage critical thinking by the students" (Stedman & Adams, 2012, p. 9) because they become dependent on memorization and retrieval of the information. Conversely, teachers should employ efficient teaching methods and learning techniques that encourage students to participate, and to engage and communicate with others. They should also incorporate different programs that develop children's critical thinking, "such as de Bono's CoRT materials, Lipman's philosophy programs and Feuerstein's instructional enrichment program… and the Talent Unlimited program" (Rodd, 1999, p. 351). These programs encourage critical thinking skills by challenging students to produce meaningful information and allowing them to choose the meaningful and useful knowledge based upon given criterion.

Essentially, Simpson and Courtney (2002) recommended teachers use the following teaching methods in order to enhance students' critical thinking skills.

Inquiry-based learning encourages learners to participate actively in classroom activities and offers countless benefits over independent learning, such as discovering and focusing on real world problems by formulating critical questions. Answering these questions leads students to analyze the learning materials, explore the surrounding world, and engage their communities.

Another effective teaching critical thinking method is the classroom debate. According to Scott (2008), several studies found that classroom debate progresses and develops student critical thinking skills by engaging students in the learning materials through asking questions, testing hypotheses, evaluating assumptions, and reading and writing critically. Also, classroom debates encourage students to distinguish between the main points and supporting details. In addition, Walker and Warhust (as cited in Scott, 2008)

> claimed that debates in the classroom have been effective in increasing critical thinking by letting students connect as they learn subject knowledge. In their classes, they found that 82% of students thought that they understood the subject matter, and 85% believed that they learned something valuable. (p. 40)

However, to achieve the benefits of classroom dialogue, teachers should play an active role in facilitating the discussion process to allow equal student participation.

To improve children's critical thinking, Costa (as cited in Ozkan- Akan, 2003) stressed the important role of school activities such as adequate applications in developing students' critical thinking skills and operating a wide range of thinking skills. In fact, these activities help educators reform the students' mentalities to become critical, effective, and productive thinkers rather than passive recipients of information.

In order to assess students' critical thinking skills, Scott noted "there are many ways that critical thinking has been assessed in the classroom, including using pre-and posttest, case studies, storytelling, role-playing, and debates" (p. 40). Also, as Bissell and Lemons (2006) stated, educators can use Bloom's taxonomy to assess the improvement of student critical thinking skills by escalating leaners from the lowest level (memorization) to the highest level (evaluation) through ample classroom activities.

Teacher Perceptions

Teachers' perceptions have a powerful effect on their adoption of teaching techniques, use of a verity of assessment instruments, and students' learning performance in the classroom. Therefore, the need to focus on teachers' perceptions, beliefs, and opinions has become a significant topic for decision makers to improve and develop any educational system. Researchers have recommended future study to investigate teacher perceptions toward teaching and learning because they enhance educators and policy makers in education comprehension

> of the relationship between teacher beliefs and education reform. Many of the reform attempts of the past have ignored the role of teacher beliefs in sustaining the status quo. Many studies reviewed suggest that teacher beliefs are a critical ingredient in the factors that determine what happens in classrooms. (Tobin, Tippins, & Gallard, 1994, p. 64)

Regarding teacher perceptions, there are several different definitions of perception. Czerniak, Lumpe, and Haney (as cited in Tarman, 2012) defined teacher perceptions as "personal convictions, philosophies, or opinions about teaching and learning" (p. 1966). Similarly, Rokeach (1968) explained teacher perceptions as "any simple proposition, conscious or unconscious, inferred from what a person says or does, "I believe that" (p. 113). Sainn and Ugwuegbu (1980) define perception as the systemic series of questions by which researchers draw out and obtain meaningful themes and opinions about the specific topic being studied. This process helps researchers to analyze and interpret the participants' emotions and feelings.

Moreover, Sainn et al. (1980) pointed out that stimulating the perceiver helps researchers to extract the study participants' experience and society's demands and desires. Also, in this type of study, individuals play an active role in expressing personal experience. Additionally,

"perception is a higher mental process which helps an individual build up a model of his or her world in order to help anticipate future happenings and deal with them appropriately" (Sainn et al., 1980, p. 199).

There are interrelated relationships between teacher perceptions and their actions in the learning setting. However, Tarman (2012) stated it is possible to change teachers' prior perceptions by providing them with professional developmental programs. Teacher perceptions toward improving thinking skills and critical thinking have recently been the subject of investigation to explain and illuminate how teachers' beliefs affect teacher practice and the classroom environment. The teacher is one of the most significant educational system components in terms of producing creative and productive students. Susuwele-Banda (2005) contended that "a school may have good classrooms and all the necessary teaching materials, but if teachers are not able to organize the classroom environment to promote the learning process, all the materials and classrooms mean nothing" (p. 35).

In fact, researchers have acknowledged that teachers play an important and active role in successfully improving critical thinking abilities of students in elementary schools. They found improving learners' critical thinking skills largely depends on the teachers (Dunn, 1988; Sa-U & Abdrahman, 2008; Smith, 2002; Tengku, 1994; Thibeault, 2004). Ozkan-Akan (2003) stated that teachers' perceptions can have either a positive or negative impact on the development of students' critical thinking abilities because they are able to bolster and hamper students' thinking abilities. Teachers' perceptions toward teaching thinking skills and their lack of sufficient theoretical and practical knowledge of thinking skills hinders their ability to facilitate the learning process (Kowalczyk et al., 2012). Rosanai and Suhailah (as cited in Ozkan-Akan, 2003)

found the “teachers’ sense of efficacy and value of teaching” (p. 146) thinking influenced their perception on teaching students thinking.

Essentially “it is important to consider how much a teacher’s perception of critical thinking has effect on the student’s ability to learn and thinking critically” (Stedman & Adams, 2012, p. 9). In the following section, I addressed the factors that have influenced teachers’ perceptions toward generally improving thinking skills while specifically focusing on critical thinking across all education disciplines.

Addressing Obstacles to Improving Critical Thinking Skills

Although the significance of developing students’ thinking skills is becoming understood, there are several factors that hinder and impede the progression of critical thinking abilities. These factors are society (Bataineh & Alazzi, 2009), educational background, social-class, school involvement of parents, (Lauer, 2005; & Maiorana, 1992), teaching methods, and learning material (Beyer, 1984; & Brookfield, 1987) that depend on the factual knowledge that limits judgment and evaluation skills, classroom environment (Howie, 2011; Kelly, 2009; Kowalczyk. et al., 2012; Moore, 2009; Stedman & Adams, 2012; Zeteroglu et al. 2012), and teacher perceptions (Alazzi, 2008; Bataineh & Alazzi, 2009; Burke et al., 2007; Fisher, 2007; Ozkan-Akan, 2003). Additionally, barriers impeding improvement of critical thinking in the classroom include the educator’s lack of necessary skills to assess and allocate the students’ critical thinking skills and resources to implement critical thinking strategies within classroom environments (Aliakbari & Sadeghdaghighi, 2013; Kowalczyk et al., 2011).

Similarly, Sternberg (as cited in Ozkan-Akan, 2003) summarized the obstacles to fostering student thinking an ability in eight constraints: teacher perception, student aptitude and mental ability, learning material, learning sequence, teaching strategy, the partnership among teachers and students, learning competency, and classroom environment.

In Saudi Arabia, Al-Qahtani (1995) conducted research on the factors influencing the teaching of thinking skills in social studies courses such as history and geography. These factors are teacher perceptions about their teaching of thinking skills, classroom structure, teaching methods, the role of the students, and instructional technology. In this study, I examined the following ideas in order to deduce if they affect Islamic teachers' perceptions toward improving critical thinking: teacher perceptions of society and school community constrain improvement of critical thinking skills, teacher perceptions of self-efficacy constrains improving critical thinking skills, teacher perceptions of Islamic studies constrains improvement of critical thinking skills, teacher perceptions of teaching methods constrains improvement of critical thinking skills, teacher perceptions of classroom structure constrains improvement of critical thinking skills, teacher perceptions of student ability constrains improvement critical thinking skills, and teacher perceptions of assessment tools constrains improvement critical thinking skills.

Teacher Perceptions of Society and School Community Constrain Improvement of Critical Thinking Skills

In the Middle East, society and community culture are considered the most common obstacle to improving critical thinking and instead favor harmony and security in the community (Alazzi, 2008). Therefore, "questioning authority figures such as parents, teachers, and school administrators, and politicians is interpreted as disrespectful behavior and opposing the accepted ways of doing things so that critiquing and questioning knowledge and authorities is not promoted in their societies" (p. 10). In less developed countries, the role of school curriculum is to deliver the culture of society to the learners in terms of initiating students into norms of their

cultures and teaching them the common cultural heritage because they think it is an essential way to protect their communities from external influences (Bataineh & Alazzi, 2009).

In a Saudi context, culture is an important resource for reforming and building school curricula because it represents the different aspects of society, such as religions, economies, and customs. However, culture is the one of topics that conservative leaders and politicians deem off limits to criticism and questioning. Therefore, students are discouraged from questioning, challenging, or critiquing the ideas of authorities, such as teachers, elders, parents, and politicians. Students often try to avoid such topics for critical discussion because they would be subject to failing in their academic courses or social exclusion (Allamnakhrah, 2013).

Authority figures are another cultural aspect in these types of societies that often attempt to create the hypothetical subliminal political ceiling in an effort to control citizen's questions. However, this leads the limiting of people's freedom and affects people's identities. These figures often thwart people from practicing critical thinking in their daily lives (Allamnakhrah, 2013; Bataineh & Alazzi, 2009).

It is vital to stimulate student critical thinking through practical activities across different disciplines to foster and improve the student's mental abilities. Also, Moore (2009) stressed that encouraging students' in practicing thinking skills, such as inference making, decision-making, and problem solving, will help them to think effectively and to become more productive citizens. However, Allamnakhrah (2013) contended that the advantage of critical thinking is its effect beyond the academic environment to the real world where it will be used to increase the quality of life throughout society and the competence of the workers in the workplace.

Teacher Perceptions of Pre-Service Candidate Teacher Preparation Program and In-service Teacher Professional Developmental Program Constrain Improvement of Critical Thinking Skills

Critical thinking enables individuals to engage in the process of reaching sound conclusions by collecting comprehensive information that is linked to individual, community, financial, and political topics (Beyer, 1984; Howie, 2011). It is essential to improve cognitive skills during childhood in order for students to lead successful lives in in several key areas, such as meeting marketplace demands and solving societal problems (G. F. Smith, 2002).

In order to participate successfully in the global business competitions, educators have argued for the inclusion of critical thinking skills in schools across all educational disciplines (e.g., Al-Essa, 2009; Al-Qahtani, 1995; Alwehaibi, 2012). This is because critical thinking is becoming one of the essential goals of school curricula in the 21st century (Ozkan-Akan, 2003; Sa-U & Abdrahman, 2008). In fact, Elder (2005) insisted that "critical thinking is foundational to the effective teaching of any subject" (p. 39); similarly, Al-Qahtani (1995) and Thibeault (2004) proposed that all school subjects, such as mathematics, science, language arts, and social sciences study are grounded in critical thinking.

For that, Elder (2005) emphasized the significance of including critical thinking across all educational disciplines in both teaching candidate preparation programs and in-service teacher training programs. Dewey (as cited in Allamnakrah, 2013) proposed that the "teacher education programs should be able to help pre-service teachers reflect on problems of practice" (p. 197). Similarly, Walsh and Paul (1988) stated that critical thinking "should be thoroughly integrated into all aspects of the teacher education programs and prepare future teachers to be models for

effective thinking strategies" (p. 40). Likewise, Akyuz and Serap (2009) pointed out that undergraduate teacher programs must be built on critical thinking because

> [M]any educators believe that specific knowledge will not be as important to tomorrow's workers and citizens as the ability to learn and make sense of new information. On the other hand, most scholars can agree that one aspect of critical thinking is the ability to analyze, understand, and evaluate an argument. (p. 541)

However, several studies (Allamnakrah, 2013; Alwehaibi, 2012) reported that Saudi students lack the ability to think rationally and critically. They attributed this problem to their teachers' failure to teach critical thinking skills to learners which is due to a lack of theoretical and practical knowledge of critical thinking. Researchers claim that a lack of critical thinking knowledge and practice impedes the improvement of students' critical thinking (Kowalczyk et al., 2012; Lauer, 2005; Paul, 2007; Stedman & Adams, 2012). Furthermore, Allamnakrah (2013) mentioned that the lack of critical thinking in teaching candidate preparation programs not only affects current students, but also future students because current "students will be responsible for instilling critical thinking in their own future students. If critical thinking is not taught effectively [in pre-service teacher education programs], student teachers will be unable to teach critical thinking effectively to their own future students" (p. 198). Or, as Tsui (as cited in Allamnakrah, 2013) claimed, "If these students do not receive training in higher-order thinking while at college, when can they expect to receive it" (p. 198)?

Researchers asserted that teachers often have aspirations of teaching critical thinking skills to students but they "may not understand how to teach at higher levels or even what strategies teaching at a higher level may include" (Whittington & Newcomb, as cited in Stedman & Adams, 2012, p. 10). Additionally, Kowalczyk et al. (2012) found nursing educators have not

improved their undergraduate students' critical thinking skills because they prioritized "the practical knowledge rather than questioning and reasoning the knowledge which limits students' learning competences, especially problem solving and making decision" (p. 230).

Another aspect of the lack of critical thinking knowledge is educators using different terminology to describe thinking skills. They base the terminology on their background and understanding of the critical thinking concepts while attempting to implement critical thinking in the classrooms setting which influences the improvement of student critical thinking (Alazzi, 2008; Bataineh & Alazzi, 2009; Ozkan-Akan, 2003). For example, Tebbs (as cited in Ozkan-Akan, 2003) surveyed 432 teachers from different educational disciplines and discovered that the majority of teachers were unprepared for teaching thinking due to the subject matter and their training programs. Additionally, "educators identify time as a constraint when trying to prepare and plan critical thinking activities" (Kowalczyk et al., 2012, p. 227).

As a result, Grant (as cited in Ozkan-Akan, 2003) stated "teachers need a broad and deep understanding of subject matter and pedagogical strategies in order to develop critical thinking skills" (p. 12). Karras (as cited in Al-Qahtani, 1995) recommended that school administrators should determine the eligibility of teachers by their knowledge of the subject matter being taught in the classroom and the ability to implement critical thinking strategies through teaching the subject matter. In other words, teachers should be tested for their ability to incorporate and integrate critical thinking skills into the subject matter.

Kenney (2013) mentioned "teachers might shy away from teaching critical thinking to their gifted readers because they, themselves, do not feel that their own skills are adequate" (p. 30). However, she found that "as teachers venture forward and begin to incorporate more critical thinking into their instruction, they will find that their students will become more

thoughtful consumers of information; and teachers will grow in their own critical thinking skills and in their ability to develop those skills in their students" (p. 30).

Regarding in-service teacher professional developmental programs, Allamnakrah, (2013) found that critical thinking is not included in current in-service teacher professional training programs; Al-Miziny (2010) and Al-Qahtani (1995) affirmed that inclusion of critical thinking in in-service teacher professional training programs is still limited and inadequate in Saudi Arabia. Tebbs (as cited in Ozkan-Akan, 2003) surveyed 432 teachers in Turkey from different educational disciplines and discovered that the majority of teachers were unprepared for teaching thinking due to the subject matter and their training programs.

As a result, educators are sometimes afraid to teach critical thinking in the classroom due to a lack of theoretical background and practical techniques in critical thinking (Alazzi, 2008; Al-Essa, 2009; Al-Miziny, 2010; Al Gamdi, 2008; Bataineh & Alazzi, 2009; Khojasteh and Smith, 2010; Ozkan-Akan, 2003).

Teacher Perceptions of School Curriculum Constrains Improvement of Critical Thinking Skills

Another potential obstacle is the teacher being confused about the process and product of learning and how that confusion may slow down students' critical. In fact, the product is in reality the transmission of information to students via materials, which is set by curricular planners.

In Saudi Arabia, curriculum, as a product, reflects the educational philosophies, political agendas, and Islamic cultures that determine the framework of the curriculum that mold students' thinking in certain ways (Kelly, 2009). Maiorana (1992) mentioned that many teachers are confused about the curriculum as a product and curriculum as a process, which results in their

hampering the improvement of students' thinking skills. They think their role is to transmit information rather than to teach thinking skills while the purpose of education is "to think effectively" (Maiorana, 1992, p. 30).

The typical a role of a teacher is to transmit the information to students while the students receive and memorize the knowledge for a period of time. Saudi Arabian elementary school teachers usually follow a rigid and inflexible course syllabus to be covered within a short period of time. They primarily teach the national school curriculum by pouring knowledge into students' minds rather than focusing on improving student's skills (Al-Qahtani, 1995; Snyder & Snyder, 2008). Saudi national curriculum encourages Saudi students to learn effectively through rote memorization of factual knowledge. Cameron (2011) pointed out that a rote memorization learning technique "begins with Islamic studies, but this method is applied in all other subject areas including math, science, and history" (p. 2).

In general, the proponents of curriculum as product think providing students with rich in-depth knowledge is important for learners, especially younger ones, to provide them with a strong background in the different subjects, which is necessary in their future. As evidence, Stenhouse (1975) pointed out a useful and simple method based on surveying adult students about what they gained by learning. Their responses were divided into four main categories: learning as increasing knowledge, memorizing information, acquiring facts and skills, and interpreting information in different ways.

The most significant advantage of the product model is the protection it provides for the culture of a society, especially a conservative society, by being transmitted from one generation to another. For instance, conservative societies use the product model to mold their members in certain ways and refuse any development that counters their cultures. Modern industrial societies

that do not have specific patterns of culture use the product model for the most common and timeless cultural elements for their learners (Kelly, 2009).

On the other hand, the curriculum-as-process approach is considered as "more open-ended than the product approach which tends to focus on the degree of interaction between students with each other, students with teachers, and both of them with knowledge" (M. Smith, 1996, p. 7). It focuses on practical knowledge rather than theoretical and aims to formalize learning more than accumulate information and experiences. Furthermore, he mentioned that the skills of observation are essential because ability and observation are "communication skills - verbal and non-verbal" (M. Smith, 1996, p. 674). The process model is concerned with developing all the human skills at the same time through learning experiences. Sheehan (1986) noted that "the process model gives learners chances to develop their skills by exploring the surrounding world and providing them with opportunities to control their learning abilities" (p. 674).

The processes model is a preferable system for many reasons. First of all, it emphasizes external and internal learning. "Learning is something external that helps pupils to discover the real world around them and to experiment with new knowledge in the schools; the external learning leads to increasing the student's motivation by seeing their learning progressions" (Kelly, 2009, pp. 95-96). Moreover, it delivers learning materials to the students using different tools that help students to understand the materials through analytical thinking skills. Also, it is a critical and active system that offers students the freedom to learn through their experiences based on their skills through exploration of the world. Furthermore, it provides students many opportunities to use their gained knowledge to explore the world and make their own discoveries. In addition, it concentrates on improving student's skills in four orientations:

cognition, humanity, behavior, and social. It also helps teachers to improve students' thinking skills by investigating problems to teach them how they surmount and overcome life's obstacles.

In Saudi Arabia, as research indicated, the curriculum as product blocks students' ability to think critically about the learning materials (e.g., Al-Qahtani, 1995; Alwehaibi, 2012). Al-Essa (2009) and Al-Miziny (2010) argued for education reforms by integrating critical thinking skills into all aspects of education. Also, teachers should recognize the difference between education as a concept from other kinds of teaching, such as "training, instruction, conditioning, and indoctrination" (Kelly, 2009, p. 57). This distinction helps teachers focus on the types of knowledge they should present and how it can be presented. Maiorana (1992) recommended that universities and colleges prepare teachers to teach thinking skills and be able to practice it in different situations. "It is a sad truth that the 'average' college student does not think critically, and not all courses include critical thinking" (Scott, 2008, p. 39).

Teacher Perceptions of Teaching Methods Constrains Improvement of Critical Thinking Skills

Brookfield (1987) asserted that improving critical thinking could be hindered by a teacher's inability to distinguish between teaching organization and teaching approaches. A teaching approach focuses on the ways or methods of conveying knowledge to the students and the framework of the subject matter. Teaching organization focuses on how the lesson is arranged in order to help students engage more easily.

According to Maiorana (1992), this clarification allows teachers to discern between the ideas of the subject matter and the arrangements of the classroom. As a result, using different teaching methods and classroom organization offers students many opportunities to practice thinking skills.

Kowalczyk et al. (2012) and Maiorana (1992) addressed the role of teaching methods in improving students' critical thinking abilities in terms of providing opportunities to practice thinking skills. In elementary schools, children are growing up quickly, which requires using optimal teaching methods for them to meet their psychological and philosophical needs (Fisher, 2007). As research indicates, teaching thinking skills aims to meet children's needs through using more effective direct or indirect teaching methods.

In fact, an indirect teaching method offers students opportunities to discover and explore their environments through many activities. However, some teachers tend to use direct teaching methods, which means knowledge is delivered and passed directly through teachers, the textbook, or both. Direct teaching methods also usually utilize a presentation and explanation format to easily convey a large amount of knowledge (Allamnakrah, 2013; Al-Qahtani, 1995).

Moore (2009) insisted that the improvement of critical thinking skills relies on effective teaching methods and providing learners with opportunities to practice. He recommended teachers use questions as teaching methods. There are a number of questioning skills that teachers should learn and practice. Questioning skills depend on many techniques, such as redirecting question, wait time, halting time, and reinforcement. These approaches help learners to perform the tasks and achieve the learning goals. One of these techniques is waiting time, which is when teachers give students time to think about their questions before answering. However, Rowe (1974) mentioned that a high percentage of teachers do not give students enough time to think about and answer questions, often waiting just one second for answers to their questions. He recommended teachers increase the wait time to help students respond correctly and avoid incorrect answers. Moreover, this helps students become more confident in asking clarifying questions and expressing their opinions about topics they have learned. Taking

enough time to think about the teacher's questions encourages students to become more active in the classrooms because they have many opportunities to think deeply and analytically. Furthermore, wait time helps students understand the materials well because they take enough time to analyze them from different angles. Finally, waiting improves the students' thinking skills through their assessment of questions, and improves communications with their teachers and fellow students.

Another method is open communication, which means giving the students opportunities to express their opinions on the discussion topic. In this method, teachers must set defined roles and procedures for the successful class discussion. For example, the teacher's role is to manage the discussion, which means the teacher is the director of the students' learning, and guides them in achieving the learning goals.

However, some educators resist the transition from the teacher-centered approach to the learner-centered learning approach. This is because the learner-centered approach gives students opportunities to gain knowledge from different resources and share it with others. They prefer a lecture method to cover the learning material based upon the course timetable. These teachers also sometimes encounter difficulties in using the optimal teaching methods for critical thinking such as role-play (Moore, 2009). Moreover, some teachers are unable to determine the proper assessment instrument that "effectively and objectively measures students' strength and weakness in critical thinking" (Fani, n.d, p. 2).

Moore (2009) stated that direct teaching methods are not effective for teaching at a higher level of thinking or for retaining knowledge over a long period of time because the student role is to sit quietly, listen, and memorize information. Also, these teaching methods lead teachers to think on behalf of the students and to solve their problems. Snyder and Snyder (2008) found

that “lecturing is not the best method of instruction, and objective tests are not the best method of assessment (p. 93). As evidence, according to Allamnakrah (2013) and Al-Qahtani (1995), lecture is the predominate teaching method in Saudi classrooms, which is the main impairment to student lack of learning critical thinking because it limits opportunities for reasoning and investigation chances (Moore, 2009; Ozkan-Akan, 2003).

In order to improve children’s critical thinking, teachers should have a critical “personality and become a role model for children. In other words, they should have a fluent, flexible and authentic way of thinking” (Zeteroglu et al., 2012, p. 3137). Teachers should be confident, well-informed, natural, genuine, sincere, and heartfelt in their training of students in the various levels of thinking skills. This is “[s]o that they can create a teaching and learning environment that will encourage children to be [critical] and that they can supervise” (Zeteroglu et al., 2012, p. 3137) their analytical development.

Equally important, as Howie (2011) emphasized is the notion that improving critical thinking “requires us as teachers to ‘intervene at the level of the mental process and teach individuals what processes to use when, and how to use them, and how to combine them into workable strategies for task solution’” (p. 5). Additionally, students should feel free to express their opinions without hesitation and fear. If not, they tend to imitate other ideas or to follow other beliefs without questioning them.

Teacher Perceptions of Student Ability Constrains Improvement of Critical Thinking Skills

Allamnakrah (2013) claimed that teachers believe students won’t adapt to unfamiliar critical thinking strategies because they have not practiced in their homes. In other words, if the students are not interested in critical thinking, they won’t benefit from that teaching style.

Moreover, teachers want their students to engage and participate actively in critical thinking courses, but "they found that students are basically passive during these activities" (Al-Qahtani, 1995, p. 159).

Students are sometimes reluctant to practice critical thinking skills because they assume it requires hard work to get the correct answer (Williams**,** 2005, p. 182). They tend to give quick answers to complex and complicated questions instead. Aliakbari and Sadeghdaghighi (2012) claimed that students "are not tolerant of the difficulty of thinking" (p. 3). Interestingly, Alabi and Fasasi (as cited in Allamnakrah, 2013) stated that students prefer to spend their leisure "time listening to music from their headsets, even during lectures, instead of engaging themselves in productive activities" (p. 30).

However, Choy and Cheah (2009) and Stedman and Adams (2012) argued that students can think critically using their own cognitive skills, but the improvement of critical thinking skills relies on the amount of time, activities, and teachers supporting these efforts. Allamnakrah, (2013) pointed out that it is easy to blame it on the students' mental ability rather than taking into account the causes of the problem and, later, finding solutions. In other words, Aliakbari and Sadeghdaghighi (2012) asserted that "students' constraints can be ascribed to lack of chance to practice thinking skill, mostly due to the overloaded curriculum and their own attitude toward thinking" (p. 3). Teachers should use different teaching methods and techniques in confronting the students' resistance to engaging in active learning.

Moreover, educators should motivate students to analyze and synthesize others' arguments, ask a series of clarification questions, and evaluate the credibility of the sources in the learning environment. Bataineh and Alazzi (2009) stated that students' critical thinking skills are particularly influenced by

> [T]eacher behaviors, and the classroom culture. The seven behaviors are: teacher's inquiry; discussion, multi-communication, and encouraging students to ask questions; cooperative learning, teachers reaction; time of waiting for answers; seat arrangement and number of students; and teacher instruction, as well as modeling. (p. 58)

It is vital that changes be made in teacher's perceptions of student critical thinking ability because some think the, "student may not need to be taught critical thinking as thinking is the natural process carried by everyone" (Choy & Cheah, 2009, p. 198). Of course, "it is a natural process, but when left to itself, can often be biased, distorted, partial, uninformed, and potentially prejudiced; excellence in thought must be cultivated" (Limbach & Waugh as cited in Choy & Cheah, 2009, p. 198).

Teacher Perceptions of Classroom Structure Constrains Improvement to Critical Thinking Skills

Another barrier to improving critical thinking is classroom structure. Educators have a difficult job to improve students' critical thinking skills effectively in crowded classrooms (e.g., Alwehaibi, 2012; Ozkan-Akan, 2003). For example, Saudi teachers are often disappointed and discouraged to teach critical thinking in class rooms that are not designed and established to function as schools.

> [B]ecause of the rapid expansion of [elementary education] in Saudi Arabia, sufficient schools could not be built; existing large buildings were rented and converted with minimal alterations into schools. Classrooms tend to be cramped; hence class activities involving movement or action are constrained; seating arrangements do not allow for small-group work. Thus the layout of a classroom

> often precipitates the dominance of the teacher, the passivity of the students, and consequently impedes the interaction, the exchange, and the personalizing of the educational environment which are essential to the teaching of the [critical thinking] skills. (Al-Qahtani, 1995, p. 161)

Moreover, teachers tend to provide students with a wealth of knowledge in their specific discipline by teaching them to master key information, but "they struggle with the time and resources needed to design effective strategies in order to teach critical thinking" (Goodwin as cited in Scott, 2008, p. 39). Additionally, Snyder and Snyder (2008) claimed time is one of the major issues in teaching critical thinking skills in classrooms that are growing. Likewise, Kowalczyk et al. (2012) agreed with Snyder and Snyder's findings that "educators identify time as a constraint when trying to prepare and plan critical thinking activities" (p. 227).

In order to overcome such barriers to improving critical thinking, the current study attempted to contribute to the process of improving the Saudi educational system by examining the Islamic teachers' perceptions of improving thinking skills in the elementary school. This might help the decision makers think about teaching candidate preparation programs in terms of pre-service teachers preparation courses and in-service teachers training programs. Eventually, it would reflect on the students' quality of learning by producing productive and effective students in the classroom environment.

Summary

This chapter presents a literature review on the importance of teaching and improving critical thinking skills for students regardless of educational level. It also addresses teachers' perceptions toward improving students' thinking skills and looks at the primary factors influencing teacher insights of cognitive ability development.

CHAPTER THREE

METHODOLOGY

Research recognizing the importance of developing children's thinking skills has increased because modern life has become more complex increasing the requirements for generating new knowledge, comprehension, judgment, and evaluation skills in order to succeed in the job market. It is essential to improve cognitive skills in childhood in order to ensure the future success of students.

There are several factors that encourage or hinder the development of students' critical thinking, but teachers play a significant role in successfully improving children's thinking abilities in elementary school based on their perception toward teaching thinking skills, whether positive or negative (Alazzi, 2008; Bataineh & Alazzi, 2009; Beyer, 1984; Brookfield, 1987; Burke et al. 2007; Fisher, 2007; Howie, 2011; Kelly, 2009; Kowalczyk. et. al, 2012; Lauer, 2005; Maiorana, 1992; Moore, 2009; Ozkan-Akan, 2003; Stedman & Adams, 2012; Zeteroglu et al., 2012).

The purpose of this study was to examine the Islamic teacher's perceptions of improving critical thinking skills in the Saudi elementary school system and to investigate the factors influencing these perceptions in order to identify any possible obstacles in teaching critical thinking skills. It is hoped that the results of the study will persuade teachers to use critical thinking more frequently in the classroom.

Research Questions

This study aimed to answer the following questions:

1. How do male Islamic elementary school teachers define critical thinking?

2. What are the perceptions of male Islamic elementary school teachers on improving critical thinking skills among students in Saudi Arabian elementary schools?
3. What factors influence the implementation of critical thinking instruction by male Islamic elementary school teachers in Saudi Arabian elementary schools?

Design of Study

This study is descriptive in nature. "The purpose of descriptive research is to describe, record, analyze, and interpret existing conditions involving comparison and/or contrasts while attempting to discover relationships between existing non-manipulated variables" (Adelman, 1994, p. 35). Descriptive design aims to understand the research problem, both quantitatively and qualitatively, through participant perceptions. I used a mixed-methodology, which is the type of research that combines components of qualitative and quantitative research in different ways, such as philosophical worldview positions, inferences, and the interpretations of results to reach an understanding of the research phenomenon or research problem (Creswell & Plano Clark, 2011).

According to Creswell and Plano Clark (2011), and Stedman and Adams (2012), there are several advantages to using a mixed-method research design. One advantage is that the mixed-methods research design allows educational researchers to use multiple instruments for collecting more evidence for studying a research problem than either quantitative or qualitative research alone. For example, when researchers aim to solve a social problem or to improve and develop teaching effectiveness, they gather veracious types of data by using open-ended questionnaires, interviews, focus groups, document analysis, testing, and surveys.

Another advantage is researchers being encouraged to employ inductive and deductive thinking skills in order to understand the research problem. A third is that the combined strength

of quantitative and qualitative research methods provides researchers with a research design that allows them to collect meaningful data. Finally, it helps researchers answer the study's questions from different perspectives, multiple philosophical viewpoints, or research paradigms.

Although there are advantages to mixed-methods research, it is sometimes not applicable or appropriate because it requires specific skills and can be time consuming when conducting research. In addition, formulating, analyzing, and interpreting research questions and collecting data using mixed-methods can be complex. The six mixed-methods research designs are "the explanatory sequential strategy, exploratory sequential strategy, sequential transformative strategy, concurrent triangulation strategy, concurrent embedded strategy, and concurrent transformative strategy" (Creswell, 2009, p. 211). In this study, I used the explanatory sequential mixed-method design (see figure 1), which

> is a popular strategy for mix methods design that often appeals to researchers with strong quantitative leanings. It is characterized by the collection and analysis of quantitative data in a first phase of research followed by the collection and analysis of qualitative data in a second phase that builds on the results of the initial quantitative results. (Creswell, 2009, p. 211)

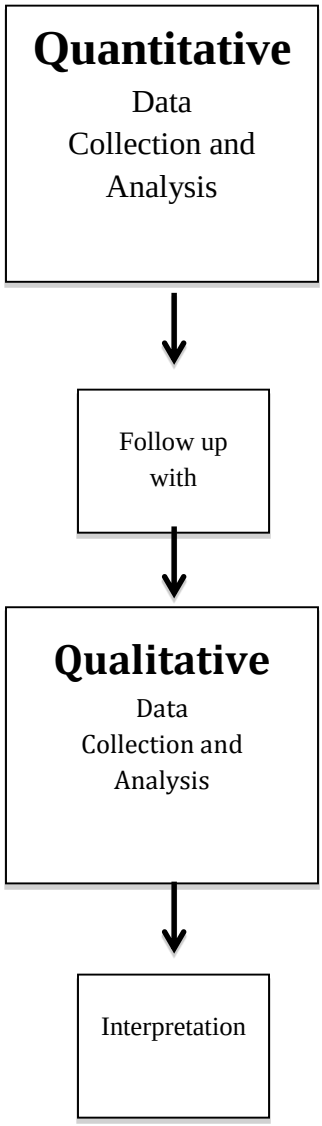

Figure 1. Explanatory sequential design (Creswell & Plano Clark, 2011, p. 69).

The impetus for using the explanatory sequential mixed-method design is to use qualitative results to illustrate the quantitative findings from the beginning and to explain the correlation between the quantitative and qualitative results. Bradley and Morse (as cited in Creswell & Plano Clark, 2011) contended that the explanatory sequential mixed method "is well suited when the researcher needs qualitative data to explain quantitative significant (or nonsignificant) results, positive-performing exemplars, outlier results, or surprising

results"(p. 82). However, "the main weakness of this design is the length of time involved in data collection, with the two separate phases. This is especially a drawback if the two phases are given equal priority" (Creswell, 2009, p. 211).

As mentioned above, this design consists of two phases, quantitative and qualitative. In the quantitative phase, this study examined the teachers' perceptions of improving critical thinking in Saudi elementary schools using a survey research method, which is considered the most widely and frequently used method of research in several key disciplines such as education, sociology, and business (Ary, Jacobs & Sorensen, 2006; Bataineh & Alazzi, 2009; Ozkan-Akan, 2003; Stedman & Adams, 2012).

There are several techniques for collecting data, such as individual interviews, focus groups, telephone interviews, mail surveys, electronic mail surveys, and online surveys (Ary et al., 2010). The many advantages of the survey research method make it the most popular and commonly used method of research. A survey allows researchers to collect data about the population's characteristics such as attitudes, knowledge, perceptions, beliefs, decisions, needs, interests, religions, countries, and demographics. Also, it helps researchers gather information quickly from a large number of participants with reasonably little effort and expense (Ary et al., 2010; Creswell, 2009; Creswell & Plano Clark, 2011). Although there are advantages of using the survey research method, "it is not as easy as it might initially appear. It requires careful planning, implementation, and analysis if it is to yield reliable and valid information" (Ary et al., 2010, p. 278).

In this study, I used a mailed survey to each participant with a request they answer the questions and return it by a given date. This method helped me to collect data from a large number of subjects from diverse locations and educational experience (Bataineh & Alazzi, 2009;

Ozkan-Akan, 2003; Stedman & Adams, 2012). The mailed survey "guarantee[s] confidentiality or anonymity, thus perhaps eliciting more truthful responses than would be obtained with a personal interview. The mailed questionnaire also eliminates the problem of "interviewer bias" (Ary et al., 2010, p. 284).

There are several disadvantages associated with the survey method that are mostly connected with misunderstanding and misinterpreting the survey's statements or questions by the respondents. In order to avoid this, Creswell (2009) and Ary et al. (2010) recommended novice researchers formulate a series of clarification questions aimed at getting the right answer. There is another disadvantage of mailing questionnaires linked to

> [T]he low return rate. It is easy for the individual who receives a questionnaire to lay it aside and simply forget to complete and return it. A low rate limits the generalizability of the results of a questionnaire study. It cannot be assumed that nonresponse is randomly distributed throughout a group. (Ary et al., 2010, p. 284)

To minimize a low return rate, I followed the Ary et al. (2010) recommendations for increasing the rate of returned questionnaires. These suggestions allowing respondents a reasonable length of time to complete the survey, a cover letter detailing the sponsorship of research, wording the survey questions attractively, stating the potential benefits of the research, using incentive techniques such as money, and contacting the respondents frequently.

To generalize the findings of survey research, researchers must control the common potential sources of error in sampling and measurement (Ary et al., 2010; Bataineh & Alazzi, 2009; Dillman, 1991; Innabi & El Sheikh, 2007; Ozkan-Akan, 2003; Sa-U & Abdurrahman, 2008; Stedman & Adams, 2012). Dillman (1991) described sampling errors arising as "results from heterogeneity on the survey measures among members of the population. It is attributable to the

fact that certain members of the population are deliberately excluded by selection of the subset of members for which responses were obtained" (p. 227).

Ary et al. (2010) defined sampling error as “the difference between a population parameter and sample statistics” (p. 285). For computing the population parameters, researchers rely on sample statistics, which is a basic element in inferential statistics (Dillman, 1991). To avoid sampling errors the size of the study’s sample should be increased so the expected sampling error decreases because “small samples produce more sampling errors than large ones” (Ary et al., 2010, p.159).

Another common potential source of error is in measurement, which occurs when the components of the research instruments are so ambiguous so as to influence the participant responses based on their personal understanding. For example, researchers sometimes aim to describe and examine a certain phenomenon, but respondents are sometimes unable to provide researchers with accurate information due to the unclear survey statements and alternative interpretations (Ary et al., 2010; Creswell & Plano Clark, 2011). In order to prevent this error, researchers should use simple, concise, and clearly written language in the research instruments to ensure the validity and reliability of the findings.

This study’s survey themes included demographic information, such as educational background, teaching experience, general views on improving critical thinking, and obstacles to improving critical thinking in the Saudi elementary schools such as educational background, cultural and social constraints, learning materials, accessibility to classroom resources, and student motivations and aptitudes. Finally, all the survey statements were translated and checked by an accredited professional translator to avoid any translation errors or semantic

misunderstanding. This helped non-English speakers understanding of the survey's concepts and enabled them to choose the appropriate answer for each statement.

In the qualitative phase of this study, I investigated the teachers' perceptions of improving critical thinking in Saudi elementary schools through a semi-structured interview. This is defined as "a process in which a researcher and participant engage in a conversation focused on questions related to a research study" (DeMarrais, 2004, p. 55). Researchers often use the face-to-face interview to obtain specific information about participants' interpretations of the world around them. This kind of interpretation reflects the interviewee's familiarity with and level of anxiety about the research topic (Alazzi, 2008). To obtain valid and reliable data, Merriam (2009) emphasized the importance of asking good questions during the interview process, which requires continuous training and practice. She recommended novice researchers do

> pilot interviews that are crucial for trying out your questions. Not only do you get some practice in interviewing, but you also quickly learn which questions yield useless data, and which questions, suggested by your respondents, you should have thought to include in the first place. Different types of questions will yield different information. (Merriam, 2009, p. 95)

Wording of interview questions plays an important role in extracting people's opinions on the topic being studied. According to Patton (2004), "using words that make sense to the interviewee, words that reflect the respondent's world view, will improve the quality of data obtained during the interview. Without sensitivity to the impact of particular words on the person being interviewed, the answer may make no sense at all – or there may be no answer" (p. 312).

The semi-structured interview method has several advantages that encourage its use by researchers for gathering data. The interviewer has a great deal of control over the order of interview questions, enabling him or her to obtain the desired information. Moreover, it is a flexible research instrument because

> [T]he interviewer has the opportunity to observe the subjects and the total situation in which he or she is responding. Questions can be repeated or their meanings explained in case the respondents do not understand them. The interviewer can also press for additional information when a response seems incomplete or not entirely relevant. A greater response rate is another obvious advantage of personal interview. (Ary et al., 2010, p. 380)

On the other hand, a disadvantage is that it is an expensive method compared to other research methods. The researchers may have to pay for training an assistant interviewer to become qualified and eligible for interviewing the study's subjects. Interviewer bias can be a disadvantage in terms of shared sympathies or gender and race discrimination. To avoid interview bias, researchers should train people in skillful interviewing techniques in order to gather valid and reliable findings. Interviewing teachers in this study led the researcher to understand the quantitative results about critical thinking and its barriers that were gathered by the survey.

Population and Sample

Initially, I identified the target and the accessible population in order to aid in the selection of an appropriate representative sample. According to Ary et al. (2010), the target population is "the large group to which the researcher wishes to generalize the results of the

study" (p. 149), while the accessible population is "the population of subjects accessible to the researcher for drawing a sample" (p. 149).

The target population for this study was all male Islamic teachers in both rural and urban public elementary schools in located in the Southwestern region of Saudi Arabia. However, the accessible population sample consisted of male Islamic elementary school teachers in the Abha educational district, which is the capital city of the southwestern region of Saudi Arabia. The accessible population lessened the time and effort the researcher needed for data-collection.

Based on the National Report on Education Development in the Kingdom of Saudi Arabia (2013), 192 male Islamic teachers were included in this study. The teachers were distributed in 68 schools around the Abha city during the 2013-14 academic year. I chose these particular teachers as the study's population for several reasons. The most significant being that a research agreement between King Khalid University and the Abha educational district permits access to the schools for research purposes.

The appropriate and convenient type of sampling for the quantitative phase is cluster random sampling because "it is very difficult, if not impossible, to list all the members of a target population and select the sample from among them" (Ary et al., 2010, p. 154). In this type of sampling, a researcher "might choose a number of schools randomly from a list of schools and then include all [participants] in those schools in the sample" (Ary et al., 2010, p. 154).

Abha educational district is divided into five regions: Abha City, Al-sawda, Al-qraa, Prince Sultan Bin Abdul-Aziz City, and Khamis Mushayt city. I applied to the branch of the Saudi Ministry of Education in Abha to ascertain the number of schools and teachers in each region in order to help me draw a representative sample (see Appendix A). I also requested

permission from King Khalid University, where I work, to conduct the research in Abha educational district.

Table 1

Number of Islamic Teachers Based on Geographical Regions in Southwestern Saudi Arabia

Region	**Number of Schools**	**Number of Male Teachers**
Abha city	32	66
Al-sawda	4	23
Prince Sultan Bin Abdul-Aziz city	3	13
Khamis Mushayt city	31	70
Al-qraa	10	20
Total	80	192

For the qualitative phase, I selected subjects through purposeful sampling, which is "the process of identifying a population of interest and developing a systematic way of selecting cases that is not based on advanced knowledge of how the outcomes would appear" (Robert Wood Johnson Foundation, n.d). The purposeful random sampling included all the male Islamic teachers in the Abha educational district.

Instrumentation

The survey (see Appendix A) consisted of 50 items and was designed based on the literature review in terms of defining critical thinking, the value of improving critical thinking skills at an early age, and obstacles to improving critical thinking. Basically, the study's survey included two sections. The first section was designed to gather demographic

characteristics of the study's participants such as school location, educational background, and teaching experience. The second section was designed to examine teachers' perceptions on:

(1) The value of improving critical thinking skills in an early age, and

(2) Factors influencing the perceptions of Islamic studies teachers toward improving thinking in elementary schools.

Participant responses to each statement were in the form of a five-point Likert scale that "assesses attitudes toward a topic by presenting a set of statements about the topic and asking respondents to indicate for each other whether they strongly agree, agree, are undecided, disagree, and strongly disagree" (Ary, 2010, p. 209). The majority of the survey statements were adopted from Ozkan-Akan (2003) study regarding teachers' perceptions on improving thinking skills in general. The survey was randomly distributed to a sample of the Saudi elementary school teachers during the fall semester of 2013.

In pilot tests, I introduced the questionnaires to Islamic teachers with the Saudi Ministry of Education's definition of critical thinking, the brief and necessary information about critical thinking and the possible obstacles in improving critical thinking skills for elementary schools students. This pilot study helped me to check the language of the survey and "decide whether the study is feasible and whether it is worthwhile to continue. The pilot study provided the opportunity to assess the appropriateness of the data-collection methods and other procedures and to make changes if necessary. Unanticipated problems that appear can be solved at this stage, thereby saving time and effort later" (Ary, 2010, p. 95). This pilot study was carried out with 10 Islamic teachers working in the public schools located in Abha educational district in November, 2013. My assistants, who are faculty members in King Khalid University, and I read aloud each statement of the questionnaire to respondents as these teachers were asked to

complete the questionnaire by selecting the appropriate responses that corresponded to their personal choices. They offered some helpful suggestions and feedback in order to determine if any modification of the survey's statements were necessary to ensure they would be understandable. At the same time, I gave questionnaires to three Saudi professors at King Khalid University, King Saud University, and Al Jouf University to assess the survey's statements in terms of their wording and relevance of the items to the study and to review the content for accuracy in the translation of the statements. Based upon the reviewer's suggestions, the necessary modifications were made to help me to measure the data accurately. These procedures were followed for the internal validity of the questionnaire. For external validity, the study's sampling type was a cluster random sample that allowed me to generalize the study's finding over the entire population.

An informal discussion took place in order to understand the reviewers' comments. It was suggested that a number of items should be reworded in order to increase understanding by future participants. Furthermore, I calculated the reliability analysis of the questionnaire by SPSS 19.0 so that the Cronbach's Alpha was 0.856 presented the degree of internal consistency of the questionnaire's items. Ultimately, the questionnaire was determined to be valid, reliable, and ready for distribution to the study's sample.

The semi-structured interview (see Appendix B) aimed to extract participants' opinions about the study's topic to determine their understanding of the survey's statements. Therefore, the semi-structured interview questions were developed based on the survey results and in light of the study questions, which assisted me in obtaining a holistic picture of their perceptions and thoughts. I grounded and adopted the interview questions from Alazzi's (2008), which focused on secondary school teachers' perceptions toward critical thinking, in order to ensure the

credibility and reliability of the study. In addition, I randomly selected a sample of Saudi Islamic elementary school teachers in the 2013 fall semester for the purpose of interviewing them at their particular school sites. These interviewees represented different educational backgrounds and experience in order to determine whether or not those factors influence their perceptions toward critical thinking in the elementary school. The interview questions were written in English and translated into Arabic language to make the interviewees more comfortable when answering the interview questions.

Regarding credibility and reliability of the interview questions, three academics proficient in both Arabic and English reviewed the translations to ensure they would be understood by the interviewees. They provided me with meaningful suggestions. I trained my assistants to be qualified in interviewing the study's subjects and in recording the semi-structured interview data independently and separately, to be able to discuss interview themes, and to resolve any recording discrepancies. After recording and transcribing the interview data, I sent the interview themes to the interviewees to check the originality and authenticity of their interviews and to get their final permissions for analyzing the qualitative data (see Appendix F). These procedures helped me to produce 100% reliability, which is a high degree of agreement on the recording data among the interviewers.

Data Collection Procedures

I applied to the Saudi Ministry of Education seeking permission to access the schools and obtain geographical information about the schools in Abha educational district. As mentioned, Abha educational district is divided into five regions, which are Abha City, Al Sooda, Prince Sultan Bin Abdul-Aziz City, Khamis Mushayt, and Alqraa. I randomly selected one region using

the coin flip technique, and then made a list of that region's schools. I included all the male Islamic elementary teachers from that region in the study sample.

In addition, the selected participants completed consent forms to meet the Southern Illinois University Human Subject Board requirements. Additionally, I translated the consent forms into Arabic in order to meet the King Khalid University and Saudi Ministry of Education requirements and regulations I then distributed the questionnaires to the selected participants with a letter that explained the study's purpose and its future contributions toward developing the Saudi educational system.

To clarify any survey misunderstandings, I randomly selected 10 teachers who responded to the survey questions for interviewing during the academic 2013/2014 year. The purpose of the interviews was to ask them about their perceptions toward critical thinking. Before the interview, interviewees supplied background information, such as their educational background, in order to aid in the collection of valid and valuable data. I informed the interviewees that all the interview information and videotapes were for research purposes only. The primary language used in the interviews was Arabic in an effort to make interviewees comfortable and to help them better understand the interview questions. The average duration of each interview was 20 minutes. These interviews were videotaped for accurate recording of data. I tried to avoid leading the interviewees to any particular answers, and encouraged and motivated them to express their opinions and beliefs freely. Finally, these interviews were conducted over a two-week period from December 10 to 25, 2013 (see figure 2).

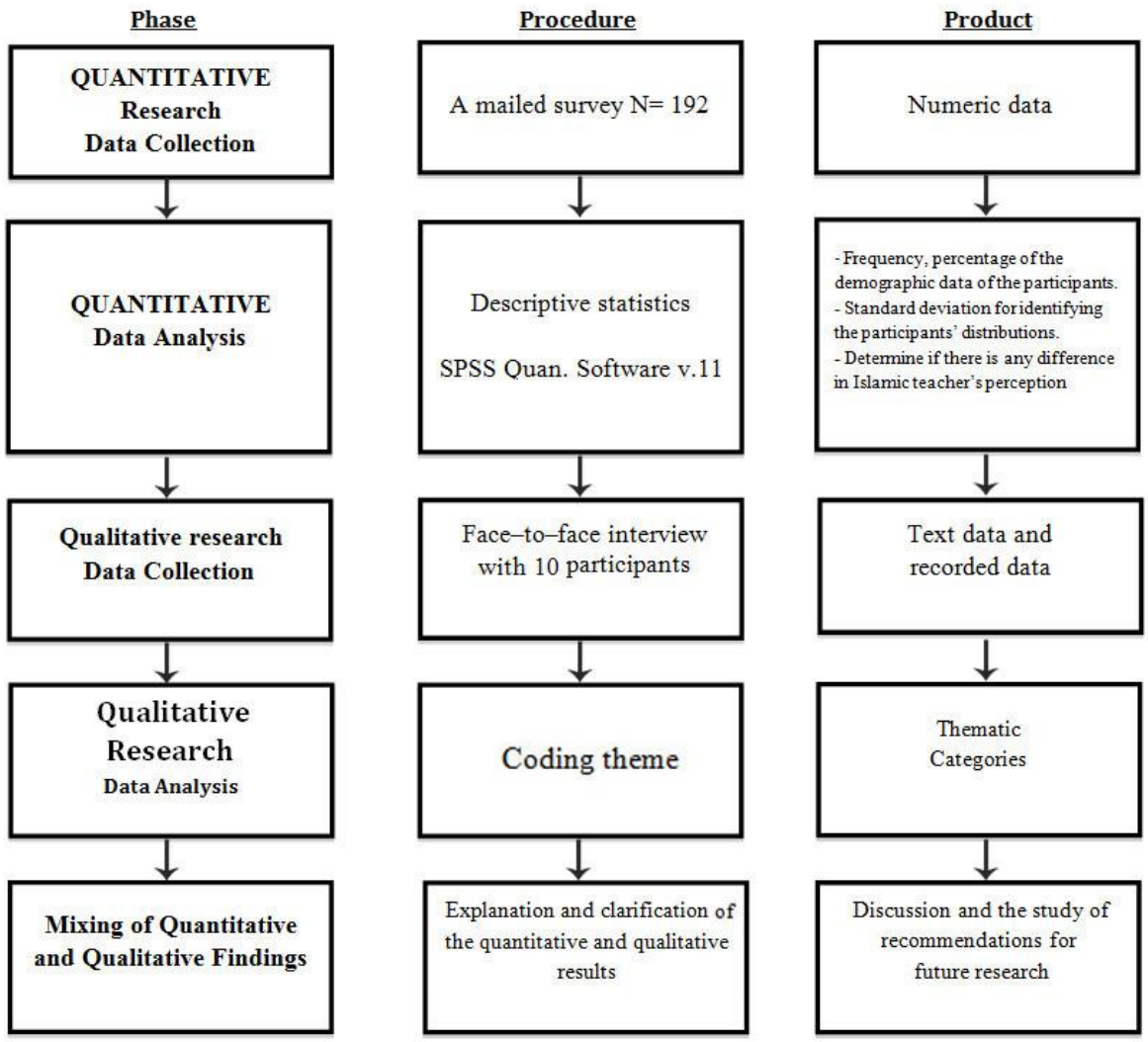

Figure 2. Data collection procedures of study

Data Analysis

Quantitative data was collected through survey questionnaires and analyzed using descriptive statistics. I used SPSS 19.0 for statistics analysis. The questionnaire data was analyzed to determine the teachers' perceptions toward improving critical thinking in terms of their valuation of integration with the content knowledge, identifying what factors influence teachers' perceptions, and listing the obstacles in improving critical thinking in the elementary school sites. For this purpose, I employed descriptive statistics to calculate the frequency

and percentage of the participants' demographic data of the participants. I computed the frequency and mean scores of each survey statement and calculated the standard deviation for identifying the participants' distributions in order to answer the research questions on the factors affecting Islamic teachers' perceptions and identifying improving critical thinking obstacles.

Qualitative data was gathered through interviews. After recording the interviews, I transcribed the interview data into Arabic. The transcriptions were then sent to all interviewees to confirm the originality of the interviews' transcriptions, translations and accuracy. The transcripts were then translated into English by three researchers fluent in both Arabic and English in order to ensure translation accuracy. I used analytic induction methods to analyze the interview data. For each question, all the key and significant expressions, themes, and phrases were listed and summarized in a separate list. These expressions and themes were coded and then categorized into groups by the similarity of their meanings and the categories of data. I identified and labeled these categories based on the quantitative data. After that, interviewees' responses were recorded and analyzed.

Timeline of the Study

I conducted the pilot tests for the questionnaires and the interview questions from November 17 to 25, 2013. Between November 30 and December 6, 2013, I distributed the questionnaires to the selected subjects. After that, I entered the study data into SPSS and analyzed it by the end of December 2013. After analyzing the quantitative data, I interviewed participants from December 12 to 23, 2013. The write-up of the study's results was completed by January 10, 2014.

Limitations of the Study

This study had the following limitations:

1. The study's population is limited to male Islamic teacher in the elementary schools within the southern region of Saudi Arabia.
2. The in-service teachers selected for the study have backgrounds in thinking skills either through the university preparation or teaching training programs based on the national report on education development in the Kingdom of Saudi Arabia (2013).
3. The results of this study are generalized only to male Islamic teachers' perceptions of thinking skills in elementary schools.

Summary

In summary, as a mixed-methods study, the quantitative and qualitative approaches will incorporate two phases. The first phase is the quantitative method, which was conducted through a survey, the results of which were analyzed by the descriptive statistical approach. The second phase was carried out by a qualitative approach (interview). This methodological chapter described (a) population and sample, (b) instrumentation of the study, (c) data collection procedures, and (d) data analysis techniques.

CHAPTER FOUR

FINDINGS AND DISCUSSION

This study examined the opinions of male Islamic teachers on improving critical thinking skills in the Saudi Arabian elementary school system and investigated the factors influencing the perceptions of Islamic teachers about teaching critical thinking skills. My intent was to identify any obstacles to teaching thinking skills in general and critical thinking skills in particular in the Saudi elementary school. This study sought to answer the following questions:

1. How do male Islamic elementary school teachers define critical thinking?
2. What are the perceptions of male Islamic elementary school teachers on improving critical thinking skills among students in Saudi Arabian elementary schools?
3. What factors influence the implementation of critical thinking instruction by male Islamic elementary school teachers in Saudi Arabian elementary schools?

Previous studies (Alwehaibi, 2012; Ozkan-Akan, 2003; Sa-U & Abdurrahman, 2008) hypothesized that there are many factors that can influence Islamic teacher's perceptions about improving thinking students' skills in elementary schools, such as teaching methods, appreciation of teaching thinking, educational background, teaching experiences, teaching methods, classroom equipment and learning materials. However, this study assumed that society and the school community also play heavy roles in influencing teacher perceptions, specifically in Middle Eastern Countries, in terms of controlling teachers' and students' critical abilities by setting security and social limitations.

Respectively, the seven sections in Table 2 present Islamic teachers' perceptions and even misconceptions about critical thinking, barriers in Saudi society and school community, quality of teacher preparation programs, Islamic studies curriculum, teaching method, classroom

structure, and student ability. Essentially, in an effort to address the study's questions, the second category addressed the first and second questions while others answered the third one.

Table 2

An Overall Classification of Islamic Teachers' Perceptions on Improving Critical Thinking in Saudi Arabian Elementary Schools

No.	Teacher's Perceptions Regarding Critical Thinking
1	Islamic teachers' perceptions –and even misperception about the improvement of critical thinking skills in the Saudi elementary schools.
2	Islamic teacher's perceptions that student ability hinders improvement of critical thinking skills.
3	Islamic teachers' perceptions that teaching methods hinders improvement of critical thinking skills.
4	Islamic teachers' perceptions that classroom structure hinders improvement of critical thinking skills.
5	Islamic teachers' perceptions of society and school community hindering the improvement of critical thinking skills.
6	Islamic teachers' perceptions that pre-service teachers' preparation programs and in-service teacher professional developmental programs hinder improvement of critical thinking skills.
7	Islamic teachers' perceptions that school curriculum hinders improvement of critical thinking skills.

The results section and discussion of the research are based on the data analysis. Fundamentally, an examination and exploration of both the quantitative and qualitative data exposed a diversity of substantial and meaningful themes linked to the meaning of critical thinking and the obstacles to improving critical thinking abilities in Saudi Arabian elementary schools. Using descriptive statistics for each category and calculating the final scores was completed by SPSS as the means for analyzing the quantitative data. The quantitative data was analyzed to determine the teachers' perceptions toward improving critical thinking in terms of

the value of integrating it with the content knowledge, identifying the factors influencing teachers' perception, and listing the obstacles to improving critical thinking in elementary school sites. For all tables, the five point Likert scale is used to rank the Islamic teachers' responses from "strongly agree with the given statement =5" to "strongly disagree with the given statement =1". I transcribed the qualitative data and analyzed it by coding and categorizing themes.

Demographics

This section presents the background and characteristics of the study's sample, such as the school location, educational background, and teaching experience. As Table 1 illustrates, the Abha educational district is divided into five regions: Abha city, Al-sawda, Al-qraa, Prince Sultan Bin Abdul-Aziz city, and Khamis Mushayt city. Of the 192 Islamic teachers who taught in the elementary schools in the southwestern region of Saudi Arabia, a total of 138 completed the mailed survey and submitted their responses.

This represents a return rate of 73%. I followed the Ary et al. (2010) suggestions that allows respondents a reasonable length of time to complete the survey, stating the potential benefits of the research, and attaching the research committee members letter (see Appendix A). Also, Saudi culture is a collective and supportive culture, which helps me to have a great return rate. Then, I selected 10 Islamic teachers for conducting the study interview, which represents 7.24% of the sample.

Table 3 shows the personal characteristics, demographic information, educational backgrounds, and teaching experience of the study sample. For example, a large number of Islamic teachers (60) worked in the public schools in Abha city (43.47%), while only 10 worked in Al-sawda (7.25%). Also, 10 Islamic teachers worked in Prince Sultan Bin Abdul-Aziz city (7.25%), and 8 teachers taught in Al-qraa area (5.80%). Additionally, 50 teachers worked in

Khamis Mushayt city, which represents 36.23% of the study participants. Essentially, Al-sawda, Prince Sultan Bin Abdul-Aziz city, and Al-qraa are more rural and conservative area while Abha city and Khamis Mushayt city are more densely populated and affluent.

Linked to educational background, the majority of the participants (n=68) hold a bachelor's degree in Islamic studies, which represents 49.27% of the study's participants. Additionally, 40 Islamic teachers hold an associate's degree in Islamic studies, representing 28.99% of the study's sample. The remaining participants of the study sample (21.74%) hold a bachelor's degree in different disciplines such as language art, history, geography, physical education, or science. This is due to the lack of specialized teachers and the location of schools.

With regard to teaching experience as a variable, 50 of 138 (36.23%) Islamic teachers who completed the questionnaires have10 or fewer years of teaching experience in elementary schools, and 35 (25.36%) Islamic teachers have taught for 11 to 15 years. Approximately 30 (21.74%) Islamic teachers had between 16 to 20 years of teaching experience, and 14 (10.15%) teachers had teaching experience between 21 to 25 years of teaching experience. A total of 9 Islamic teachers (6.52%) had more than 25 years of teaching experience.

Table 3

Distribution of the Study Participants by School Location, Educational Background, and Teaching Experience

Variables		**Frequency**	**Present**
School Location	Abha city	60	43.47%
	Al-sawda	10	7.25%
	Prince Sultan Bin Abdul-Aziz city	10	7.25%
	Al-qraa	8	5.80%
	Khamis Mushayt city	50	36.23%
N=		138	100%
Educational Background	Associate degree	40	28.99%
	Bachelor's degree in Islamic Studies	68	49.27%
	Bachelor's degree in other disciplines	30	21.74%
Teaching Experience	5-10 years	50	36.23%
	11-15 years	35	25.36%
	16-20 years	30	21.74%
	21-25 years	14	10.15%
	Over 25 years	9	6.52%

The qualitative data was gathered through the purposive sampling of 10 Islamic teachers selected to be interviewed by me and my assistants who are three faculty members in King Khalid University, Saudi Arabia. The participants were selected based on four criteria:

a) agreeing to voluntarily participate in the study by completing the consent form; b) completing

the study's questionnaire; c) have experienced teaching Islamic studies at the elementary schools level; and d) representing a range of Islamic teachers' responses to the questionnaire items, educational backgrounds and schools' locations. The detailed characteristics of interviewees are shown in Table 4.

Table 4

Background of Interviewees

No.	**Name of Teacher**	**Educational Background**	**Years of Teaching experience**	**School location**
1	Salah	Associate degree of Islamic Studies	10	Abha
2	Khalid	Bachelor of Islamic Studies	25	Abha
3	Rashd	Bachelor of Islamic Studies	15	Abha
4	Marzuk	Bachelor of History	7	Abha
5	Ahmad	Bachelor of Islamic Studies	5	Al-sawda
6	Mohammed	Bachelor of Geography	13	Al-sawda
7	Ali	Bachelor of Islamic Studies	18	Prince Sultan Bin Abdul-Aziz city
8	Yahya	Associated degree of Language Arts	28	Khamis Mushayt
9	Ibrahim	Bachelor of Islamic Studies	12	Khamis Mushayt
10	Taha	Bachelor of Islamic Studies	21	Al-qraa

Research Questions One and Two

The first section presents Islamic teachers' perceptions –and even misperceptions- about the improvement of critical thinking skills in the Saudi elementary schools.

The results obtained from the analysis of the questionnaire identify the obstacles to improving critical thinking skills in Saudi elementary schools. This section was used to answer the following questions:

1. How do male Islamic elementary school teachers define critical thinking?
2. What are the perceptions of male Islamic elementary school teachers on improving critical thinking skills among students in Saudi Arabian elementary schools?

Through this section, I attempted to determine whether or not Islamic teachers have a basic knowledge of critical thinking. One goal was to discover the degree of appreciation Islamic teachers have for and how much value they place on the critical thinking skills of elementary school students. Other goals were to determine whether or not the Islamic teachers' perceptions were positive, whether or not they value critical thinking in general or not, and whether or not they understand the meaning of critical thinking.

In order to accomplish these goals, Islamic teachers were questioned to determine their personal degree of agreement or disagreement with seven particular statements about the meaning of critical thinking and the benefits of improving critical thinking skills for the students, members of community, and society in general. I provided the questionnaire respondents with the Saudi Ministry of Education's definition of critical thinking in order to clarify their understanding of the term critical thinking. I used this definition because the teachers are likely to be more familiar with it when compared other definitions more prevalent in the literature. Providing Islamic teachers with a familiar definition helped me avoid

confusion. Such confusion often occurs when researchers use decision making and metacognition, for illustrating and prioritizing thinking skills interchangeably with the term "critical thinking", which are often assumed to be synonymous (e.g., Alazzi, 2008; Alwehaibi, 2012; Ozkan-Akan, 2003; Sa-U & Abdrahman, 2008). Using this definition also helped me determine the Islamic teachers' actual perceptions in order to accomplish the study objectives.

Table 5

The Extent to Which Islamic Teachers Agree or Disagree with the Critical Thinking Definitions of Critical Thinking (CT)

Statement	**Strongly agree (5)**	**Agree (4)**	**Undecided (3)**	**Disagree (2)**	**Strongly Disagree (1)**	**Mean** *M*	**Standard deviation** *SD*
CT enables students' to use their higher order thinking (i.e. analysis, synthesis, and evaluation).	43.8	29.9	0	10.5	15.8	4.34	0.585
CT is a method of thinking that would help students to enjoy the learning process.	47.1	26.5	0	22.1	4.3	4.31	0.551

As shown in Table 5, the majority of respondents (74%) agreed with the given definition of critical thinking, which includes observation, analysis, synthesis, evaluation, collection of evidence, comparison, contrast, innovation, invention, abstraction, and construction. It encourages educators to use a variety of teaching methods for developing students' abilities of evaluation, and for organizing their thoughts and ideas (the strategic plan of the Ministry of Education, 1974). Illustrating this, the first and second statements of the questionnaire

generated the strongest agreement with the meaning of critical thinking (M= 4.34) and critical thinking is a technique that helps learners take delight in the learning process by the positive engagements of higher order thinking skills (M= 4.31). In order to explain these findings, respondents mentioned that the Ministry of Education's definition addressed essential critical thinking skills and how educators can improve these skills in students. Additionally, they agreed with the statement that critical thinking is a technique that assists learners to engage in the learning process. As an example, Salah made the following comment:

> A critical thinking as a mental term it can be defined differently. Someone can define it as a mental process; someone else can say it is a way of storing information. Personally, I define critical thinking as finding solutions or discovering hidden things. It also is known as gathering supporting evidences to criticize an issue. Therefore, it is vital for educators to understand that human beings consist of three major elements, which are the mind, the heart, and the body. The first component is the mind (brain) that does the process of thinking while the heart is the realm of human feeling. The third component is the body, which is used for all human actions, behavior, and movements. Thinking is a mental task and such tasks are performed by using different skills, which students use to judge things when seeking a solution for a problem. Educators usually label these skills that learners use to deal with problems in life as "*-mental abilities-*" or "*-mental skills-*."

Another example, Khalid defined critical thinking as:

> Critical thinking is a learning method that teacher could use to challenge student thinking ability, to motivate students' engagement in the learning processes,

> to achieve learning outcomes and goals, and to obtain gratifying results. In other words, critical thinking as a set of skills, using analysis, synthesis and evaluation that students employ during the process of knowledge acquisition. Additionally, it is a process of collecting evidences about whether the information is correct or incorrect. If it is incorrect, we investigate more opinions about the information so we have many results.

On the other hand, over 25% of the respondents did not agree with the given critical thinking definition as a method of thinking that would help students to enjoy the learning process. However, during the interview, I found the majority of interviewees defined critical thinking differently, generally offering vague and ambiguous thoughts on the meaning of critical thinking and its skills. As example, Yahya perceived critical thinking as

> Critical thinking is a way of increasing trust among teachers and students that allows students to become equal in the sense of knowledge. Critical thinking is the fastest way to memorize information in a short amount time. A learner has to have quick wits, thinking skills, and the ability to assess results quickly. [To have such skills,] a learner has to pay attention in the class and must be physically healthy. Islamic teachers must understand the Islamic curriculum entirely. They have to know that a curriculum includes the student, the building, and the course materials. It also includes the health and safety aspects of the classroom environment, the teacher's psychological tools, and ability to understand the students from different perspectives - such as the students' psychology.

The findings are consistent with the findings of several studies (Allamnakrah, 2013; Alwehaibi, 2012) in terms of teachers failing to teach critical thinking skills to learners due to

their own lack of knowledge of critical thinking and how to implement it in the learning site. Researchers claim that a lack of academic and applied knowledge of critical thinking and practice impedes students' critical thinking relating to their developmentally appropriate level of challenge (Kowalczyk et al., 2012; Lauer, 2005; Paul, 2007; Stedman & Adams, 2012). However, teachers are sometimes eager to teach critical thinking skills to learners, but have insufficient knowledge of critical thinking and how to implement the strategies of teaching it (Whittington & Newcomb as cited in Stedman & Adams, 2012).

Despite the Islamic teachers' claims of daily practice of critical thinking skills, researchers (e.g., Allamnakhrah 2013; Al-Qahtani 1995; and Alwehaibi, 2012) argued that Saudi teachers generally do not teach critical thinking in their classrooms or implement its strategies effectively. For example, Saudi undergraduate students have reported that their teachers were not taught critical thinking at all. In fact, teachers are sometimes interested in teaching critical thinking to students based on personal experience and comprehension of the concept. However, when they attempted to act on their desires during instructional time, they could not do it. Teachers seem to be unaware of methods to teach critical thinking and improving critical thinking in schools (Alazzi, 2008; Innabi & El Sheikh, 2007).

Linked to the Islamic teachers' claim of daily practice of critical thinking skills, researchers (e.g., Allamnakhrah, 2013; Al-Qahtani, 1995; Alwehaibi, 2012) argued that the Saudi teachers generally did not implement critical thinking in their classrooms. For example, Saudi undergraduate students have reported that their teachers were not taught critical thinking at all. In fact, teachers are sometimes interested in teaching critical thinking to students based on personal experience and comprehend the conception of critical thinking; however, in reality, when they attempted to translate their desires to the real world and to instructional time, they

could not do it. For that, teachers seem to be unaware about teaching critical thinking and improving critical thinking in schools (Alazzi, 2008; Innabi & El Sheikh, 2007).

Regarding the benefits of improving and practicing critical thinking in the school setting, the majority of questionnaire respondents (76%) valued the teaching and improving of students' critical thinking skills in their schools. As Table 6 shows, five statements produced the strongest agreement with the necessity of improving critical thinking skills (M= 4.31) in order for students to learn better in their courses (M= 4.26). Similarly, they appreciated the individual benefits of improving critical thinking for elementary school students, such as self-confidence (M= 3.60) and relieving monotony (M= 4.37). Also, they pointed out improving critical thinking ability led to enhance the quality of life (M= 4.21).

Taken together, the interviewees' comments as well as the participants' responses to the questionnaire statements, reveal that the majority of interviewees were not familiar with critical thinking as a term, let alone the definitions of critical thinking. Furthermore, they were not aware of the techniques and strategies for teaching critical thinking, but indicated they have taught and practiced critical thinking in their classrooms daily. These superficial conceptions were in contradiction with definitions found in the literature, even with the Ministry of Education definition. So, lack of knowledge of critical thinking has a powerful effects on valuing and appreciation of teaching critical thinking. As example, Ali perceived critical thinking as

> In my opinion, critical thinking is defined as the facilities and ideas that are required for a lesson being taught to students. It is also described as the type of thinking which focuses mainly on learning knowledge that a teacher passes on in the classroom or what the student thinks about the lesson. Comprehension and memorization skills are the most essential critical thinking skills for young

> learners because of the role these skills play in encouraging students' learning. For example, to be considered a critical thinker, a student must memorize the texts, elicit main ideas, comprehend, and then restate the information in his own words to assess the understanding of the information. Additionally, teachers should know if a student has good comprehension and memorization skill that will help him or her to develop. Otherwise, if the student has limited skills, he accepts principles without analyzing the information. The teacher should encourage the student to read from different sources. In such cases, students will be educated and can understand information in a fuller and more complete manner. Learners can also explain their ideas and make determinations on whether to understand other views.

However, some interviewees' contended that critical thinking helps both students and teachers maximize the benefits of learning the content of Islamic studies and produce satisfying learning results by practicing different thinking skills at the same time. Moreover, they stated that the benefits of boosting students critical thinking ability not only for pupils, but significantly improves and encourages the flourishing of society as well as the quality of the societal life by producing creative and productive citizens. The Khalid's strongest views can be summarized briefly by one participant:

> In my opinion, as I have often stated, the Education Ministry's mission is to develop thinking skills at different educational levels. Based on my teaching experience as an Islamic education teacher in primary, teaching critical thinking has become one of the priorities in teaching young learners because such skills are

> important to daily life, particularly for teachers and learners, and in general for citizens.

In another example of support for teaching critical thinking at the elementary school level, Rashd made this statement:

> Focusing on improving critical thinking will be productive in industry and the industrial processes or any other field. Developing critical thinking produces active members of society who will help the country by being permitted to speak freely and discuss their social and financial issues.

As a result, these findings emphasized the literature that asserts that education and critical thinking are connected and related to each other (G. F. Smith, 2002; Howie, 2011; McGuinness, 2005; Ozkan-Akan, 2003). These findings highlight the benefits of improving critical thinking exceeded and surpassed the academic achievement, claiming that critical thinking is an essential tool for shaping personal characteristics. Furthermore, teaching critical thinking enhances students' learning experiences and maximizes the outcomes of the students' learning (Allamnakrah, 2013; Al-Qahtani, 1995; Al-Qmadi, 2008; Alwehaibi, 2012). Educators should be aware of the benefits of improving students' critical thinking skills in terms of increasing self-confidence, and releasing weariness and tedium. This finding concurs with the major finding that emerged from Alwehaibi's (2012) study. Moreover, the majority of the questionnaire respondents recognized that it is essential that critical thinking take place in the classroom and be included in all courses in order for all students to perform better in class. These finding are supported in the arguments of Choy and Cheah, (2009), Dunn, (1988), L. Smith (2002), Tengku, (1994), Thibeault, (2004), and Sa-U and Abdrahman (2008).

Table 6

The Extent to Which Islamic Teachers Agree or Disagree with the Benefits of Improving Critical Thinking (CT) in the Saudi Elementary Schools

Statement	**Strongly agree (5)**	**Agree (4)**	**Undecided (3)**	**Disagree (2)**	**Strongly Disagree (1)**	**Mean** *M*	**Standard deviation** *SD*
CTS are needed for daily problem solving.	29.9	46.1	10	4	10	4.31	0.551
CTS are needed for the courses to be learned better.	37.0	58.0	0	0.7	4.3	4.26	.737
CT increases self- confidence in the classroom.	21.7	38.4	9.4	16.7	13.8	3.60	1.363
CT relieves monotony in the classroom.	42.0	47.8	0	0	10.1	4.37	0.664
CT is essential for high quality of life.	47.1	40.6	0	5.1	7.2	4.21	0.841

On the contrary, only 5 to 20% of the Islamic teachers in this study did not appreciate nor understand the essential effect of advancing students' critical thinking across all educational levels. Table 6 illustrates five statements that generated the strongest disagreement with the essential advantage to their students' daily life in terms of solving various aspects of societal problems.

These teachers also did not agree with the positive effects in learner performance when teaching and practicing critical thinking across all Islamic subjects, such as Tajwid, Tafisr, Hadith, Figh, and Tawheed. They had almost equal value for the benefits of promoting students' thinking abilities on personal characteristics, such as increasing self-confidence and relieving

monotony.Twelve percent thought that developing critical thinking would not lead to improvement in the quality of life.

During the face-to face interviews, I found a number of interviewees had no experience in or understanding of critical thinking in general. They also were careful to express their personal views about the benefits of fostering and promoting students' critical thinking skills due to the political and social boundaries and limitations. For example, Ahmad stated that

> I think critical thinking is not worth much in our life because it allows people to protest the governmental rules so that it may destroy our community like Egyptian community.

Additionally, Ibrahim shared the following comment:

> Critical thinking is not important to integrate in Saudi school programs because it encourages people to citizen a number of critical topics. These topics will lead people to be skeptical in the Islamic religion or against the Saudi government agenda. I really do not see any benefits of improving critical thinking for young learners,

Consequently, these teachers do not value the importance of improving students' critical thinking abilities, regardless of their educational levels. This finding is noteworthy in that it concurs with other studies that found teachers play an important and active role in successfully improving critical thinking abilities of students in elementary schools (Dunn, 1988; Kowalczyk et al., 2012; Ozkan-Akan, 2003; Sa-U & Abdurrahman, 2008; L. Smith, 2002; Tengku, 1994; Thibeault, 2004).

They also found improving learners' critical thinking skills largely depends mainly on the teachers. In addition, teachers' perceptions can affect the enhancement of students' critical

thinking abilities positively or negatively because they are able to either bolster students' thinking abilities or hamper them. Therefore, teachers' perceptions toward teaching thinking skills and their lack of sufficient theoretical and practical knowledge of thinking skills hinders their ability to facilitate the learning process.

Overall, the first section revealed teachers' perceptions toward improving critical thinking may encourage or impede students' thinking abilities. In fact, teachers' perceptions have a powerful effect on their adoption of teaching techniques, the variety of assessment instruments employed, and students' learning performance in the classroom.

There are interrelated relationships between teachers' perceptions and their actions in the learning setting. The results obtained from this category emphasize that teachers play an important and active role in successfully improving critical thinking abilities of students in elementary schools. These results are supported in the literature by showing that the improvement of learners' critical thinking skills largely depends on the teachers. Teachers' perceptions also positively or negatively affect the enhancement of students' critical thinking abilities because they either bolster or hamper students' thinking abilities (Dunn, 1988; Ozkan-Akan, 2003; Sa-U & Abdurrahman, 2008; Smith, 2002; Tengku, 1994; Thibeault, 2004).

Research Question Three

3- What factors influence the implementation of critical thinking instruction by male Islamic elementary school teachers in Saudi Arabian elementary schools?

The analysis of teachers' perceptions of society, the school community, pre-service teachers' preparation programs, in-service teacher professional development programs, Islamic subject curriculum, teaching methods, classroom structures, and student ability are taken in account to answer the third research question. Table 7 displays the means and standard deviations for the six categories in the questionnaire that examined the perceived barriers to teaching critical thinking.

Table 7

Mean Scores of the Questionnaire Section' Items

No.	Items	Mean Scores of All Section Items	Standard Deviation
1	Islamic teacher's perceptions of student ability hindering the improvement critical thinking skills.	4.31	0.147
2	Islamic teachers' perceptions of teaching methods hindering the improvement critical thinking skills.	4.29	0.416
3	Islamic teachers' perceptions of classroom structure hindering the improvement critical thinking skills	3.72	0.353
4	Islamic teachers' perceptions of society and school community hindering the improvement critical thinking skills.	3.70	0.404
5	Islamic teacher's perceptions of pre-service candidate teachers' preparation programs and in- service teacher professional developmental programs hindering the improvement critical thinking skills.	2.69	1.122
6	Islamic teachers' perceptions of Islamic studies curriculum hindering the improvement critical thinking skills.	2.57	0.162

The second section focuses on teachers' perceptions of whether students' ability is a constraint to improving critical thinking in Saudi elementary schools.

In this section, the respondents were given five statements as to whether student ability restricts improving critical thinking skills and asked to express their level of agreement with each. Student ability was the barrier that scored highest with total mean of 4.31. The data in Table 8 shows that mean scores ranged between 4.21 (items 2, 4, and 5) and 4.48 (items 1 and 3). The standard deviations range from .618 (items 2, 4, and 5) to 1.344 (items 1 and 3). The overall mean for this category is 4.31, which means the majority of the study respondents agreed that student ability restricts the improvement of critical thinking skills. This table also shows that the responses of Islamic teachers to statements 2, 4, and 5 with a standard deviation of 1.34 are more heterogeneous than the responses to statements 1 and 3, which have a standard deviation of 0.61.

Islamic teachers' perceptions were considered the main obstacle to teaching critical thinking in the Saudi elementary schools. But Table 8 illustrates that students are also regarded as a significant obstacle. The results were obtained from five statements given to Islamic teachers who were asked to indicate their personal agreement that Saudi student ability is a constraint to improving critical thinking skills in Saudi elementary schools.

Approximately 96% of the respondents reported that students view their Islamic teachers as authority figures, a cultural perception that means they cannot be subject to arguing or questioning. Moreover, 79% of the respondents thought elementary students lack the necessary knowledge for improving and practicing critical thinking in the classroom. It was the opinion of 96% that elementary students experience difficulty and are impatient and irritated when practicing critical thinking activities. 79% of respondents said the students lack the interest to engage in the critical thinking activities and prefer simpler factual activities and assignments.

It was made evident during the participant interviews that these teachers hoped their students would enthusiastically contribute and participate in daily critical thinking skills activities, either in or out of the classroom.

However, they found their students to be largely discouraged, and passive, and lacking motivation to challenge themselves in complex activities. Significantly, interviewees stated that since students are loathing to respond to or to participate in critical thinking activities, the teachers tend not to incorporate them. They also mentioned that students become anxious, especially when asked clarification questions that require the use of fundamental critical thinking skills, such as analyzing and synthesizing information. Students also become comfortable with basic questions that only required memorized responses. Taha made the following statement:

> There are a number of problems related to teaching critical thinking to Saudi students, but the major problem is linked to the students. Saudi students, through their daily allotment of time, have no time to deal with learning materials, let alone practice critical thinking because of personal interest activities, such as soccer. Also, they were not interested in learning complex materials because complicated activities would affect their future careers. Most Saudi students view passing the national and academic achievement test with a high grade point average as the highest priority because it makes them eligible for admittance to high ranked universities and colleges. The main concern for students is to get a good grade versus actually learning the content.

Ali made a similar point:

> Many students do not prefer to practice critical thinking at the learning site as they are not familiar with the learner centered teaching methods. Practicing

> critical thinking seems, to those students, to be a new experience that might be the opposite of how they previously learned across all their educational levels. If elementary students were not interested in critical thinking, they won't benefit, even if the Islamic teachers' perceptions are positive toward teaching critical thinking. Also, students do not have a preference for complex and difficult learning. They want to pass the national exam easily with high scores.

This finding supports the view of Alwehaibi's (2012) study that showed engaging students in critical thinking activities could lead to the improvement and promotion of critical thinking skills. However, Allamnakrah (2013) claimed that some teachers believed students have no interest in learning critical thinking, especially if they assume it will not be required when taking the national test. He pointed out that teachers are sometimes willing for their students to engage and participate actively in critical thinking courses, but they found students to be inactive learners during critical thinking practice. Therefore, students preferred to arrive at answers easily and to enjoy their leisure time doing fun activities. Dealing with these issues, of course, is a difficult and complex job for teachers, but they should do their best to improve students' skills and share their personal experiences with others.

In contrast to these findings is the fact that elementary students lack the knowledge for improving their critical thinking skills. Nearly 17% of the respondents argued that Saudi students have the ability to apply critical thinking skills, but these abilities cannot be developed by their own efforts. Students' abilities should be primarily fostered and promoted in their classroom by experienced and knowledgeable teachers. Moreover, 17% contended that Saudi students tend to learn complex and challenging activities, but the teacher is responsible for providing students with ample learning activities and motivating them to actively participate.

Teachers play a primary role in the overall learning process in terms of implementing critical thinking instructions and activities in the classroom. Marzuk made the following statement:

> Currently, the new mission of the Saudi Ministry of Education in the updated curricula is that all students are equal. That's so high achievers are distributed into groups in the classes. In other words, when an Islamic teacher starts a class, he should divide the students into four groups with two high achievers in each group. This way, lower achievers will benefit from the higher achievers and have a chance to participate in collaborative learning, which helps them to start to develop their skills. In the new curricula, Islamic teachers are required to use collaborative learning to help the lower achievers learn from the higher achievers, which is the new technique recommended by the ministry. Presently, Islamic teachers have some students who challenge their teachers in the classroom, a phenomenon that is not a problem since they support students seeking information. Finally, the Saudi Ministry of Education encourages that students look for information. A teacher can give students a question and the students are required to go and try to find the answer wherever they can find it.

Salah offered this perspective:

> Simply, teachers should engage students in the learning process because students are supposed to practice critical thinking skills in order to justify their arguments and persuade others. However, Islamic teachers sometime tend to blame students by attributing the failure of improving critical thinking in Saudi schools to the students rather than attributing it to the cultural or social context or other reasons. In my opinion, the main reason for the failure of critical thinking in Saudi

elementary schools is related to the Saudi educational system, which must make reforms concerning critical thinking. Once this has been completed the stakeholders of education can chide Islamic teachers and elementary students if they do not use critical thinking effectively.

Furthermore, this study's findings coincide with those of Al-Essa (2009), who discovered that critical thinking generally was absent across all educational levels. He mentioned that Saudi researchers have advocated integrating critical thinking into the school curriculum and classroom activities. It is also consistent with the studies of Choy and Cheah (2009), and Stedman and Adams (2012) that indicated students can think critically using their own cognitive skills, but the improvement of critical thinking skills requires time, activities, and teachers-supported efforts. Furthermore, this study's findings correspond with the major findings in Allamnakrah's (2013) study that showed it is simple to blame students' mental ability rather than taking into account and addressing the causes and solutions of this problem.

Aliakbari and Sadeghdaghighi (2012) are supported by this study's finding that students' ability as an obstacle can attribute to the lack of opportunity to practice critical thinking in the classroom and to the overloaded of learning materials. Additionally, students should be able to express their opinions without hesitation and fear. If not, they tend to imitate other's ideas or to follow other's beliefs without question.

Table 8

The Extent to Which Islamic Teachers Agree or Disagree with Statements on that Student Ability as Constraint to the Improvement of Critical Thinking Skills (CTS)

Statement	**Strongly agree (5)**	**Agree (4)**	**Undecided (3)**	**Disagree (2)**	**Strongly Disagree (1)**	**Mean *M***	**Standard deviation *SD***
Students perceive Islamic teachers as authority figures.	52.9	44.9	0	2.2	0	4.48	.618
Students lack needed background knowledge for practicing CT.	68.1	11.6	2.9	8.7	8.7	4.21	1.344
Students are impatient with the difficulty of practicing CT activities.	52.9	44.9	0	2.2	0	4.48	.618
Students lack interest in CT activities.	68.1	11.6	2.9	8.7	8.7	4.21	1.344
Students prefer activities and assignments with simple factual questions and answers.	68.1	11.6	2.9	8.7	8.7	4.21	1.344

The third section concentrates on teacher's perceptions of whether teaching methods constrain the improvement of critical thinking skills in Saudi elementary schools.

In this section, Islamic teachers were given six statements about the teaching methods employed in Islamic courses said to constrain the improvement of critical thinking skills in elementary school students. They were asked to reveal the extent to which they agree with each statement of the questionnaire (see Table 9). Teaching methods was the second highest scoring obstacle to the improvement of critical thinking abilities in Saudi elementary schools with total mean of 4.29.

More than 98% of the respondents reported that Islamic teachers do not provide adequate critical thinking activities in the daily lesson plan even though such activities play a significant role in training students in critical thinking. Equally important, nearly 72% of the respondents think the Saudi national standardized tests impede the development of critical thinking skills because they mainly aim to assess students' memorization abilities of the factual ideas and concepts of the Islamic courses. During face-to-face interview, Mohammed reported that

> The Saudi national tests classify into groups. One group consists of students eligible for further academic education in either the universities or teacher education colleges. The second group is students eligible for vocational education institutions.

Another perspective, Yahya remarked:

> Nowadays, it is crucial to include critical thinking in elementary schools by using effective teaching methods and learning strategies. However, Islamic teachers use traditional and direct teaching methods and rote-learning methods, such as lecture, while they have options to choose to teach students based on critical thinking stra-

> tegies. Another important idea is that teachers sometimes do not like to use discussion and questioning as teaching methods address questionable and sensitive topics, such as political issues. Personally, I think it is the Islamic teacher's responsibility to teach students in groups and let them ask, answer and infer the answers. The role of the teacher is to facilitate and lead the classroom discussion.

Additionally, almost 98% of the teachers responded to the statement about teaching methods for delivery of Islamic concepts saying that Islamic teachers usually lecture about such concepts to elementary schools students because they feel a need to cover content within the timetable of the course and following the scope and sequence of the content. Nearly 72%, of the Islamic teachers affirmed that they do not provide their students sufficient time for improving critical thinking skills in class or implement instructional techniques for fostering students thinking skills. Interestingly, almost 98% reported they do not welcome questions that have no obvious answer because such questions make them nervous and uncomfortable.

These findings are consistent with studies by Al-Qahtani (1995), Brookfield (1987), Fisher (2007), Kowalczyk et al., (2012), and Maiorana (1992) that found improvement of critical thinking could be hindered by a teacher's confusion in distinguishing between teaching organization and teaching approaches. A teaching approach focuses on the methods of conveying knowledge to the students and the framework of the subject matter. Teaching organization focuses on how the lesson is arranged in order to help students easily engage.

In fact, this clarification allows teachers to discern between the ideas of the subject matter and arrangements of the classroom. Significantly, the interviewees' comments, similar to the respondents' responses to the questionnaire statement, reveal that teaching critical thinking

skills in elementary school should meet the children's needs through using learner- centered teaching methods. For instance, Khalid made this suggestion:

> In my personal opinion, using learner-centered teaching methods gives learners the chance to challenge themselves. Additionally, concerning teaching critical thinking, these teaching methods encourage students to discover their world and investigate complex problems to find the right solutions. However, he pointed out Islamic teachers sometimes resist the transition from the teacher-centered teaching approach to the learner-centered learning approach. This is because of the belief that in using different teaching methods, educators give up some measure of student's discipline, which will affect classroom management.

With respect to the Saudi national standardized tests, more than 73% of respondents stated that the Saudi national standardized tests impede student critical thinking abilities because of the emphasis on memorization of the Islamic studies content rather than applying knowledge in different learning situations.

On the other hand, a number of respondents argued that the Saudi national standardized tests do not impede the development of critical thinking skills, but they help decision makers assess the educational systems as whole and identify the students' cognitive and professional abilities. Of course, these tests focus mostly on memorization, but there are several sections for assessing problem solving and decision-making.

Moreover, nearly 12% of these Islamic teachers asserted they usually attempt to provide their students sufficient time to practice critical thinking in class either through activities or questions. They also argued that it is not necessary for Islamic teachers to cover Islamic course content because the main goal is to understand how the students employ the Islamic concepts, morals, manners, and ethics in the real world.

Table 9

The Extent to Which Islamic Teachers Agree or Disagree with Statements on Teaching Methods Being a Barrier to the Improvement of Critical Thinking Skills (CTS)

Statement	**Strongly agree (5)**	**Agree (4)**	**Undecided (3)**	**Disagree (2)**	**Strongly Disagree (1)**	**Mean** *M*	**Standard deviation** *SD*
Islamic teachers do not provide adequate CT opportunities within lesson plans.	69.6	28.3	2.2	0	0	4.67	.514
National standardized tests impede the development of CTS.	30.4	42.8	14.5	12.3	0	3.91	.970
Islamic teachers usually lecture the knowledge to the students.	69.6	28.3	2.2	0	0	4.67	.514
Islamic teachers do not provide students with enough time for practicing CT in the class.	30.4	42.8	14.5	12.3	0	3.91	.970
Islamic teachers are uncomfortable with their students' questions that they may not be able to answer.	69.6	28.3	2.2	0	0	4.67	.514
Islamic teachers feel a need to cover content.	30.4	42.8	14.5	12.3	0	3.91	.970

The fourth section focuses on teachers' perceptions of whether classroom structure hinders the improvement of critical thinking skills.

In this section, Islamic teachers were given four statements about classroom structure being viewed as a constraint to the improvement of elementary school students' critical thinking skills. They were asked to express their agreement or disagreement with each statement. Classroom structure was the third highest scored barrier to developing students' critical thinking abilities with a total mean of 3.72.

As Table 10 shows, 74% of respondents agreed that classrooms are not conducive for facilitating the teaching of critical thinking skills for elementary school students. However, 25% claimed that the schools in the urban Abha educational district are well-prepared for teaching critical thinking in terms of including all the necessary learning materials, laboratories, Internet networks, and technological equipment. At the same time, they contended that Islamic teachers who teach in the elementary schools located in the rural area of Abha's educational district encounter difficulties in teaching critical thinking due to the lack of the essential learning materials, libraries, and Internet network. Also, there is large number of schools not originally designed to serve as schools, causing students and teachers to adapt to inadequate classroom sizes, lighting, and safety measures. Salah offered the following comments:

> There are things we, teachers and students, lack, such as facilities. For example, schools are not as well-prepared as they are supposed to be. There must be smart boards and round tables for group discussions. In the urban area of the Abha educational district, elementary schools are generally prepared with a number of learning facilities and techniques, but these schools do not have the necessary tools for teaching thinking skills in general and critical thinking in particular.

> A teacher buys what is affordable from his own pocket because the Ministry of Education does not provide many of the necessary items. When a teacher gives a student a problem to solve using thinking skills, students have to have the required tools whether they study math, Islamic education, social studies, or geography.

Rashd shared his perspective:

> Based on my educational experience, I would say that elementary school classes are the same as they have been for 40 years. They are traditional and not prepared for teaching such new topics like critical thinking skills.

This finding concurred with Ozkan-Akan's (2003) study that found educators have a difficult job of improving students' critical thinking skills effectively in crowded classrooms. Moreover, this study's finding is consistent with the studies of Al-Qahtani (1995) and Alwehaibi (2012) that found Saudi teachers are often disappointed and discouraged to teach critical thinking in classrooms that are not designed to function as schools.

With regard to time being an obstacle in the improvement of students' critical thinking, more than 58% of Islamic teachers stated they do not have time to develop their own activities for practicing critical thinking. Their reason is the lack of resources for teaching critical thinking across all educational disciplines but particularly Islamic courses. However, more than 33% argued that they do have time to develop critical thinking during or after the school day, but they prefer not to work during times they are not being paid. Moreover, they claimed the majority of urban schools are provided with meaningful and useful resources, which teachers can use as guidelines for classroom activities.

This finding is supported further by the studies of Kowalczyk et al. (2012), Scott (2008), and Snyder and Snyder (2008) that claimed time is a major barrier in teaching critical thinking skills in classrooms that are growing in size. They also found that teachers tend to provide students with a wealth of knowledge in their specific discipline by mastering key information, but face difficulties in teaching time and finding helpful learning resources for teaching critical thinking to the students.

Linked to the difficulty of assessing the students' critical thinking works, nearly 59% of the respondents reported that teachers are not prepared to assess critical thinking because they did not receive any prerequisite knowledge of critical thinking in teaching candidate programs or in-service professional training programs. On the other hand, almost 29% did not believe that assessing critical thinking is possible for well-prepared teachers in the elementary schools located in the urban Abha educational district because of a lack of continuous professional training and experienced and expertise Islamic teachers, and provided assessment resources. Islamic teachers need short-term and long-term training to become familiar with critical thinking assessment instruments.

Table 10

The Extent to Which Islamic Teachers Agree or Disagree with Statements on Classroom Structure Constrains Being a Constraint to Improving Critical Thinking Skills (CTS)

Statement	**Strongly agree (5)**	**Agree (4)**	**Undecided (3)**	**Disagree (2)**	**Strongly Disagree (1)**	**Mean** *M*	**Standard deviation** *SD*
Classrooms do not help Islamic teachers facilitate CTS.	42.0	32.6	0	25.4	0	4.16	.806
Islamic teachers do not have enough time to get prepared for developing activities for CT.	39.1	19.6	8.0	16.7	16.7	3.47	1.54
Islamic teachers do not have enough resources to teach CT.	39.9	39.1	1.4	8.0	11.6	3.87	1.33
Islamic teachers are not prepared to assess CT.	26.1	33.3	10.9	15.2	14.5	3.41	1.39

The fifth section concentrates on Islamic teachers' perceptions of whether Saudi society and school community constrain the improvement of critical thinking skills in Saudi elementary schools.

In this section, the questionnaire included nine items on whether Saudi society and the school community influence improving learners' critical thinking abilities in Saudi elementary schools. This was the fourth highest ranked barrier with total mean of 3.70. These items generated the strongest agreement with the negative roles Saudi society and the school communities play in fostering and promoting of students' critical thinking abilities. The first item concentrates on the positive effect development of critical thinking skills has on different aspects of society (M= 4.26). The second item asked whether Saudi society valued and supported the process of promoting students' critical thinking skills (M= 4.07). The third statement addressed the notion that Saudi society hinders efforts in accelerating students' critical thinking ability because of the potential effect on society (M=4.07). Based on this result, questioning people in authority may be interpreted as discourteous and disrespectful behavior (M=3.85). Notably, Ali explained that

> To be honest, Saudi parents need to teach children that others' views must be respected and appreciated. Also, questioning and arguing with a person in charge of something is inappropriate manner and unacceptable cultural behaviors.

As displayed in Table 11, the majority of participants strongly agreed that improving critical thinking skills leads to improvements in Saudi society in terms of providing citizens with opportunities to speak up about issues such as health care deficiencies, economic crises, and politician corruption.

Table 11

The Extent to Which Islamic Teachers Agree or Disagree with Statements Regarding the Influence Society Has on Improving Critical Thinking Skills (CTS)

Statement	**Strongly agree (5)**	**Agree (4)**	**Undecided (3)**	**Disagree (2)**	**Strongly Disagree (1)**	**Mean** *M*	**Standard deviation** *SD*
Improving CTS thinking skills leads to improving Saudi society.	37.0	58.0	0	4.3	0.7	4.26	.737
Saudi society does not value CT.	34.1	52.9	0	12.3	0.7	4.07	.948
Improving CT affect the Saudi of society security.	34.1	52.9	0	12.3	0.7	4.07	.948
It is disrespectful to question people in authority.	28.3	49.3	2.2	20.3	0	3.85	1.050

Contrary to this supportive view, only 5% of the respondents stated that improving critical thinking may help society's leaders and decision makers to improve the Saudi community. The same respondents asserted that teachers in general and Islamic teachers in particular should focus on teaching essential skills such as communication, leadership, and social coexistence with others at the elementary school level. They thought that critical thinking is

a suitable and welcome skill for mature people, but not for young learners because it requires employing a number of high-ordered thinking skills. Instead, teachers should focus on providing students with solid theoretical knowledge in different subjects such as Islamic studies, math, science, history, and geography. Moreover, they believed it important to delay practicing critical thinking skills to the high school level when students are mature enough to evaluate and make wise decisions.

Table 11 shows that over 85% of respondents strongly agreed that Saudi society does not value improving critical thinking, For example, Marzuk reported that

> Saudi society has a negative effect on improving students' critical thinking abilities. Also, Saudi students grow up in an uncritical society because parents and teachers raise and teach children that others' ideas and opinions must be respected. Additionally, elders and people in authority usually attempt to limit children's, and even adults', freedom to discuss what they want to address. Therefore, parents and teachers sometimes train students to defer to powerful people because of the traditional belief that the community must be ruled and governed by the elites who have the leadership skills for making society flourish. Moreover, I have determined that it is difficult for Islamic teachers to enhance students to think rationally when their society hinders and limits citizens' mental ability. Also, it is unimaginable to ask students to critique the speech of societal leaders when they are not able to ask questions in their classrooms.

The comments provided by the interviewees revealed two different views on this topic. The first view was shared by the majority of interviewees and contends that Saudi society does not appreciate or support the process of developing citizens' critical thinking skills for two

reasons: 1) teachers and parents must teach students to respect the cultural ideas and accept them without question; and 2) a common misconception among elders and politicians is that improving critical thinking among young learners may affect the security and conformity of Saudi society. In other words, parents and leaders of society interpret questioning and back-and forth dialogue with people in authority as disrespectful and inappropriate behavior.

These findings are consistent with Allamnakhrah's (2013) and Alazzi's (2008) studies. They mentioned the culture of Middle Eastern society is considered the most common obstacle to improving critical thinking, and instead favors harmony and security. These studies found that authority figures in societies that value harmony and security often attempt to create a hypothetical political ceiling to control citizens' questions, but it leads to limiting people's freedom and affects people's identities. These figures often prevent people's ability to practice critical thinking in their daily lives.

Interestingly, the current study found that teachers are unwilling to teach critical thinking at the elementary school level. They view critical thinking as an adult skill, and to be a waste of time for young learners to use higher-ordered thinking skills, especially at the foundation level. Another reason cited is that teaching critical thinking to either young or adult learners is not an important skill for taking and passing the national exams. These tests assess the students' ability in mastering the knowledge already being studied. These findings are reinforced in Alazzi's (2008) study. He found Jordanian teachers considered critical thinking to be a set of mature skills that teachers should not waste time teaching students, with practicing complicated and complex high- ordered thinking skills, especially at the foundational level.

However, only 12% of the Islamic teachers thought that Saudi society appreciates and encourages the improvement of young learners' critical thinking skills by elementary school

teachers. This opposite view claims that Saudi society appreciates and encourages elementary school faculty to improve young learners' critical thinking skills. The reasoning is that the current elementary school students are the future leaders responsible for the employment of critical thinking skills by other citizens either in school or at work.

They emphasized the consequence of the teacher's role in encouraging students to express gently and politely their opinions and beliefs and to question people in authority in order to produce productive and wise leadership. For instance, Mohammed stated:

> In Saudi Arabia, people often practice critical thinking beyond the educational context. Saudi citizens have freedom to raise their voice about educational, political, and social problems. As a teacher, I thought the Ministry of Education encourages teachers to use a variety of teaching methods to improve students' learning performance, as well as their thinking skills. However, it is vital to focus on reading and writing skills in elementary schools and postpone practicing high-ordered thinking skills to high school due to its knowledge background.

Another example is Ibrahim's perspective:

> Islamic teachers should know that schools are not the only places where students practice critical thinking. Students practice critical thinking in their homes or in their daily interaction within their societies. For example, parents may discuss things have happened with their children and the children are able to relate to them. If a problem happens, parents start asking why such a problem happens, and analyzing its background and cause. You can find some students who practice this skill but they do not know they are practicing critical thinking. Of course, some social connections and ways of understanding issues can be obstacles either with

> parents or students because of the environment they have grown up in. For instance, when older people speak, children are supposed to keep silent rather than inject their own opinion on the subject. However, the youngest child has to be taken into account, as our prophet spoke to a two-year boy. This boy had a personality that had to be respected due to his ability to think critically. Parents need to respect young people because they will be important figures in the future and we have to take their opinions into account when they are children.

These findings correspond with Allamnakhrah's (2013) and Moore's (2009) studies that emphasized the importance of stimulating student critical thinking through practical activities across different disciplines to foster and improve students' mental abilities. Also, Moore (2009) stressed that raising students motivations in practicing thinking skills in daily life, such as making inferences, decision-making, and problem solving, would help them think effectively and become more productive citizens. Essentially, Allamnakhrah (2013) pointed out the advantage of critical thinking goes beyond the academic environment to the real world in terms of increasing the quality of daily societal activities, as well as the competence of employees in the workplace.

In summary, considering the view of both opponents and proponents of the effect of Saudi society, I found that Saudi Arabia is flourishing and developing into a modern society by borrowing industrial notions and innovative ideas. However, Saudi society is very proud of the Islamic civilization and its culture. Therefore, the Saudi decision makers always attempt to ground any new social movement or modern progress into their local culture rather than importing another culture, including Arabian culture. In Saudi Arabia, it is the school's responsibility to socialize young citizens into the Saudi culture and coexist with other people

regardless of their social class or economic status. This is achieved by teaching students to respect and admire the ideas and traditions that emerge from the culture and elders in the community. Thus, teachers and students act as defenders of the Saudi culture and ideas. In less developed countries, the school curriculum's role is to deliver the culture of society to the learners by initiating students into norms of their cultures and teaching them the common cultural heritage. This is to protect their communities from external influences, which is consistent with the Bataineh and Alazzi (2009) study.

Notably, this finding agrees with Halpern's (1996) findings in which he pointed out that there is a common misconception about the word *critical* that is sometimes used to insult a person who is always questioning national figures, or making undesirable comments. In fact, critical thinking involves a series of mental skills with the purpose of reaching and providing valuable findings that would improve society as whole.

In regard to school community influence, the questionnaire contained five items focusing on the positions of Saudi school administrators and parents. The first statement was about the unenthusiastic view school administrators and teacher supervisors have toward accelerating learner critical thinking skills in the classroom (M=3.29). Such learning was not emphasized in their observation notes (M= 3.00). Therefore, teacher supervisors usually force Islamic teachers to cover the Islamic studies content (M=3.52), which causes them to avoid administrative disapproval for teaching critical thinking at the elementary schools level (M=3.60). The teachers also fear parental dissatisfaction for allowing their children to practice critical thinking in the classrooms (M=3.66).

As Table 12 shows, more than half (55%) of Islamic teachers thought that the school staff, administrators, and teaching supervisors for both pre-service teachers and in-service

teachers do not always provide support for improving critical thinking in the elementary schools in terms of strategies, techniques, and activities. Moreover, more than half of Islamic teachers insisted that teaching supervisors do not emphasize improving critical thinking skills in their observation comments and notes. They also pointed out those teaching supervisors usually force Islamic teachers to cover the Islamic content according to scope and sequence of the subject.

Another important finding is that over 55% of respondents usually fear administrative disapproval for teaching critical thinking in the classrooms and for using unusual teaching methods, such as field trips and focus groups. In addition, they are apprehensive of parental disapproval for concentrating on critical thinking skills. This stems from parents thinking that students who employ critical thinking may be isolated from their community because they viewed critical thinking as negative behavior. As example, Ahmad stated:

> Saudi school administration staffs generally discourage improving critical thinking in the school sites because they do not value the benefits of developing thinking skills in students or in society. They also ask teachers to discipline students learning because they are afraid to have protesters in their schools.

On the other hand, 35% of the Islamic teachers who completed the questionnaire argued that the Saudi Ministry of Education, school administrators, teacher supervisors, and parents usually support teachers in general, and Islamic teachers in particular, to implement critical thinking strategies across all educational levels and disciplines. Furthermore, they mentioned that implementing critical thinking is one of the primary criteria in the annual assessment of teacher performance in the classroom.

These findings are consistent with the Ozkan-Akan's (2003) findings in which he found school staff, such as administers and teaching supervisors, sometimes limit teachers' abilities in

teaching students how to think logically and rationally by providing them with inadequate professional training opportunities whether related to the subject content or not.

Table 12

The Extent to Which Islamic Teachers Agree or Disagree with Statements Regarding the Influence School Communities Has on Improving Critical Thinking Skills (CTS)

Statement	**Strongly agree (5)**	**Agree (4)**	**Undecided (3)**	**Disagree (2)**	**Strongly Disagree (1)**	**Mean** *M*	**Standard deviation** *SD*
School administrators and teaching supervisors do not support improvement of CT in the classroom.	26.8	29.0	8.7	18.1	17.4	3.29	1.471
Improving CTS is not included in teaching supervisors' observations.	57.2	8.7	0	11.6	22.5	3.007	1.264
Islamic teachers are forced to cover the content of textbooks.	29.0	25.4	21.7	17.4	6.5	3.52	1.256
Islamic teachers fear administrative disapproval.	38.4	16.7	21.7	13.8	9.4	3.60	1.363
Islamic teachers fear parental disapproval.	39.9	31.2	0.7	12.3	15.9	3.66	1.496

The sixth section focuses on teachers' perceptions of pre-service Islamic teachers' preparations programs and in-service professional developmental programs hindering the improvement of critical thinking skills in Saudi elementary schools.

In this section, Islamic teachers were given ten statements about whether their pre-service preparation and in-service professional developmental programs constrained improving critical thinking skills. Respondents were asked to express to what degree they agreed or disagreed with each given statement. Table 13 and 14 present the means and standard deviation for the ten statements in the questionnaire. Teacher's preparation programs and professional development programs were the fifth highest obstacle scored with a total mean of 2.69.

As Table 13 shows, the statements in this section produced the strongest Islamic teacher responses that colleges, universities, and even school districts do not consider fostering critical thinking skills an educational priorities (M=1.92). Therefore, there is a common belief that educational college administrators and university faculties think there is no need to spend much time on accelerating and training pre-service teachers' critical thinking skills (M=1.92);

Another stated reason is that critical thinking skills could be learned naturally, as part of human growth (M=1.92). However, the respondents believed that it is important to include critical thinking skills in pre-service Islamic teacher education programs (M= 4.63). Unfortunately, the respondents perceived that pre-service Islamic teacher education programs do not emphasize practicing critical thinking skills in Islamic studies undergraduate course (M= 4.34) because it is not deemed an essential component of pre-service Islamic education programs across all Saudi higher education institutions (M= 4.64).

Training Islamic teacherS in critical thinking is not considered a fundamental element of professional training (M= 3.81). As such, the general perception is that Islamic teachers are unqualified to teach critical thinking skills in the classroom (M=3.95) due to the lack of basic and perquisite knowledge of critical thinking (M= 3.78) and the inability to implement critical thinking strategies (M= 3.95).

Table 13 shows more than 81 % of the Islamic teachers strongly agreed or agreed that developing critical thinking skills is not considered a major goal of the Saudi educational program for pre-service or in- service teachers. Furthermore, they stated that it is the educational college's responsibility to work on and spend time on improving pre-service Islamic teachers' thinking skills in general and critical thinking skills in particular for two reasons. First, teacher candidates may inherit intellectual and thinking skills from their parents, but these skills must be trained and developed in their pre-service academic courses and internship programs in order for them to increase their competencies. Secondly, these teacher candidates will potentially teach critical thinking to their future learners and be responsible for answering students' critical questions.

With regard to pre-service teacher preparation programs, 95% of Islamic teachers stressed the importance of including critical thinking skills into pre-service Islamic teacher academic programs, either in Saudi universities or teacher education colleges. However, they contended that the pre-service educational programs do not currently include any theoretical courses that teach the meaning, strategies, and techniques of critical thinking. A considerable number of Islamic teachers (74%) reported that Islamic teachers lack knowledge of what constitutes critical thinking and strategies for improving critical thinking.

Another important aspect is that more than 73% of the respondents asserted that the university and teacher education college faculty do not encourage teaching candidates to think critically through the academic courses because it has not been established as one of the pre-service Islamic education program priorities. The result is that these candidates lack theoretical and practical courses in critical thinking.

Table 13

The extent to which Islamic teachers agree or disagree with statements that pre-service teacher preparation programs constrains improvement of critical thinking skills (CTS)

Statement	**Strongly agree (5)**	**Agree (4)**	**Undecided (3)**	**Disagree (2)**	**Strongly Disagree (1)**	**Mean** *M*	**Standard deviation** *SD*
Improving CTS has not been established as one of the school priorities.	37.0	44.9	8.7	7.2	2.2	1.92	.971
There is no need to spend time on improving CTS.	7,2	2.2	8.7	37.0	44.9	1.92	.971
CTS are learned naturally.	7.2	2.2	8.7	37.0	44.9	1.92	.971
It is important to integrate CTS into pre-service Islamic teacher academic programs.	63.8	35.5	0.7	0	0	4.63	.499
Pre-service Islamic teacher academic programs do not emphasize improving CTS.	36.2	63.0	0.7	0	0	4.34	.521
Improving CTS has not been established as one of the pre-service Islamic education programs priorities.	64.5	35.5	0	0	0	4.64	.480

Linked to the in-service professional training programs, as Table 14 displays, 79% of the Islamic teachers stated that in-service training programs do not emphasize improving critical thinking skills or provide strategies for teaching students critical thinking in the classroom. Based on this result, 60% of the Islamic teachers who completed the questionnaire stated that Islamic teachers feel unprepared to teach critical thinking skills in the elementary schools due to their lack knowledge of critical thinking. Khalid summarized briefly these strong views:

> In my opinion, the Saudi Ministry of Education needs reform and to conduct its educational training programs in a critical manner in order to meet societal desires, teacher, and student needs. There are numerous training programs, but the problem is that training is done regardless of whether the teacher grasps the content of the training.

Essentially, in order to produce productive and capable citizens, this study stresses the importance of integrating critical thinking across all levels of educational curricula. This finding agrees with studies by Al-Qahtani (1995), Elder (2005), Ozkan-Akan (2003) and Sa-U and Abdrahman (2008) that emphasized the significance of including critical thinking across all educational programs in both teacher candidate preparation programs and in-service teacher training programs. Additionally, they pointed out that all higher educational institutions have to prepare future teachers to become problem solvers and critical thinkers. Walsh and Paul (1988) stated that critical thinking should be incorporated into all educator teaching programs to prepare teachers as role models as critical thinkers. Allamnakrah (2013) and Alwehaibi (2012) reported that Saudi students lacked the ability to think critically. They attributed this problem to teachers'

failure to educate learners in critical thinking skills due to their own lack of theoretical and practical knowledge of critical thinking.

This study's finding is also consistent with studies by Kowalczyk et al. (2012), Lauer (2005), Paul (2008), and Stedman and Adams (2012). These studies claimed that a lack of critical thinking knowledge impedes students' critical thinking as they reach each developmentally appropriate challenge level. Furthermore, these findings correspond with Allamnakrah's (2013) study that mentions the lack of critical thinking courses in teacher preparation programs not only affects the current student, but also future students because the current learners will be teaching future students. If the current teaching candidates do not receive professional training in critical thinking, they will not be qualified or eligible to teach critical thinking to future learners.

Tsui (as cited in Allamnakrah, 2013) questioned how teacher candidates who are not taught critical thinking and are not able to practice its strategies in their educational colleges can be expected to deliver critical thinking skills to their students. In other words, this study acknowledged that teacher perceptions toward critical thinking can affect students' learning performance. For example, if teachers misunderstand something, they prefer to avoid addressing it in the classroom, even if it is important for students.

This finding is supported further by Whittington and Newcomb in their study (as cited in Stedman & Adams, 2012). They mentioned that teachers often aspire to teach critical thinking skills to students but they do know how to handle it or implement critical thinking strategies and techniques. Equally important, this study's finding is similar to the findings in studies conducted by Alazzi (2008), Al-Essa (2009), Al-Miziny (2010), Al-Qmadi (2008), Bataineh and Alazzi (2009), Khojasteh and Smith (2010), and Ozkan-Akan (2003). They indicated that educators are

sometimes afraid to teach critical thinking in the classroom due to a lack of a background in theoretical and practical techniques for teaching critical thinking. Reflecting on the fact that improving critical thinking skills has not been recognized as one of the Saudi elementary schools' priorities, less than 10% of Islamic teachers argued that critical thinking has become a fundamental educational goal for Saudi elementary schools. Salah reported:

> The strategic plan of the Saudi Ministry of Education underscored the importance of instilling critical thinking in potential students. In the past, pre-service teachers had poor and weak knowledge background in critical thinking because the curricular was not updated. Now, the situation is changing and the new staff and curricula we received from the ministry needs more studies and training and for teachers to be the base in the educational process. Professional teachers attend training courses and know what teaching thinking skills means. They also know teaching strategies and thinking skills.

This finding is reinforced by the Alwehaibi (2012) study. She stated that the Ministry of Education has reformed its educational system in order to improve students' thinking abilities and practical skills by switching their emphasis from imparting information to the students to examining and evaluating knowledge in order to improve the students' cognitive abilities. This allows students to achieve their potential goals and to play an active role in their country's reformist developments.

In another finding, nearly 9% of questionnaire respondents claimed that there is no need to spend much time on improving and fostering critical thinking skills of teaching candidates because these skills are learned naturally. However, they insisted that educational college administrators should incorporate critical thinking in the pre-service education programs and in-

service professional development programs in order to produce effective and successful teachers. More than 20% of the respondents argued that Islamic teachers are qualified and prepared for teaching critical thinking to the students because they have already acquired an essential knowledge of critical thinking and had adequate opportunities to practice and implement several types of critical thinking strategies during their teaching internships.

Table 14

The Extent to Which Islamic Teachers Agree or Disagree with Statements that In-Service Teacher Professional Developmental Program Constrains Improvement of Critical Thinking Skills (CTS)

Statement	**Strongly agree (5)**	**Agree (4)**	**Undecided (3)**	**Disagree (2)**	**Strongly Disagree (1)**	**Mean** *M*	**Standard deviation** *SD*
In-service-training programs do not emphasize improving CTS.	36.2	43.5	2.2	2.2	15.9	3.81	1.373
Islamic teachers lack knowledge of what constitutes CT.	42.8	31.9	5.1	2.2	18.1	3.78	1.472
Islamic teachers lack CT strategies.	59.4	13.0	7.2	4.3	15.9	3.95	1.513
Islamic teachers are unprepared to teach CTS.	59.4	13.0	7.2	4.3	15.9	3.95	1.513

The seventh section focuses on Islamic teacher's perceptions of whether Islamic studies curriculum hinders the improvement of critical thinking in Saudi elementary school.

The questionnaire presented nine statements on whether Islamic studies curricula impede the improvement of critical thinking skills for elementary school students. Islamic teachers were asked about the degree to which they agreed or disagreed with the given statements. Islamic studies curricula, with a total mean of 2.57, was the sixth highest scored obstacle to improving critical thinking ability in Saudi elementary schools. As Table 15 indicates, more than 79% of the respondents had the opinion that the current Islamic studies curriculum is not appropriate for promoting critical thinking abilities. Nearly three-fifths of the Islamic teachers affirmed that the Islamic courses stress memorization Islamic law facts and concepts. In addition, approximately 76% of the Islamic teachers asserted that mastering the content of Islamic studies is a top priority of elementary school Islamic teachers, as opposed to improving students' critical thinking skills. They stated this is due to pressure from teacher supervisors and school administrators.

Another essential finding is that 69% of respondents stated that Islamic study materials are highly structured and aim to provide students with sequential facts and knowledge regarding faith and beliefs. More than 73% of Islamic teachers viewed Islamic courses as not conducive and lacking helpful materials for fostering and promoting elementary students' critical thinking skills. They stated this is because these courses do not include or provide activities for improving critical thinking.

Taken together, the responses and the comments provided by the interviewees, regarded Islamic studies courses as poor, ineffective, and of unattractive design, which negatively affects fostering students' thinking abilities. For example, more than 73% of these teachers claimed that

Islamic studies curriculum does not view improving critical thinking as important. Yahya commented:

> Islamic studies textbooks are presented in a way that does not help in developing students' critical thinking skills. They include numerous facts that students must memorize in order to pass all of the national curricular exams. Therefore, teachers are considered equally responsible as their students' poor outcomes as is the inferior curriculum design.

This finding suggests that the role of Islamic teachers is to deliver information to the students and mold them in the same teacher's view, while the students receive and memorize the knowledge for a period of time. Saudi Arabian elementary school teachers tend to cover a rigid prescribed course syllabus within a short period of time. This finding concurs with Al-Qahtani's (1995) study, in which he pointed out that Saudi teachers generally deliver the national school curriculum by pouring knowledge into students' minds rather than focusing on improving student's skills. Also, he highlighted that the Saudi national curriculum encourages Saudi students to learn factual knowledge effectively through rote memorization, and that these courses actually block the students' ability to think about the material critically.

Notably, more than 72% of the respondents argued that mastering the content of the Islamic studies curriculum does not produce critical thinkers because of the emphasis on lower-ordered thinking skills, such as memorization and comprehension. Equally significant, 74% of the respondents emphasized the need for incorporating critical thinking skills into the Islamic studies courses, such as Quran, Tajwid, Tafisr, Hadith, Figh, and Tawheed.

On the contrary, more than 20% of the respondents argued that the current reforms in the Islamic studies curriculum are appropriate for encouraging and developing elementary schools students' critical thinking skills. They stated these courses build on Bloom's Taxonomy starting from lowest level, which is memorization, to the most complex level, which is evaluation. They also mentioned that curriculum designers have attempted to translate the Ministry of Education goals into the school curricula and the learning materials.

Approximately 22% of the respondents opposed the notion that Islamic studies curriculum stresses only memorization of facts and concepts, and believe these courses encourage students to think critically by providing them with challenging activities. Similarly, these teachers emphasized the importance of mastering the content of Islamic studies because it serves as a foundation for Saudi students to think critically by providing them with supporting evidence and knowledge. This finding is consistent with Maiorana's (1992) study that illustrated the degree that teachers are confused between the product and process of learning and how that confusion may hinder students' critical thinking. Majorana (1992) mentioned that many teachers are confused between the curriculum as a product and a process, which hampers the improvement of their students' critical thinking skills.

Therefore, the teachers think their role is to transmit information rather than to teach thinking skills, while the purpose of education is to promote students' thinking. This finding is supported further by Al-Qahtani (1995), Al-Essa (2009) Al-Miziny (2010) and Alwehaibi, (2012) that show teachers should recognize from the start the difference between education as a concept from other forms of teaching, such as training. This distinction helps teachers focus on the important knowledge they should present and how best to present it to their students.

Linked to the transfer of critical thinking among all Islamic studies courses, nearly 25.4% of Islamic teachers argued that critical thinking skills cannot always be implemented in such courses such as Tawheed (the oneness of Allah). They pointed out that is because the material is based on the Holy Quran and the sayings of the Prophet Mohammad (peace be upon him). Of course, critical thinking can be implemented in some Islamic studies courses, such as Figh (Islamic jurisprudence). Such courses usually provide students with real-world problems, such as financial transactions.

Table 15

The Extent to Which Islamic Teachers Agree or Disagree with Statements on that School Curriculum Constrains Improvement of Critical Thinking Skills (CTS)

Statement	**Strongly agree (5)**	**Agree (4)**	**Undecided (3)**	**Disagree (2)**	**Strongly Disagree (1)**	**Mean** *M*	**Standard deviation** *SD*
Islamic courses are not appropriate for developing CTS.	64.5	15.2	0	0	20.3	4.03	1.577
Islamic studies curriculum stresses only memorizing facts and concepts.	27.5	49.3	0.7	9.4	13.0	3.68	1.322
Learning the Islamic studies content is more important than CTS.	50.7	26.1	0.7	13.0	9.4	3.95	1.376
Islamic studies curriculum does not give importance to improving CT.	39.9	34.1	1.4	11.6	13.0	3.76	1.417
Islamic studies curriculum is highly structured.	39.9	30.4	8.0	16.7	5.1	3.83	1.259
Islamic studies curriculum is not conducive to CT.	30.4	42.8	14.5	12.3	0	3.91	.970
Islamic studies curriculum does not provide activities for improving CT.	69.6	28.3	2.2	0	0	4.67	.514
Mastering content leads students to become critical thinkers.	0	12.3	14.5	42.8	30.4	3.91	.970
CTS are needed to transfer knowledge between Islamic studies courses.	42.0	32.6	0	25.4	0	4.16	.806

Summary

This chapter focuses on the study's data analysis and summarizes the study's findings. This explanatory sequential mixed-method study aims to examine Islamic teachers' ideas about improving critical thinking skills in elementary schools in a Southwestern province of Saudi Arabia. In this chapter I used seven sections to answer the research questions. I found the most significant perceived barrier to improving critical thinking in the Saudi elementary schools is student's ability, with a total mean of 4.31.

This is due to Saudi students being discouraged to question authority figures, such as teachers, elders, parents, and politicians. Teaching methods as an obstacle received the second highest rating, with total average of 4.29. This is a result of teacher confusion in distinguishing between teaching sequences and teaching approaches, and the fact that direct teaching is the primary method used. Classroom structure was the third highest rating as an obstacle to the development of critical thinking, with total mean of 3.72.

This stems from such a large number of elementary schools in the Southwestern of Saudi region that were not originally designed to function as schools. The influence of society and the school community on a teacher's perception plays an important role in hindering students' critical thinking abilities, with a total mean of 3.70. Saudi culture is not considered by conservative leaders and politicians to be open to criticism or questioning while is the foundation of reforming and building school curriculum.

The pre-service teacher preparation programs and in-service teacher professional developmental programs also constrain the improvement of critical thinking skills and was the fifth highest-ranked obstacle, with average mean of 2.69.Teachers' failure to educate students

how to think critically and the lack of theoretical and practical knowledge of critical thinking are the reasons behind this.

The Islamic studies curriculum was the lowest ranked obstacle for improving critical thinking skills, with average of 2.57. This is because of teachers' confusion between the product and process of learning, which impedes fostering students' critical thinking.

CHAPTER FIVE

CONCLSUIONS, IMPLICATIONS, AND RECOMMENDATIONS

This chapter presents the conclusions of this study and the implications for practice and future research. The purpose of this study is to examine perceptions of Islamic teachers on improving critical thinking skills in the Saudi elementary school system and to investigate the factors influencing these perceptions in order to identify any obstacles to teaching thinking skills in Saudi elementary schools. The results are classified into seven sections,

- Islamic teachers' perceptions that critical thinking constrains the improvement of critical thinking skills
- Islamic teachers' perceptions that Saudi society and the school community constrain the improvement of critical thinking skills
- Islamic teachers' perceptions that pre-service teacher preparation programs and in-service teacher professional developmental programs constrain the improvement of critical thinking skills
- Islamic teachers' perceptions that the school curriculum constrains the improvement of critical thinking skills
- Islamic teachers' perceptions that teaching methods constrain the improvement of critical thinking skills
- Islamic teachers' perceptions that classroom structure constrains the improvement of critical thinking skills; and
- Islamic teachers' perceptions that student ability constrains the improvement of critical thinking ability.

In addition, the results were aligned with the research questions that are summarized as follows:

1. How do male Islamic elementary teachers define critical thinking?
2. What are male Islamic elementary teachers' perceptions toward improving critical thinking skills among students in Saudi Arabian elementary schools?
3. What factors influence male Islamic elementary teachers' implementation of critical thinking instruction in Saudi Arabian elementary schools?

The data presented in Chapter 4 allows me to make sound conclusions regarding each of these questions. Conclusions are presented for each question, followed by a discussion of the implications of those findings. Limitations that emerged during the study are also discussed. Finally, I presented a number of recommendations for practice and for future researchers.

Conclusion and Discussion

It should be noted that the subjects who completed the questionnaire and participated in the semi-structured interviews revealed and expressed their personal perceptions toward the teaching of critical thinking and identifying the common obstacles to improving critical thinking in Saudi elementary schools. This study reveals that teaching critical thinking is not an easy task for teachers, and it was not considered one of the priorities of the recent reform of the Saudi educational system. These findings emerged in response to the research questions in order to achieve the short and long term objectives of the study.

The findings clearly showed that Islamic teachers' perceptions have a powerful effect on their adoption of teaching critical thinking to young learners and their use of a variety of techniques to improve critical thinking ability in Saudi elementary schools. In addition, it was revealed that there is a relationship between Islamic teachers' perceptions and their actions in the learning setting, as well as their beliefs and students' learning progress. This study found there is

a correlation among teacher acquisition of the critical thinking knowledge and implementation of strategies and techniques in critical thinking in the classroom.

Unfortunately, Islamic teachers in Saudi Arabia are not familiar with critical thinking as a term, let alone its definitions. They are also not aware of approaches and techniques for teaching critical thinking. For the most part, the Islamic teachers themselves are considered a barrier to improving critical thinking in young learners because they lack the critical mindset and the necessary knowledge of critical thinking. It can therefore be inferred that Islamic teachers do not value the advantages in developing young learners' critical thinking skills. These findings were consistent with the findings of Allamnakrah (2013) and Alwehaibi (2012), who pointed out that students' failure to thinking critically is a result of the teacher's failure to teach critical thinking skills in the learning setting. They also found university and teaching college faculties were unable to instill critical thinking in their students due to a lack of theoretical and practical knowledge of critical thinking, which impedes the improvement of students' critical thinking. Of course, teachers often aspire to foster students' critical thinking abilities, but lack the necessary prerequisite knowledge for implementing critical thinking in the classroom.

To answer the third research question, I encouraged the study participants to identify these barriers so that they could be overcome these barriers in order to encourage a positive attitude toward critical thinking and to create a productive and effective learning environment.

Although the significance of developing students' thinking skills is becoming understood and evident, there are several factors that impede the progress of critical thinking abilities in Saudi elementary schools. The questionnaire's respondents and interviewees attributed the negative reactions and perceptions of teachers in general and Islamic teachers in particular

toward developing students' critical thinking ability can be linked to several factors. These factors are:

- Influence of Saudi society and the school community,
- Pre-service education programs and in-service professional development programs,
- Content of the Islamic studies textbook,
- Teaching methods,
- Classroom structure, and
- Student ability.

This study's findings are consistent with those of the studies carried out by Al-Qahtani (1995), Bataineh and Alazzi (2009), Beyer (1984), Brookfield (1987), Howie (2011), Kelly (2009), Kowalczyk et al. (2012), Lauer (2005), Maiorana (1992), Moore (2009), Stedman and Adams (2012), and Zeteroglu et al. (2012). Those studies acknowledged that there were several factors that hindered the progress of critical thinking abilities, namely society (Bataineh & Alazzi, 2009), educational background, social-class, and parental involvement in school, (Lauer, 2005; Maiorana, 1992), teaching methods, learning materials (Beyer, 1984; & Brookfield, 1987) that depend on the factual knowledge that limits judgment skills, and classroom environment (Howie, 2011; Kelly, 2009; Kowalczyk. et, 2012; Moore, 2009; Stedman & Adams, 2012, & Zeteroglu et al. 2012), and teacher perceptions (Alazzi, 2008; Bataineh & Alazzi, 2009; Burke et al. 2007; Fisher, 2007; Ozkan-Akan, 2003).

Additionally, barriers impeding improvement of critical thinking in the classroom include the educator's lack of necessary skills to assess the students' critical thinking skills and resources to implement critical thinking strategies within classroom environments (Aliakbari & Sadeghdaghighi, 2012; Kowalczyk et al., 2011). Similarly, Sternberg (as cited in Ozkan-Akan,

2003) summarized the obstacles to fostering student thinking ability in eight constraints: teacher perception, student aptitude and mental ability, learning material, learning sequence, teaching strategy, teacher/student partnership, learning competency, and classroom environment.

The questionnaire respondents in the current study reported seven major obstacles to improving elementary school students' critical thinking ability and implementing critical thinking teaching strategies as follows.

Student Ability

Student constraint was considered to be the primary obstacle to improving critical thinking in Saudi elementary schools because of students' impatience in overcoming the difficulty of critical thinking. Another reason is student failure of practicing critical thinking, which can be ascribed to teachers' failure to teach critical thinking in the classroom.

Another barrier is the overloaded curriculum and inadequate opportunities to practice critical thinking during the learning process. The study participants also stated that students lack the interest to engage and participate in critical thinking activities, preferring activities and assignments with fact-based questions and answers.

Teaching Methods

The second factor related to the improvement of critical thinking in Saudi elementary schools is transmitting knowledge to the students through lectures was regarded by Islamic teachers as a barrier to improving students' critical thinking ability. This study concluded that Islamic teachers use direct teaching methods, such as lecturing, which do not provide adequate critical thinking activities in the daily lesson plan. Such learning activities play a significant role in developing students' critical thinking abilities. According to this study's results, it is advised

that the knowledge of critical thinking should be translated to the field of practice in the learning setting which was suggested by Innabi and El Sheikh (2007).

Classroom Structure

Islamic teachers claim that classrooms do not help Islamic teachers facilitate teaching critical thinking skills for elementary school students, especially in the rural areas of Saudi Arabia. Islamic teachers expressed disappointment and discouragement at having to teach critical thinking in classes that were not originally designed to function as schools because these schools were not well prepared to produce critical thinking students in terms of effective classroom environments, learning technology, and library. In addition, it should be noted that insufficient time for Islamic teachers to prepare and plan critical thinking activities and for students to learn new learning techniques and knowledge applications are yet another barrier to teaching critical thinking.

Saudi Society and the School Community

The fourth factor related to the improvement of critical thinking in Saudi elementary schools is the Saudi society and the school community which are viewed as significant obstacles to improving critical thinking in high schools and secondary education institutions (Allamnakhrah, 2013; Al-Qahtani, 1995; Alwehaibi, 2012). This is due to the societal structure and the value placed on harmony and security in the Saudi community. In a Saudi context culture is an important resource for reforming educational systems in general, and designing school curricula in particular. However, Saudi culture is a topic not open to critique so that the conservative citizens and politicians deem it off limits to criticism and questioning.

Another consideration is the societal perception of critical thinking. The study's interviewees revealed that there is a common misconception toward critical thinking as a term

and a mental activity due to the political agenda and the structure of society. For example, critical thinking has a negative connotation, one that implies opposing opinions and encouraging social revolution. Saudi citizens perceive critical thinking as a negative activity due to the subliminal political ceiling that is in place to control citizens' questions and desires. Allamnakhrah (2013) pointed out that critical thinking has been addressed by education policy makers as an essential educational goal for current students, but persistently taboo topic as far as political reforms or governmental decision are concerned.

These findings helped me to answer an important question: Why did the recent reconstruction and redesign of the Saudi educational system fail to improve Islamic teachers' perception of critical thinking? Basically, if critical thinking is not influencing the cultural patterns of Saudi society, then Islamic teachers have to practice and learn to implement critical thinking during pre-service education programs and in-service professional training programs. Moreover, the faculty of educational colleges should instruct teaching candidates about the benefits of practicing critical thinking in daily activities because the effects of improving critical thinking go beyond the academic environment to the real world. Critical thinking can also be used to improve the quality of life throughout society and competency in the workplace (Allamnakhrah, 2013).

Needless to say, reforming the Saudi educational systems around critical thinking cannot be achieved without normalizing critical thinking among Saudi citizens. Moreover, Saudi students are taught by knowledgeable and experienced educators but they will be unable to think rationally unless their teachers understand how to implement critical thinking strategies in the classroom.

Pre-service Teacher Preparation Programs and In-service Teacher Professional Developmental Programs

The second most influential factor in Islamic teacher perceptions of critical thinking is pre-service education programs and in-service teacher professional developmental programs. This study found that critical thinking has been recognized as a major component of any future Saudi educational system reform. It should be noted that there is a recent movement within some Saudi universities and teaching colleges to place critical thinking at the heart of the educational developmental process by creating an environment that involves a critical thinking curriculum, inquisitive teachers, and effective teaching methods, as mentioned by Allamnakhrah (2013), Al-Qahtani (1995), and Alwehaibi (2012).

However, according to the study's results, inclusion of critical thinking skills in higher education is still limited due to the societal pressures against the concept of critical thinking. It has not been considered a priority of the Saudi educational colleges or universities, or even the school districts. It is significant that a number of the study's participants emphasized the importance of including critical thinking across all educational disciplines, especially Islamic education, in both teacher candidate preparation programs and in-service teacher training programs.

This is because there is a common misconception among Islamic teachers about the effectiveness of critical thinking in teaching Islamic studies for elementary education students. This study's finding was supported by Akyuz's (2009) findings that undergraduate teacher programs must be built on critical thinking because of the benefits of integrating critical thinking in the teacher education programs has on increasing the quality of education outcomes (Allamnakrah, 2013).

There is another important finding. It is the responsibility of university faculty, educational college administrators, and policy makers in the Saudi Ministry of Education to reform the pre-service Islamic teachers' education programs and build on the core life skills, such as critical thinking, because these teacher candidates will potentially instill critical thinking into their future learners and be responsible for answering students' critical questions. If these teacher candidates do not acquire perquisite knowledge to teach critical thinking to students in the university and teaching colleges, where are they supposed to learn and train? The educators feel unprepared to teach critical thinking to the students due to a lack of theoretical background and practical techniques in critical thinking.

This study found that critical thinking is not included in current in-service Islamic teacher professional training programs, which is consistent with the findings in Allamnakrah (2013) study. Moreover, the integration of critical thinking in in-service Islamic teacher professional training programs is still limited and inadequate in Saudi Arabia, a finding which is in line with those of Al-Miziny (2010) and Al-Qahtani (1995).

Islamic Studies Curriculum

Islamic teachers criticized the current Islamic studies subjects because of the focus on content quantity rather quality and its focus on the memorization of facts rather than analyzing, synthesizing, and evaluating the content. The teachers pointed out that the current Islamic studies curricular are not appropriate for promoting critical thinking ability. They called for educational reforms in the Saudi educational system and school curricula with critical thinking as the basis of such reforms. These reforms will have positive effects on the students in particular and society in general.

Implications for Practice

In this section, it is crucial to present the major and essential findings of this study, and to provide suggestions for overcoming the barriers to improving critical thinking abilities for young learners. This study might help curriculum designers, policy makers in the Ministry of Education, teaching supervisors, educators in general, and Islamic teachers in particular by raising awareness of the necessity of teaching critical thinking in elementary schools and providing suggestion into the problem of understanding Islamic teachers' perceptions of the obstacles to improvement of critical thinking by young learners.

One of the main of this study findings is that Islamic teachers lack the basic knowledge of critical thinking in terms of their inability to define critical thinking to students regardless of their educational levels. The teachers do not value or welcome practicing critical thinking in general, but in school in particular. In order to tackle this problem, it is the responsibility of university and teaching faculties and school staffs to create both long and short-term plans that include a number of enrichment programs and professional training programs for the school neighborhoods. These development programs would eventually provide citizens with adequate opportunity to express their opinions about their social, financial, and political issues, and the mentality of would change gradually and positively toward critical thinking as a fundamental educational goal over the next decades.

Another essential finding of this study is the lack of inclusion of critical thinking in pre-service education programs and in-service professional training programs. Cooperation among Saudi universities, teaching colleges, and the Ministry of Education in terms of increasing specific courses designed for teaching critical thinking and methods for implementing critical thinking in the learning site is recommended. Also, educational policy makers must understand

the importance of providing Islamic teachers with ample opportunities to explore the orientations toward teaching critical thinking in order to shape and develop their personal teaching philosophy and critical thinking concepts. Islamic teachers should learn to teach students from multiple viewpoints and focus on comparing the differences and similarities of textbook content across all disciplines.

Another finding is that the current Islamic studies curriculum is not appropriate for challenging students' thinking ability due to its focus on factual and spiritual knowledge. To tackle this problem, those responsible for the design of the elementary curriculum should understand the role of textbooks in fostering students' critical thinking ability, in terms of inclusion of a series of challenging topics and questions. Also, they should look at the educational experiences of other developing countries in order to design effective and efficient learning textbooks. Educators should teach students using multiple learning materials to encourage leaners to explore the surrounding environment and understand the material being taught, as well as acquiring expertise in critical thinking.

Another finding is that Islamic teachers usually teach by lecturing to the students, which is an impediment to improving their students' critical thinking skills. Educators should employ different methods of teaching thinking skills such as in a separate class, in specific subjects, and through infusing throughout the curriculum such as small group discussion, and heuristic methods. Teaching thinking through the separate class method focuses on improving the thinking skills-cognitive process through specific programs in a separate lesson. Developing thinking skills through specific subjects focuses on improving the students' thinking skills through a series of lessons to raise the level of thinking within each subject and to accelerate their development to the next stage of thinking (Dewey & Bento, 2009). The infusion method can be

used across the curriculum, and is defined as metacognition. David (as cited in Scott, 2008) states the infusion method involves critical thinking, decision-making, synthesis, and analysis of content being studied. This method plays a central role in activating student-thinking skills in an explicit manner using different types of thinking skills. It is recommended that Islamic teachers persist in asking students to think critically.

The last major finding is that Islamic teachers view student ability as a constraint to improving critical thinking, specifically student lack of interest in practicing critical thinking. Islamic teachers and curriculum developers take student resistance of practicing difficult activities and active learning into their account. In addition, they should understand the different learning styles, age level of the students, psychological characteristics of students, student's learning aptitude, appropriate teaching method, and theoretical orientation of critical thinking in the elementary schools. Moreover, they should motivate and encourage students to challenge themselves to reach a sound conclusion.

Implications for Research

This study has provided a number of recommendations for future research that includes the following:

1. There is a need to examine female Islamic teachers' perceptions toward critical thinking in the Southwestern region of Saudi Arabia in order to identify the similarities and differences between male and female teacher perceptions.
2. It is vital to investigate perceptions of teachers in other disciplines, such as language arts, social science, English, and math in order to offer policy makers in the Ministry of education a holistic picture of the Saudi educational system.

3. Qualitative studies, interviews with students, and classroom observation can be carried out to investigate students' perceptions about how teachers teach critical thinking in the classroom, or if they perceive obstacles to that.
4. There is an urgent need to examine in depth the influence of society and the school community on teaching student thinking in general and critical thinking in particular.
5. More research is needed on the pre-service education programs and in-service professional training programs in terms of restructuring these programs to include critical thinking.

Summary

In summary, this chapter presents the conclusions of this study, and the implications for practice and future research in order to make meaningful contributions in the critical thinking knowledge and provide some useful suggestions for Saudi policy makers in education.

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APPENDICES

Appendix A

Islamic Teacher's Perceptions of Improving Critical Thinking Skills in the Saudi Arabian Elementary Schools

QUESTIONNAIRE (ENGLISH VERSION)

The majority of questionnaires adapted of Teachers' perception of constraints on improving student thinking in high schools *Survey* developed by Ozkan- Akan, (2003).

****

Section1: Please respond and complete to the questions bellow by choosing the appropriate the letter for you.

1. What is your educational background?
    a) Associate degree
    b) Bachelor of Islamic studies
    c) Bachelor of different disciplines
    d) Master
    e) Doctorate
2. How many years have you taught in the elementary schools?
    a) 5-10 years
    b) 11-15 years
    c) 16-20 years
    d) 21-25 years
    e) Over 25 years

3. What is your school location?
    a) Abha city.
    b) Al-sawda.
    c) Prince Sultan Bin Abdul-Aziz city.
    d) Al-qraa.
    e) Khamis Mushayt.

Section 2: Bellow are several statements that related to the significance of improving critical thinking in the elementary schools and the factors are influencing teachers' perception toward developing student critical thinking abilities. Please read carefully, and respond to each one of the questionnaire statements by selecting the appropriate option for you on the five- point scale (Likert scale):

The Definition of Critical Thinking (CT):

The strategic plan of the Ministry of Education (1974) identifies the critical thinking skills that include observation, analysis, synthesis, evaluation, collecting evidence, comparison, contrast, innovation, invention, abstraction, and construction. So, it encourages educators to use the different kinds of teaching method for developing students' abilities of evaluation, and organizing their thoughts and ideas.

1. Islamic teachers' perceptions of critical thinking constrain improving critical thinking skills (CTS).

N	Statement	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1	CT engages students' higher order thinking (i.e. (analysis, synthesis, and evaluation).					
2	CT is a method of thinking that would help students to enjoy with the learning process.					
3	CTS are needed for daily problem solving.					
4	CTS are needed for the courses to be learned better.					
5	CT increases self- confidence in the classroom.					
6	CT relieves monotony in the classroom.					
7	CT is essential for high quality of life.					

2. Islamic teachers' perceptions of society and school community constrain improving critical thinking skills.

N	Statement	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
8	Improving CTS thinking skills leads to improving Saudi society.					
9	Saudi society does not value CT.					
10	Improving CT affect the Saudi of society security.					
11	It is disrespectful to question people in authority.					
12	School administrators and teaching supervisors do not support improvement of CT in the classroom.					
13	Improving CTS is not included in teaching supervisors' observations.					
14	Islamic teachers are forced to cover the content of textbooks.					
15	Islamic teachers fear administrative disapproval.					
16	Islamic teachers fear parental disapproval.					

3. Islamic teachers' perceptions of pre-service candidate teachers' preparations programs and in- service teacher professional developmental programs constrain improving critical thinking skills.

N	Statement	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
17	Improving CTS has not been established as one of the school priorities.					
18	There is no need to spend time on improving CTS.					
19	CTS are learned naturally.					
20	It is important to integrate CTS into pre-service Islamic teacher academic programs.					
21	Pre-service Islamic teacher academic programs do not emphasize improving CTS.					
22	Improving CTS has not been established as one of the pre-service Islamic education programs priorities.					
23	In-service-training programs do not emphasize improving CTS.					
24	Islamic teachers lack knowledge of what constitutes CT.					
25	Islamic teachers lack CT strategies. CTS.					
26	Islamic teachers are unprepared to teach CTS.					

4. Islamic teachers' perceptions of Islamic studies curriculum constrain improving critical thinking skills.

N	Statement	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
27	Islamic courses are not appropriate for developing CTS.					
28	Islamic studies curriculum stresses only memorizing facts and concepts.					
29	Learning the Islamic studies content is more important than CTS.					
30	Islamic studies curriculum does not give importance to improving CT.					
31	Islamic studies curriculum is highly structured.					
32	Islamic studies curriculum is not conducive to CT.					
33	Islamic studies curriculum does not provide activities for improving CT.					
34	Mastering content leads students to become critical thinkers.					
35	CTS are needed to transfer knowledge between Islamic studies courses.					

5. Islamic teachers' perceptions of teaching methods constrain improving critical thinking skills.

N	Statement	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
36	Islamic teachers do not provide adequate CT opportunities within lesson plans.					
37	National standardized tests impede the development of CTS.					
38	Islamic teachers usually lecture the knowledge to the students.					
39	Islamic teachers do not provide students with enough time for practicing CT in the class.					
40	Islamic teachers are uncomfortable with their students' questions that they may not be able to answer.					
41	Islamic teachers feel a need to cover content.					

6. Islamic teachers' perceptions of classroom structure constrain improving critical thinking skills.

N	Statement	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
42	Classrooms do not help Islamic teachers facilitate CTS.					
43	Islamic teachers do not have enough time to get prepared for developing activities for CT.					
44	Islamic teachers do not have enough resources to teach CT.					
45	Islamic teachers are not prepared to assess CT.					

7. Islamic teachers' perceptions of student ability constrain improving critical thinking skills.

N	Statement	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
46	Students perceive Islamic teachers as authority figures.					
47	Students lack needed background knowledge for practicing CT.					
48	Students are impatient with the difficulty of practicing CT activities.					
49	Students lack interest in CT activities.					
50	Students prefer activities and assignments with simple factual questions and answers.					

Appendix B

Islamic Teacher's Perceptions of Improving Critical Thinking Skills in the Saudi Arabian Elementary Schools

Interview questions (ENGLISH VERSION)

The interview questions are adapted of Teachers' perception of critical thinking: A study of Jordanian secondary school social studies teachers developed by (Alazzi, 2008, p. 15).

****

1. **What are the Islamic teachers' perceptions of critical thinking?**
    - Can you explain what does critical thinking means to you?
    - What are the skills related to critical thinking?
    - Do you think critical thinking essential to our society? Why?
    - Do you think critical thinking essential to our society? Why?
    - What are Islamic teacher opinions on characteristics of critical thinkers?

2. Do the Islamic teachers teach critical thinking as part of their Islamic studies instructions?

- Do you enjoy teaching critical thinking in the classroom?
- Are there certain kinds of critical thinking that you are trying to teach?
- How often do you involve students in critical thinking?
- Do you design your own critical thinking activities or do you rely on textbook materials or other materials? Explain

3. Based on teacher's views, what are the obstacles of improving critical thinking skills in the Saudi elementary schools?

Appendix C

11/05/2013

To whom it My Concern:

Mr. Mesfer Alwadai, who is a PhD student in the department of Curriculum and Instruction in Southern Illinois University at Carbondale, asked us to translate his dissertation instruments which are survey questionnaire and interview questions that will be used for collecting data for his topic "Islamic teacher's perception of improving critical thinking skills in the Saudi elementary school".

As master students majoring in applied linguistics and native speakers of Arabic, we translated them from English to Arabic. We tried our best carring the same meaning of the English version in order to help me meeting the research goals and conducting accurate, valid, and reliable data. Please do not hesitate to contact us if you have any questions.

Sincerely,

Translators: Nief Algamdi and Obied Alaqlobi. If you have any questions, please feel free to contact us: Naif3g3@hotmail.com/ obied@siu.edu

Appendix D

Declaration Form...

I, ... acknowledged the validity of the information given to the researcher Mesfer Alwadai as a requirement to get a doctorate degree from Southern Illinois University Carbondale/ Department of Curriculum and Instruction for the academic year 2013/2014. If you have any questions about the study, please contact me. Thank you for taking the time to assist me in this research.

Mesfer Alwadai
Southern Illinois University in Carbondale
College of education and Human service
Department of Curriculum and instruction
Phone number: 6184121370
mesferalwadai@siu.edu
Or contact the advisor

Prof. John McIntyre
Chair of Department of Curriculum and instruction and a Coordinator of Curriculum Studies
Mailcode 4610
Southern Illinois University Carbondale
625 Wham Drive
Carbondale, Illinois 62901
Phone: (618) 453-2415
E-mail: johnm@siu.edu

Name of interviewee:

Signature:

Email:

Phone Number:

بسم الله الرحمن الرحيم

نموذج إقرار على صحة المعلومات المعطاة والمترجمة

نعم أنا المدعو/ ..... الموقع أدناه على صحة المعلومات المعطاة من خلال المقابلات الشخصية حول معوقات تنمية التفكير الناقد لدى طلبة المرحلة الإبتدائية بالمملكة العربية السعودية من وجهة نظر معلمي التربية الإسلامية بمنطقة عسير- مدينة أبها ومحافظة سراة عبيدة والتي يسعى من خلالها الباحث/ مسفر أحمد الوادعي استيفاء متطلبات الحصول على درجة الدكتوراة من جامعة جنوب إلينوي بمدينة كاربنوديل للعام الأكاديمي ٢٠١٣/٢٠١٤ولكم جزيل الشكر والتقدير.

الاسم/

التوقيع/

معلومات الاتصال/

Appendix E

A COVER LETTER FOR SCHOOL PRINCIPALS AND PARTICIPATING ISLAMIC TEACHERS

(ENGLISH VERSION)

Dear School Principal and Teachers:

My name is Mesfer Alwadai. I am a doctoral student in the Department of Curriculum and Instruction at Southern Illinois University Carbondale. I am conducting a study titled "Islamic Teacher's Perceptions of Improving Thinking Skills in the Saudi Elementary Schools." The purpose of this study is to examine the Islamic teacher perceptions of improving thinking skills in the Saudi elementary school system and to determine the influential factors which impact teacher perceptions of improving thinking skills, such as educational background, teaching experiences, teaching methods, classroom equipments, and society and school community.

According to my research plan, the Islamic teachers who are currently working in the public school during the academic year 2013-2014 at Abha city in Saudi Arabia are expected to be participants for this study. The research design is the sequential mixed-methods explanatory that contains both quantitative and qualitative methods in order to accomplish the study goals through two stages. In the quantitative stage, I request the study participants to fill out the surveys, which consist of 30 statements answered within 15 minutes. Then, in the qualitative stage, I select a random sample from survey respondents to be interviewed about the study topic in terms of checking their understanding of the survey statements and gather further explanation information. The interview session will take no more than 45 minutes.

I will follow all the legal steps of protecting the participant's identities by using a pseudonym throughout the study to maintain their confidentialities. Also, the recorded data will

not be linked to individually identifiable subjects in order to protect individual privacy. Moreover, this study data will not use any more after conducting study.

For conducting this study, it requires the voluntary participation in terms of completing the survey and answering the interview questions. Importantly, your completing the study survey and interview indicates a voluntary agreement to be part of the study. Also, I attach the consent forms with this communication that indicates your willingness to participate in the study. If you agree to participate in the study please sign the consent form.

If you have any further questions about this study, please do not hesitate. Feel free to ask the researcher or the supervising research professor, Dr. John McIntyre who the chair of Curriculum and Instruction department at Southern Illinois University Carbondale, IL 62901-4610, Mailcode 4610, Phone: (618) 453-2415, E-mail: johnm@siu.edu. I appreciate your collaborations and helping to conduct this study.

Sincerely,

Mesfer Alwadai - Doctoral Student

Department of Curriculum and Instruction, Southern Illinois University Carbondale

001 (618)412-1370 (United States) & 00966 (553) 759-479 (Saudi Arabia)

mesferalwadai@siu.edu or Mesfer-753@hotmail.com

Appendix F

CONSENT FORMS

(ENGLISH VERSION)

My name is Mesfer Alwadai, I am a doctoral student in the Department of Curriculum and Instruction at Southern Illinois University Carbondale. The following permission statements indicate your consent to voluntarily participate in my study. This study is a partial fulfillment of the requirements for the Doctor of Philosophy Degree in Curriculum and Instruction, Southern Illinois University Carbondale.

I am asking you to participate in my research study. This study aims to examine the Islamic teachers' perceptions and to determine the factors influencing teachers' perceptions toward critical thinking in the Saudi elementary schools.

Participation is voluntary. If you choose to participate in the study, read the following statement and sign your name.

"I would like to participate in the research project, and I understand that at any time I may discontinue my participation in the project without penalty."

(Signature) (Date) _____

"If I am interviewed, I give a permission for the interview to be recorded. I understand that I have right to quit the study participation at any time. The participants' responses will be kept confidential reasonably and the researcher will choose a pseudonym to help maintain subjects confidentiality.

After conducting this study, I understand all recorded voices will be destroyed. Finally, the researcher has answered all my questions regarding this research topic and purpose to my satisfaction."

(Signature) (Date) _____

If you have any questions about the study, please contact me. Thank you for taking the time to assist me in this research.

Mesfer Alwadai
Southern Illinois University in Carbondale
College of education and Human service
Department of Curriculum and instruction
Phone number: 6184121370
mesferalwadai@siu.edu
Or contact the advisor

Prof. John McIntyre
Chair of Department of Curriculum and instruction and a Coordinator of Curriculum Studies
Mailcode 4610
Southern Illinois University Carbondale
625 Wham Drive
Carbondale, Illinois 62901
Phone: (618) 453-2415
E-mail: johnm@siu.edu

Appendix G

بسم الله الرحمن الرحيم

الولايات المتحدة الأمريكية

ولاية إلينوي

جامعة جنوب إلينوي

كلية التربية

قسم المناهج وطرق التدريس

Southern™ Illinois University Carbondale

معوقات تنمية التفكير الناقد لدى طلبة المرحلة الإبتدائية بالمملكة العربية السعودية من وجهة نظر معلمي التربية الإسلامية بمنطقة عسير- مدينة أبها ومحافظة سراة عبيدة

النسخة النهائية للإستبانة

الباحث

مسفر أحمد مسفر الوادعي

العام الدراسي ١٤٣٤/١٤٣٥ هـ

إشراف الأستاذ الدكتور

Prof. John McIntyre

سعادة مديرمدرسة / ..... وفقه الله تعالى

سعادة معلم التربية الإسلامية بمدرسة / ..... وفقه الله تعالى

السلام عليكم ورحمة الله وبركاته وبعد:

فلا يخفى على شريف علمكم أهمية تنمية التفكير الناقد لدى طلاب المرحلة الابتدائية لما له من أثر بالغ في ازدهار المخرج التعليمي الذي يصبو إليه المعلم والمجتمع. ومن هذا المنطلق فإن الباحث يقوم بإجراء دراسة للحصول على درجة الدكتوارة في مناهج وطرق تدريس العلوم الشرعية من جامعة جنوب إلينوي بالولايات المتحدة الأمريكية بعنوان " معوقات تنمية التفكير الناقد لدى طلبة المرحلة الابتدائية بالمملكة العربية السعودية من وجهة نظر معلمي التربية الإسلامية بمنطقة عسير التعليمية ".

وتهدف الدراسة إلى التعرف على مدى إدارك معلمي التربية الإسلامية بالمملكة العربية السعودية لمفاهيم التفكير الناقد و تحديد أبرز معوقات تنمية التفكير الناقد لدى طلبة المرحلة الابتدائية. وقد أعد الباحث قائمة بمفاهيم التفكير الناقد وأبرزالمعوقات التي تواجهه معلم التربية الإسلامية في تنميته للتفكير الناقد لدى طلبة المرحلة الابتدائية و سبل التغلب عليها.

كما تهدف الدراسة إلى الإجابة على التساؤلات التالية:

١. ما مدى إدراك معلم التربية الإسلامية في المرحلة الإبتدائية بالمملكة العربية السعودية لمفاهيم التفكير الناقد ؟

٢. ما أبرز معوقات تنمية التفكير الناقد التي تواجهه معلم التربية الإسلامية في المرحلة الإبتدائية بالمملكة العربية السعودية ؟

وللإجابة على أسئلة الدراسة تم إعداد وبناء استبانة يجري تطبيقها على 198 معلم للتربية الإسلامية في المرحلة الإبتدائية بمدينة أبها بالمملكة العربية السعودية.كما قد قام الباحث بتقسيم الاستبانة إلى تسعة محاورعلى النحو التالي:

١. رؤى معلمي التربية الإسلامية حول التفكير الناقد كعائق لتنمية مهارات التفكير الناقد لدى طلبة المرحلة الابتدائية بالمملكة العربية السعودية.

٢. برامج إعداد معلمي التربية الإسلامية كعائق لتنمية مهارات التفكير الناقد لدى طلبة المرحلة الابتدائية بالمملكة العربية السعودية.

٣. البرامج التطويرية والإثرائية لمعلمي التربية الإسلامية كعائق لتنمية مهارات التفكير الناقد لدى طلبة المرحلة الابتدائية بالمملكة العربية السعودية.

٤. مقررات التربية الإسلامية كعائق لتنمية مهارات التفكير الناقد لدى طلبة المرحلة الابتدائية بالمملكة العربية السعودية.

٥. طرق تدريس التربية الإسلامية كعائق لتنمية مهارات التفكير الناقد لدى طلبة المرحلة الابتدائية بالمملكة العربية السعودية.

٦. الفصل الدراسي بتجهيزاته كعائق لتنمية مهارات التفكير الناقد لدى طلبة المرحلة الابتدائية بالمملكة العربية السعودية.

٧. قدرة الطالب العقلية واستعداده كعائق لتنمية مهارات التفكير الناقد لدى طلبة المرحلة الابتدائية بالمملكة العربية السعودية.

٨. الهيئة التعليمية من مشرفين وإداريين كعائق لتنمية مهارات التفكير الناقد لدى طلبة المرحلة الابتدائية بالمملكة العربية السعودية.

٩. المجتمع بأيدولوجياته كعائق لتنمية مهارات التفكير الناقد لدى طلبة المرحلة الابتدائية بالمملكة العربية السعودية.

ولذا آمل من سعادتكم التكرم بالإجابة على الاستبيان المرفق بوضع علامة (x) أمام الإجابة المناسبة من خانات المقياس الخماسي (موافق بشدة، موافق، محايد، غير موافق،غير موافق بشدة) الذي يمثل رأيك بكل دقة وموضوعية لما له أثر بالغ الأهمية في الوصول بهذه الدراسة إلى النتائج المرجوة. علماً بأن كافة المعلومات المعطاة سوف تستخدم لأغراض البحث العلمي فقط.

شاكراً لك تعاونك واستجابتك وفقك الله تعالى في دنياك وآخراك.

الباحث / مسفر أحمد مسفر الوادعي

المعيد بجامعة الملك خالد ـ كلية التربية

قسم المناهج وطرق التدريس

للتواصل

الجوال/ ٠٥٥٣٧٥٩٤٧٩

الايميل/

Mesfer-753@hotmail.com

الجزء الأول: المعلومات الأساسية من خلال وضع دائرة حول الاجابة المناسبة

1. المؤهل العلمي:

- دبلوم
- بكالوريس
- دراسات عليا

2. عدد سنوات الخدمة في تدريس المرحلة الإبتدائية :

- أقل من 5 سنوات.
- من 5 الى 10 سنوات.
- من 11 الى 15 سنوات.
- من16 إلى 20 سنة.
- من21 إلى 25 سنة.
- أكثر من 25 سنة .

3. موقع المدرسة:

- أبها.
- السودة.
- الفرعاء.
- مدينة الأمير سلطان (حجلاء).
- خميس مشيط.
- سراة عبيدة.
- ظهران الجنوب.

الجزء الثاني: محاور الاستبانة:

في القسم التالي العديد من العبارات التي تناقش مدى إدارك معلمي التربية الإسلامية بالمملكة العربية السعودية لمفاهيم التفكير الناقد و تحديد أبرز معوقات تنمية التفكير الناقد لدى طلبة المرحلة الابتدائية من خلال المقياس الخماسي الذي يتكون من العبارات التالية (موافق بشدة، موافق، محايد، غير موافق،غير موافق بشدة).

مثال توضيحي لكيفية الاجابة عن فقرات الاستبانة:

م	العبارة	درجة الموافقة				
		كبيرة جداً	كبيرة	متوسطة	ضعيفة	ضعيفة جداً
1	التفكير الناقد هو نوع من أنواع التفكير الذي يساعد الطالب على الاستمتاع بالعملية التعليمية داخل الفصل التعليمي.	X				

يوضح المثال في الأعلى أن درجة موافقة المشارك للعبارة كبيرة جداً , والمطلوب من سعادتكم وضع نفس العلامة لدرجة موافقتكم لعبارات الاستبانة فعلى سبيل المثال:

- درجة الموافقة كبيرة جداً توضع العلامة (X) أمام العبارة.
- درجة الموافقة كبيرة توضع العلامة (X) أمام العبارة.
- درجة الموافقة متوسطة توضع العلامة (X) أمام العبارة.
- درجة الموافقة ضعيفة توضع العلامة (X) أمام العبارة.
- درجة الموافقة ضعيفة جداً توضع العلامة (X) أمام العبارة.

المحور الأول:

رؤى معلمي التربية الإسلامية حول التفكير الناقد كعائق لتنمية مهارات التفكير الناقد لدى طلبة المرحلة الابتدائية بالمملكة العربية السعودية.

م	العبارة	كبيرة جداً	كبيرة	متوسطة	ضعيفة	ضعيفة جداً
١	التفكير الناقد ينشط المستويات العليا من التفكير لدى طلبة المرحلة الإبتدائية كمهارات التحليل وجمع المعلومات والتقييم .					
٢	التفكير الناقد هو نوع من أنواع التفكير الذي يساعد الطالب على الاستمتاع بالعملية التعليمية داخل الفصل التعليمي.					
٣	التفكير الناقد من المهارات الضرورية المساعدة للمتعلم في التغلب وحل المشكلات اليومية.					
٤	التفكير الناقد من المهارات الضرورية للتعلم الفعّال المقررات الدراسية .					
٥	التفكير الناقد من المهارات الضرورية التي تعمل على زيادة ثقة المتعلم بنفسه.					
٦	التفكير الناقد يعمل على إيجاد البيئة تعليمية تفاعلية التعليمي التفاعلي بين المعلم والمتعلم .					
٧	التفكير الناقد من المهارات الضرورية لرفع مستوى جودة العمل في الحياة اليومية للمتعلم.					
٨	مهارات التفكير الناقد مهارات تكتسب بالفطرة وليس هناك حاجة مَاسة لتنميتها وتطويرها.					

المحور الثاني والثالث:

- برامج إعداد معلمي التربية الإسلامية كعائق لتنمية مهارات التفكير الناقد لدى طلبة المرحلة الابتدائية بالمملكة العربية السعودية.

- البرامج التطويرية والإثرائية لمعلمي التربية الإسلامية كعائق لتنمية مهارات التفكير الناقد لدى طلبة المرحلة الابتدائية بالمملكة العربية السعودية.

م	العبارة	كبيرة جداً	كبيرة	متوسطة	ضعيفة	ضعيفة جداً
١	تنمية مهارات التفكير الناقد ليس من أولويات إعداد معلمي التربية الإسلامية في مؤسسات الإعداد بمختلف أنواعها.					
٢	البرامج الأكاديمية في مؤسسات إعداد معلمي التربية الإسلامية تفتقر إلى تهئية المعلم بالمهارات اللازمة لتدريس مهارات التفكير الناقد في المرحلة الابتدائية.					
٣	مهارات التفكير الناقد مهارات تكتسب بالفطرة وليس هناك حاجة مّاسة لتنميتها وتطويرها.					
٤	تنمية مهارات التفكير الناقد تستغرق وقت أطول مما يدفع القائمون على مؤسسات الإعداد لتجاهلها.					
٥	هناك حاجة ماسّة لإدارج مهارات التفكير الناقد ضمن البرامج الاكاديمية لاعداد معلمي التربية الإسلامية في مؤسسات الإعداد.					
٦	غياب برامج تنمية مهارات التفكير الناقد ضمن البرامج التطويرية والإثرائية لمعلمي التربية الإسلامية.					
٧	البرامج الحالية لتدريب معلمي التربية الإسلامية تركز على مهارات التفكير الدنيا.					
٨	معلمي التربية الاسلامية يجهلون مفاهيم التفكيرالناقد.					
٩	معلمي التربية الاسلامية يجهلون استراتيجيات تعليم التفكير الناقد.					
١٠	معلمي التربية الاسلامية غير مهيئين لتعليم مهارات التفكير الناقد لطلبة المرحلة الإبتدائية.					

المحور الرابع:

مقررات التربية الإسلامية كعائق لتنمية مهارات التفكير الناقد لدى طلبة المرحلة الابتدائية بالمملكة العربية السعودية.

م	العبارة	كبيرة جداً	كبيرة	متوسطة	ضعيفة	ضعيفة جداً
١	مقررات التربية الإسلامية تفتقد المواضيع المحفزة لمهارات التفكير الناقد لدى طلبة المرحلة الإبتدائية.					
٢	تركيز مقررات التربية الإسلامية على المهارات العقلية الأساسية كالحفظ والفهم.					
٣	أنشطة مقررات التربية الإسلامية غير محفزة للتفكير الناقد لدى طلبة المرحلة الإبتدائية.					
٤	اتقان طلبة المرحلة الإبتدائية لمقررات التربية الإسلامية يجعل منهم مفكرين وناقدين .					
٥	غياب مبدأ التكامل المعرفي بين مقررات التربية الإسلامية والتركيز على مبدأ تجزئة المعرفة					

المحور الخامس:
طرق تدريس التربية الإسلامية كعائق لتنمية مهارات التفكير الناقد لدى طلبة المرحلة الابتدائية بالمملكة العربية السعودية.

م	العبارة	كبيرة جداً	كبيرة	متوسطة	ضعيفة	ضعيفة جداً
١	غياب استخدام الطرائق التعليمية المحفزة للتفكير الناقد في تدريس مقررات التربية الإسلامية لدى طلبة المرحلة الإبتدائية.					
٢	غياب الأنشطة التعليمية المحفزة للتفكير الناقد في تدريس مقررات التربية الإسلامية لدى طلبة المرحلة الإبتدائية.					
٣	الاختبارات التحصيلية تعيق تنمية مهارات التفكير الناقد لدى طلبة المرحلة الإبتدائية.					
٤	المقرر الدراسي والإنتهاء منه في الوقت المحدد من أوليات معلم التربية الإسلامية في المرحلة الإبتدائية.					
٥	وقت الحصة الدراسية يمثل عائق لمعلم التربية الإسلامية في تفعيل الأنشطة التعليمية المحفزة للتفكير الناقد لدى طلبة المرحلة الإبتدائية.					
٦	استخدام الأسلوب الإلقائي الأسلوب الشائع لدى معلمي التربية الإسلامية في إيصال المعلومات لطلبة المرحلة الإبتدائية.					
٧	يتجنب معلمي التربية الإسلامية أسئلة التلاميذ التي تتطلب عمق في الطرح والتفكير.					

المحور السادس:
الفصل الدراسي بتجهيزاته كعائق لتنمية مهارات التفكير الناقد لدى طلبة المرحلة الابتدائية بالمملكة العربية السعودية.

م	العبارة	كبيرة جداً	كبيرة	متوسطة	ضعيفة	ضعيفة جداً
١	الفصول الدراسية في المباني المستأجرة تعيق تنمية مهارات التفكير الناقد لدى طلبة المرحلة الإبتدائية.					
٢	افتقاد معلم التربية الإسلامية للوقت الكافي لإعداد أنشطة لتنمية مهارات التفكير الناقد لدى طلبة المرحلة الإبتدائية.					
٣	عدم وجود الوسائل التعليمية التي تساعد على تنمية مهارات التفكير الناقد لدى التلاميذ في المدرسة.					
٤	عدم تجهيز الفصول الدراسية بالتكنولوجيا الحديثة ساهم في إعاقة تنمية مهارات التفكير لدى التلاميذ.					

المحور السابع:
قدرة الطالب العقلية واستعداده كعائق لتنمية مهارات التفكير الناقد لدى طلبة المرحلة الابتدائية بالمملكة العربية السعودية.

م	العبارة	كبيرة جداً	كبيرة	متوسطة	ضعيفة	ضعيفة جداً
١	التفكير الناقد يُمَّكن المتعلم من التنبؤ بالنتائج المتوقعة من خلال المعلومات والأدلة المتوفرة لديه.					
٢	ينظر الطالب إلى معلم التربية الإسلامية كسلطة مطلقة داخل الفصل الدراسي.					
٣	ليس لدى طلبة المرحلة الإبتدائية المقدرة على تحمل صعوبة التفكير الناقد.					
٤	يفضل طلبة المرحلة الإبتدائية الأنشطة التعليمية ذات الأسئلة السهلة والمباشرة. (					

المحورالثامن و التاسع:

- الهيئة التعليمية من مشرفين وإداريين كعائق لتنمية مهارات التفكير الناقد لدى طلبة المرحلة الابتدائية بالمملكة العربية السعودية.
- المجتمع بأيدولوجياته كعائق لتنمية مهارات التفكير الناقد لدى طلبة المرحلة الابتدائية بالمملكة العربية السعودية.

م	العبارة	كبيرة جداً	كبيرة	متوسطة	ضعيفة	ضعيفة جداً
١	المجتمع لا يعطي قيمة لتطوير مهارات التفكير الناقد.					
٢	سؤال أصحاب السلطة والنفوذ في المجتمعات العربية يفسر على أنه سلوك غير حضاري يتجاوز حدود الأدب.					
٣	تنمية مهارات التفكير الناقد لدى الطلاب في مراحل تعليمية مبكرة قد يؤثر على الأمن المجتمعي من خلال ارتفاع سقف الحرية في النقد.					
٤	غياب ثقافة النقد البناء واحترام الرآى المخالف في المجتمع المدرسي.					
٥	عدم وضوح أهداف المدرسة فيما يتعلق بتنمية مهارات التفكير الناقد لدى طلبة المرحلة الإبتدائية.					
٦	التفكير الناقد يذيب الفروقات المجتمعية بين أفراد المجتمع.					
٧	تنمية التفكير الناقد في المراحل العمرية الأولية قد تقود الانسان الى الاصطدام بمسلمات المجتمع سواء أكانت فكرية أوعقدية أوعاداته أو تقاليده					
٨	التحولات المجتمعية والفكرية للمجتمع صورة بارزة من صور نضج التفكير الناقد					
٩	التفكيرالناقد يهدف إلى طرح الأسئلة الجرئية بهدف اكتشاف الحقائق المجتمعية الغائبة عن أفراد المجتمع.					
١٠	تنمية مهارات التفكير الناقد عامل مهم في تطويرمجتمع الطالب.					

معوقات تنمية التفكير الناقد لدى طلبة المرحلة الإبتدائية بالمملكة العربية السعودية من وجهة نظر معلمي التربية الإسلامية بمنطقة عسير- مدينة أبها ومحافظة سراة عبيدة

اسئلة المقابلة (النسخة العربية)

المحور الأول:

رؤى معلمي التربية الإسلامية حول التفكير الناقد كعائق لتنمية مهارات التفكير الناقد لدى طلبة المرحلة الابتدائية بالمملكة العربية السعودية.

1. كمعلم للتربية الإسلامية ماذا يعني لك التفكير الناقد ؟
2. ماهي المهارات المرتبطة بالتفكير الناقد ؟
3. هل تعتقد ان التفكير الناقد ذا أهمية بالنسبة لمجتمعك ؟ لماذا ؟
4. هل تستخدم التفكير الناقد كجزء من تدريسك لمقررات التربية الاسلامية في المرحلة الابتدائية ؟
5. و أنت تقوم بتدريس مهارات التفكير الناقد لطلابك هل انت تستمتع بذلك ؟
6. هل تعتمد على نفسك في اعداد انشطة التفكير النااقد أو تعتمد على كتب ؟ وضح.
7. من خلال وجهة نظرك كمعلم للتربية الإسلامية ماهي أبرز الفوائد التي يجنيها المتعلم والمجتمع على حد سواء من تنمية مهارات التفكير الناقد ؟

المحور الثاني:

معوقات تنمية مهارات التفكير الناقد لدى طلبة المرحلة الابتدائية بالمملكة العربية السعودية.

1. من وجهة نظرك كمعلم للتربية الإسلامية ماهي أبرز معوقات تنمية مهارات التفكير الناقد لدى طلبة المرحلة الابتدائية بالمملكة العربية السعودية ؟
2. ماهي أبرز الحلول المناسبة للتعامل مع عوائق تطوير مهارات التفكير الناقد لدى طلبة المرحلة الابتدائية بالمملكة العربية السعودية ؟

بسم الله الرحمن الرحيم

سعادة مدير مدرسة / ..... وفقه الله تعالى

سعادة معلم التربية الإسلامية بمدرسة / ..... وفقه الله تعالى

السلام عليكم ورحمة الله وبركاته وبعد:

فلا يخفى على شريف علمكم أهمية تنمية التفكير الناقد لدى طلاب المرحلة الأبتدائية لما له من أثر بالغ في ازدهار المخرج التعليمي الذي يصبو إليه المعلم والمجتمع. ومن هذا المنطلق فإن الباحث يقوم بإجراء دراسة للحصول على درجة الدكتوارة في مناهج وطرق تدريس العلوم الشرعية من جامعة جنوب إلينوي بالولايات المتحدة الأمريكية بعنوان " معوقات تنمية التفكير الناقد لدى طلبة المرحلة الابتدائية بالمملكة العربية السعودية من وجهة نظر معلمي التربية الإسلامية بمنطقة عسير التعليمية ".

وتهدف الدراسة إلى التعرف على مدى إدارك معلمي التربية الإسلامية بالمملكة العربية السعودية لمفاهيم التفكير الناقد و تحديد أبرز معوقات تنمية التفكير الناقد لدى طلبة المرحلة الابتدائية. وقد أعد الباحث قائمة بمفاهيم التفكير الناقد وأبرزالمعوقات التي تواجهه معلم التربية الإسلامية في تنميته للتفكير الناقد لدى طلبة المرحلة الابتدائية و سبل التغلب عليها.

ولتحقيق أهداف الدراسة فقد استخدم الباحث منهجتين بحثيتين وهما: البحث الكمي والبحث النوعي من خلال المراحل التالية:

المرحلة الأولى : وهي التي تعنى بالبحث الكمي والتي من خلالها سيطلب الباحث من عينة البحث إكمال الاستبانة الخاصة بهذه الدراسة والمكونة من 50 سؤال خلال 15 دقيقة.

المرحلة الثانية وهي التي تعنى بالبحث النوعي والتي من خلالها سيتم اختيار عينة عشوائية من المشاركين في البحث لإجراء العديد من المقابلات بهدف معرفة مدى استيعابهم لعبارات الاستبانة المعطاة وستغرق المقابلة الواحدة من 15 إلى 20 دقيقة.

وتبعاً للخطة المتبعة في هذا البحث فإن العينة المتوقع مشاركتهم هم معلمي التربية الإسلامية في منطقة أبها وسراة عبيدة التعليميتين ممن لا زال يمارس المهنة التعليمية للعام الأكاديمي 2013-2014 م.

ورغبة من الباحث في حفظ الحقوق الشخصية للمشاركين في البحث، فإن الباحث سيتبع الإجراءات النظامية المتبعة لحفظ حقوق المشاركين في البحوث العلمية بما في ذلك عدم الإشارة إلى اسم أي من المشاركين إضافة إلى عدم استخدام بياناتهم في غير هذه الدراسة. وتجدر الإشارة إلى أن المشاركة في هذه الدراسة

اختيارية وبمحض إرادة المشارك وإنه بمجرد المشاركة في تعبئة الاستبانة أو إجراء المقابلة تعتبر موافقة ضمنية للمشاركة في هذه الدراسة. كما سيطلب الباحث سيُطلب من كل مشارك يرغب في المشاركة في هذا الدراسة أن يوقع على نموذج إقرار الموافقة والمرفق ضمن مرفقات هذه الدراسة.

لمزيد من المعلومات أو الاستفسارات, يرجى التواصل مع باحث هذه الدراسة أو المشرف عليه وهو د. جون ماكنتاير رئيس قسم المناهج وطرق التدريس بجامعة جنوب الينوي في كاربوندیل بالولايات المتحدة الأمريكية, الينوي 62901, الرمز البريدي: 4610, هاتف: 6184532415, البريد الالكتروني: johnm@siu.edu . شاكرين لكم تعاونكم واهتمامكم.

الباحث

مسفر أحمد الوادعي

طالب دكتوراة بقسم المناهج وطرق التدريس بجامعة جنوب الينوي في كاربوندیل بالولايات المتحدة الأمريكية

قسم المناهج وطرق التدريس بجامعة جنوب الينوي في كاربوندیل

هاتف : 0016184121370 - 00966553759479

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إقرار الموافقة على المشاركة في الدراسة

فإنني الباحث المدعو/ مسفر أحمد الوادعي أدرس بمرحلة الدكتوراه بجامعة جنوب الينوي بكاربونديل في الولايات المتحدة الأمريكية (تخصص مناهج وطرق تدريس) أقوم بدراسة بحثية بعنوان"معوقات تنمية التفكير الناقد لدى طلبة المرحلة الإبتدائية بالمملكة العربية السعودية من وجهة نظر معلمي التربية الإسلامية بمنطقة عسير- مدينة أبها ومحافظة سراة عبيدة" تكرماً ولطفاً من سعادتكم, أرغب في مشاركتك في هذا الدراسة علماً بأن مشاركتك في هذه الدراسة تعتبر موافقة ضمنية على أن تكون ضمن عينة الدراسة ، وفي حالة الموافقة أرجو التكرم بالإطلاع على الإقرار التالي:

لدي الرغبة في المشاركة في هذه الدراسة علما بأني على وعي تام بأنه يحق لي إيقاف مشاركتي كعينة في هذا البحث في أي وقت وبدون أي عقوبة نظامية.

الاسم/

التوقيع/ التاريخ/

هذه المقابلة مبنية على موافقتي الشخصية على المشاركة في هذه الدراسة ومبنية على موافقتي على التسجيل الصوتي لها على أن يقوم الباحث باستخدامها استخداما نظامياً بما في ذلك عدم الإشارة إلى اسمي وعلى أن تقتصر مشاركتي على هذه الدراسة فقط وأن جميع التسجيلات الصوتية الخاصة بي سيتم إتلافها في نهاية هذه الدراسة. وأنا على وعي تام بأنه يحق لي أن إيقاف مشاركتي كعينة في هذا البحث في أي وقت وبدون أي عقوبة نظامية. ختاما, أقر بأن الباحث أجاب على جميع أسئلتي الخاصة بهذه الدراسة إجابة تامة كافية.

الاسم/

التوقيع/ التاريخ/

لمزيد من المعلومات أو الاستفسارات, يرجى التواصل مع باحث هذه الدراسة أو المشرف عليه شاكرين لكم تعاونكم واهتمامكم.

المشرف على باحث هذه الدراسة:

د. جون ماكنتاير.

رئيس قسم المناهج وطرق التدريس بجامعة جنوب الينوي في كاربوندیل بالولايات المتحدة الأمريكية.

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DISSERTATION TITLE:

Islamic Teacher's Perceptions of Improving Critical Thinking Skills in the Saudi Arabia Elementary Schools

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