

## University of Southampton Research Repository ePrints Soton

Copyright © and Moral Rights for this thesis are retained by the author and/or other copyright owners. A copy can be downloaded for personal non-commercial research or study, without prior permission or charge. This thesis cannot be reproduced or quoted extensively from without first obtaining permission in writing from the copyright holder/s. The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the copyright holders.

When referring to this work, full bibliographic details including the author, title, awarding institution and date of the thesis must be given e.g.

AUTHOR (year of submission) "Full thesis title", University of Southampton, name of the University School or Department, PhD Thesis, pagination

**UNIVERSITY OF SOUTHAMPTON**

FACULTY OF LAW, ARTS & SOCIAL SCIENCE

SCHOOL OF EDUCATION

Teachers' and pupils' perceptions of and responses to cooperative  
learning methods within the Islamic culture courses in one  
secondary school in Saudi Arabia

By

ABDULRAHMAN ALGARFI

Thesis submitted for the degree of Doctor of Philosophy

24 of May, 2010

قال صلى الله عليه وسلم "يد الله مع الجماعة..." رواه الترمذي

**God's hand is with the group**

## ABSTRACT

Teachers' and pupils' perceptions of and responses to cooperative learning methods within the Islamic culture courses in one secondary school in Saudi Arabia

**Keywords:** Cooperative learning, continuing professional development (CPD), training, implementation, classroom change, Islamic culture, secondary school.

This study investigated the development and implementation of cooperative learning in two Saudi classrooms seeking the perspectives of teachers and pupils. A review of the literature suggests that efforts to introduce cooperative learning have tended to be initiated in Oceanic, North American or European contexts (Jolliffe and Hutchinson, 2007). Research is less forthcoming in other regions in the world. Research on group work / cooperative learning methods in Arab-speaking nations is in its infancy. The specific purpose of this thesis is to examine the development and implementation of cooperative learning in two Islamic culture classes in one secondary school in Saudi Arabia. In both, the perceptions of teachers and pupils were sought, to gather the opinions of teachers regarding changes to their classroom practice.

Two male secondary teachers with 19 and 12 years teaching experience participated in a 10-hour training programme on cooperative learning in the classroom, and then they and their pupils (39 pupils) were tracked over a four-week period to investigate their experiences of this new approach. Individual interviews with teachers took place at four points across the research period: before and after the training programme, in the middle of the implementation stage and at the end of the project. Focus group interviews with pupils also took place before, in the middle and after the implementation stage. In addition, field note observations of approximately 40 lessons were made and short segments of some lessons were videoed. Teachers kept an audio reflective log to record their experiences.

Results indicated that both teachers initially had very limited knowledge of cooperative learning. The findings indicated that teachers were very supportive of the training they received. Pupils and teachers described a number of benefits of cooperative learning and the opportunity to experience a broader range of educational outcomes. Teachers described and demonstrated a number of aspects of their practice that illustrated a shift to a more pupil-centred classroom, with their role becoming more of a facilitator of learning. Pupils highlighted their enjoyment and new-found freedom and opportunity to take greater ownership of and responsibility for their and others' learning. The research provides further contributions to the literature on cooperative learning in general and specifically about its use in Saudi Arabia. The study reveals the need for wider consideration and development of cooperative learning in both pre-service and in-service programmes in Saudi Arabia and the implications for a number of stakeholders to realise the aims presented.

## ACKNOWLEDGEMENTS

**In the name of Allah most gracious most merciful**

*First and foremost, thanks and praise to Allah, the most Gracious and most Merciful.*

I would like to thank and express my sincere appreciation to all those who have helped, assisted and contributed to the successful completion of this thesis. Without their help and support, this journey would not have been possible.

First of all, I would like to thank my supervisor Dr. Gary Kinchin for his unconditional support and valuable guidance during the progress of this study. I would also like to thank my second supervisor Professor Mary Ratcliffe, who offered wise comments. I feel fortunate to have received their guidance and mentorship.

I wish to express my gratitude to the teachers, pupils, staff, and the head teacher of one secondary school in my home country particularly in Abha city for their support and help during the data collection phase. The generous efforts of the participants in this study are highly appreciated. In addition, I would also like to thank the Ministry of Education in Saudi for granting permission and facilitating the venues to conduct this study, and also I would like to thank the College of Education at King Khalid University for its support during the data collection stage.

The author is grateful to the Government of Saudi Arabia represented by King Khalid University for providing the necessary financial support, which allowed this research to continue unimpeded. The support is gratefully acknowledged.

My sincere gratitude and heartfelt thanks go to my wife, my daughters, and my son for their continued love and support. Last, but not least, the author is thankful to his parents, wife, brothers, sisters and children for their understanding and encouragement. The completion of this research is but a very small reward for their efforts and great expectations.

# Table of Content

ABSTRACT .....	III
ACKNOWLEDGEMENTS .....	IV
Table of Content .....	V
List of Tables .....	X
CHAPTER ONE.....	1
INTRODUCTION .....	1
1.1 Motivation for This Research .....	1
1.2 Definition of cooperative learning .....	3
1.3 The Rationale for the Study.....	4
1.4 The Research Problem.....	6
1.5 Research Questions .....	7
1.6 The Structure of the Research.....	8
1.7 Summary.....	9
CHAPTER TWO .....	10
THE SAUDI EDUCATION SYSTEM.....	10
2.1 Introduction.....	10
2.2 The Saudi Education System: A brief history .....	10
2.3 Factors influencing the Saudi educational system .....	11
2.4 The Broad Objectives of the Saudi Education System.....	13
2.5 Stages of General Education:.....	14
2.5.1 Elementary schools.....	14
2.5.2 Middle schools .....	14
2.5.3 Secondary schools .....	15
2.6 The Key Objectives of Secondary School Education .....	16
2.7 The Islamic Culture Curriculum in Saudi Arabia .....	17
2.8 The New Secondary Educational System Project.....	19
2.9 Teacher Training Programmes in Saudi Arabia.....	21
2.10 The Future of the Saudi Educational System.....	23
2.11 Summary.....	25
CHAPTER THREE .....	26
LITERATURE REVIEW.....	26

3.1 Change in Schools.....	26
3.1.1 Learning Theories.....	29
3.2 The Strategy of Change in the Classroom.....	32
3.3 Change Management.....	34
3.4 Resistance to Change.....	36
3.5 Teachers Teaching With New Methods .....	38
3.5.1 Lecture approach (or direct teaching).....	39
3.5.2 The Discussion and Dialogue Approach .....	39
3.5.3 The Personalised Learning Approach.....	40
3.5.4 Applications of Technology.....	41
3.5.5 The Cooperative Learning Approach .....	42
3.6 Preparing Teachers for Cooperative Learning Approach.....	48
3.7 Pupils and New Strategies in the Classroom .....	51
3.8 Designing Group Work in the Classroom .....	57
3.9 Continuing Professional Development (CPD).....	59
3.10 The Need for Change and Development in Saudi Schools .....	63
3.11 Definition of cooperative learning .....	64
3.12 Cooperative learning in Arabic Study .....	65
3.13 Types of Cooperative Learning Methods .....	70
3.14 The advantages of using cooperative learning (group work) .....	73
3.14.1 Increasing pupils' achievement .....	74
3.14.2 Teambuilding .....	74
3.14.3 Interaction between pupils .....	75
3.14.4 Pupils' motivation .....	76
3.14.5 Increasing cooperation and reducing competition.....	76
3.14.6 Changing pupils' behaviour .....	77
3.14.7 Increasing thinking skills .....	77
3.14.8 Self-Esteem .....	78
3.14.9 Further advantages of using cooperative learning.....	78
3.15 Disadvantages, Obstacles, Challenges and Risks of Using Cooperative Learning .....	79
3.16 Cooperative learning and religious Education.....	81
3.17 Cooperative learning and Al-Fiqh.....	82
3.18 The Relationship between Teachers' Beliefs and their Practice.....	84
3.19 Cooperative Learning from the Islamic Perspective .....	86

3.20 Summary.....	87
CHAPTER FOUR .....	88
RESEARCH METHODOLOGY .....	88
4.1 Introduction.....	88
4.2 Research Approaches .....	88
4.3 Qualitative Approach .....	90
4.3.1 Case Study .....	92
4.3.2 Action Research .....	94
4.3.3 The Advantages and Disadvantages of Qualitative Research.....	95
4.3.4 Data Collection Methods .....	96
4.3.4.1 The Interview Method.....	96
4.3.4.2 Focus group interviews .....	98
4.3.4.3 Observation methods .....	99
4.3.4.3.1 The Advantages and Disadvantages of Observation.....	100
4.3.4.3.2 Types of observation .....	101
4.3.4.3.3 Observers and the Observation .....	102
4.3.5 Triangulation .....	102
4.4 The Quantitative Approach.....	103
4.5 Present Research Design .....	105
4.5.1 Research Sample .....	107
4.5.1.1 The school .....	108
4.5.1.2 The teachers.....	110
4.5.1.3 The pupils .....	111
4.5.1.4 The curriculum .....	111
4.5.2 Training Programmes for Teachers .....	112
4.5.3 Data Collection.....	115
4.5.3.1 Interviews .....	115
4.5.3.1.1 Interview Pilot Study.....	116
4.5.3.2 The Focus Group Interviews .....	117
4.5.3.3 Observation .....	118
4.5.3.4 Reflective journal/log.....	119
4.6 Research Data Analysis .....	119
4.6.1 Constant Comparison .....	121
4.7 Ethical Issues .....	125

4.8 Validity and Reliability .....	127
4.9 Summary.....	129
CHAPTER FIVE .....	130
DATA ANALYSIS.....	130
5.1 Introduction.....	130
5.2 Research Question 1 .....	131
5.2.1 The Teachers .....	131
5.2.1.1 Importance of Training .....	131
5.2.1.2 Changing roles, responsibilities and relationships .....	136
5.2.1.3 Emerging Clarity .....	140
5.2.1.4 Inevitable Constraints: Some Hesitancy Remains .....	146
5.2.1.5 Some Differences between Teachers A and B .....	151
5.2.3 Summary .....	153
5.3 Research Question 2.....	154
5.3.1 Introduction.....	154
5.3.2 Unclear and Uneasy at the Start .....	154
5.3.3 Feeling more comfortable, confident and courageous.....	157
5.3.4 Freedom and Being in Charge.....	160
5.3.5 Playing New Roles .....	163
5.3.6 Improved my/our learning .....	167
5.3.7 The methods themselves and the curriculum.....	171
5.3.8 Knowing each other better.....	172
5.3.9 Did not work for all .....	175
5.3.10 Summary .....	178
5.4 Research Question 3.....	179
5.4.1 Introduction.....	179
5.4.2 Planning for Cooperative learning (Resources) .....	179
5.4.3 The shift from directed pedagogy .....	182
5.4.4 Specifying Lesson Objectives .....	185
5.4.5 Physical Layout .....	187
5.4.6 Broadening Lesson Outcomes.....	189
5.4.7 Active Supervision and Monitoring .....	192
5.4.8 Holding Pupils Accountable .....	194
5.4.9 Delegation of Power, Authority, and Control of the class.....	197

5.4.10 Peer Teaching and Pupil involvement .....	200
5.4.11 Using Summary/Plenary .....	203
5.4.12 Chapter Summary .....	205
CHAPTER SIX.....	206
GENERAL DISCUSSION.....	206
6.1 Introduction.....	206
6.2 Training and CPD .....	206
6.3 Shifting concerns.....	211
6.4 Role Shifts .....	218
6.5 Freedom.....	228
6.6 Nearness.....	231
6.7 Resistance .....	234
6.8 Cooperative learning and the Islamic Curriculum .....	237
CHAPTER SEVEN .....	241
CONCLUSION AND RECOMMENDATIONS .....	241
7.1 Introduction.....	241
7.2 Key Findings and the Contributions of This Study.....	242
7.3 Limitations of the Study .....	249
7.4 Future Research Directions.....	250
7.5 Final remarks .....	251
References .....	253
Appendices .....	270

## List of Tables

Table (2.1) the development of elementary schools for boys.....	14
Table (2.2) the development in elementary schools for girls.....	14
Table 2.3 the development in middle schools for boys.....	15
Table 2.4 the development in middle schools for girls.....	15
Table 2.5 the development in secondary school for boys.....	15
Table 2.6 the development in secondary school for girls.....	15
Table 2.7 the latest statistics of the secondary school in Saudi.....	16
Table 2.8 the number of secondary schools conducting the new project in 2008.....	21
Table 3-1 Traditional environment and new environment.....	27
Table 3-2 the differences between Industrial and Information Age .....	28
Table 3-3 summary of the Saudi studies using cooperative learning .....	69
Table 4-1 Qualitative Approach versus Quantitative Approach .....	90
Table 4.2 Research Data Collection Process.....	107
Table 4.3 Pupils' numbers in the focus group interviews.....	118

# CHAPTER ONE

## INTRODUCTION

### 1.1 Motivation for This Research

Research on cooperative learning over the last three decades points to its effectiveness in the enhancement of pupils' academic achievements, social relationships, peer interaction and thinking skills (Cohen, 1994; Johnson & Johnson, 1989; 2003; Slavin, 1995; Vermette and Foote, 2001; Abrami *et al.*, 2004; Tarhan, 2008; Law, 2008). According to Slavin (1995), there are a number of reasons to support the continuing development and implementation of cooperative learning in classrooms. Firstly, a considerable body of research demonstrates the positive effect of using cooperative learning on outcomes, including the acceptance of academically disadvantaged classmates and increased self-esteem. Secondly, there is a growing realization that pupils need to learn to think, to solve problems, to integrate their knowledge and experience in the learning process and to apply the skills they have to increase their achievements. Thirdly, cooperative learning enables pupils to gain experience in building deep understanding by seeing others' perspective on a certain topic under discussion. Fourthly, cooperative learning can promote diversity in the classroom as a resource rather than a problem. Pupils from different backgrounds contribute alternative sources of information for their group mates, which can make for deeper understanding of the lessons. Finally, cooperative learning has illustrated the positive influence on relationships among pupils of different ethnic backgrounds and between mainstream and special educational needs pupils (Slavin, 1995).

As stated above, employing cooperative learning in the classroom not only increases pupils' achievements but also grants them the opportunity to gain new skills, such as

working in teams to achieve specific goals (Cohen, 1994). Individual accountability is promoted through team working and individuals begin to learn their individual strengths and weaknesses (Gilles and Ashman, 2003). As indicated, cooperative learning also promotes dialogue and interaction, respect for others' opinions, acceptance, modification of inappropriate behaviour and increased self-esteem (Slavin, 1996; Sharan, 1992; 1994; Johnson and Johnson, 1994; Kanag and Kanag, 1994).

Researchers (Slavin, 1996; Kagan, 1998; Rittschof and Griffin, 2001; Johnson and Johnson, 2004) maintain that there is still considerable confusion and disagreement on why cooperative learning methods influence achievement and under what classroom conditions cooperative learning has more desirable effects. Of relevance to this thesis, they add that there is still a need for research to be undertaken at the intersection of cooperative learning and the curriculum in diverse contexts and in different subjects and at various grades. Furthermore, research needs to be completed on programmes of professional development, designed to support teachers' implementation and maintenance of high quality, thoughtful work (Cohen *et al.*, 2008), hence this study. In addition, more research is needed on issues such as the effect of cooperative learning on gifted pupils, replacing homogeneity with heterogeneity, the effect of cooperative learning on inter-group relations, self-esteem, and the acceptance of mainstream opinion in the classroom (Neber *et al.*, 2001; Sapon-Shevin and Cohen, 2004). Generally, although cooperative learning has been studied in a large number of field experiments, there is still much more to be done at all levels and in a broader range of educational institutions and schools (Cohen *et al.*, 2008). This thesis, in part, is a response to such calls and seeks to investigate the development of cooperative learning in the context of secondary education in Saudi Arabia.

## **1.2 Definition of cooperative learning**

The concept of cooperative learning as a teaching method gained momentum in the early seventies. According to Sharan (1994, p. 3), “the new wave of cooperative learning appeared in the early seventies, following the pioneering work of John Dewey and later Alice Miel and Herbert Thelen in the 1950s”.

There are several definitions of cooperative learning. According to Slavin (1995), cooperative learning involves sharing between pupils when they work together, learning from each other and helping teammates to learn as well. Slavin and Cooper (1999) add that cooperative learning methods enhance academic, cognitive and social standards, in an approach that is frequently recommended for its positive effect on pupils. Veenman *et al.* (2000) report that cooperative learning methods place pupils in small groups so that they can work together and help each other to understand the academic content of their courses. They go on to add that, in cooperative classrooms, pupils are expected to discuss and debate with each other, filling the gaps in each others’ understanding. In other words, cooperative learning adds to individuality in study and practice. Ravenscroft *et al.* (1999) state that cooperative learning methods form the foreground of an active process for pupils to learn and to exchange information through interaction, leading to deeper learning. Artzt and Newman (1993) are of the view that cooperative learning involves small groups of learners working together as a team to solve problems, to complete tasks and to achieve common goals. From the previous definitions, it is clear that cooperative learning switches the teaching style from ‘teachers to students’ to ‘students to students’.

Cooperative learning, collaborative learning and group work are usually used to express the meaning of ‘working together’. However, Panitz (1996) indicated some differences

between cooperative learning and collaborative learning. Collaborative learning is a personal philosophy, not just a classroom technique, where people come together in groups with a sharing of authority and acceptance of responsibility regarding the group's actions from the group members. Collaborative learning respects and highlights individual group members' abilities and contributions. Cooperative learning, on the other hand, is a set of processes that help pupils in a classroom to interact together in order to achieve a specific goal which is usually in a specific context. Furthermore, cooperative learning is more directed and closely controlled by the teacher. Johnson and Johnson (2006) defined group work as a collection of individuals working together interdependently to achieve a goal and having the motivation to interact and to influence each other under a clear set of rules and norms, which enhance the feeling of belonging among the group members. Moreover, Cohen (1994) added that a key feature of group work is the delegation of authority in a classroom to the pupils to accomplish specific tasks, allowing them to make mistakes and struggle on their own. Pupils are responsible and accountable for the final product.

The terms cooperative learning and group work are used in this study as synonyms that present the idea of pupils working together to achieve specific goals directed and controlled by the teachers.

### **1.3 The Rationale for the Study**

A review of the literature suggests that efforts to introduce cooperative learning have tended to be initiated in Oceanic, North American or European contexts (Jolliffe and Hutchinson, 2007). Research has been less forthcoming in other regions in the world. This doctoral thesis is in part a response to the paucity of research on group work/cooperative learning methods in Saudi Arabia. An assessment of the wider educational

landscape in the author's home country points to the urgent need to more broadly influence current teaching practice in schools and more specifically to implement alternative pedagogical approaches, such as cooperative learning, in the curriculum.

The potential for the present research is further motivated by a call for reform in the education system in Saudi Arabia, including the curriculum, teacher training, teaching methods, teaching instruments, school management and school buildings (Alkanem *et al.*, 2005).

The possibility for the proposed study emerged out of the researcher's master's level thesis. A study (Algarfi, 2005) of 35 teachers of Islamic culture courses in Saudi Arabia showed that there was considerable uncertainty concerning the concept of cooperative learning, and in some instances complete misunderstanding of the meaning of cooperative learning. Some two thirds of teachers claimed to have heard of cooperative learning, although the majority of those (82.8 per cent) agreed that the concept of cooperative learning was far from clear in their minds. Only 7 of 35 teachers offered a definition close to that in the accepted literature (Algarfi, 2005).

From the researcher's experience, cooperative learning offers one alternative for reforming teaching methods and style, because it challenges the traditional pedagogy in Saudi schools. Recently, the Ministry of Education in Saudi Arabia has shown some interest in cooperative learning methods in the form of a project called "New Secondary School Teaching", an initiative, in part based on cooperative learning methods. This project is being implemented in 76 schools over the country and will be evaluated in the early part of 2010. If the results are encouraging, then it is anticipated that the initiative will be extended to all secondary school in Saudi Arabia.

The current doctoral proposal is considered to be important for several reasons. Firstly, it is considered to be one of the early studies on cooperative learning methods in secondary-level Islamic culture courses in Saudi Arabia (Alkanem *et al.*, 2005). Secondly, it is hoped that the study might encourage others to examine the possibilities for cooperative learning methods in classrooms, especially in Saudi Arabia, and potentially inform discussion on both content and other pedagogical matters across the Saudi educational system, in both pre-service and in-service teacher education. According to Algarfi (2005):

“... almost all the teachers, who participated in that study (35 teachers), agreed that there is a real lack in teacher training and development programmes and more than 70 per cent of them emphasised that they received insufficient training at university, and during their work at the Ministry of Education” (p. 53).

Thirdly, the study might be extended to all levels of the Saudi education system, as Islamic culture courses are taught in schools, colleges and universities. Finally, the author hopes that the study could not only reflect on Saudi schools positively, but may also influence, in the long term, Saudi life and culture, by spreading the concept of working cooperatively in groups to support and encourage the whole community in lifelong learning.

#### **1.4 The Research Problem**

In Saudi Arabia, the fact emerged that education research should be part of the educational effort and serve to improve it (Alhammed *et al.*, 2004). Consequently the purpose of this study is to examine the development and the implementation of cooperative learning in Islamic culture classes taught in one secondary school in Saudi Arabia. Employing a qualitative approach will help to obtain an understanding of the

perceptions of teachers and the pupils. The study also intends to examine and describe any shift from current methods of learning and teaching to those possible within a cooperative learning framework.

Of note, Algarfi (2005) discovered that 60 per cent of teachers in his sample (N = 35) claimed they used a lecture style (defined in a later chapter), debate or dialogue in their teaching, which they justified in the following two ways: a) having been taught as pupils by the same methods, and b) feeling a sense of security after having experienced traditional teaching and learning methods over a long period of time. Between 94 percent and 100 per cent of the teachers were of the view that using cooperative learning methods could benefit their pupils positively, by encouraging learners to listen to others' ideas, building teamwork, building confidence in themselves, spreading dialogue among learners, increasing knowledge, enhancing their achievements and providing opportunities to learn from each other. This doctoral thesis aims to determine if such processes and outcomes can be achieved in the Saudi context.

## **1.5 Research Questions**

This qualitative research examines the following questions:-

1. What were Saudi teachers' perceptions of cooperative learning as an approach to teaching and learning both during and following their professional development?
2. In what ways did Saudi pupils respond to cooperative learning in their classroom?
3. To what extent did experience with cooperative learning influence teachers' classroom practice?

## **1.6 The Structure of the Research**

The thesis consists of seven chapters. Chapter One has introduced the motivation for the research, and explained the rationale for the study. It identified the research problem, clarifies the context of the research and outlines the research questions. Chapter Two gives a brief background regarding the Saudi educational system, which includes the stages of general education (elementary school, middle school, and secondary school). The chapter also considers the Islamic culture curriculum in Saudi Arabia. Chapter Three gives a review of the relevant literature on cooperative learning, its definitions, and its advantages and disadvantages. It also refers to Islam, as a religion, in cooperative learning. This chapter, in addition, discusses teachers' attitudes about cooperative learning, group work in classrooms (designing groups, advantages and disadvantages of group work) and changes in schools, including the need for change, teachers in change, pupils with new strategies in the classroom and curriculum change.

Chapter Four outlines the methodology and starts with the differences and the similarities between quantitative and qualitative methods, then moves to the benefits of using the triangulation method. It also considers the methods used to collect data from interviews, the advantages and disadvantages of that, the key interview questions and the pilot questions, and observation, including its tools and the plan for implementation in the classroom. The chapter discusses a number of relevant issues, such as the sample for the study, validity and reliability, ethical issues and the procedural tool for data analysis. The findings from the analyses of the qualitative data are presented in Chapters Five and Six. These findings are discussed in relation to the literature. Finally, Chapter Seven presents the major conclusions, limitations and recommendations regarding research into cooperative learning methods and their use, not just in Islamic culture courses, but also in a wider range of settings in Saudi Arabia.

## **1.7 Summary**

This chapter, in general, has highlighted the motivation and rationale for this study and identified the research problem and research questions. The next chapter will present some background to the Saudi educational system and the Islamic culture curriculum.

# **CHAPTER TWO**

## **THE SAUDI EDUCATION SYSTEM**

### **2.1 Introduction**

The previous chapter sought to clarify the research motivation, presented the rationale for the study, and outlined the specific research questions. Given that this work was undertaken in Saudi Arabia, it is important to provide an overview of the Saudi education system. This chapter provides general background regarding the Saudi educational system and points to some factors that presently shape the system. The meaning and significance of the Islamic culture curriculum are also presented. The chapter concludes with a discussion of current teacher training arrangements in Saudi and sets out some of the future plans for the Ministry of Education.

### **2.2 The Saudi Education System: A brief history**

The current Saudi education system was established in 1926, when King Abdul-Aziz decreed the opening of an administration for education in Mecca. In 1928, the education council was also established in Mecca. This council is regarded as the foundation stone of the Saudi education system (Alhogail, 2003). According to Alhammed *et al.* (2004), by the end of 1926, twelve elementary schools had emerged. The first middle school was founded in 1927, the purpose of which was to prepare pupils who had potential ability to teach to become teachers themselves. In 1936, the first school preparing students to study abroad was established. Pupils who had completed middle school could enrol in this school for a period of three years. Some graduates from this school were sent abroad to study at university level in other Arabic countries, such as Egypt. These schools were regarded as the first secondary schools in Saudi Arabia (Alhammed

*et al.*, 2004). In 1943, the Al-Tawheed School opened in Taife city. The aim of the Al-Tawheed School was to prepare pupils to study at Sharia College, with a view to them becoming judges or academic staff in colleges (Alhammed *et al.*, 2004). According to Islamic tradition, boys and girls should be educated separately. The first school for girls was established in 1941 in Jeddah. In the same period, a number of other schools for girls were established, in Mecca, Riyadh, Damam and Medina (Alhammed *et al.*, 2004).

In 1952, the Ministry of Education was established and King Fahad bin Abdulaziz became the first Minister of Education. This Ministry oversees boys' education only, in pre-school, elementary school, middle school and secondary school. In 1960, the Presidency for girls' education was established, covering general education from elementary through middle school to secondary level. Girls' education now also comprises teacher training schools and colleges (Alhammed *et al.*, 2004, Alhogail, 2003). In 2003, the Presidency for girls' education was incorporated into the Ministry of education (Alhogail, 2003).

### **2.3 Factors influencing the Saudi educational system**

According to Alsonbl *et al.* (2004), many factors influence the Saudi education system and shape its direction, aims and objectives. These factors are:

- Islam:- Saudi Arabia is a Muslim country in which religion governs every aspect of life. Saudi Arabia plays a central role in the history of Islam, as the prophet Mohammed was born there. Consequently, Islamic perspectives govern any new educational concepts (Motoaly, 2004). "Historically, Saudi Arabia has occupied a special place in the Islamic world, for it is towards Mecca and Islam's most sacred shrine, the Ka'abah, located in the Holy Mosque, which Muslims throughout the world turn to devoutly in prayer five times a day. An

appreciation of Islamic history and culture is therefore essential for a genuine understanding of the Kingdom of Saudi Arabia, its Islamic heritage and its leading role in the Arab and Muslim worlds” (Ministry of Education website: [http://www.moe.gov.sa/openshare/englishcon/About-Saud/Religion.htm\\_cvt.html](http://www.moe.gov.sa/openshare/englishcon/About-Saud/Religion.htm_cvt.html), 20<sup>th</sup> of May 2010).

Educational policy in Saudi Arabia (including aims, objectives and targets) is thus founded completely on Islamic culture concepts (Motoaly, 2004). Sonbol *et al.* (2004) state the following points about learning within Islamic culture: a) learning is the right of every citizen (equality of educational opportunity) and it is the obligation of government to provide both a suitable environment and resources and equipment for learning; b) Islamic culture courses are essential at all levels (primary school, middle school and secondary school) for boys and girls; c) boys and girls must learn separately in a suitable environment. d) all studies (humanities and sciences) are in alignment with Islamic beliefs.

- Arabic is the language of the holy Quran. The majority of courses are therefore taught in Arabic (Alhammed *et al.*, 2004)
- Political factors: - Saudi Arabia has a centralised monarchy. It was founded by King Abdul-Aziz in the early years of the nineteenth century (Alhammed *et al.*, 2004). Centralisation influences the Saudi educational system in many ways, such as: the construction of buildings, the curriculum, teacher training and working conditions, in-service training programmes and school equipment, which are all provided by government (Motoaly, 2004). Although there is geographical diversity in the country, the government seeks to ensure that all pupils in the country receive the same level of educational provision (Alsonble *et al.*, 2004)

- Economic factors:- Saudi Arabia is one of the most important producers of oil in the world, which reflects economically on the educational system. Education is free for all students, not only in the general education sector but also in higher education (Alsonble *et al.*, 2004).

## **2.4 The Broad Objectives of the Saudi Education System**

The objectives of Saudi educational policy (in general) are to ensure that education becomes more efficient, to meet the religious, economic and social needs of the country and to continue to reduce illiteracy among Saudi adults. There are several specific objectives for education, which are as follows (Alhogel, 2003):

- Islamic objectives: educational policy built on Islamic perspectives.
- Cognitive objectives: pupils must be provided with all the information and knowledge that they need to prepare them for the future, with focus on promoting pupils' skills (reading skills, thinking skills, understanding the environment and providing them with second languages such as English).
- Scientific objectives: helping pupils to use science to solve problems, promoting skills, innovation and creativity. In addition, under scientific objectives pupils are encouraged to gain skills in technology, research, observation, analysis and reflection.
- Attitudes and values objectives: the aim is to broaden attitudes about life from the Islamic point of view and that of national and community identity. Pupils should learn the history of the kingdom of Saudi Arabia and the importance of Saudi as a country, not just in the Arabic Islamic world, but also in the world in general.

## 2.5 Stages of General Education:

The education system in Saudi Arabia, for both boys and girls, has three main compulsory stages, which are detailed below.

### 2.5.1 Elementary schools

Pupils enter elementary school at the age of six, and remain for six years. Pupils are graded each year according to examination results. Passing exams is a condition for moving to the next educational stage. Ten years ago, the Ministry of Education determined that pupils in elementary school would no longer be examined. The Ministry deemed these pupils would be evaluated by continuous assessment during the year, then graded for the next (Alhogail, 2003).

The development of elementary schools during the last forty years (number of schools, pupils and teachers) is shown below. Table 2.1 and Table 2.2 show the development of schools for boys and girls respectively (Alhammed *et al.*, 2004, p. 102).

**Table 2.1 The development of elementary schools for boys**

Years	Schools (No.)	Pupils (No.)	Teachers (No.)
1969	1,383	267,529	12,157
2007	6,688	1,255,117	107,227

**Table 2.2 The development in elementary schools for girls**

Years	Schools (No.)	Pupils (No.)	Teachers (No.)
1969	15	5,180	113
2007	6,766	1,187,365	113,828

### 2.5.2 Middle schools

Middle school lasts three years. Pupils are accepted in middle school if they have a certificate from elementary school. Movement from year to year also requires successful

completion of an examination (Alhogail, 2003). The growth in the number of schools is summarised in Tables 2.3 and 2.4 (Alhammed *et al.*, 2004, p. 110).

**Table 2.3 The development in middle schools for boys**

Years	Schools (No.)	Pupils (No.)	Teachers (No.)
1957	20	2,515	173
2007	3,927	609,300	54,034

**Table 2.4 The development in middle schools for girls**

Years	Schools (No.)	Pupils (No.)	Teachers (No.)
1962	5	235	0
2007	3,576	535,248	57,531

### 2.5.3 Secondary schools

Secondary schooling also takes three years. All pupils entering this stage must hold a certificate from middle school. Tables 2.5 and 2.6 outline the growth in the number of secondary schools in Saudi Arabia during the last 50 years (Alhammed *et al.*, 2004, p. 115).

**Table 2.5 The development in secondary schools for boys.**

Years	Schools (No.)	Pupils (No.)	Teachers (No.)
1952	12	1,697	176
2007	2,250	541,849	41,108

**Table 2.6 The development in secondary schools for girls.**

Years	Schools (No.)	Pupils (No.)	Teachers (No.)
1962	1	21	0
2007	2266	471,225	46,715

The average age for starting secondary school is around 15 years. Pupils who want to study at university level have to gain a secondary education certificate. The exams in

the final year are set by the Ministry of Education for both boys and girls (Alhogail, 2003), and are typically taken at the age of 18.

The latest general statistics about the general education sector in Saudi Arabia were published in 2007, as shown in Table 2.7, comprising results from all three stages mentioned earlier.

**Table 2.7 The latest statistics on secondary schools in Saudi.**

2007	Schools (No.)	Pupils (No.)	Teachers (No.)
Boys	14,790	2,446,245	207,897
Girls	17,329	2,366,258	240,898
Total	32,119	4,812,503	441,795

## **2.6 The Key Objectives of Secondary School Education**

The main objectives of secondary school education in Saudi Arabia (Alhogail, 2003; Alhammed *et al.*, 2004; Alsonble *et al.*, 2004) are:

- To teach the general concepts of Islamic culture.
- To promote skills appropriate to the pupils' age.
- To promote care and avoidance of negative thinking.
- To provide helpful experiences for the future.
- To develop relationship skills, such as cooperation, planning, giving help, giving charity and organizing work.
- To develop scientific thinking skills and training in research skills.
- To prepare pupils for the Saudi employment market.
- To prepare able pupils for university level.
- To raise awareness of the main features of family life, such as good relationships, rights, obligations, respect and responsibility.

- To train pupils in social programmes inside and outside school.
- To promote critical thinking, observation and analysis.
- To promote linguistic skills and expressiveness.
- To motivate and accustom pupils to the library, internet, media and technology usage.
- To teach national values.

Whilst these objectives cover the development of skills such as cooperation, critical thinking, social skills, and research skills, some are of the view that these are not made explicit in lessons. Indeed, recent study analysing the content of some of the Saudi curriculum indicated that it lacks emphasis on the high thinking skills mentioned in Bloom's taxonomy of objectives and tends to concentrate more upon knowledge and memorizing skills, recommending use of a lecture approach (<http://www.moe.gov.sa/testbank/ContentAnalysis.aspx> accessed: 20<sup>th</sup> of May 2010). This is indeed, consistent with the need to implement other pedagogical approaches in Saudi classrooms such as cooperative learning (a gap which this study is trying to fill), to allow the pupils to achieve more personal and social skills rather than just knowing and memorizing facts.

## **2.7 The Islamic Culture Curriculum in Saudi Arabia**

The Saudi curriculum covers a number of subjects at all levels, including Arabic, mathematics, history, science, geography, art, physical training and Islamic culture. The present study examined Islamic culture courses as a condition of sponsorship by King Khalid University in Saudi Arabia, which required the research to focus on the teaching and learning of the Islamic culture curriculum in some Saudi schools.

There are five compulsory elements to the Islamic culture curriculum at every level of general education in Saudi schools. These elements, according to Alhammed *et al.* (2004) and Alhogail (2003) and The General Educational Objectives Document (2002), are:

1) The Holy Quran: which is the compilation of the verbal revelations that were given to the prophet Muhammad over the period of his prophecy (twenty-three years). It is the holy book of the Muslims that illustrates (for them) the law and commandments for their social and moral behaviour, and contains the main principles of the religion. In this part of the curriculum all the verses of the Holy Quran are taught. It is divided into twelve sections and covered over years one to twelve). In each year, pupils learn how to read the verses correctly and may be asked to memorize some of them;

2) Al-Tafsir: it is a commentary on the verses of the Holy Quran, to show their objectives and to make them clear, so that the book of Allah can be understood correctly. In the Al-Tafsir, curriculum pupils learn the meaning of the verses, learn the benefits and the wisdom behind the verses and are encouraged to implement these in their lives;

3) Al-Tawhid: the word *Tawhid* in Arabic means make it one, not two or three, just one. Therefore, the meaning of Al-Tawhid in Islamic religion is the recognition of the 'oneness' of God, through what the Holy Quran says and what the prophet narrated. In fact, the Al-Tawhid curriculum deals with all matters of belief, for example, all the names and attributes of Allah, the names of the Prophet Mohammed, matters of worship, the barriers between believers and disbelievers, all the matters of the last day, regarding paradise and hellfire.

4) Al-Hadith: *Hadith* means the sayings and teachings of the prophet (which is the second source of information for Muslims concerning the right way to live). Everything that the prophet said or did was carefully noted and remembered. Accordingly, the pupils, in this part of the curriculum, study the Prophet Mohammed's sayings, his character, his doings, his behaviour and his morals. In addition, explanations of what the prophet said are provided in the curriculum. Relationships (among parents, wives and husbands, children, neighbours, teachers, schoolmates, friends, and people from other countries and faiths) are covered in this part.

5) Al-Fiqh: *Fiqh* means intelligence and knowledge. The study of Islamic law and jurisprudence is called Al-Fiqh. Therefore, this curriculum is about matters of religious law and ritual such as how prayers, the Hajj, Ramadan and charity work should be performed. In addition, the curriculum explains in detail all marriage and divorce issues and all *Hallal* food matters (food allowed by Islam) and what is not *Hallal* (forbidden). All economic matters, such as selling, buying, shares, and all commercial exchange are clarified in the Al-Fiqh curriculum.

As indicated, at the time of data collection only the Al Fiqh curriculum was timetabled at the target school during the summer term. The current study specifically investigated this Al-Fiqh curriculum at the secondary schools stage in Saudi Arabia, covering all matters regarding marriage and divorce in Islam. This curriculum also includes content on selling, buying, companies and the legal rules of competition in Islam.

## **2.8 The New Secondary Educational System Project**

In the 2005-6 academic year, the Ministry of Education in Saudi Arabia started a new project called the New Secondary Educational System, comprising two programmes. The first is compulsory for all pupils and the second is optional. Pupils have to choose

between two pathways: literature or science. The project, according to The New Secondary Educational System Guide (2005) aims to: a) give pupils the opportunity to plan their future early; b) promote pupils' decision-making skills and self-esteem by giving them the power to choose their courses, their teachers and their school; c) the project depends on Grade Point Average (GPA) as a system of assessment; d) skills, such as self-learning, thinking skills, cooperation skills, group work, interaction and dialogue are addressed as a target in the project. The context of these aims, particularly those that emphasise cooperation and group work, provide a window of opportunity for this thesis.

The project indicates some fundamental principles, which are:

- 1) Integrating every subject in two or three courses.
- 2) Flexibility: Pupils are able to choose the number of courses that they are going to study in each term. They have the authority to design their timetable as well.
- 3) Individual academic guidance: Each student has to have a supervisor (one teacher) who should help to set and achieve aims, solve problems, and support them in planning their future.
- 4) The evaluation system using grade point average (GPA) entitles pupils who did not pass any course to repeat that course with no need to repeat the whole year, as was the case in the traditional system.

The project started in 2005 in 21 schools over the country and continued in 2006. It extended to 42 schools and by the end of 2008 it was conducted in 76 private and state schools (see table 2.8).

**Table 2.8 the number of secondary schools conducting the new project in 2008**

2008	State schools	Private schools
Boys	22	15
Girls	23	16
Total	45	31
	76	

It was planned that the project would be evaluated by the Ministry of Education by the end of 2007, before replacing the traditional system. According to the project website (<http://www.hs.gov.sa/> accessed 20<sup>th</sup> of May 2010), this deadline was extended until the beginning of 2010 to give more time for the project to be understood better by all shareholders. In fact, the Ministry of Education delegated the evaluation of the project to Taibah University (one of the universities in the west of Saudi, specifically, in Al-Madinah Al-Munawarah).

The present study is intended to contribute, indirectly, to this wider evaluation and will be one of the early of its kind. The study was implemented in one of the schools that used the project, which enabled the researcher to collect the data needed easily and in a short time (approximately 6-7 weeks).

## **2.9 Teacher Training Programmes in Saudi Arabia**

Teachers (male or female) in Saudi Arabia graduate from initial teacher education in one of two ways: 1) from Teachers' Colleges, which prepare teachers for elementary/primary schools, and 2) from Colleges of Education at universities (Alsonbl *et al.*, 2004). According to Summary Statistics on General Education in Saudi Arabia (2005), there were approximately 442,000 teachers (male and female) in the general education sector. Although there are specific criteria which are employed when teachers are chosen, the shortage and the need for teachers in Saudi schools has permitted many

unqualified teachers to work in them (Alhammed *et al.*, 2004). Thus, there is a necessity to support these teachers and enhance both their subject and pedagogical knowledge. This support is currently lacking and teachers enter schools with a very limited level of teaching ability.

There are two types of teacher training programmes in Saudi Arabia. The first is pre-service training, provided at university and Teachers' Colleges. Trainees are prepared academically and educationally (Alsonbl *et al.*, 2004). Algarfi (2005) observed that some graduates from these programmes, in some Saudi universities, considered their training to be insufficient and outdated, in terms of approaches to teaching and learning. Secondly, very limited in-service training programmes are provided by the Ministry of Education. In-service training programmes are known to be restricted to a very short period (e.g. one hour) and typically relate to subject knowledge, time management, improving teachers' confidence (e.g. presentation skills) and technology or updating teachers with much wider educational issues (Alhammed *et al.*, 2004). To the researcher's knowledge little if any attention is paid to alternative models of teaching.

Preparing teachers in Saudi Arabia carries several problems that can potentially influence the whole educational system. Alhammed *et al.* (2004) outlined some issues, which were: a) Huge numbers of teachers who are unqualified teach in schools and without formal teacher education because of the teacher shortages. b) Teachers have limited knowledge of learners' needs, whether educationally or psychologically, and a narrow range of current educational approaches to achieve desired aims. They may also understand key concepts wrongly, such as reward and punishment, and need support in assessment and classroom management; c) Initial teacher education is provided by different institutions, such as universities, Teachers' Colleges and the Ministry of

Education. Each of these institutions runs different programmes, with a different structure (scope and sequence) and different aims, which might lead to a wider range of outcomes; d) There is a gap between theory (at universities, teachers' colleges and the Ministry of Education) and the reality of teaching in schools (practice).

## **2.10 The Future of the Saudi Educational System**

From 2005, Saudi Arabia enacted comprehensive reform within the educational sector, including the curriculum, the use of technology, promoting teaching skills, and resources (school buildings) (<http://www.moe.gov.sa/openshare/moe/index.htm> 20<sup>th</sup> of May 2010). According to Alkanem *et al.* (2005), the change in the general education sector in Saudi aimed at furnishing skills needed for the information age, for instance, the skills of thinking and working critically, including the skills of problem solving, creativity and invention, cooperative skills, communication skills, understanding other cultures, technological skills and self-learning. Of particular interest to this thesis, the future of the general educational system in Saudi, as Alsonbl *et al.* (2004) claim, is to support and employ several types of learning in school, such as e-learning, self-learning, cooperative learning, open learning, distance learning and continuance learning and prepare school management, teachers, pupils and school equipment to support these types of learning. This thesis examines the development and implementation of cooperative learning.

In 2007, King Abdullah bin Abdul-Aziz announced a new project for developing the general education sector, which came into practice in 2008. This project, (<http://www.tatweer.edu.sa/QuickBrief/Pages/ProjectTargets.aspx> 20<sup>th</sup> of May 2010) is called 'Tatweer', and has four general aims, which are:

- To re-develop the curriculum to be consistent with the fast development in cognitive learning and technology.
- To re-prepare teachers' skills to meet future needs.
- To improve and develop the learning environment by integrating technology and the digital world in the classroom.
- To promote pupils' skills, abilities, and creation and innovation through classroom activities and new pedagogical approaches.

Economic change demanded urgent change in the Saudi educational system. Some studies point to the need for development and change in Saudi schools. Aljarf (2004) claimed that the educational system in Saudi, when compared to other countries, requires development in alternative teaching methods, updating of the content of many curricula, increase in the scope of teacher training and the use of technology in the classroom. In addition, Mansour and Alhodithy (2007a) believe that

“There is a common conviction that the academic performance of students in Saudi Arabia at different levels of schooling is less than acceptable. The low performance of students in Saudi has been explained in terms of the pedagogy used in the classroom, which is teacher centred, expressing the dominance of the teacher.”

In the same way, Alrasheed *et al.* (2003) drew attention to the absence of new teaching approaches in Saudi schools, such as cooperative learning, problem-solving, e-learning and the use of ICT. They criticised the popular teaching methods common in many Saudi classrooms (namely lecture and dialogue). In addition, they argued that the content of some curricula was designed to reflect these approaches and tended to concentrate upon rote learning and ignored other skills needed for the labour market, including personal and social skills, thinking skills and cooperation. Almufadda also reported the tendency for Saudi teachers to use a lecture style which depends on

transmitting information to pupils. He acknowledged that the lecture method has its place, but other approaches that concentrate more on pupil-centred learning (skills not just information) and learning facilitated by teachers should be encouraged in Saudi classrooms (<http://faculty.ksu.edu.sa/5345/default.aspx> 20<sup>th</sup> of May 2010). This research is therefore consistent with this call for development, change and reform in Saudi classrooms, with specific focus upon introducing and developing cooperative learning at secondary level.

## **2.11 Summary**

This chapter has covered several issues regarding the Saudi educational system. It has covered some important factors that currently influence the Saudi educational system. The stage of general education and the objectives of the main target stage (secondary school) have been illustrated. This chapter also explained the Islamic culture curriculum, and the new secondary educational system arrangement for initial teacher training programmes. The future of the Saudi education system, from the Ministry of Education's point of view, is to move to other types of teaching and learning styles, to encourage the conduct of research in schools and to support its findings for future benefit. This study into the implementation of cooperative learning is a contribution to such an objective.

## **CHAPTER THREE**

### **LITERATURE REVIEW**

#### **3.1 Change in Schools**

Educational change and reform tend to reflect globalisation and the advancing of economies. In recent years, the basis for educational change, in many countries, has been economic (Hargreaves, 1994). Teachers and teaching methods are at the heart of change (Hargreaves, 1994), and many issues require focus during the process of change and development, which include, according to Burden (1986), teaching methods, discipline, curriculum development, lesson planning, rules and procedures, and relationships between teachers and pupils, supervisors, parents and other members of school communities. According to Fullan (2001) reform is not just about putting the latest policy into place, it means changing the culture in classrooms, including higher education, and the wider community.

Defining and accomplishing educational change is complex, but in practice implies four factors: new materials, new teaching approaches, new theory and new policy (Fullan, 2001). While addressing the Arabic context, according to Alkanem *et al.* (2005), any change in the world today demands a focus upon outputs as well as inputs, and teachers who are sources of knowledge now have a greater responsibility in organising learning. Technology is causing shifts in teaching methods (Alkanem *et al.*, 2005), while group methods have been shown to develop the skills needed in the market nowadays.

Education in the third millennium faces several challenges (globalization, technology, open markets, and economic competition), which have brought new concepts regarding

how individuals learn to put to the fore the necessary skills, alertness and knowledge (Poole, 2003). These factors can influence the education system in many ways, including in curriculum design, teaching methods, teacher training and schools generally. Implementing traditional educational theory is no longer enough to prepare learners for the future or to equip them with the skills needed (Alkanem *et al.*, 2005). The International Society for Technology in Education (ISTE, 2000 p. 3) illustrates the characteristics of both the traditional learning environment and the new learning environment as indicated in Table 3.1 below.

**Table 3-1 Traditional environment and new environment**

<b>Traditional learning environment</b>	<b>New learning environment</b>
- Teacher is the centre of learning	- Student is the centre of learning
- Stimulating just one sense	- Stimulating many senses
- One way of learning	- Several ways of learning
- Individual learning	- Group work
- Transfer of information	- Exchange of information
- Passive learning	- Active learning based on research and discovery
- Transferring facts / knowledge	- Critical thinking and decision making
- Reaction, response	- Initiative and planning action
- Evaluation based on exams	- Authentic evaluation depending on the whole context (alternative evaluation)

The new learning environment has emerged because school is a part of life, and the two elements (life and school) are in interaction.

Both Reigeluth (1999) and Alkanem *et al.* (2005) state that: 1) In the “agrarian age”, business was organized around the family, and they discuss the concept of school being associated with one room (in the schoolhouse) and one teacher; 2) In the industrial age,

the family became overcome by bureaucracy and business organization, which shaped the traditional learning environment; 3) Now, as we go deeper into the information age, which has changed organizations, skills need also to change. Reigeluth (1999) showed some of the characteristic market differences between industrial-age organizations and information-age organizations (Table 3-2).

**Table 3-2 the differences between the Industrial and Information Ages**

<b>Industrial Age</b>	<b>Information Age</b>
- Standardisation	- Customisation
- Bureaucratic organisation	- Team-based organisation
- Centralised control	- Autonomy with accountability
- Adversarial relationships	- Cooperative relationships
- Autocratic decision making	- Shared decision making
- Compliance	- Initiative
- Conformity	- Diversity
- One-way communication	- Networking
- Compartmentalisation	- Holism
- Component oriented	- Process oriented
- Planned obsolescence	- Total quality
- CEO or boss as “king”	- Customer as “king”

Trilling and Hood (1999) examined the skills needed for life in the third millennium and how employees should think about them. These skills include thinking and working critically, including the skills of problem solving, creation and invention, cooperative skills (working in a team), communications skills, understanding other cultures, self-dependence and job change, computer and technology skills and self-learning. Reigeluth (1999) also argued that, in any education system that wants to meet the above needs, it is very important to take a closer look at the paradigm of training and education, and take action by changing the context that is taught and the methods that are used. Schools in many countries (and in all Middle Eastern countries) today are facing pressures to

reform and change their education systems, not just because of the transfer to the information age, but also because of several factors that enforce change in schools, such as the change in concepts and ways of individual learning, the failure of the traditional learning style to satisfy the need of the third millennium and the need for new skills in the era of globalization (Fullan, 2001; Poole, 2003; Alkanem *et al.*, 2005).

### **3.1.1 Learning Theories**

Several theories have shaped learning within the education system in the last century. It is generally agreed that three types of educational theories have attempted to interpret the way that individuals learn (Schunk, 2000). These three theories are behaviourism, cognitivism and constructivism, as described below.

1) The behaviourist theory in the 1950's considered the learning process as being dependent on stimuli and responses (Schunk, 2000). It concentrated on the behaviours of learners rather than the process of thinking. The way of learning in behaviourism was related to events impacting memory, practice, outcomes, theories and design, and the style of controlling learning attitudes (Skinner, 1990).

2) Cognitivist theory attempted to discover more about thinking processes. This theory concentrated on how information is received, stored and used (Reigeluth and Moore, 1999), emphasising ability or existing potential. In the classroom, the suitability of information was emphasised (Reigeluth and Moore, 1999). The authors focused on pupils' readiness to learn, thinking about cognitive assemblies (including understanding, realization and knowledge), succession of learning materials, speed and reinforcement of the learning process, discovery methods, learning through experience and patterning the brain structure.

3) The constructivist theory attempts to encourage open learning experience. Learners, according to the constructivist theory, build knowledge through experience (Bednarz, 1998). Bednarz added that learning should be active, organized and depend on problem solving. According to Mayer (1999), constructivist theory comprises several concepts regarding the processes of learning. These concepts are: a) building knowledge that can be used in a social context, b) opportunities to manage self learning, c) distributed cognition and shared intelligence among pupils (cooperative learning), leading to social constructivism, d) support for individual cognitive development and e) student reflection on and in the learning environment. Knowledge construction is carried out by the learners themselves, not just by transfer of knowledge from teachers. In constructivist theory, multiple perspectives among pupils interacting with each other, are a very important part (Desautels, 1998; Schank, 1999).

Jonassen and Land (2000) clarify the key differences between constructivism, on the one hand, and behaviourism and cognitivism (objectivism), on the other hand, in terms of designing the student learning environment. Objectivism seeks specific outcomes from learning processes. In constructivism, the outcomes cannot be predicted and teaching should support learning, not control it. Learning from a constructivist perspective, therefore, depends on learners' activities, with an active teaching style that should concentrate on individual learning, group work, and cooperation with others, the exercise of communication and thinking skills, discovery and knowledge building (Jonassen and Land, 2000). Jonassen and Land go on to suggest a model for constructivist learning, whether in groups or individually, with content related to pupils' interests and desires, and where solving problems involves cooperation among pupils and with teachers.

With change in learning theory, several areas of the educational system should be modified or re-designed, in terms of the learning environment, such as teachers' and pupils' roles, the curriculum, methods of teaching and learning, evaluation style, and pupils' ways of thinking (Alkanem *et al.*, 2005). Although all these areas are important and cohere on the whole, the main focus of this thesis is on teachers, pupils and teaching methods.

According to Alkanem *et al.* (2005), teachers following constructivist theory in the information age are required to provide a positive environment where pupils can give their opinions freely without criticism or derision. The learning environment should aim to connect pupils' previous experiences with new learning concepts, help pupils to develop high-quality cognitive structure, motivate them to think positively about the topic and involve them in finding further solutions to particular problems (Poole, 2003). Teachers are also required to provide materials that encourage pupils intellectually and physically to work in teams (Mcwhaw *et al.*, 2003). Teachers are responsible for organizing learning experiences in the classroom, evaluating progress in learning, providing constructive feedback, helping pupils in reflective thinking, involving them in inside and outside class activities, encouraging them in positive interdependent support and choosing teaching methods that support all these concepts (Brody and Davidson, 1998; Alkanem *et al.*, 2005). Generally, teachers' roles lie in supervision, consultation, advice, training, and designing and providing materials.

Pupils' roles in the constructivist learning situation go beyond merely listening to teachers, being passive, and typically following a more traditional structure. According to Reigeluth (1999), pupils contribute to the learning process and activities, learn in small groups, discover new information, share learning with group mates, using various

methods of learning, learn different concepts regarding individual needs, use thinking skills and regard teachers as helpers and supporters in discovery and problem solving.

Of particular relevance to this research, Alsaleh (2004) states that changes in all fields demand new and alternative teaching methods beyond lecturing, involving cooperative learning methods and learning based problem solving. According to Sharan (1994), cooperative learning methods strive to enable pupils to assume a high degree of responsibility for their own learning, rather than perceiving learning as imposed by others. Pupils are more likely to accomplish this when they are given the opportunity to practise (Steinert, 2004). Cooperative learning methods are facilitated by having pupil groups participate in regulating their own activities in the classroom, including planning and the conduct of learning (Sharan and Sharan, 1992; Sharan and Shaulov, 1990). Cooperative learning methods aim to have a positive impact not only on classrooms, but also on the wider school environment. Cooperative learning entails significant decentralization of decision making in the classroom, by empowering pupils to play a role in directing their own academic behaviour and work in school (Sharan, 1994).

Teachers, in the process of change in school generally and in classrooms specifically, play the key role and, because of that, they should follow training and development programmes to become ready to accept changes and implement appropriate methods in classrooms (Angelides, 2002; Gillies, 2004, b; Roux and Ferreira, 2005).

### **3.2 The Strategy of Change in the Classroom**

There are several strategies that can be used in any organisational process, such as the top-down and the bottom-up approaches. Top-down is a traditionally imposed strategy (Rosenblit, 2002), while the bottom-up strategy spreads change upwards, towards the

top of the pyramid, and is more of a “voluntary” approach (Fullan, 2001). Rosenblit (2002) claims that, using both strategies together may be the best way to optimise a change process and avoid resistance.

Algamody (2004) claims that individuals’ interactions with the environment around them (political, social, economical and cultural) shape their attitudes and reactions. Accepting or resisting change is an individual reaction, which should be taken into account in any change process. Even the Holy Quran speaks of change taking place within individuals. “*Verily never with Allah change the condition of people until they change it themselves (with their own souls)*” (Ra’d 13:11, translated by Ali, 2003, p. 589). Algamody (2004) supports the idea of internal change of attitudes, principles, beliefs and views. The bottom-up approach is relevant to this research, according to its objectives. Sharing ideas, information, experience and help are at the core of this research. Fullan (2001) believes that change will not take place unless the meaning of change is shared and clear for everyone. Therefore, the current research investigates the bottom-up strategy of change in the classroom, which aspires to influence the ‘top of the pyramid’ in the Ministry of Education in Saudi Arabia. The bottom-up strategy is recommended, because the Saudi educational system has been controlled by government and has been somewhat reluctant to embrace change. This bottom-up approach working with and alongside teachers is seen as one such effort to stimulate change. This study looks at one Saudi school, in which it is hoped that a new pedagogical approach can be adopted by working directly with teachers to develop and implement change in classrooms. This study also permitted the researcher to work side by side with the teachers to equip this change in these classrooms.

### **3.3 Change Management**

Change is an essential part of life, and may be driven by several factors, such as culture, technology or the economy. Change reflects underlying shifts in values, beliefs, and expectations (Hughes, 2006). According to Paton and McCalman (2000), it is impossible to undertake any journey of change without addressing the purpose of that change and the direction that it is going to take. Managing change is also about handling the complexities of it after evaluating, planning, and setting out on the considered operational and strategic journey. It is about ensuring that this journey is worthwhile and reaches its desired destination.

Change management is commonly defined as a set of processes employed to ensure that significant changes are implemented in an orderly, controlled and systematic fashion to produce organizational change (<http://www.tech-faq.com/change-management.shtml> 20<sup>th</sup> of May 2010). Managing change is not easily achieved, and one might be accused of being too focused on the task, during the process, or to be too focused on the process. Although there is no one right way, there are a number of frameworks within which one can find a way that is right for change. Sufficient consultation and communication are important, before, during and after the change processes, to visualise clearly the end state and to flesh out the specifics of the change, leaving no room for emergent possibility, or unease in the organization. (Green, 2007).

Change management has been developed over a period of time and there are a number of factors that might determine the management of change. Paton and McCalman (2000) point out six factors associated with successful change, namely:

- 1) *The role and selection of the problem owner*, which means who is the right person to do the job in terms of management skills, involvement and commitment to the project.
- 2) *Locating the change on the change field*, which means determining the nature of the change, what is its motivations (technical or people related issues) and its impact upon the organization.
- 3) *The TROPICS test*, which means addressing some factors related to the change processes, namely: a) time scales; b) resources; c) objectives; d) perceptions; e) interest; f) control and g) sources.
- 4) *Force field analysis: a positioning tool*, which is a diagram using a technique that answers any questions related to the nature of the change, resistance, support for the change, the forces of change
- 5) *Success guarantors: commitment, involvement, and shared perception*, meaning that change management requests understanding of the likely impact of the change on those systems most affected by it.
- 6) *Managing the triggers* of the change processes that may influence the reaction of the staff and the whole organisation.

In addition, there are several models of change management such as the ADKAR model, which is one of the models that have played a great part in change management. It was developed by Prosci ([www.prosci.com](http://www.prosci.com). accessed 20<sup>th</sup> of May 2010). In this model, there are five stages that must be realised in order for an organisation or an individual to successfully change. “These five stages are:

- Awareness - An individual or organization must know why a specific change or series of changes are needed.

- Desire - Either the individual or organizational members must have the motivation or desire to participate in the called for change or changes.
- Knowledge - Knowing why one must change is not enough; an individual or organization must know how to change.
- Ability - Every individual and organization that truly wants to change must implement new skills and behaviours to make the necessary changes happen.
- Reinforcement - Individuals and organizations must be reinforced to sustain any changes making them adopt a new behaviour; if not, an individual or organization will probably revert back to their old behaviour” ([www.prosci.com](http://www.prosci.com) 20<sup>th</sup> of May 2010).

As a way of managing the change, this study depends on the five stages that were determined by ADKAR. Both teachers who participated in this study had the knowledge of the change that was needed in their classes and reasons for that change. They had the motivation and desire to participate in both the training and the implementation stages. The knowledge and information regarding how to implement the change were given to them through the training programme. After that, both teachers had the choice to participate or not in the project. Finally, the teachers had the opportunity to implement planned changes in their classes with the support needed from the researcher.

### **3.4 Resistance to Change**

Individuals have a strong preference for stability, whilst change means moving to uncertainty and an unfamiliar area. Individuals usually want to stay in their ‘comfort zone’ and change usually brings them to another zone. Knowles and Linn (2008) gave a clear definition of resistance, as a reaction against change, which is evident in the presence of pressure, and the affective and motivational sides of change. It underlies the

affective and cognitive reactions that influence people, especially when they become aware that they are at the centre of an attempt to make a change. There is a definite natural reaction, to worry and think about every aspect of the situation (Knowles and Linn, 2008). Individuals usually resist change because they fear the unknown and are comforted by the familiar, and usually the success is tagged to the past and the present not to the future (Paton and McCalman, 2000).

Paton and McCalman, (2000) highlighted some reasons that might cause fear of change, leading to resistance, namely: a) the change can cause a redesigning of the whole organisation or part of it; b) the change challenges the old ideas, which include stability, continuity and the pursuit of security; c) the change encourages debate, which is very healthy when well managed, but otherwise it is a dangerous to the stability of organisations it does not succeed. King and Anderson (1995) indicated some similar reasons for resistance to change. Individuals may feel high levels of resistance if they feel a loss of control over unfolding events. Individual achievement and a need for independence might be another contributory factor. King and Anderson add that unfortunate previous experiences of change might have a significant impact and lead to negative personal attitudes towards change, lack of trust, misunderstanding of the intention of change and narrow self-interest. Finally, at a group level, resistance might exist for several reasons such as social norms, group coherence, and suffering from 'groupthink'. In addition, change usually brings with it extra workload, which is a natural cause of resistance (King and Anderson, 1995).

As managing resistance to change is so important, the manager or the 'owner' of change should first analyse resistance factors and causes (Hughes, 2006). Hughes adds that good communication, support, involvement of participants in decisions about change

and its processes, and negotiation are among the possible strategies that may be utilised to overcome resistance.

According to Sparkes (1991), understanding teachers' perspectives regarding the change process depends on how the teachers assess that change and what are the benefits and the outcomes that they and their pupils may gain. Usually teachers attempting change are concerned about some classroom issues, such as control and pupil achievements (Sparkes, 1991). Managing change then becomes a significant issue for Saudi teachers, who were brought up with one style of teaching, which is locally known as the lecturing style, and changing that is not an easy task.

### **3.5 Teachers Teaching With New Methods**

According to Fullan (2001, p115-123), speaking about reform in ...:

“Starting with teachers means starting with reform and change to routines, overload and limits....; daily demands on teachers crowd out serious sustained improvement and development.....; change is needed, because many teachers are frustrated, bored, and burned out; and they are not exactly thriving on psychological reward, primarily because they do not have access to new ideas and have few opportunities for growth”.

Teachers can be motivated towards change. A range of available current teaching methods may be reviewed. Many teaching methods are used in classrooms. For example, the lecture method is traditionally used in Saudi Arabia. We define it as the teacher only talking and delivering information. Alternatively, there is discussion and dialogue, personalised learning, e-learning and application of technology and group work or cooperative learning. Using these methods may depend on the aims and objectives of each lesson (Davis, 1999).

### **3.5.1 Lecture approach (or direct teaching)**

According to Exley and Dennick (2004), a lecture is described as teaching in which teachers are telling pupils or showing them what they want them to know or to achieve, which is usually described as a didactic approach that involves pupils in listening and note-taking. It is important to note that this method has been in use for a long period of time (Poole, 2003). Lectures refer to the use of learning activities which typically involve teachers delivering information, describing, explaining, questioning, modelling, demonstrating and setting goals for pupils (Kyriacou, 1995). Kyriacou claims that lecturing is an important approach for pupils seeking to gain a clear picture of a topic in a controlled lesson structure, with an explicit delivery of appropriate content, but it should be added that this method should be used sparingly, or at least with common sense.

Lecturing tends to put the teacher in a position of authority as the a controlling provider of learning (teacher-centred learning) and pupils in a position as passive receivers of information (Fariver and Webb, 1998). Brown and Race (2002) illustrate that a major problem might be faced when the lecture is used as a means to deliver content in an overloaded curriculum. Poor structure of the lecture might lead to a boring lesson, with pupils unable to discover actively what is to be learnt, or to construct their understanding through their own efforts (students-centred learning).

### **3.5.2 The Discussion and Dialogue Approach**

Ments (1990) claims that discussion may be regarded as a process of teaching that involves interaction between teachers and pupils to exchange information or ideas to achieve a goal, which may vary from whole class discussion to a conversation between the teacher and an individual student.

Brookfield and Preskill (1999) state that that discussion and dialogue give pupils the opportunities for an exchange of thought and feeling and it allows them to think about their ideas, to promote their understanding of content ideas and to promote thoughtfulness (dialogue acts as a model for thought). On the other hand, discussion and dialogue allow teachers to assess what pupils understand, to match support more accurately to pupils' understanding and enable them to move flexibly as ideas develop during lessons (Brookfield and Preskill, 1999).

Fox (1995) pointed out some challenges that might be found in teaching with the discussion and dialogue method, such as: a) it can be difficult to allow all pupils to talk in each lesson, especially when the number of pupils in the classroom is high. b) The method might prevent teachers from completing the topic of the lesson; c) because teachers, in general, have wider knowledge than pupils, pupils might not have questions or comments to add or discuss; d) spreading discussion in the classroom might cause loss of control by teachers.

### **3.5.3 The Personalised Learning Approach**

Personalised learning was an idea started in the UK in 2004, and can be understood as modified education to support individual needs, interests and aptitudes. According to the Department for Education and Skills, personalised learning entitles practical, high quality teaching based on a sound knowledge and understanding of each child's need (DfES, 2004). The authors add that personalised leaning does not mean that pupils learn alone or are left to their own devices, which might lead to low aspiration. It means shaping teaching around the ways that young pupils learn and taking note of the unique talents of every student.

West-Burnham and Coates (2008, p. 16) state that the nature of personalised learning can be identified by the following: a) learning is designed in response to the defined needs of pupils; b) pupils are active participants in the management of learning; c) pupils are partners in the design and development of future provision; d) the primary accountability of providers is to pupils and e) pupils are able to make valid, self-directed choices. In addition, there are five principles of personalised learning set out by the Department for Education and Skills, namely: a) assessment, b) effective teaching and learning strategies, c) curriculum entitlement and choice, d) school organisation and e) strong partnership beyond school (NCSL, 2006).

The Teaching and Learning Research Programme (TLRP) and the Economic and Social Research Council (ESRC) in the UK (2004) believe that there are four particular challenges facing the development of personalised learning, which are: 1) conceptualisation, 2) authenticity, 3) realism, and 4) risks (in particular, lack of clarity, lack of response of the profession and losing mutual communication).

### **3.5.4 Applications of Technology**

There are some significant aspects for education in moving from the industrial age to the information age, such as a shift in demographics (Bitter and Pierson, 1999). Poole (2003) attempted to determine the meaning of using technology in teaching and learning, including all the equipment used to support education (i.e. computer programmes, software, the World Wide Web, overheads), all the skills needed in using technology in school, understanding the processes of teaching and learning through technology (i.e. e-learning, distance learning, web-based learning, ICT), and the human support needed to achieve the best from technology in education (including personnel from designers, programmers, experts, and teachers).

Bates (1997) found four reasons for using technology in education: 1) to improve the quality of learning; 2) to improve access to education and training; 3) to reduce the cost of education; and 4) to improve the cost-effectiveness of education. Aggarwal (2003) argues that using technology in education (such as web-based learning) reduces the restrictions on time and place; it saves learners' time because it is available anytime, and can be provided anywhere. However, Alexander (2001) claims that much of staff development in technology is focused around teaching strategy based on PowerPoint, Web page development, and use of online conferencing systems, and might ignore other important issues that influence the whole learning process, such as the teachers' conception of learning, and what and how pupils learn. Klein *et al.* (2001) point out that in using technology (e-education), some important factors in learning can be missed, namely face-to-face communication and social/group-based interactions. Lack of evaluation or assessment of learning, the facility for plagiarism, the loss and gain of study skills are other problems arising from using technology or e-education (Klassen and Vogel, 2003).

### **3.5.5 The Cooperative Learning Approach**

An examination of this teaching approach is the focus of this thesis. More details regarding cooperative learning methods are discussed in Section 3.7 onwards.

Changing teachers' classroom practice (moving from traditional methods of teaching to new methods, such as cooperative learning or e-learning) requires much work. According to Fullan (2001) there are three domains that should be taken into account in any change process. These are as follows:

- 1) Teaching skills, which include a variety of teaching methods, planning high expectation and monitoring assessment.

- 2) The classroom climate, which involves how pupils feel in the classroom with respect to clarity, fairness, participation, care, interest, and safety.
- 3) Professional characteristics, which consist of: professionalism (dealing with challenges, gaining respect), thinking (analytical, and conceptual), planning and setting expectations (drive for improvement, information-seeking), leading (passion for learning, holding people accountable), relating to others (teamwork, empathy).

Given this, cooperative learning methods differ considerably in theory and practice from what might be viewed as more traditional whole-class instruction, as witnessed in Saudi Arabia. According to Sharan and Sharan (1992), prospective teachers interested in using cooperative learning methods have to acquire skills for organizing the classroom and facilitating the implementation of methods. Teachers must acquire skills for analysing and evaluating implementation (Gillies, 2003).

Research has found that teachers feel more positive when they use cooperative learning methods, because it allows them the means by which they can reach many more pupils and engage them in learning (Sharan, 1994). Working in cooperative groups during formal educational programmes becomes the basis for participants stating classroom needs for success and planning applications with options to meet those needs (Rolheiser and Stevahn, 1998).

Rolheiser and Stevahn (1998) claim that one of the largest educational shifts in recent years has been the movement from transmission models of teaching (spreading information from one person to another) to transactional models (exchange information between two or more people working in group). Rolheiser and Stevahn add that

cooperative group learning is a key part of this shift, which counters the transmission paradigm of learning and tracking that still predominates and focuses on the active involvement of pupils. According to Fullan, (2001) there are two significant barriers to achieving educational change: a) lack of awareness regarding the need to change, and b) the lack of the necessary skills to make the change. So, when shifting method, teachers should recognise that, in cooperative learning classes, they are not allowed to engage primarily in the transmission of information to pupils according to predetermined criteria of quantity and pace of instruction or primarily in maintaining discipline; their main role is to facilitate the constructive and productive academic work of teams of pupils, who might participate in choosing the content and procedures of their investigative efforts (Sharan, 1994).

The use of cooperative learning methods enables teachers to become more learner centred and less tied to the transmission of subject matter. Some authors (Sharan, 1994; Rolheiser and Anderson, 2004; Johnson and Johnson, 2006) claim that cooperative methods also help teachers to concentrate less on themselves as presenters of information. One of the decisive measures of professionalism in most service professions is the practitioner's ability to attend closely and with empathy to the needs of the client and not to be highly invested in the presentation of self.

Brody and Davidson (1998) state that many development programmes have taken the form of in-service training for teachers and administrators, and their aim is to equip teachers with new classroom strategies and experiences to assist the achievement of pupils. Such training programmes are very important because teachers are the centre of change, and need to increase their capacity for dealing with change and development (Fullan, 2001).

Teachers in cooperative learning realise that interaction among individual learners in groups cannot be entirely predicted or controlled by teachers. Therefore training programmes must strive to have teachers accommodate, to varying degrees of uncertainty, what their pupils will contribute and produce when they conduct a group work project (Sharan and Sharan, 1992). Brody (1998) states that, regarding the issues of control, implementing cooperative learning requires teachers to reconstruct not only their practice but also their notions of control and authority; teachers might also be worried or wonder whether groups will cover all the material, understand the main points of the lesson, and know how to summarize them. In all likelihood, the pupils will share that feeling of uncertainty about the process and outcomes of group work, especially the first time that they do it (Sharan and Sharan 1992).

Foote *et al.* (2004) claim that group work can change teachers' roles dramatically, such that no longer will it be the teachers' responsibility to watch for every mistake immediately and correct it. Instead, authority is delegated to pupils and to groups of pupils. Teachers do remain in charge of ensuring that the aims of lesson have been achieved and that learners in the classrooms receive the help they need (Cohen, 1994). Pupils in cooperative learning classes are empowered to make mistakes to find out what went wrong, and what might be done about it (Lerouge *et al.*, 2004). Brubacher (2004) presents some new roles of teachers, for instance, teachers giving direction, establishing roles, training the pupils to use norms for cooperation, allocating pupils to groups, delegating authority to those pupils who are to play special roles, and most importantly, holding groups accountable for the product of their work.

Brody (1998) claims that cooperative learning requires teachers to make many more decisions than they may have done previously, especially between what they want to do

and what actually occurs in the classroom. Brody and Nagel (2004) believe that teachers whose decision-making approach is consistent with the principles of reflective practice generally welcome these new decisions. In addition, these teachers may notice that cooperative learning makes them better observers and assessors of pupils and the learning process (Brody and Nagel, 2004). Brody (1998) claims that such practice requires a new set of teaching behaviours, new understanding about children, how they learn and are motivated to learn, and a broader educational goal, one that explicitly focuses on helping children become caring, fair and responsible people, as well as learners. Learning new behaviours and approaches to teaching, however, is an extremely challenging task that requires time, commitment, repeated practice and a network of support, encouragement, and feedback (Watson *et al.*, 1998).

According to Sharan (1994), the role of teachers employing cooperative learning is to think of the learning space as a system composed of small groups in functional learning units, which engage with curricular materials appropriate for the groups' centred learning. Furthermore, Brubacher (2004) points out that it is crucial that teachers can identify and locate a wide variety of resources for learning beyond textbook related assignments that involve groups in planning topics of study and enable them to assure free exchange of information, offer mutual help, and maximum participation. This helps groups to reflect on interactions among members, to receive feedback from one another on performance, to develop and become more friendly and effective, and to select the cooperative learning methods most appropriate for the materials to be studied. Combining or integrating two or more methods, as circumstances require, affords pupils the best possible means for pursuing the study at hand (Mandel, 2003). Pupils can be advised on the selection of creative means for organizing and presenting their work to their peers and to the teacher for evaluation (Johnson and Johnson, 2004). Teams of

teachers can be involved in problem-solving and decision-making on a school-wide basis (Sharan, 1994).

In the main, cooperative learning methods, according to Sharan (1994), help teachers to become more learner centred and less tied to the transmission of arranged subject matter. In addition, Sharan adds that cooperative learning helps to change the way of teaching from “teachers to students” to “students to students”. There are several issues regarding teachers and their motivations for cooperative learning, which should be of concern in any project implementing cooperative learning, such as the importance of understanding the concept of cooperative learning. According to Veenman *et al.* (2000, p. 283) “Teachers must understand the nature of cooperative learning and the components of a well-structured cooperative lesson in order to use cooperative learning effectively”. Therefore, teachers new to cooperative learning may need professional development before attempting this approach in their classes. In addition, it was suggested that teachers may have to clarify the structure, review the strategies that will be used and teach the necessary skills to pupils if needed (Veenman *et al.* 2000).

Although some teachers employ cooperative learning in their classes successfully, there are several factors that might prevent them from doing so, such as teachers’ fears about adequacy, level of training, follow-up support, the influence of the principal, and the school climate or community culture (Abrami *et al.* 2004). Overcoming these factors might encourage teachers to use cooperative learning methods, which in turn might lead to feeling good about their teaching (Sharan, 1994).

### **3.6 Preparing Teachers for Cooperative Learning Approach**

According to Fullan (2001), teaching needs to become a highly intellectual as well as a highly caring profession, because it takes place under an intensity of social and political circumstances. It is also a profession that demands great emotional intelligence. Fullan adds:

“The question is: can the profession become good? This will entail understanding what effective teachers are, and working at improving performance at all levels in the system....25% of the solution is to attract good people to teaching and provide them with the best possible initial preparation....this would be no mean feat, as solid teacher preparation programmes are in minority.....75% of the solution is to ensure that they have a place to work that enables them to learn on the job” (p. 237).

Fullan also emphasises that most macro strategies to improve teaching are individualistic in the sense that they try to generate more and more necessary skills, knowledge and dispositions.

Sharan and Sharan (1992) claim that training programmes should provide teachers with the opportunity to create and experience a cooperative learning project. They add that, instead of learning about cooperative learning, teachers learn mainly by doing it, with the addition of systematic reflection about what they did. Finkbeiner (2004) argues that teachers in cooperative learning classes may build knowledge and information and may become aware of their own strengths and weaknesses and those of their pupils. Finkbeiner adds that teachers need to participate in skills training workshops, but they also need to have training programmes and group opportunities to receive and give help and, more simply, to discuss the positive and negative ways of implementing new methods. Training is a significant issue for Saudi teachers; it should equip them to

promote pedagogical change in the classroom and allow them to move forward to use cooperative learning. Johnson and Johnson (2003) state that teachers learn how to use innovation as well as judge its desirability on more information-based grounds and they can be in a better position to know whether they should accept, modify or reject new methods. Fullan (2001) emphasises that purposeful interaction between teachers is essential for continuous improvement.

Roy (1998) states that effective training programmes should include the following elements: theoretical understandings of the model, classroom demonstrations of the model, and supervised practice with expert feedback and classroom coaching. Roy adds that changes in classroom behaviours are more likely to occur, as a result of training programmes, when all these elements are present. Specific to this work and the training used in this thesis, he believes that teachers are able to learn the theory of cooperative learning through practice activities, reading, discussion and presentations. Johnson and Johnson (2006) state that, in training, programme issues should be addressed, such as positive interdependence and individual accountability. Participants experienced activities that clarified the difference between ordinary groups and cooperative groups, and the activities involved reviewing descriptions of group activities.

According to Roy (1998), there are many ways, through training programmes, to understand underlying theory, and one of the most effective strategies is to debrief after experiential activities. There are multiple demonstrations of cooperative learning in content areas and grade levels, which include workshop participants simulating cooperative learning activities, viewing video-tapes of actual cooperative lessons, or having a group of pupils complete a cooperative activity. A learning path of the training used in this research was to allow teachers to see video examples of group work in

action. The video examples were only available in English. They involved a wide range of participants, so that each person has a model that closely resembles his/her working environment. Participants developing cooperative learning activities practise delivering the lessons and receive feedback during the training programme (Roy, 1998).

Jones (2006) points out that creating meaningful cooperative experiences for participants means that programme trainers need to choose relevant topics that have meaning, where they can grapple with real issues and problems, use adult language and go beyond role play demonstration. In addition, they need to apply the elements basic to all effective cooperative interaction, carefully and systematically structuring those elements into every cooperative activity (Rolheiser and Stevahn, 1998). Therefore, teachers in this study were given the freedom to choose the appropriate methods of cooperative learning to be used in their practice. They were also given the freedom to choose appropriate topics from the curriculum to be taught.

Farivar and Webb (1998) believe that, there are many perspectives from which trainers can understand schools; the cultural perspective is an important one, because it focuses on the social construction of organizations, and that might help in choosing an appropriate training programme model. Moreover, trainers should observe participants' actions, and address needs in meaningful, appropriate and honest ways (Rolheiser and Stevahn, 1998).

Finkbeiner (2004) emphasises that programme trainers in cooperative learning need to attend to variables that will promote the transfer of cooperative learning into classroom practice. In addition, they may help participants to recognize opportunities for adaptation and application to ensure practice in varied contexts and provide specific

support for transfer. The researcher (because it was believed that there was no expert in cooperative learning in the region) delivered the training programme himself to ensure that teachers understood the cooperative learning method elements. He tried to help the teachers on using the approach on the Islamic culture curriculum and how the content could be consistently adapted. Programme trainers also need to consider the importance of participants practising new skills in multiple contexts as part of instruction, and teachers should be given opportunities to experience a range of cooperative learning tasks, activities and lessons, in a number of different content areas, during long-term professional development programmes (Gillies, 2004, b).

### **3.7 Pupils and New Strategies in the Classroom**

According to Fullan (2001), it is possible to obtain short-term gains in pupils' achievement scores without preparing them, but these less powerful strategies produce superficial gains. Preparing pupils thoroughly for change is much preferable.

Fullan (2001) argues that the new common ground for both cognitive scientists and sociologists concerns motivations, relationships and substantial learning that only happen when schooling operates in a way that connects pupils relationally in a relevant, engaging and worthwhile experience. Given that a small proportion of pupils are engaged in such a way is a measure of the seriousness of the problem. In other words, Fullan (2001) claims that the more the accountability system becomes focused only on cognitive achievement, the greater the gap will become between those pupils who are doing well and those who are not. He adds that this is because the main problem with disengaged pupils is that they lack a meaningful personal connection with teachers, the context of the lesson and with others in the classroom and school. In other words, learners lack the motivational capacity to become engaged in learning, and this is why

communication and social skills development should go hand-in-hand with cognitive development, which enables them to become motivationally engaged with other learners (Fullan, 2001).

According to Veenman and Denessen (2005), the focus of any cooperative learning programme is to encourage pupils to exchange elaborated help (leading to deeper understanding) rather than non-elaborated help; according to that, pupils should be taught the difference between elaborated and non-elaborated help and they should be given guidelines about how to be effective help-givers. They add that pupils should be given guidance in effective help seeking so that they would be more likely to receive elaborated help than non-elaborated help. Indeed, giving pupils clear structure about their roles in cooperative learning, what should they do and what would be expected from them might encourage them to give and receive help.

Farivar and Webb (1998) state that giving and seeking elaborated help are sophisticated skills that cannot be developed in isolation. High-level interaction skills presuppose that pupils possess basic communication and small-group social skills, that they feel comfortable interacting with others in small groups, and that cooperative and pro-social norms are in place to encourage positive and beneficial interaction. Building effective “help-giving” and “help-seeking” assumes that pupils can listen to others, allow or encourage others to participate, and can resolve disagreements in constructive ways (Veenman and Denessen, 2005). Without such basic communication and social skills, pupils may try to bully others, dominate group work without listening to others or letting them participate, sit back and let others do all of the work, or criticize others in hurtful ways (Gillies, 2004, a). All of these detrimental processes would “short-circuit” any attempts to engage in effective helping (Farivar and Webb, 1998).

According to Fullan (2001), one of the important starting points is to understand the fundamental reasons that might prevent pupils from engaging in group work learning activities. For example, pupils might have lower self-concepts and self-esteem than engaged peers, they might feel under pressure from their friends if they exhibit achievement behaviour, and they might be treated by their peers as a “hindrance” or “annoyance”. Cohen (1994) reveals that the first step in introducing group work to any classroom is to prepare pupils in a training programme for cooperative work situations, so that they know how to behave without direct supervision, but the goal of the training programme is to establish cooperative learning rules and norms and to equip pupils with them (Cohen, 1994). Because of the time limit for collecting data, pupils in this study did not receive a specific training programme. They were introduced gradually to cooperative learning, and after one week they started to understand their role in the new method (see appendix D).

Cooperative learning methods must be selected, linked and integrated in context. The development of pupils in a particular classroom must be understood. To promote optimal learning through cooperative strategies, two points must be addressed: the outcomes that are desired and under which conditions they may emerge (Rolheiser and Stevahn, 1998). The first step in the sequence (preparation for group work) involves activities that make pupils feel that they are a part of the class (class inclusion and class building) and part of a group (teambuilding) (Jacobs *et al.*, 2002). These classroom activities help pupils become acquainted with each other’s names and interests and make them feel comfortable in their class. Jacobs *et al.* (2002) state that teambuilding activities help pupils become familiar with members of their small group, learn commonalities with their teammates, feel comfortable and develop cohesion. In addition, pupils are prepared for group work with activities that help them learn to work

with others, including social skills (listening attentively, working with classmates without putting them down, speaking politely without shouting), and communication and cooperation skills, especially important for effective small group work. Sharing ideas and information, promoting equal participation by everyone, interacting constructively and positively, checking each other's understanding, understanding the difference between cooperation and competition, and promoting equal participation by everyone are examples of that (Farivar and Webb, 1998).

Assigning group tasks involves a major change from traditional classroom norms. According to Cohen (1994) each student in each group is asked to depend on other pupils and they are responsible not only for their behaviour but also for group behaviour and for the product of group efforts. Jacobs *et al.* (2002) specify that, instead of listening to the teacher, pupils are asked to listen to other pupils, ask for other opinions, give others a chance to talk, and make brief and sensible contributions to the group effort. Indeed, if pupils are not prepared for cooperative learning very well, they will not discuss any new ideas or express their own thinking. The authors add that pupils need to understand the teacher's purposes in introducing small groups and why group work skills are important. Many pupils do not realise that adult life calls for working with others who are not close friends; they must know that, in the world of work many important tasks are accomplished in small groups with members who are not necessarily friends (Cohen, 1994).

According to Battistich and Waston (2003), pupils who learn to interact successfully with their group mates in the classroom tend to be accepted by their peers, teachers and in the school environment, while pupils who fail to learn such skills tend to be rejected by their group mates. Teaching pupils the skills needed for effective peer interaction can

provide the foundation for success at school and success in life (Mills *et al.*, 2006). Johnson and Johnson (1987) argue that how pupils interact with each other typically depends on the type of interdependence that teachers structure into their pupils' learning goals. In other words, whether pupils work in lessons cooperatively, competitively or individualistically will depend on how the teacher structures the lessons. According to Johnson and Johnson (1987), in order to motivate pupils to learn new skills, teachers must understand and realise the skills that they need. In addition, pupils should know the skills that are needed to work in cooperative groups, and they should have the opportunity to practise them (Grisham and Molinelli, 1995; Damron and Mott, 2006).

Johnson and Johnson (2006), state that trust is a necessary condition for stable cooperation and effective communication. Pupils should be more open to expressing their thoughts, feelings, reactions, opinions, information, ideas acceptance and support for their group mates and desire to cooperate (Johnson and Johnson, 2006). This leads us to ask whether this is not only the first opportunity for the Saudi pupils in this study to experience cooperative learning but also their first opportunity for them to verbally share their opinions on these experiences. Encouragement can also be given by pointing out or rejecting non-supportive behaviours that shut off future cooperation, such as silence, ridicule, and superficial acknowledgment of an idea (Johnson and Johnson, 2006). Trust can be encouraged among pupils during group activities by pushing them to contribute openly, and share materials and resources.

According to Kagan and Kagan (1994), if we want to promote cooperative learning skills among pupils in classroom, then it is not enough to depend on the natural acquisition of social skills. They believe that it is the teachers' responsibility to structure learning such that pupils acquire social skills while they are doing their class activities,

which requires: (1) assignment of roles and starting with attractive tasks, (2) modelling (choosing an appropriate model of cooperative learning) and using reinforcement, (3) structure in the classroom (tables and chairs) and the lesson materials to support group work, and (4) reflection (feedback) and planning time. With these tools and as pupils interact in their cooperative groups, they might become skilful in listening, paraphrasing, taking the role of another, managing group processes and dealing with dominant, shy, hostile or withdrawn group members (Kagan and Kagan, 1994). In this way, pupils obtain skills not just learn about them. From a classroom layout point of view, it is likely that pupils in Saudi Arabia have only ever been taught in rows.

George *et al.* (2002) state that, in group work settings, pupils need to feel comfortable in working with classmates, to be willing to share ideas, to ask questions and to take risks; that might occur as a result of setting rules and conditions, which shape behaviours among pupils, such as listening when others are talking, criticising ideas but not the person presenting them, valuing and respecting each individual member, and helping others without doing the work for them.

With cooperative learning, pupils do get to the heart of learning, which is what pupils need. According to Ashman and Gillies (2003), the development of a learning community starts from the school classroom. It develops depth of knowledge and the skills needed in the community by integrating accountability and a new culture of improvement. Pupils have to be supported and given the opportunity by teachers to play the role in the classroom. As Rolheiser and Stevahn (1998) claim, pupils' success in playing cooperative learning roles depends on the teacher's ability to make effective decisions about using cooperative learning in the classroom and delegating authority to their pupils.

### **3.8 Designing Group Work in the Classroom**

Group power characterises individual life. From birth we are part of a family, without which we would not easily survive; we learn, work and play in groups. Some state that it is difficult to contemplate not being part of group (Johnson and Johnson, 2004). According to Cohen (1994), group work is an effective technique for achieving certain kinds of intellectual and social learning goals; it is also a superior technique for conceptual learning, for creative problem solving and for increased oral language proficiency.

Johnson and Johnson (2004) believe that, working in a group gives pupils opportunities to practise looking at causes and effects, hypothesising, deciding, inducing and problem solving. In addition, it helps to produce a deeper level of interaction between pupils. Slavin (1995) adds that working in groups socializes pupils towards adult roles of making decisions, listening to others' opinions, working in organizational life and thinking critically. Furthermore, groups establish social norms about what is and what is not acceptable behaviour and influence what we value and what we aspire to achieve (Sharan, 1992). Groups also enhance pupils' relationships positively, because pupils usually need to have peers who know them well, like them and respect them as individuals (Johnson and Johnson, 2004). According to Cohen (1994), the power of groups is reflected in their impact on the development of interpersonal and small group skills, communication, generosity in giving credit, support for others, constructive criticism, caring and sharing.

Group work entitles every member to participate in an indicated task without direct and immediate support from the teacher (Cohen, 1994). Group work is an effective technique for achieving certain kinds of intellectual and social learning goals; it is also a

greater technique for conceptual learning, for creative problem solving, and for increasing oral language proficiency; group work improves inter-group relations by increasing trust and friendliness, and teaches pupils skills for working together; it is also a strategy for solving two common classroom problems: keeping pupils involved with their work, and managing instruction for pupils on a wide range of academic skills (Cohen, 1994).

According to Johnson and Johnson (2004), instruction groups can be used in any lesson or curriculum unit for lesson planning, when the instructional goals indicate their use, when materials are limited, when the task is complex, when new material is being learned, when multiple perspectives are being studied, when creativity is required and when the task involves solving a problem and there are divisible responsibilities.

Learning process groups should be encouraged (Johnson and Johnson, 2004) when:

- (1) Achievement, retention, deeper-level understanding, and higher-level reasoning are important.
- (2) Intrinsic motivation, continuing motivation and achievement motivation are important.
- (3) Positive interpersonal relationships among pupils are important; pupils need social support both academically and personally from their classmates and the teacher.
- (4) Pupils' self-esteem and self-efficacy are important.
- (5) Pupils' social skills, interpersonal competencies and abilities to work as parts of teams are important.
- (6) Pupils' general psychological health is important.

Cohen (1994) claims that telling pupils to get into groups and carry out classroom tasks designed to improve basic skills is not enough to ensure learning achievement, but group work generally brings positive results.

### **3.9 Continuing Professional Development (CPD)**

Professional Development is the systematic maintenance, improvement and broadening of knowledge and skills, and the development of personal qualities necessary for the implementation of professional and technical duties throughout our working life (Brody, 1998). In addition, professional development is an essential ingredient in supporting or stimulating a successful level of change and development in school (Hargreaves, 1994). Brody and Davidson (1998) believe that professional development conveys a commitment to a high quality learning experience for all teachers or adults working with pupils on a regular basis. Goodall *et al* (2005) confirmed that, where teachers are able to access new ideas and share experiences more readily, then there is a potential for school and the classroom to improve. The report adds that improving investment in the development of staff and creating opportunities for teachers to collaborate and share best practice is clearly worthwhile.

Kennedy (2005) outlines nine models of continuing professional development (CPD). Two of these models are of relevance to the CPD programme employed in this thesis

1. The Training Model provides teachers with the opportunity to update their pedagogical skills in order to be able to transfer them competently to their classrooms. This model of CPD allows teachers to discover new skills and new knowledge that they can use in their future practice and which, according to Kennedy (2005) is delivered to them by an expert in the field (see Ishler *et al.*, 1998). According to Hoban, (2002) the training model is acknowledged as an

effective means of introducing new knowledge which can be used in practice. Hoban added that the training model also provides an effective way for leading and supporting teachers to improve their practice. This model was used specifically in this thesis to permit use of cooperative learning methods in two Saudi classes. Informed by the work of Ishler *et al.* (1998) the outline of the training programme addressed the skills needed for the practical implementation of cooperative learning, while the theoretical element concentrated on expanding the teachers' knowledge about the types of cooperative learning, its benefits, advantages, disadvantages, the challenges that might be faced, and the role of both teachers and pupils. Indeed the programme was designed to introduce the teachers to an alternative teaching approach. Further information concerning the training programme can be found in section 4.5.2 and in Appendix A.

2. The award-bearing model emphasises the completion of a programme of study usually validated by universities. External validation can be viewed as an exercise of control by the validating and funding bodies. Sometimes pressure is made to focus on classroom practice, rather than just academic learning.
3. The deficit model: professional development under this model can be designed specifically to address a perceived deficit in teachers' performance. It examines perceived weaknesses in individual teachers, not ones related to organisational and management practice. Blame for underperformance is attributed to individuals and ignores collective responsibility.
4. The cascade model involves teachers attending training events and then cascading or disseminating information to colleagues. This model focus upon skills and knowledge which are regarded as a more important aspect than a focus on value.

5. The standard-based model is a model of CPD that belittles the notion of teaching as a complex, context-specific, political or moral endeavour. It rather represents a desire to create a system of teaching and teacher education that can generate and empirically validate connections between teacher effectiveness and student learning.
6. The coaching/mentoring model depends on one-to-one relationships, generally, between two teachers, and is designed to support CPD. The relationships can be collegiate, but are probably more likely to be hierarchical. In other words, professional learning can take place within the school context and can be enhanced by sharing dialogue with colleagues. In order for the model to be successful, interpersonal relationships are crucial and participants must have well-developed interpersonal communication skills.
7. The community of practice model depends on a clear relationship between communities of practice and mutual support. This model differs from the previous one in that it can be between more than two people. Learning with this model involves three essential processes: evolving forms of mutual engagement, understanding and tuning the organisation and developing a repertoire, style and discussion. Learning in a community is positive and proactive, but could also be a passive experience.
8. The action research model is defined as the study of a social situation involving the participants themselves as researchers, with a view to improving quality of action. The quality of action can be achieved by the participants' understanding of the situation and by the practice within the situation.
9. The Transformative Model: the main characteristic of this model is the combination of practice and conditions that support a transformative agenda. It describes a learning process of "becoming critically aware of one's own implicit

assumptions and expectations and those of others and assessing their relevance for making an interpretation" (Mezirow, 2000, p. 4). This model concentrates on what is required for adults to identify, assess and evaluate alternative sources of information and in some cases, reframe their world-view through the incorporation of new knowledge or information into their world-view or belief system. Usually a transformative model is guided by different assumptions about educational aims and processes allowing teachers to make meaning through reflection on new knowledge and experiences (Dirkx, 1997). Of relevance to this thesis this model is regarded as a means of supporting educational change and the key to this model is its effective integration with a range of training models, as described earlier.

This study aims to promote change in two teachers' philosophically and pedagogically through attempting a specific innovation. It seeks to deepen their understanding and get them to think differently about their instructional, managerial and organisational skills. In addition, it is an attempt to help teachers teach for a broader set of outcomes that not only address academic achievements but foregrounds social and affective development and develops greater pupil responsibility, interdependency and accountability. It also tries to position the teachers in a 'new place' in the classroom which requires new knowledge and skills to change practice from what might be termed a traditional teacher-led method to one that is more pupil-centred. In sum, this transfer in the classroom acknowledges the transformative model by including a new theory of teaching, new knowledge and skills with a training model that is designed to be delivered to them. According to Shallcross *et al.* (2006), professional development strategies that develop activities within a school and its local community are a particular priority in both pre-service and in-service teachers' environmental education for

sustainable development, and whatever the educational system, professional development must have a significant whole school development philosophy (p. 298). This thesis will concentrate (as mentioned above) on two models, the training model and the transformative model, because these models serve the targets and objectives of this study as explained earlier.

### **3.10 The Need for Change and Development in Saudi Schools**

According to Alkanem *et al.* (2005) traditional educational applications are no longer sufficient to give teachers the necessary tools to enable them to succeed in a competitive world. The features of the Arabic style in pedagogy are of teacher-dependent learning for transmission or transfer of knowledge, and individual learning for examinations. On the other hand, the current view in the Arab-speaking world might be that pupils are the centre of learning and individual learning, but that does not include the new teaching methods, such as cooperative learning, exchange of knowledge and experience between pupils, thinking critically, dialogue, making decisions and evaluation, which can be assessed on many outcomes not just exams (Alkanem *et al.*, 2005).

The main problem in Saudi schools is inertia in the education system (curricula, teaching methods, teacher training programmes, school facilities and evaluation methods). The present system was established many years ago and has not been subject to change. An illustration is the last edition of the teachers guide, published in 1999 by the Saudi Ministry of Education, which makes mention of just four types of teaching method that teachers should follow, namely lectures, discussion, dialogue and experiments. This document overlooks modern methods such as cooperative learning, e-learning, and distance learning. Soanah *et al.* (2003) claim that such inertia inhibits

pupils in terms of creative thinking, and promotes learner fear of failure, lack of self-confidence, absence of dialogue skills and fear of criticism.

### **3.11 Definition of cooperative learning**

There have been several definitions and descriptions of cooperative learning. According to Slavin (1995), cooperative learning involves sharing between pupils when they work together, learning from each other and helping their teammates. In addition, Slavin and Cooper (1999) describe cooperative learning methods as those which enhance academic, cognitive and social standards. Veenman *et al.* (2000) report that cooperative learning places pupils in small groups so that they can work together and help each other to understand the academic content of their courses. They go on to add that, in cooperative classrooms, pupils are expected to discuss and debate in groups, filling the gaps in each others' understanding. In other words, cooperative learning adds to individuality in study and practice. Ravenscroft *et al.* (1999) state that cooperative learning promotes active learning, where pupils exchange information through interaction and promote deeper learning. Artzt and Newman (1993) believe that cooperative learning involves small groups of learners working together as a team to solve problems, complete a task and achieve common goals. From the previous definitions, it is apparent that cooperative learning switches the teaching style from "teacher to student" to "student to student".

The concept of cooperative learning as a teaching method gained momentum in the early seventies. According to Sharan (1994, p 3), "the new wave of cooperative learning appeared in the early seventies following the pioneering work of John Dewey and later Alice Miel and Herbert Thelen in the 1950s". Slavin (1995, p4), claims that "Research on specific applications of cooperative learning to the classroom did not begin until the

early 1970s". At that time, four independent groups of researchers began to develop and research cooperative learning methods in classroom settings. The methods developed in the seventies are called 'Students Teams-Achievement Divisions' (STAD), 'Teams-Games-Tournaments' (TGT), 'Jigsaw II', 'Team Accelerated Instruction' (TAI) and 'Cooperative Integrated Reading and Composition' (CIRC) (Slavin, 1996, p.7). Several other strategies emerged and were developed in universities around the world, such as 'Group Investigation', developed by Yael and Shalom Sharan at the University of Tel Aviv (Sharan and Sharan, 1995) and 'Learning Together', developed by David and Roger Johnson at the University of Minnesota (Slavin, 1995, p. 11). All these strategies are discussed and explained in the sections below and each shares an intent to transform the classroom from a collection of individuals to a network of groups (Sharan, 1994). In sum, cooperative learning methods are powerful methods for enabling pupils to communicate with each other in classes and to benefit from the diversity of school and community (Putnam, 1998).

### **3.12 Cooperative learning in Arabic Study**

Research has examined the use of cooperative learning in the Arabic classroom context. The majority of these studies have been undertaken in Egypt and mainly assessed the impact of cooperative learning methods on pupils' achievement (e.g. Aldeep, 2004). According to the website of the King Faisal Centre for Research and Islamic Studies in Riyadh (<http://www.kfcris.com> 20<sup>th</sup> of May 2010), and the website of the King Fahad National library (<http://www.kfnl.gov.sa/> 20<sup>th</sup> of May 2010) there are few studies on cooperative learning in Saudi Arabia, the majority being masters' dissertations in the research centre or university libraries (e.g. King Saud University). These studies have investigated cooperative learning applications in some areas of the Saudi curriculum. Hakeem (2006) examined the impact of cooperative learning on year 9 girls' creativity

in art. Using a control group design, Hakeem studied four classes. Two classes (which included 43 girls) served as control groups and the other two classes (which included 40 girls) as the experimental groups. The Torrance Thinking Creatively scale (pre- and post) was used to collect data in four areas: 1) the importance of the art curriculum, 2) the content of the curriculum, 3) the connection between the art curriculum and the girls' lives, and 4) the extent to which girls were interested in studying art. Findings indicated the cooperative learning method for the experimental groups increased the girls' creative abilities and had an effect of changing their attitudes towards the art curriculum.

Alqahtani (2006) examined the use of cooperative learning in a geography curriculum in one girl's school. The study investigated the impact of using the Jigsaw method on year 7 girls' achievements and attitudes towards the Geography curriculum. Using a pre-post test with both a control and an experimental group, findings revealed the Jigsaw method showed an increase in the pupils' achievements within the experimental group. Working in a group also encouraged pupils to learn more by sharing information and interacting with each other. This study also showed that cooperative learning method positively influenced pupils' attitudes towards the Geography curriculum. Alhusaini (2002) determined the impact of using cooperative learning in the teaching of Year 4 girls' Science. Employing a pre-post test control group design, it was found that cooperative learning increased pupils' achievements in the experimental group and also developed their abilities in several skills such as observation.

Alinizi (2006) compared the impact of cooperative learning method with the use of discussion method in developing pupils' scientific thinking skills in one secondary school biology curriculum school. One hundred Year 10 boys were divided into three groups. Group one was taught using cooperative learning method, group two was taught

by a discussion method and the third group was taught by a traditional [more direct] method. Using a scientific thinking scale, which was prepared by Dr Aldekam in King Saud University in Riyadh, the study demonstrated that, compared with the traditional method, both cooperative learning and discussion method showed a positive impact upon the pupils' scientific thinking skills. It was also found that cooperative learning encouraged pupils to interact with each other and pushed them to participate more actively in the learning process. Alinizi (2006) concluded cooperative learning method acted as a catalyst for increasing pupils' scientific thinking.

Alnaser (2001) employed cooperative learning in one physics curriculum in an all-girl's school. The purpose was to measure the impact of cooperative learning on 83 Year 11 pupils' achievements and attitudes towards physics in two classes over a period of eight weeks using a control group design. Pre- and post tests determined that cooperative learning both increased pupils' attitudes toward physics and increased the pupils' academic achievements. Alnaser discovered that using cooperative learning inside the classroom allowed the pupils to exchange ideas which led to the development of higher thinking skills.

Fodah (1999) aimed to investigate the use of cooperative learning method versus a traditional method on learning computer concepts and programming in one College of Education for Girls. The study used an experimental design by dividing students into an experimental group who experienced cooperative learning and a control group who were taught using a traditional learning approach. The study use pre-post test and practical test as tools of collecting data. It was found that the entire tests showed the positive impact of cooperative learning upon the students' achievements in programming and the students' information toward computer concepts and

programming.

Of particular relevance to this thesis, a search of the literature revealed a very small number of studies documenting the use of cooperative learning in the Islamic culture curriculum, all of which are unpublished documents. Alkaribi (2007) examined the effects of cooperative learning on primary pupils' achievements while learning the Holy Quran. This study focussed specifically on using the Jigsaw method and its impact on the achievements and performances (reading and memorizing) of Year 7 girls. The study employed a control and experimental group method and data were collected using a pre- and post test. This experimental study showed a significant difference in the pupils' achievements by using cooperative learning. However, there were no indications of any improvement in the pupils' performance (reading and memorizing the Holy Quran).

Using survey research methods, Almutairi (2006) attempted to determine the perceived obstacles to using cooperative learning in teaching the Islamic culture curriculum from the teachers' and the supervisors' perspectives. This study showed that 76% of 133 teachers surveyed agreed that they did not use cooperative learning in their teaching. Several reasons were revealed including insufficient knowledge about cooperative learning methods, large class size numbers and teacher workload. This study also reported that a lack of training in alternative teaching pedagogies [not just in cooperative learning] was a major factor that prevented many of these teachers from using other teaching approaches.

Almufadda (2006) used a control group design and compared the impact of using cooperative learning on the achievement of pupils in a year 11 Al-Fiqh curriculum with

the traditional method (<http://faculty.ksu.edu.sa/5345/default.aspx> (20<sup>th</sup> of May 2010).

This study employed pre-post test as a the main data collection tool from both a control group (46 pupils) and an experimental group (46 pupils). It was found that the pupils' achievement in the control group (traditional method) was significantly better than the pupils' achievements in the experimental group (cooperative learning).

The following table (Table 3-3) provides a summary of the reviewed studies on cooperative learning undertaken in Saudi Arabia

**Table 3-3 summary of the Saudi studies using cooperative learning**

N	Study by	Year	School type	curriculum	Research methodology
1	Hakeem	2006	Girls - middle school	art	control group design (pre-post test)
2	Alqahtani	2006	Girls - middle school	geography	control group design (pre-post test)
3	Alhusaini	2002	Girls – primary	science	control group design (pre-post test)
4	Alinizi	2006	Boy – secondary	biology	scientific thinking scale ( pre-post test)
5	Alnaser	2001	Girls – secondary	physics	control group design (pre-post test)
6	Fodah	1999	Girl - College	computer	control group design (pre-post test)
7	Alkaribi	2007	Girls - middle school	Holy Quran	control group design (pre-post test)
8	Almutairi	2006	Teachers	Islamic culture	survey
9	Almufadda	2006	Boy- secondary	al-Fiqh	control group design (pre-post test)

These studies point to the early growth of cooperative learning in the Saudi context and have revealed a number of positive findings in terms of pupil achievement. Some are of the view that further pedagogical research on this method in Saudi secondary schools is still very much needed (Alkanem *et al.*, 2005). The above review indicates that the vast majority of studies have employed experimental designs. The use of qualitative methods to seek the perceptions and experiences of participants has been less forthcoming. There is a need to broaden the range of research methodologies to examine cooperative

learning in the Saudi context to also include qualitative approaches which gather data using observation, interviews, written reflections and focus groups. Therefore, this thesis seeks to contribute to the apparent paucity of qualitative research on cooperative learning in Saudi by employing direct observation of cooperative learning methods in secondary classrooms over an extended period and also conducting interviews with teachers and pupils to gather their perceptions of and experiences with this teaching approach. Finally, given the above review, this thesis also examines cooperative learning in a geographical area of Saudi Arabia that to date has not been used.

### **3.13 Types of Cooperative Learning Methods**

Since the implementation of cooperative learning in schools, many researchers (Cohen, 1994; Johnson & Johnson, 1989; 2003; Slavin, 1995; Vermette and Foote, 2001; Abrami *et al.*, 2004) have discovered a diversity of methods that can be used effectively in many subjects. These methods all depend on one principle, namely team learning, which has featured in many studies. There are several cooperative learning methods, as follows:

**1) Students Team-Achievement Divisions method (STAD):** the technique in this method is based on the idea of having pupils work in teams by dividing them into groups of four or five that are mixed in performance level, sex, and ethnicity (Sharan, 1994). According to Slavin (1995), the main idea behind this method is to motivate pupils and encourage them to help each other to achieve desired skills and outcomes. In this method, the teacher presents a lesson, after which the pupils work together to make sure that they have all understood the lesson. Then every student is examined individually about the lesson, without consultation. The average of the team members' results is the score for the whole team. After each examination, the team score is added

to previous scores, until a final score is reached. The winning team receives a reward (Slavin, 1995, p. 5).

**2) Team-Games-Tournaments method:** this cooperative learning method uses the same procedure in STAD, but replaces the quizzes with weekly tournaments (Sharan, 1990). In this method, pupils play academic games with members of other teams to contribute points to their team scores, which means pupils from different teams play to obtain points towards an individual grade (Slavin, 1995). Slavin adds that pupils in this method have opportunities for success because they play with pupils of the same ability and at the same level of achievement (low achievers play with other low achievers; high achievers play with other high achievers).

**3) The Jigsaw method:** pupils in every team share work together, and find interdependence in their work. When pupils engage in this method, they bring together diverse experiences, expertise, strengths, interests, knowledge and perspectives to reach goals (Slavin, 1995). Each group has to choose some material to read, such as a short book or chapter. Each group member should randomly be assigned as an expert in some part of that material. All experts in one topic from different groups sit together and discuss their topic, after which they return to their original groups and teach their topics to their group mates. Finally, an examination is taken individually (Sharan, 1994).

**4) The Team Accelerated Instruction method:** in the Team Accelerated Instruction method, pupils combine cooperative learning with individual instruction, each member having to work on a specific unit. Teammates check their results with each other. Every member studies all units in turn and then is tested, in all units, individually without help

from teammates. This method of cooperative learning works particularly well for mathematics lessons (Slavin, 1995, p.7).

**5) Cooperative Integrated Reading and Composition method:** this method is a comprehensive program for teaching reading and writing. According to Sharan (1994), it involves three concepts, namely basic related activities, direct instruction in reading comprehension, and finally an integrated piece of writing about the reading topic. Pupils, in this method, are assigned to teams, pairs or triads, according to their reading level. The teams perform different activities, such as reading to one another, summarising their reading to each other and understanding the main ideas in their reading. In addition, they might be asked to write about their reading and present to the whole class. At the end of that, the pupils will be given an individual test about their reading (Sharan, 1994; Slavin, 1990; 1995).

**6) Group investigation method:** group investigation is another method of cooperative learning that integrates interaction and communication in the classroom to achieve academic concepts. This method develops the classroom into a social system. By this method, pupils have the chance to decide what they will study. Pupils, who are involved in this method, are divided into groups of four to six members, each of which choose a topic of interest and investigate it. At the end of that, they present what they have found to their classmates (Sharan and Sharan, 1992; Sharan, 1994).

**7) The CO-OP CO-OP method:** this cooperative learning method is similar to the group investigation method. It involves several steps. Pupils are asked to indicate their topics of interest. They are divided into groups. Each member takes responsibility for one section and works individually before presenting to group mates and being

questioned by them. At the end, each group's topic has to be presented to the whole class for discussion (Slavin, 1995; Sharan and Sharan, 1992).

**8) The Learning together method:** according to Johnson and Johnson (1994) the Learning Together method comprises important concepts, namely pupils working face-to-face in groups of four or five members, finding interdependence to achieve group goals and showing that they have individually mastered the material. In addition, they have to be taught effective means of working together to achieve the goals. Certain targets are set, such as presenting work together or writing a group assignment. The teacher specifies the topic and the various concepts that should be learnt in each lesson, as well as the criteria to be followed. This includes advice on decision making and problem solving, and also teaching mutual respect. Finally, pupils are evaluated on two aspects, the work completed and the pupils' interactions observed by the teacher during the lesson (Johnson and Johnson, 1994).

The cooperative learning methods discussed above are generic methods to which there are a number of variations, such as Complex Instruction, Structured Dyadic Methods, Group Discussion, Group Projects, and Structured Academic Controversy (see Sharan, 1994; Slavin, 1995).

### **3.14 The advantages of using cooperative learning (group work)**

There are many advantages of using cooperative learning methods in classrooms, which have been identified by research. Some of these advantages are described below.

### **3.14.1 Increasing pupils' achievement**

Many studies indicate that using cooperative learning methods has contributed to raising pupils' achievements. According to Sharan (1990), pupils involved in cooperative learning methods attain higher levels of achievement than pupils working individually. Slavin (1996) claims that, in twenty-two studies, pupils involved in cooperative learning methods had significantly higher achievements than pupils working in the traditional way. Moreover, Slavin (1996) states that children involved in group activities achieve more growth than children of similar age who work individually. Sharan and Sharan (1992) found that pupils' results were considerably higher than in traditional methods. Slavin and Cooper (1999) believe that cooperative learning methods promote some of the important goals of education, increasing the academic achievement of all pupils. Putnam (1998) states that, achievements and productivity are greater when pupils are learning cooperatively, than when they compete or work alone. Johnson and Johnson, (2004) claim that pupils working in groups can achieve more, especially when new and complex knowledge and skills need to be mastered. They add that groups can raise individuals' levels of aspiration, and encourage them to achieve beyond their wildest expectations. In addition, groups can give individuals insights and understanding that they never achieve alone (Johnson and Johnson, 2004).

### **3.14.2 Teambuilding**

Building team strength is an important advantage in this concept. According to Slavin (1995), many teachers and researchers have suggested that pupils should be prepared to work in groups before being involved in any cooperative learning method. Millis and Cottell (1998) add that team building is a very important part of team learning, and teachers have to prepare pupils for this. Sharan (1994) states that when there is a positive team identity, communication and respect among team members and good

learning is more likely to emerge. Slavin (1996) believes that pupils in a successful team learn more, while members who are not comfortable working with each other might not be successful, and the work might not be completed. Building a team is an important part of cooperative learning, according to Kagan and Kagan (1994, p. 129). They point out five aims of teambuilding, namely: 1) getting acquainted, 2) team identity, 3) mutual support, 4) valuing differences, and 5) developing synergy. They add that the most common arrangements of teams in cooperative learning are: 1) heterogeneous teams, 2) random groups, 3) interest teams and 4) homogeneous teams. All these types of teams are useful for different purposes. Kagan and Kagan (1998) claim that in any cooperative team, four principles must be maintained, namely: a) positive interdependence, b) equal participation, c) individual accountability and d) simultaneous interaction.

### **3.14.3 Interaction between pupils**

Interaction, according to Webb (1985), is the important point that distinguishes cooperative learning methods from other learning methods. Sharan and Sharan (1992) believe that the positive interaction between pupils in the classroom is the key to implementing cooperative learning methods. Slavin (1996) claims that the interaction between pupils in tasks will help to enhance achievements and pupils will learn from each other during their dialogue and discussion of content. Ghaith and Yaghi (1998) argued that low-achievers might learn more challenging concepts through interaction with their group mates. Gillies (2004, a) indicates that a good cooperative group is one in which pupils work with each other, argue, discuss, explain and share information. He adds that, when children cooperate and work together, they respond to requests for help from their group mates. Interaction in groups is very important for productivity; in other words, unless group members share ideas and information, they will not be able to find

creative solutions or discover underlying principles to the problem on which they are working (Gillies, 2004, a).

#### **3.14.4 Pupils' motivation**

Pupils' motivation is a further advantage of using cooperative learning methods. According to Sharan and Sharan (1992), there is considerable evidence that cooperative learning methods enhance pupils' motivation to learn. Specifically, Sharan and Shaulov (1990) found that integrating cooperative methods enhances pupils' motivations to learn, more than in traditional approaches. Slavin (1996) also states that feedback, debate and discussion may encourage pupils' motivation to overcome fear and misunderstanding and search for better solutions. Positive interdependence in cooperative learning among all group mates encourages them and motivates them to help each other and exert more effort to achieve group success (Ghaith and Yaghi, 1998). Shaaban (2006) points out that cooperative learning gives pupils the opportunity to see the value of the content of what they study, and perceive themselves as competent contributors to group goals; thereby their motivation will be enhanced and promoted.

#### **3.14.5 Increasing cooperation and reducing competition**

Increasing cooperation between pupils and reducing individual competition are one of the greatest benefits that cooperative learning methods bring to classrooms. That is not to say that competition is necessarily harmful, but it may discourage pupils from helping or encouraging each other. In addition, competition can be problematic and embarrassing. Cooperation is healthy and more effective (Slavin, 1995). Graves (1994) claims that, in several schools today, competition is not welcomed by most pupils, because the majority of them find it a problem and look forward to leaving school to work in a more cooperative environment.

### **3.14.6 Changing pupils' behaviour**

Another advantage of implementing cooperative learning methods is the potential to change bad behaviour. Johnson and Johnson (1998) believe that, even when team members originally do not like each other, the cooperative experience promotes friendship. Cooperative learning has been found to encourage and promote interpersonal relationships. Johnson and Johnson (1998) state that “working cooperatively creates far more positive relationships among diverse students”. According to Sharan (1994), when pupils have been involved in one of the cooperative learning methods, the misbehaviour of some pupils will be dealt with by the group, without requiring the teacher’s help, because bad behaviour from one member negatively affects the whole team’s achievements. Lazarowintz *et al.* (1985) claim that pupils who engage in Jigsaw methods grow to like group mates more than others in their classrooms. Johnson and Johnson (2004) point out that cooperative learning impact pupils’ actions and it determines their behaviour. They add that involving pupils in cooperative learning (groups) provides them with information that helps them to resolve ambiguities about the nature of the social world (such as family and peer groups, friends), and supports them with needed skills. Cooperative learning (group work) might influence pupils’ beliefs and values and what they think should be achieved (Johnson and Johnson, 2004). In addition, Johnson and Johnson believe that cooperative experience, compared with competitive and individualistic experience, result in more positive and supportive relationships, more friendships and fewer pupils remaining isolated.

### **3.14.7 Increasing thinking skills**

Cooperative learning methods are ways of developing thinking skills, because, when pupils engage in a cooperative group, they see other ways of thinking during their discussion with each other (Slavin, 1995). Ellis and Feldman (1994) note that working

in a cooperative group gives pupils a window into the thought processes of other group members, mediating and shaping their own thinking.

### **3.14.8 Self-Esteem**

Self-esteem can be defined as a judgment about one's own worth, based on how well-liked and competent a person believes him/herself to be (Putnam, 1998). The self-esteem of pupils can be increased when they start to like school better, and enjoy a greater number of friendships (Slavin, 1994). Furthermore, according to Schmuck (1985), several cooperative learning studies have found that, because pupils in a cooperative group feel more liked by their teammates, their self-esteem increases. Putnam (1998) claims that one of the important outcomes of cooperative learning is the positive effects on pupils' self-esteem. Putnam adds that improved self-esteem can be as a result of achieving challenging goals, from gaining the respect of others and from favourable comparisons.

### **3.14.9 Further advantages of using cooperative learning**

Some further advantages can be gained from implementing cooperative learning methods in classrooms, for instance, giving pupils the opportunity to set their goals, and to indicate and define their interests and their relationships (Sharan, 1994, p.341).

In addition, cooperative learning methods help teachers to become more learner oriented and less focused on their own performance as presenters of information. The researcher also found that teachers feel more effective when they use cooperative learning methods, because it gives them the means to help them to engage pupils in learning (Sharan, 1994, p.340). Moreover, Sharan (1994) notes that using cooperative learning

methods will reduce centralization in decision making in classrooms, and give pupils ownership of their academic behaviour and work in school.

### **3.15 Disadvantages, Obstacles, Challenges and Risks of Using Cooperative Learning**

Although there are a considerable number of advantages of using cooperative methods in classrooms, there are some disadvantages and potential obstacles for those who choose to use them. For example, pupils in some cooperative learning methods (e.g. group investigation) have more limited coverage of material than other pupils studying by themselves (Slavin, 1996), which might be regarded as one challenge for some teachers.

Another disadvantage of using cooperative learning is that it may allow teammates to supply an answer without any understanding of the question. According to Slavin (1996, p. 45), “If a group member wants her group to be successful, she must teach her group mates. If she/he simply tells them the answer, they will fail the quiz that they must take individually”. Teachers who see themselves as being responsible for delivering the content of the curriculum and preparing them for examinations might see cooperative learning as a risk. Furthermore, Slavin (1996) states that teamwork means less individual accountability, so that if one or two members of the team do all the work for the others, this can lead to failing in the team ultimately, which might be considered by some teachers as another risk. In addition, according to Nijhof and Kommers (1985) some learners are good learners but less disposed to using necessary social skills; putting shy learners in groups might prevent some of them from learning or participating, and may lead to loss of confidence (Baines *et al.*, 2009).

Using cooperative learning (group work) might lead to more misbehaviour among some learners, who view the group arrangement as an opportunity to discuss irrelevant topics. These problem behaviours, as Johnson and Johnson (2006) have highlighted, are due to a lack of team maturity, in that pupils usually need more time to understand expectations and tasks and respond to them. They add that passiveness in some members and less involvement are further challenges for teachers, in that some team members might not participate, follow directions or pay attention, showing little if any enthusiasm. Moreover, Suliman (2005) claimed that the size of the classroom might be a problem and could prevent teachers from using group work. In addition, lesson time might be considered as a challenge for the teachers, as it might not be enough to cover all the activities, especially if pupils fail to use the time productively.

Classroom management and in particular a teacher's ability to control the class can be challenged by the group-based arrangement. Slavin (1995) indicated that cooperative learning might lead to increased noise in a classroom, which might cause some problems in schools, especially among those who typically prefer quiet seatwork and traditional instruction and do not like noise. Furthermore, classroom discipline and classroom control are problems that might emerge through using inappropriate cooperative learning methods (Johnson and Johnson, 1987); therefore, designing groups, preparing materials and activities well are very important factors, which may maximise classroom control and classroom management. In addition, usually in cooperative learning methods, pupils depend on each other in the learning process, to learn together, to contribute and to interact with each other; therefore, pupil absenteeism can be particularly disruptive when this method is used (Slavin, 1995).

### **3.16 Cooperative learning and religious Education**

Cooperative learning is a teaching approach seeking to not only promote pupils' achievements but also develop their social and personal skills by placing them in groups and encouraging them to learn with and from each other. This meaning of cooperative learning appears consistent with the aims and objectives of religious education which have been expressed by some authors. Wedge (2002) claimed that implementing cooperative learning in such a curriculum enables relationships between pupils and groups (community) to develop according to their faith. Developing an appreciation of equality, integrity, mutual growth and respect for other nations can unite individual and bring diverse learners together, which is one of the important aims of any religious education curriculum (Wedge, 2002). Wedge added that the fundamental conviction of our faith is that human life is fulfilled in knowing, loving and communicating with others. Indeed, in her view the implementation of cooperative learning allows these meanings and the process of socialisation in our life to occur.

Yalajn (2003) drew attention to the potential for cooperative learning within four stated aims and objectives for the Islamic religious education which are 1) building knowledge by learning the Islamic culture curriculum, , 2) building an individual with good personality in several aspects, such as development the mental skills, enhancement of the spiritual growth, support all good morals, and increased creativity, 3) building a good nation by building unity, fairness, cooperation, mercy, and working together as a whole (group), and 4) building good culture by following the curriculum of Allah that he clarified in the Holy Quran that consist of (for example ) fairness, respect, keeping people rights, benefaction and calling people to the right path, which should be implemented among the Muslim people and with peoples from other nations. Similarly Bagarsh and Alsubhi (1996) also illustrated also some of the religious education

objectives by that 1) creating competent citizen who respect others, follow the law of the country, responsible, and who used his skills and ability to participate in building the country; 2) creating a good environment and atmosphere for building the individual's good behaviour and relationship in the society; 3) building individuals' skills such as the ability of carrying responsibility, respect others right, doing his job, the ability of working cooperatively, and control angriness. Cooperative learning employs the philosophy that individuals work together to achieve shared goals and to maximize their own and each other's learning. It fosters positive interdependence in the classroom, individual accountability, interpersonal, relationship, interaction, respect for others' opinions (or faith) and social and personal skills. According to Wedge (2002) it is a particularly useful approach to the teaching and learning of religious education in that it moves away from competitive and individualistic styles of learning, and instead develops the individual's responsibilities for group learning. As illustrated cooperative learning can support the aims and the objectives of religious education by building individual achievement, knowledge, personal and social skills inside the classroom where individuals participate directly or indirectly to meet the needs of whole society.

### **3.17 Cooperative learning and Al-Fiqh**

Al-Fiqh in Arabic languages is a synonym of the words understanding and comprehension. It is one of the Islamic culture curriculum was described in Section 2.7. Al-Fiqh according to the scholars has the following meaning: The knowledge of the practical rules of Shari'ah acquired from the detailed evidences in the sources of Shari'ah (Al-Zuhaili, 1989).

The Comprehensiveness of Al-Fiqh, according to Al-Zuhaili (1989), includes:

1. **Worship**- this aspect of Al-Fiqh is dealing with salah, Zakaah, Siyaam, and hajj.

2. **Family issues**- this aspect of Al-Fiqh is dealing with the family from the beginning to the end. Such as the conditions for a sound marriage divorce and so forth.
3. **Transactions**- this aspect of Al-Fiqh is related to how we cooperate with each other in society. An example would be buying and selling goods.
4. **Politics**- this aspect of Al-Fiqh deals with the organization of government and governmental organizations in regards to the Muslim nation.
5. **Peace and war**- this aspect of Al-Fiqh deals with foreign relations with other countries depending on the current condition that exist between the Islamic state and those countries.

The companions of Prophet Mohammed, after his death, began to spread his message and the knowledge (which include Al-Fiqh) obtained (from Quran and Hadeeth) over the Islamic country. Over time, four schools of Al-Fiqh were shaped by four famous scholars, which still exist today. These are Al-Hanafiyyah by scholar Abu-hanifah, Ash-Shafi-eyyah by scholar Shafi`i, al-malikiyyah by scholar Malik and Hanabilah by scholar Ahmad. Each of these created their own path by their Ijtihad (the school opinion and thinking in all matter that has not got obvious evidence from Quran or Hadeeth), and their Ijtihads open the gate for diversity in Al-Fiqh, which allowed debate, discussion and more than one opinion in these issues. This nature of Al-Fiqh, with this diversity, show the appropriateness of teaching Al-Fiqh with cooperative learning method, which permits debate, discussion and opinions to take place in a classroom.

The research presented in this thesis did not purposely select a specific element of the Islamic culture curriculum. At the time of data collection only the Al Fiqh curriculum was timetabled at the target school. Therefore other elements of the Islamic Culture

curriculum were not available to the researcher (also see section 4.5.1.4). The Year 11 curriculum in the setting for this research included a number of topics, such as the legal rules of marriage in Islam. In fact, some of these rules and conditions of marriage are different from one scholar to another, which depends on the scholar Ijtihad in his school. This, indeed, emphasises that placing pupils in groups and allowing them to interact with each other, discuss their opinion, and make them to listen to others' opinions through cooperative learning method might be one of the best way of teaching Al-Fiqh curriculum.

### **3.18 The Relationship between Teachers' Beliefs and their Practice.**

Belief plays a vital role in determining teachers' practice. Teachers' beliefs are usually influenced by their knowledge, their own formal education, experience and culture. Flavell *et al.* (2002) state that an unusual reaction reflects a different sort of thinking or knowledge.

According to Fullan (2001), significant educational change requires a change in beliefs, teaching style and materials, which can come about only through a process of personal development in a social context. Brody (1998) believes that teachers' beliefs may have the greatest impact on what teachers do in the classroom, the ways they conceptualize their instruction and learn from experience, their beliefs about the locus of control and authority in teaching, the nature of knowledge and knowing, and conceptions of teachers' roles in decision-making. Mansour (2006) found in his study that teachers' beliefs were shaped by many sources of experience such as teachers' schooling, education, work and life experiences, culture and training (pre-service and in-service). In the same way, Lyman and Davidson (2004) state that beliefs have a certain functionality for teachers, because the context in which teachers work is often "ill-

defined” and “multi-faceted”. They add that belief systems can be understood as deeply etched patterns reflecting orientations that guide the task of teaching and the process of interaction with new ideas and practice. Therefore, teacher experience, knowledge and beliefs should be taken as the starting point for introducing new concepts or changing pedagogies in the classroom (Mansour, 2006).

Schmitt (1992) reported that knowledge shaped perceptions affect action (practice). However, perceptions, in reality, cannot exist without experience (Hamlyn, 1970). Dretske (2006) stated that a person’s perceptions typically provide us with information about all kinds of information, and perception without awareness (information and knowledge) is impossible. Some kind of experience is needed to gain perception. Gupta (2006) believes that our experiences make a fundamental contribution to our knowledge and in some way contribute to rationality. He adds that our knowledge and experience usually shape our perceptions and judgments.

Brody and Nagel (2004) argued that changing to a cooperative or collaborative perspective requires a shift in sensibility and a shift in fundamental assumptions, knowledge, perceptions and beliefs about learning, knowing and authority. Teachers’ implementation of cooperative learning may depend partly on the particular education that they have had, as well as a match between the models they are implementing or learning and their knowledge and perceptions about children and learning (Brody, 1998). In addition, many teachers, according to Rolheiser and Anderson (2004), have not considered the notion of teacher-centred versus learner-centred classrooms before implementing cooperative learning. They add that having a mental image of the learner-centred environment can help clarify goals and provide teachers with the language to assess their practice more clearly.

In summary, teachers' knowledge and information and teachers' experiences (which require some skills) usually contribute to their beliefs and can influence their practices and perceptions. Therefore, changing the pedagogical approach needs change in beliefs regarding the role of the teacher in the classroom, the outcomes they wish to promote and the benefits that they and their pupils might gain from using an alternative pedagogy. Training programmes are significant, in that they help by encouraging teachers to try cooperative learning in their classes and extend their knowledge and information. The advantages and benefits of cooperative learning are highlighted for both professionals and pupils. The training programme in this study intends to introduce the teachers to the necessary instructional and managerial skills, and how they deal with any challenges or obstacles that they may face.

### **3.19 Cooperative Learning from the Islamic Perspective**

Cooperation or working in groups is an important part in the Islamic religion. Many of the worships within Islam can be practiced in groups, for example, both Prayers and Hajj (Ibn Kather, 1999). In addition, in Islam, people who worship Allah in groups may do better than those who do not. The prophet said one praying with a group may be twenty-five times better than the one praying alone (Al-albani, 1986).

Islam encourages individuals to learn to read and what is clear from the first verse which came to Prophet Mohammed is “ read in the name of thy lord and cherish who created” (Ali, 2003). In the holy Quran (Chapter 9, verse 122) people were asked to establish groups and for them to then learn as a group and return to the rest and teach them. Ibn Kather (1999) said in this verse that Allah directs all Muslims in each tribe to send a group to the prophet Mohammed in Maddinah (a city in Saudi Arabia near Mecca where prophet Mohammed used to live) and learn the holy Quran and Sunna

(prophet saying acting and behaviour, which includes clarifying the holy Quran). And to then return to their tribe and teach them Islam. In sum, Islam as a religion supports and encourages individuals to work in groups, which includes learning in a group.

### **3.20 Summary**

The aim of this chapter has been to give the reader a wide overview of the literature related to cooperative learning. It covered the methods related to cooperative learning implementation. An extensive review of the literature on change in school and the roles of teachers and pupils in cooperative methods was conducted. The chapter also discussed the movement from traditional to new methods of teaching, such as cooperative learning and e-learning. It also presented the design of group work in the classroom, and the need for change in Saudi schools.

The next chapter considers the research methodology. It aims to discuss the theory underlying the methods used to help to understand the reasons for undertaking certain activities and explains in detail the processes of collecting data from both training and implementation stages.

# **CHAPTER FOUR**

## **RESEARCH METHODOLOGY**

### **4.1 Introduction**

The main purpose of this chapter is to provide an outline of the research methods used and to explain the procedures employed to collect data. It also discusses the literature underlying the methods and the particular reasons for the selected procedures of data collection. This chapter is divided into two parts. The first part presents an overview of the literature on research methodology (qualitative and quantitative approaches) and the data collection tools usually used with each individual method. The second part of the chapter concentrates on the setting for the research, the data collection instruments, data analysis, ethical issues and issues of validity and reliability.

### **4.2 Research Approaches**

Data can be collected from numerous sources, using different research methodologies. A research methodology comprises a set of techniques used in particular areas of research activity (Nachmias and Nachmias, 1996). There is no right or wrong methodology, but the researcher should seek the most beneficial method available given the research questions being posed. According to Huberman and Miles (2002) and Blaxter *et al.* (2001), data collected can be classified as “qualitative” if they come in word form and describe situations, individuals, or circumstances surrounding a phenomenon, whereas they are viewed as “quantitative” if they are presented in the form of numbers, counts or measurements that attempt to give precision to a set of observations. Consequently, the most commonly used classification is between the quantitative and qualitative approaches (Smeyers, 2002).

Denzin and Lincoln (1994) argue that both qualitative and quantitative approaches can be used appropriately within any research philosophy. The “positivist” approach holds that all genuine knowledge is based on sensory experience and can only be advanced by means of observation and experiments, while the “interpretivist” approach holds that the social world can only be understood from the standpoint of individuals who are part of the ongoing action being investigated (Cohen *et al.*, 2008). The choice of research method depends on the nature of the research problem. In practice, there are certain constraints, such as time and funding, that might also influence the researcher’s choice. In applying scientific method, the researcher must be aware of certain problems (Boyd *et al.*, 1985) such as investigator involvement in the use of the results, imprecise measuring devices, the possible influence of the measurement process on the results, time pressure in obtaining the results, difficulty in using experiments to test hypotheses, and the complexity of the subject.

According to Gable (1994), the literature draws a clear distinction between the two approaches, but they are not mutually exclusive, and researchers sometimes apply both. Qualitative and quantitative research techniques can be viewed as the ends of a continuum (Gable, 1994). The differences between the quantitative and qualitative approaches are detailed in Table 4-1. Remenyi (1998) argues that because research sometimes requires the collection of complex evidence to answer ‘how’, ‘why’, and ‘what’ questions, the two approaches can often be used in conjunction, as complementary approaches.

**Table 4-1 Qualitative Approach versus Quantitative Approach**

	<b>Qualitative Approach</b>	<b>Quantitative Approach</b>
<b>Types of questions</b>	Probing	Limited probing
<b>Sample size</b>	Small	Large
<b>Amount of information</b>	Substantial	Varies
<b>Requirements for administration</b>	Interviewer with special skills	Interviewer with fewer skills
<b>Type of analysis</b>	Subjective, interpretive	Statistical, summation
<b>Hardware</b>	Tape recorders, projection devices, video recorders, pictures, discussion guides	Questionnaires, computers, printouts
<b>Degree of reliability</b>	Low	High
<b>Type of research</b>	Exploratory	Descriptive or causal

Source: McDaniel and Gates (2002)

### 4.3 Qualitative Approach

Denzin and Lincoln (1994) defined qualitative research as follows:

“The word qualitative implies an emphasis on processes and meanings that are not rigorously examined or measured (if measured at all), in terms of quantitative, amount, intensity or frequency ... Qualitative researchers stress the socially constructed nature of reality, the intimate relationship between the researcher and what is studied and the situational constraints that shape inquiry. Such researchers emphasize the value-laden nature of inquiry. They seek answers to questions given meaning” (p. 124).

Qualitative research is an approach sitting within the phenomenological paradigm that involves some form of interaction between the researcher and the individual or the situation being researched (Hussey and Hussey, 2003). Morgan and Smircich (1980) argue that qualitative research is an approach rather than a set of techniques, and its appropriateness, like that of quantitative research, is determined by the phenomena to be studied and the research questions being asked. Furthermore, Kirk and Miller (1986) described the qualitative approach to research as following four steps: invention, discovery, interpretation, and explanation. However, other views of qualitative research

focus on possible design constraints, for example, being influenced by individuals' own accounts of their attitudes, motivations and behaviour (Hakim, 2000).

Qualitative research faces a problem of subjectivity, since the researcher is personally involved in working with the measurement tools (Walter and Gall, 1989). A number of features distinguish the nature and design of qualitative studies, such as the holistic investigation of phenomena and the understanding of the study in its natural setting (Walter and Gall, 1989). The nature of the research allows flexibility and responsiveness to 'multiple realities' and complexity. Selecting the sample purposively rather than randomly helps the researcher to avoid missing sample data that could be otherwise be considered as unimportant 'outliers'. Purposive sampling allows the researcher to design a study that includes both typical and non-typical subjects and thus enriches the outcome of the research (Tashakkori and Teddlie, 1998).

Hakim (2000) indicates that the strength of qualitative research lies in the validity of the data being collected. Data are normally gathered in sufficient detail for the results to be taken as true, correct, complete and believable reports of the participants' views and experiences. However, a major concern is the problem of sample size. Qualitative projects normally have smaller numbers of participants, and it is suggested that small numbers of participants cannot really be taken as representative (Hakim, 2000). This is true even when great care is taken to select a fair cross-section of subjects.

Methods of qualitative design typically include: a) case study, which provides descriptive data of the subject under study; b) meta-analysis, which is designed to analyse the statistical results from diverse previous research; c) research analysis of administrative records; d) focus group discussion, which allows the researcher to bring

together a number of informants who serve the issue of investigation; and d) in-depth interviews in the form of structured, semi-structured or unstructured design (Silverman, 2000; Kruger, 2001).

Qualitative research is a field of inquiry in its own right; it studies objects in their natural settings, attempting to make sense of phenomena in terms of meanings related to a field (Denzin and Lincoln, 1994). Qualitative research examines situated activity, in which there is an opportunity to participate in and reflect on the process of knowledge production (Flick, 2002). Denzin and Lincoln (2003) state that qualitative research taking place in natural settings gives the potential to interpret phenomena. It may use multi-methods to focus on individuals and provide interpretation (Denzin and Lincoln, 1998). Furthermore, qualitative research normally involves the practical material of a case study, interviews, a life story, observation and personal experience. It also involves texts that describe routines or problematic moments and meaning in individuals' lives (Denzin and Lincoln, 2003). Qualitative studies are ultimately interested in how participants fit with their surroundings and make sense of their experience (Berg, 2004).

#### **4.3.1 Case Study**

A clear definition of case study is difficult to formulate, because case studies are used in different disciplines, for different purposes. Hussey and Hussey (2003) refer to a case study as an extensive examination of a single instance of a phenomenon. Silverman (2000) defines case study as “a general approach to studying a research topic”. For Yin (2003), case studies represent empirical inquiry into a contemporary phenomenon within its real life context. Thus, case study is best used when the researcher thinks that the context of the phenomenon under investigation has an effect on the phenomenon. Yin (2003) goes on to argue that case studies represent a comprehensive research

strategy, which includes particular techniques for collecting and analysing data. Stake (1995) argues that case studies are not a methodological choice, but rather they are a selection of what is to be studied. All the above definitions present an important description of case studies, and refer to them as being more a choice of a case and what is to be studied, such as a community or organisation, and not a research methodology (Ryan *et al.*, 2002).

Case studies represent a research strategy involving the selection of a case, but multiple cases are also possible. Yin (2003) identified four possible designs for case studies: 1) a single case design with a single unit of analysis; 2) a single case design with multiple units of analysis; 3) multiple-case design with a single unit of analysis; 4) multiple-case design with multiple units of analysis. The choice depends on the research questions, the nature of the cases, and the conditions of research. Ryan *et al.* (2002) argued that multiple design can be used for two purposes, namely replication and theory development: similar cases might be selected to replicate the theoretical explanation, or dissimilar cases may be selected to extend the theory to a wider set of circumstances.

Despite the benefits of the case study approach, it is not problem-free. One of the major criticisms of case study is the issue of the generalisability of findings to a wider context (Yin, 2003), as case studies often involve one case, or a small number of cases (Stake, 1995). However, it should be remembered that the objective of case study is not to prove or falsify a theory for statistical generalisation, but rather to describe, illustrate, explore, or explain (Ryan *et al.*, 2002).

Researcher bias is also potentially problematic in case studies; researcher bias and lack of rigour are frequently encountered but less frequently overcome, according to Yin

(2003). Investigators must work hard not to alter or colour material and to report all evidence in a fair way. Ryan (2002) suggested that objectivity could be increased and bias reduced when a team of researchers with different backgrounds and experience is involved, and their interpretations should be fed back to the subjects of the study for their comments.

### **4.3.2 Action Research**

Valsa Koshy (2005) defines action research as “an enquiry, undertaken with rigour and understanding so as to constantly refine practice; the emerging evidence-based outcomes will then contribute to the researching practitioner’s continuing professional development”. Bassey (1998, p. 93) describes ‘action research as an enquiry which is carried out in order to understand, to evaluate and then to change, in order to improve educational practice’. Hopkins (2002, p. 41) maintains that ‘action research combines a substantive act with a research procedure; it is action disciplined by enquiry, a personal attempt at understanding while engaged in a process of improvement and reform’. Bell (1999) comments on the practical, problem-solving nature of action research, which she believes makes this approach attractive to practitioner-researchers. In addition, she highlights the fact that action research is directed towards greater understanding and improvement of practice over a period of time.

McNiff and Whitehead (2000) posited that action research is undertaken by people who are trying to understand their practice in order to improve the quality of their work with others. It is used widely to promote personal and professional awareness and development within organisational contexts. Generally, Valsa Koshy (2005) comments that action research is about working towards practical outcomes, and also about creating new forms of understanding; that is because action without understanding and

theory without action are meaningless. There are several points about action research, as summarised according to O’Leary (2004, p. 139) below;

- It addresses practical problems in a specific context and attempts to find solutions within it.
- It generates knowledge for the purpose of producing and supporting change.
- It enacts change to fulfil immediate goals.
- It is participatory; in action research, researchers collaborate with practitioners and other stakeholders.
- It is a cyclical process action that takes shape as knowledge emerges, and includes planning, action, further observation and reflection.

### **4.3.3 The Advantages and Disadvantages of Qualitative Research**

Qualitative research stresses the socially constructed nature of reality, and the intimate relationship between the researcher and the field. It seeks to answer questions related to how experience is created and given meaning. In contrast, quantitative research emphasizes the measurement and analysis of causal relationships between variables, not processes (Denzin and Lincoln, 1994). Qualitative research gives researchers the opportunity to spend more time in the field to collect rich live data. It offers researchers a chance to see the field from the inside and enables in-depth understanding of data. The important advantage of qualitative research is that it allows researchers to collect real and unique data and make detailed exploration of a topic. Studying individuals in their natural setting might be difficult without qualitative methods. Finally, qualitative research gives researchers the opportunity to play the role of active learner, and present the actual story from their point of view (Creswell, 1998).

Qualitative research also has several disadvantages (Creswell, 1998). For example, a) it is time consuming to cover all stages of data collection (organisation and analysis of data); b) collecting data can be potentially costly; c) researcher bias is possible. The issue of generalisability has already been referred to. In addition, qualitative research in a social or human science study may lack clear guidelines or a framework, making the study difficult to plan, conduct or evaluate (Creswell, 1998).

#### **4.3.4 Data Collection Methods**

In qualitative research, several types of data collection methods should be discussed.

##### **4.3.4.1 The Interview Method**

An interview is an interchange of views between two or more persons on a topic of mutual interest, enabling discussion of interpretations, and expression of a point of view (Cohen *et al.*, 2008). Cohen *et al.* point out that interviews may serve three purposes: 1) they may be used as the principal means of gathering information that have direct bearing on the research objectives. 2) They may be used to test hypotheses or to suggest new ones, or as an explanatory device to help identify variables and relationships. 3) They may be used in conjunction with other methods.

There are three types of interviews: structured, semi-structured and unstructured. In the structured interview, which is also known as a standardised interview, the questions are closed-ended, and the sequence in which they are asked is the same in every interview. The aim of this approach is to ensure that each interviewee is presented with exactly the same questions in the same order. This type of interview is more objective and easier to analyse, but is not flexible (Nachmias and Nachmias, 1996). Blackman (2002) claims

that there are three important characteristics that are often used to distinguish between a structured and an unstructured interview. First, highly structured interviews require that all interviewers ask the same set of questions to all applicants and they must not use follow-up or probe questions. Secondly, structured interviews form the basis for tighter analysis. Thirdly, the interviewers are trained to use a standardized rating form as well as *a priori* rules when rating and scoring responses to questions.

The unstructured interview contains open-ended questions, where questions can vary or be adapted according to the respondent's intelligence, understanding or beliefs. Although it takes more effort and time and is more difficult to analyse, it is flexible and may be used to explore issues in greater depth (Kidder *et al.*, 1986). The semi-structured interview contains both open-ended and close-ended questions, which means that not all questions are designed or formulated in advance. It carries some of the advantages of both structured and unstructured interviews (Kidder *et al.*, 1986). The semi-structured interview is a flexible method that allows new questions to be brought up during the interview as a result of what the interviewee says, and gives the interviewer an opportunity to probe for further information. The interviewer in a semi-structured interview generally has a framework of themes to be explored (Blackman, 2002)

There are several strategies from which researchers can choose when planning an interview. The approaches are (Thomas, 2003, p. 63):

- The loose-question approach, which aims to elicit respondents' interpretations of a very general situation.
- The tight-question approach, which aims to discover respondents' preferences among a limited number of options, such as yes/no or like/dislike.
- The converging-question approach, which is designed to incorporate the

advantage of the loose and tight methods. The interviewer first asks broad, open-ended questions then follows up the replies to explore the interviewees' opinions more deeply.

- The response-guided approach: in this strategy, the interviewer begins with a prepared question, and then spontaneously creates follow-up questions that are logical extensions of the answer that has been given to the open question. This strategy enables researchers to investigate in detail the respondents' opinions about issues related to the initial question.

#### **4.3.4.2 Focus group interviews**

A focus group is not just about getting people together to talk. It is a special type of group in terms of purpose, size, composition and procedures, which leads through interaction to data and outcomes (Cohen *et al.*, 2008). The purpose of this interview is to listen for and gather information, and to understand how people feel or think about specific issues (Krueger and Casey, 2000). A focus group can create an environment that encourages participants to share perceptions and points of view without pressure. Researchers can identify trends and patterns from group discussion, which might lead to careful and systematic analysis (Krueger and Casey, 2000). Cohen *et al.* (2008) state that focus groups are useful for:

- Orientation to a particular field of focus.
- Developing themes, topics, and schedules for subsequent interviews and/or questionnaires.
- Generating hypotheses deriving from the insights and data from the group.
- Generating and evaluating data from different subgroups of a population.
- Gathering feedback from previous studies.

Krueger and Casey, (2000) determined some characteristics of focus groups. For example, a) a focus group involves a limited number of people, such that everyone has the opportunity to share their vision; b) participants should possess certain similar characteristics, such that the researcher can achieve the purpose of the study; c) the goal of the focus group is to collect qualitative data that are of interest to the researcher, typically to find the range of opinions of people across several groups; d) focus groups must have a focused discussion; e) focus groups should help to understand the topic of interest.

Researchers (Krueger and Casey, 2000; and Cohen *et al.*, 2008) have indicated that data collected from focus groups might be influenced negatively by two types of participant: a) close friends who might inhibit disclosure on a certain topic; b) participants who might be unfamiliar or even difficult to place with others. It is more useful when data can be triangulated with more traditional forms of interviewing, questionnaires, observation and documentation (Cohen *et al.*, 2008).

#### **4.3.4.3 Observation methods**

Observation is a part of everyday life (Frank, 1999). As a scientific research method, it is multi-faceted (Wajnryb, 1992). According to Boehm and Weinberg (1987), observational techniques have been central to developments in many of the sciences, because the data collected is likely to lead to conclusions, decisions or new ideas. Obaidat *et al.* (2002) claim that many phenomena and ideas are studied in interviews or questionnaires because they need to be tested and understood by the researchers involved in the field directly. They add that observation is a tool used by individuals to gain information and experience.

Cohen *et al.* (2008) state that observation enables researchers to understand the context under investigation, to be open-ended and inductive, to see aspects that might otherwise be missed and to discover issues that participants might not have wanted to talk about in interviews. Observation in social contexts can be carried out with ease, whereas scientific observation requires more detailed planning, and systematic recording (Summerhill and Taylor, 1992). Cohen *et al.* (2008) refer to observations in physical settings, human settings, involving groups or individuals, sometimes according to gender and class, as well as interactional settings (formal or informal, planned or unplanned, verbal or non-verbal) and programme settings (for example, of school resources, style and curricula).

#### **4.3.4.3.1 The Advantages and Disadvantages of Observation**

One of the advantages of observation is that direct experience is afforded, as opposed to the second-hand information that may be obtained by other methods (such as interviews) and depth of detail can be achieved (Summerhill and Taylor, 1992). Obaidat *et al.* (2002) speak of the neutrality that observation affords and the accuracy of data, because it is recorded at the time of incidence. One of the important advantages is the possibility to record meta-language and the hidden curricula in classrooms (Stubbs and Delamont, 1977). Observation is an attractive method, as it affords researchers the opportunity to gather live data, and may enable understanding of classroom processes. According to Cohen *et al.* (2008), observers are perhaps more involved in the research environment and have greater opportunity for interpretation. Another advantage of observation is its directness. It enables researchers to study behaviour as it occurs, and gives the possibility of recording events as they occur (Selltiz *et al.*, 1976; Nachmias and Nachmias, 1996).

A disadvantage is that observation might lead to reactivity on the part of those being

observed (Summerhill and Taylor 1992, Obaidat *et al.* 2002). Cohen *et al.* (2008) claim that much preparation time is needed for implementation and analysis. In addition, Obaidat *et al.* (2002) claim that ill-prepared observation might lead to incorrect data, as classrooms might be influenced by behaviour that might change the direction of the class. Frank (1999) added that observation is not passive. It needs skilful handling of the process of looking, listening, recording and, sometimes, videoing. Observation may not be a valid or realistic option for a large population (Summerhill and Taylor, 1992). Observation relies heavily on personal interpretation, and the observer could be biased or lose objectivity in the process of observing. There may also be concentration shifts over time as well as a tendency to focus on “exotic” data (Summerhill and Taylor, 1992). In addition, there are some problems associated with observation techniques, (Hussey and Hussey, 2003). For example, the researcher cannot control variables in a natural setting, there may also be problems of ethics, objectivity and technology in recording what people say or do; the observer may sometimes fail to observe some activities because of distractions.

#### **4.3.4.3.2 Types of observation**

There are a number of types of observation. Participant observation means that researchers enter the field and observe from an internal perspective (Flick, 2002). Non-participant observation is when researchers stand outside the field and only play the role of observer (Summerhill and Taylor (1992). Thirdly, descriptive observation intends to provide researchers with an orientation in the field under study and describes the complexity of the field as far as possible. The next type is focused observation of narrow processes in specific problem areas related to the research question. Selective observation concentrates on looking for further evidence to support prior findings or finding examples of it (Flick, 2002). Obaidat *et al.* (2002) add further types. For

example, purpose observation is carried out by researchers to find specific data at a specific time with specific participants. Accidental observation and direct observation are other terms used. Participant observation is a method of data collection where the researcher is fully involved with participants and the phenomena being researched.

#### **4.3.4.3 Observers and the Observation**

Before starting observation, many considerations should be taken into account, such as the field of observation, the venue and time, the preparation of recorders, observation cards or the video camera, gaining permission to enter the field, and so on (Obaidat *et al.*, 2002). Observers should build good relationships with teachers, pupils and the school before starting observation (Borich, 1999). According to Wajnryb (1992) observers need to understand and maintain a sensitive awareness of the potential for vulnerability that inevitably accompanies any observation of teaching. Moreover, observers should know that visitors affect classroom dynamics, which means that they have to take care to minimise interruption, which might lead to incorrect conclusions. In addition, observers should be aware that data collected from classrooms may be limited and possibly not generalisable (Wajnryb, 1992). Observers should be aware of factors, either internal or external, that might affect classroom observation. Pupils perform differently when they know that they are being observed. Their behaviour may also influence the observer, particularly an active one. The teacher's level of experience may be another important factor, as may individual or cultural background. A final influence is knowledge of the school, class or subject matter to be observed, and socio-economic status might have an effect (Borich, 1999).

#### **4.3.5 Triangulation**

Researchers use triangulation to validate their results and give more confidence in them (Brannen, 1995). Triangulation is defined as the combination of different methods,

study groups, local and temporal settings and different theoretical perspectives in studying a phenomenon (Flick, 2002). There are many benefits of including multiple sources of evidence and methods of analysis. It allows the researcher to address a broad range of historical and behavioural issues, and it also leads to the case study becoming more convincing and accurate (Yin, 2003). Triangulation also leads to a strengthening of the study's usefulness for other settings (Marshall and Rossman, 1989).

Neuman (1997) advocates multiple methods to address given problems, on the basis that, in this way, different methodological weaknesses will be cancelled out to produce more convincing findings. Brannen (1995) argues that triangulation allows a holistic picture to develop, by capturing a more complete and contextual portrayal of the topic under study. Neuman (1997) believes that a combination of more than one method of research can be beneficial in some studies. In triangulation methods, the validity of conclusions can be enhanced through mutual confirmation (Bryman, 1988). There are five purposes to the combination of methods in a single study (Greene *et al.*, 1989): a) where convergence of results is sought; b) where overlapping and different facets of a phenomenon may emerge from complementary methods; c) where use in sequence enables the first method to help inform the second; d) where contradiction and fresh perspectives emerge; e) where using more than one type of method adds scope and breadth to the study. In the present research, triangulation will involve interviews, observation and focus groups.

#### **4.4 The Quantitative Approach**

Quantitative research design is concerned with the creation of empirical tests, which are meant to support or refute a knowledge claim (Walter and Gall, 1989), and can take the form of a descriptive study, primarily concerned with finding out 'what is'. Quantitative

research is based on the positivist paradigm. Quantitative research techniques share the language and logical form of positivism, which separate them from research techniques based on other approaches (Neuman, 1997). Quantitative research is therefore concerned with discovering causal relationships, and giving predictions or explanations of relationships among the variables under investigation (Creswell, 1994; Churchill, 1995).

Creswell (1994) presents some assumptions about quantitative research. They are as follows: reality is objective and singular, without the influence of the researcher; the researcher is independent from that which is being researched; research must be value-free and unbiased; formal language is used in the research; the logic of process is deductive; generalisation affords prediction, explanation, and understanding; it is independent of context; it uses accurate and reliable statistical analysis, and aims at validity and reliability; the researcher uses deductive reasoning; the samples (cases or subjects) used are large.

The quantitative approach places considerable emphasis on the statistical generalisation of findings, which seek to explain and predict events in the social world, by searching for regularities and causal relationships between constituent variables. Quantitative research, consequently, looks over social processes and focuses solely on social structure by isolating the problem from its setting (Hussey and Hussey, 2003). Quantitative methods include experimental design, which has two forms: true experimental and quasi-experimental. Other types are survey designs, which include descriptive surveys or analytical surveys, as well as regular and *ad hoc* sample surveys. A major general feature of sample survey design is visibility and accessibility. Another type of quantitative research study is a correlational study, which includes studies that

attempt to discover or clarify relationships through the use of correlation coefficients (Churchill, 1995).

The conduct of quantitative research has several steps, each dependent on the others. Failure to follow these steps may negatively affect the rest of the research. Krathwohl's model of the chain of reasoning in quantitative studies shows the following steps: (1) conclusions from previous studies, (2) explanation, rationale, theory or point of view, (3) questions, hypotheses, predictions, models, (4) study design, (5) data gathering, (6) data summary, (7) determining the statistical significance of results, (8) conclusions and (9) the beginning of the next study (Walter and Gall, 1989).

In the current research, the researcher initially considered an experimental method that would employ a pre-test and post-test control group design, by allocating the pupils in two classes randomly to one of two groups. The reasons that prevented the implementation of this method were: a) difficulty in getting permission to change pupils from one class to another; b) getting permission to change the system of examinations in Saudi schools to serve as outcome measure (controlled by the Ministry of Education) and c) the particular interest and preference of the researcher was to investigate the teachers' and pupils' perceptions regarding cooperative learning methods in Saudi classrooms.

#### **4.5 Present Research Design**

In the previous section, a review of some of the literature regarding qualitative approaches was presented. This thesis is located within the qualitative umbrella and gathers opinions and views on how individuals make sense of their experiences and socially construct their reality. This research sought to answer questions that

concentrated more on ‘how’, ‘why’ and ‘what’. In particular, it examined Saudi teachers’ and pupils’ perspectives on the introduction of cooperative learning in two Islamic classes at secondary level. Data were collected in multiple ways, using established qualitative data collation procedures (individual interviews with teachers, focus group interviews with pupils, field observations in the classroom, reflective journals, and observation of short video segments of classroom activity). The study employed a triangulation strategy across all methods and across participants to address the research purposes and to answer the research questions, as outlined in section 1.5. Employing a range of data collection methods aimed to strengthen the overall research process and more specifically the validity and trustworthiness of the emerging findings and interpretations. It also aimed to minimise any issues that might emerge from using a qualitative research approach, such as problems relating to bias and subjectivity, as addressed in section 4.33.

The research further aimed to identify teachers’ views on the impacts of using cooperative learning in the classroom. The research comprised two stages (see Table 4.1). In the first stage (training stage), the two teachers who participated in the study received some professional development over three days (approximately 10 hours) on introducing cooperative learning methods into their classroom. This training was led by the researcher, given the very limited expertise in cooperative learning currently available in the region in which this work was undertaken. In the second stage (implementation stage) teachers and pupils were involved in the cooperative learning approach in lessons, over a period of four to five weeks (see Table 4.1). This timescale fits other innovative efforts on group work / cooperative learning at secondary level (e.g. Hastie, 1996; 1998). The research setting (issues about the school, its teachers and pupils), the training programme, and data collection methods are now discussed.

**Table 4.2 Research Data Collection Process**

Programme	Data collection			Researcher Roles		
	From teachers	Days	From pupils			
	Teachers' first interview			Interview teachers		
Training stage	Teachers' training programme	1		Researcher Trains teachers on CL		
		2				
		3				
	Teachers' second interview		Pupils first focus group interview	Interview teachers		
Implementation stage	Teachers' journal record (1)		1	Interview teachers & Interview pupils Teachers' Reflective Journal (researcher and teachers observe the classrooms) <b>OBSERVATION</b>		
			2			
			3			
			4			
	Teachers' journal record (2)		5		Pupils' second focus group interview	
			6			
			7			
			8			
	Teachers' journal record (3)	Teachers' third interview	9			
			10			
			11			
			12			
	Teachers' journal record (4)	Teachers' final interview	13		Pupils' final focus group interview	
			14			
			15			
			16			
			17			
			18			
			19			
			20			

### 4.5.1 Research Sample

Cohen *et al.* (2008) claim that the quality of a piece of research stands or falls not only by the appropriateness of the methodology and instrumentation, but also by the suitability of the sampling strategy that has been adopted. Hence, a difficult question for researchers to resolve is how large their samples should be, Cohen *et al.* (2008) state

that “there is no clear-cut answer, for the correct sample size depends on the purpose of the study and the nature of the population (p. 100)”. In addition, given the nature of qualitative sampling, the number of cases sampled is often small, because there is no need for scale or need for estimates of statistical significance. Furthermore, a qualitative study aims for depth as well as breadth. Managing and analysing a large quantity of in-depth data might become problematic. However, the small-scale approach only works if the researcher has a strong sampling strategy (Ritchie and Lewis 2003).

Qualitative research uses non-probability sampling, as it does not aim to produce a statistically representative sample or draw statistical inference (Creswell, 1998). In qualitative research there are several types of non-probability sampling, namely a) convenience sampling, b) quota sampling, c) dimensional sampling, d) purposive sampling and e) snowball sampling (Cohen *et al.*, 2008). Each of these types of sampling seeks only to represent itself or instances of itself in a similar population, rather than attempting to represent the whole population (generalization).

The present qualitative study employed convenience sampling, which, according to Somekh And Lewin (2005), involves choosing the nearest available and accessible individuals (researchers choose the sample from those to whom they have easy access). In addition, convenience sampling does not represent any group apart from itself, and it does not seek to generalize to the wider population. In the following paragraphs more details are given about the sample for the current research, which includes the school, the teachers, the pupils and the curriculum.

#### **4.5.1.1 The school**

The research was undertaken in one secondary school in Saudi Arabia that was

accessible to the researcher. The school was located in a city in the south west of Saudi Arabia, and was one of the schools currently using the New Secondary Educational System (as described in section 2.8).

Data collection was undertaken across July and August 2007. The Local Authority of Education allocated the researcher to one secondary school teaching summer classes. The researcher obtained permission to enter the school, as described in section 4.7. This was the only school accessible to the researcher in the summer vacation. The system of education in Saudi includes two terms. The first starts in mid-October and continues until mid-February, and the second term starts in March and finishes at the end of June. Usually there is no formal education offered during the summer time. However, the New Secondary Educational System (see Section 2.8) is conducted in a similar way to the university system, and allows pupils to study in the summertime, to give them the opportunity to finish secondary school in two and half years.

The summer school has seventeen teachers across different subjects, two of them teaching the Islamic culture curriculum. Approximately two hundreds pupils were studying during the summer time. The researcher was introduced to the two teachers by the head teacher. The researcher explained the nature of the research to the teachers and asked if they and their pupils were willing to participate. The researcher explained what their participation would involve and clarified to them that they and their pupils were free to withdraw from the study at any time without penalty. Both teachers welcomed the idea and volunteered to take part, giving consent on their own and their pupils' behalf, under the responsibility of the head teacher.

#### **4.5.1.2 The teachers**

Two male teachers participated in the research. These teachers are referred to in this study as 'Teacher A' and 'Teacher B'. Teacher A was a 42-year old Saudi national, with over 19 years of teaching in the same school. He qualified from a University in the south west of Saudi Arabia. The regulation in this university is that all students have to complete their teaching training (pre-service) before they finish their degree, which is known as the 'Educational Integration System'. It involves going into a school one day per week to observe one lesson and to teach one lesson. Teacher A teaches students aged 16, 17, and 18, in years 10, 11, and 12.

Teacher B was a 36-year old Saudi with over 12 years teaching experience. He had taught for three years at elementary level, four years in middle school and five years at secondary level. He qualified from a University in the middle of Saudi Arabia. The teacher had completed his pre-service training under the university regulations, during his final term at university. His teaching and observation lessons were spread over two days. In preparation for teaching, each had been given eight weeks of pre-service training (one day per week). Teacher B currently teaches pupils aged 16, 17, and 18, in years 10, 11, and 12.

Both teachers taught 20 hours per week and also did supervisory work with 12 students for four hours a week. Both were required to attend morning assembly (during which all pupils must take part in some exercise and listen to the daily announcements). They have further supervisory duties one day a week (at assembly, in breaks, at lunch time, for bell ringing, and to check that all teachers are present in class). Teacher A was responsible for the resources centre, which has computers, Internet access, overhead projects, and whiteboards.

#### **4.5.1.3 The pupils**

Thirty-nine year 11 pupils participated in the research (aged 17). These pupils were in two classes. Sixteen pupils were in class A, which was taught by Teacher A, and 23 pupils were in class B (taught by Teacher B). The difference in class size was because pupils had been given the freedom to choose their classes and their teacher, which is consistent with The New Secondary Educational System guidelines (see Section 2.8).

#### **4.5.1.4 The curriculum**

There are five Islamic culture classes at secondary level, namely The Holy Quran, Al-Tafsir, Al-Tawhid, Al-Hadith, and Al-Fiqh (see Section 2.7). The present research focussed on the Al-Fiqh curriculum. Under the New Secondary Educational System, the senior school management determines which curriculum is taught during the summer term, which can mean that not all aspects of the Islamic curricula are available during the summer timetable. The school management of the target school in this study deemed that only Al-Fiqh would be taught in the summer. Therefore, no other Islamic culture curriculum was available to the researcher.

The Al-Fiqh curriculum in year 11 of secondary school covers nine units, which include several topics, namely: a) introduction to the Al-Fiqh curriculum and its rules in *sharia*, b) legal rules of marriage in Islam, c) divorce in Islam and all other matters of family and marital life, d) Islamic transaction laws (governing commercial sales, e) types of transaction forbidden by Islamic law, f) the law on sales by instalment and business transactions, g) Islamic law on letting, hiring out, loan and proxy matters, h) the rules on competition in Islam, i) criminal law (murder, suicide and car accidents) and j) punishments under Islamic law. Seven units were covered during the implementation stage. Teachers worked with pupils in preparation themselves for statutory examination.

Both teachers had previously taught the Islamic culture curriculum, which includes The Holy Quran, Al-Tafsir, Al-Tawhid, Al-Hadith, and Al-Fiqh (see section 2.7). Teacher A had taught the current curriculum (Al-Fiqh) three times before. This was the first time that Teacher B had taught Al-Fiqh.

#### **4.5.2 Training Programmes for Teachers**

As intended, prior to implementation, teachers completed a 10-hour professional development programme to develop their knowledge, skills and understanding of cooperative learning methods. The programme was a combination of the transformative and training models as set out by Kennedy (2005), in that it is not only about helping teachers update their skills related to teaching approaches but also serves “as a means of supporting educational change” (Kennedy, 2005, p. 246).

The content of the training programme was informed by several factors. The first was the literature, in which authors outlined the key issues that should be included and discussed previous attempts to introduce cooperative learning in the classroom (Johnson & Johnson, 1989; 2003; Slavin, 1995; Vermette and Foote, 2001). According to Jacobs *et al.* (2002) there are several principles that teachers should be aware of if they want to introduce cooperative learning in their classes: a) Teachers should appreciate the value of cooperative learning, which is not just a way of learning but a way of life. They should know the meaning of cooperative learning, how the classroom environment should be arranged and managed; b) Designing the group and building teams should also be addressed; c) Time should be given to develop the tools necessary for cooperative learning, including individual accountability, interaction, interdependency, equal participation and cooperation skills; and d) Teachers should also know how to help the group to become more independent by delegating responsibility for learning.

Mandel (2003) draws attention to the importance of preparing students for the real world, outlining some important issues that should be taken into account in developing cooperative learning lessons. For example, teachers and pupils should know why working cooperatively in groups is important in today's business world. Moreover, they should understand the elements, concepts and components of cooperative learning and when working in groups. He added that the materials used in cooperative learning should be prepared to serve group goals, and planned and designed to develop higher-order thinking skills, leadership and problem-solving.

The training programme was informed by Ishler *et al.*'s (1998) research on the development of a statewide training programme in cooperative learning for teachers in the USA. Ishler *et al.* (1998) focused on the nature of cooperative learning, how the teacher structures cooperative learning lessons, what decisions the teacher has to make in planning lessons, how to explain the task and the cooperative structure to pupils, how to conduct the lessons, how to monitor pupil groups as they work and interact to improve task-fulfilment and teamwork, how to assess pupils learning at the end of the lesson, how to ensure groups develop their effectiveness and how to teach pupils social skills.

A further factor contributing to the development of the training programme came out of the researcher's Master dissertation (Algarfi, 2005), which highlighted the lack of use of the cooperative learning method in Saudi classrooms and the lack of knowledge and understanding of this method apparent from questionnaire responses from teachers. The final factor was extensive discussion with supervisors regarding what should be included in the content of the training programme.

Given these factors, the training programme focused on the following content. It covered definitions of cooperative learning, the need for cooperative learning in Saudi contexts, types of cooperative learning, the advantages and disadvantages of the methods, ways of implementing cooperative learning in the classroom, planning lessons in teachers' books, familiarising teachers with ways of using the methods on the Islamic curriculum, addressing the possible challenges during implementation, and some segments of videos taken in the UK context. These UK videos were used, as the researcher was not able to locate similar visual materials from the Saudi context. After training, the teachers planned a set of lessons together to enable some of the content to be delivered through the cooperative learning method. More details of the training programme can be found in Appendix A.

The training programme took place over three days (10 hours) and was delivered by the researcher. The researcher's roles were to develop the training programme content, to prepare PowerPoint slides, to prepare handouts, from some books and websites, to translate some materials from English to Arabic, to prepare the room in the school where the teachers would attend the programme, and finally to deliver the programme.

The video (DVD) that was used in the training programme was entitled *Pedagogy and Practice: Teaching and Learning in Secondary Schools* (DfES, 2004). It contained several clips illustrating the use of group work in the classroom. These clips specifically were: a) group work in the primary school; b) Snowballing: a strategy for using group work in an English language class and the importance of reminding pupils of the main aims of a lesson; c) setting ground rules for group-work, where teachers explain to pupils what they are expecting from them in the knowledge and the skills base; d) introducing a task in which groups were asked to cooperate, discuss, interact with each

other and produce work as a group on a sheet of paper; and e) introducing a further group task which concentrated on the roles of the pupils inside each group and what was the responsibility of each group member.

These clips were in English, which the teachers found difficult to understand. The researcher showed short sections (a couple of minutes) of the tape and then paused to translate and explain what was taking place. These clips offered the teachers a visualisation of what a cooperative learning classroom might look like, the teachers' roles and the pupils' tasks.

### **4.5.3 Data Collection**

Data collection is a crucial aspect of the project. The data were collected across the two stages from teachers and pupils. The data collection methods are discussed below.

#### **4.5.3.1 Interviews**

Individual semi-structured interviews with both teachers took place at four points across the research period. The first interviews were before the training programme, and lasted approximately 30 minutes each. The purpose was to allow teachers to discuss their present teaching approaches, their initial perspective on cooperative learning methods, and what they saw as the possible benefits or pitfalls of using the approach in their teaching. The interviews informed the researcher of any need to add additional elements or materials to the training programme (which was not necessary, as all elements were covered).

The teachers were interviewed individually after the training programme for about 40 minutes to gather their opinions on the training programme and to assess the extent to

which they felt ready to implement cooperative learning methods in their teaching of the curriculum. Approximately half way through the implementation stage, teachers were interviewed again. These interviews took around 50 minutes with Teacher A and about 40 minutes with Teacher B. They allowed the teachers to give their impressions about the lessons, to describe any successes/difficulties they encountered and their views regarding pupils' responses and work in groups. Teachers also discussed any perceived changes to their instructional, organisational and managerial practice in the classroom.

Exit interviews took place at the end of the training stage and it lasted about 65 minutes with Teacher A and about 50 minutes with Teacher B. The aim was to determine the teachers' perspectives about their experiences of cooperative learning across the previous four/five weeks, their views on pupils' responses, and thoughts on their classroom practice during the lessons.

#### **4.5.3.1.1 Interview Pilot Study**

Pilot interviews had first been conducted with three Saudi teachers in Southampton, who at the time were full time research students in the UK, and were familiar with Saudi classrooms and the curriculum. The purpose was to explore the important issues relating to the theme of cooperative learning in particular environments. In addition, it offered the researcher the opportunity to practise interview procedures. The interviews sought to address any unclear questions or identify additional questions that should be asked from the interviewees' perspective. From the pilot, comments led to a rethinking of the ordering of the questions. Questions for the interviews can be seen in Appendix B.

#### **4.5.3.2 The Focus Group Interviews**

The focus group method was used to gather data from pupils (in groups of 4 or 5) and these were conducted at three points (see Table 4.1 above). The first set of interviews was conducted with four focus groups before starting the implementation stage, with the purpose of exploring pupils' current classroom experiences, their opinions about present teaching methods, knowledge about cooperative learning and possible reactions to working in a group setting. In addition, the researcher also probed for information about pupils' prior learning experiences in the classroom and on particular ways that encouraged them to learn, made them enthusiastic, or ready to learn. The questions for these interviews are in Appendix C. The second set was conducted with seven focus groups in the middle of the implementation stage. The purpose was to gather pupils' initial perspectives on cooperative learning and for them to comment on their in-class interaction with peers and teachers. It also allowed the researcher to pursue any problems pupils might be facing in terms of perceived success.

The third set of interview was conducted with five focus groups and took place at the end of the project. The aim was to obtain summary feedback from pupils on the lessons, their views on the teaching approach used, their beliefs about learning in class in a cooperative environment and whether they would like to continue to be taught in such a way in the future. Group were formed by the teachers and kept namely the same until the end of the implementation stage. The numbers of pupils in the groups over the three phases are presented in Table 4.3. The changes in group sizes were because of absences or unavailability.

**Table 4.3 Pupils' numbers in the focus group interviews**

Groups	Pupil numbers in the first focus group interview	Pupil numbers in the second focus group interview	Pupil numbers in the third focus group interview	Pupils Numbers in groups
Group 1	5	4	4	1-2-3-4-5
Group 2	5	6	6	6-7-8-9-10-11
Group 3	4	4	4	12-13-14-15
Group 4	4	4	6	16-17-18-19-20-21
Group 5		5	4	22-23-24-25-26
Group 6		5		27-28-29-30-31
Group 7		6		32-33-34-35-36-37

#### 4.5.3.3 Observation

The current research involved five observations of lessons, weekly over four weeks. The researcher observed all lessons taught by each teacher and made daily notes. Notes included a description of the setting, the events that took place and pupils' reactions to the lessons (paraphrased or direct quotes of what was heard) (Pattan, 1990). The purpose was to allow the researcher to understand deeply what was going on in the classroom. It also gave the researcher the opportunity to gather direct information that supported and clarified information gathered in interviews, focus groups or journals. In addition, short segments of some lessons were videoed, which were reviewed later and added to the field notes to support the notes gathered in the observations. These segments included how the teachers introduced the lessons, carried out plenary and monitored group work, explained a task and organised the class for either Jigsaw or STAD. The first two lessons for each teacher were videoed in full to offer a starting point for describing the teachers' approach prior to introducing the cooperative learning methods. By the end of the implementation stage, a copy of these video clips were requested by both teachers, as they claimed that they would use them as support for

themselves or for their colleagues.

#### **4.5.3.4 Reflective journal/log**

To enable both teachers to think about what took place in the lessons and how they could improve their practice (Bolin, 1988; Oberg, 1990), the teachers kept a reflective log (audio). They were asked individually, during the implementation of the training stage, to record/describe significant events that took place during the lessons. Both teachers made eight audio entries, which lasted on average between one and three minutes.

All the individual teacher interviews, the focus groups interviews and audio reflective journal were transcribed by the researcher. Transcripts were then translated into English by the researcher. All the data supporting the emergent themes were included in the thesis.

### **4.6 Research Data Analysis**

According to Bogdan and Biklen (1992) qualitative data analysis is the process of systematically searching and arranging the transcripts of the data collected to increase the researchers' understanding of them and to enable them to present what they have found to others. They add that such analysis involves working with data, organizing them, breaking them into units and synthesizing them under themes or hypotheses.

According to Berg (2004), there are a number of approaches used by qualitative researchers to analyze their data. Interpretative approaches look at the context of activity or action in the light of data collected by interviews and observed as text. The social or anthropological approaches provide researchers with a special perspective on

the material collected during the research and a special understanding of the participants and how to interpret their context. Researchers employing such methods of analysis are interested in the behavioural mechanisms of everyday life, language and relationships. Analytical processes can involve multiple sources of data (such as interviews, observations and diaries). The collaborative social research approach gathers data with the participation of subjects seen as stockholders in a situation with a need for change or action. Such analytical processes may be similar to those in the other two methods above.

According to Ezzy (2000), data analysis in most qualitative research should begin during data collection, consistent with the belief relationships between theory and data. If data analysis begins only after and not during collection, researchers can miss many valuable opportunities available at the time of collection.

The qualitative research presented in this thesis recognizes that individuals construct their own meanings of situations which emerge from social settings and that data analysis in this thesis was inductive rather than deductive, with constructs deriving from the data during the research (Lincoln & Guba, 1985; LeCompte & Preissle, 1993). According to Somekh and Lewin (2005), inductive analysis refers to the process of constructing theories from empirical data by searching for themes and seeking to make meanings from the evidence. It is a systematic procedure for analysing qualitative data where the analysis is guided by specific objectives and research questions (Thomas, 2003).

LeCompte & Preissle (1993) identify a number of procedural tools appropriate for the analysis of the qualitative data, which in this study were gathered from observations

(live and from video), individual interviews with teachers, focus group interviews with pupils and teacher reflective journals.

#### **4.6.1 Constant Comparison**

An analytical tool outlined by LeCompte & Preissle (1993) which was used in this study, was constant comparison. Boeije (2002) states that by comparing data researchers are able to do what is necessary to develop theory or themes by categorising, coding, delineating categories and linking them together to draw a final picture of the data. In addition, in constant comparison, the researcher compares new data with existing data and emerging categories and themes are devised in an effort to achieve a fit between these categories and the data (Choen *et al.*, 2008). In keeping with the research design in this thesis, Choen and colleagues add that in the constant comparison method, data are compared across a range of situations, times, groups of people, and through a range of methods. Glaser (1996) believed that the constant comparison method can be conducted through three stages (as employed in this research) The first involves coding of incidents and comparing these with previous incidents in the same and different groups and with other data that are in the same category. The second involves memos and further coding; and the third, after modifying and making the codes uniform, the categories and general themes emerge. In addition, Merriam (1998) writes that, as a procedural tool for the analysis of qualitative data, constant comparison does what it says, in that it involves the reading and re-reading of notes and transcripts in an effort to constantly compare data across participants, settings and phases of data collection in an effort to establish linkages and develop categories, which are ultimately clustered into themes. In this thesis and in accordance with Merriam (1998), constant comparison proceeded from the start of data collection in an attempt to see prominent linkages and discover repeated events. Specifically data in this study continued to be compared

across individual teachers and over time following additional interviews with the teachers throughout the duration of data collection. Similarly, data were compared across the range of pupil focus groups and again over time. Indeed, the comparison of data gathered in this thesis for the research questions was "...compared across a range of situations, times, groups of people, and through the range of methods and thus the process resonates with the methodological notion of triangulation" (Cohen *et al.* 2008, p.151).

Boeije (2002) reports that analysis using constant comparison consists of two activities; fragmenting data then connecting data under a theme. In offering a practical illustration of the levels involved in data analysis using the constant comparison approach, Boeije outlined five-steps: 1) comparison within a single interview; 2) comparison between interviews; 3) comparison within interviews from different group; 4) comparison in pairs at the level of couple; and 5) comparing couples. Boeije's (2002) work was significant in this study and given the research design in this thesis it led to the development of three steps for the purposes of illustrating how data were analysed using constant comparison.

There now follows a practical illustration that makes reference to data collected through interviews with the teachers and it exemplifies how a specific theme from the teacher interviews was identified using constant comparison. The steps in this example were as follows;

**1) comparison within a single interview:**

Initially constant comparison was conducted with one interview transcript (for example Interview 1 with Teacher A). It started with open coding and every part of the interview was carefully studied to determine what had been said and specific fragments were

labelled using a suitable code. This process aimed to establish consistency by comparing different interview parts. Following this the researcher studied the entire interview and connected all similar codes under one theme. For example, in the first stem from the first interview with Teacher A, a number of open codes were apparent. The research found in the first stem the following fragments: ('insufficient pre-service training', 'lack in in-service training', 'the in-service training programmes not appropriate', 'giving training in teaching methods is the priority', 'teachers need training', 'training is very important', 'need training on cooperative learning', 'not understanding cooperative learning', 'need for more training', 'need clarification about cooperative learning'). All these were coded as 'training'. Further comparison in terms of differences and similarities within these fragments on aspects of training became apparent. The researcher then collated all these codes under a theme that was identified as "Importance of Training".

## **2) comparison between interviews within the same group**

In this step all new interviews are treated as described in step one. Using constant comparison the researcher compared the fragments and themes with other individuals who have the same experience [in this thesis Teacher B]. A key question drove this stage of the analysis, is Teacher A talking about the same category as Teacher B? For purposes of illustration by looking at Teacher B's first interview in this research similar fragments emerged and were also coded as 'training'. Examples of these fragments included; 'There is a discord and gap between teachers and the department of training', 'they force teachers to participate in training programmes', 'I want to know everything about this method (CL)', 'I need anything to help me to implement it correctly', 'The important issue here is 'training''. This resulted in an extension in the number of fragments. When put together all these open codes continue to describe the concept at

issue and were also categorised under the same theme with Teacher A, which was “Importance of Training”.

### **3) comparing interviews within the same group over time**

Continuing this illustration, the aim of this step was to find out any change in teachers perspectives regarding the specific phenomenon over time by comparing the individual interviews over time. In this example, the themes which emerged from the first interview with the Teachers were compared with the themes that emerged from the second, third and fourth interviews respectively. In illustrating this example, Teacher A continued to talk about training in his second interview where the following coded fragments were illustrative; ‘The training programme was good’, ‘theoretical part is enough and brilliant’, ‘we need more practical’, ‘training programme added much new information’, ‘the training was very interesting and wonderful’, ‘new to me’; and similarly in the third interview examples of coded fragments included: ‘need of training’, ‘CPD is necessary’, ‘transferring my experience to others’. References to ‘training’ remained in the final interview as the following coded fragments attest; ‘training programme was a great shift’, ‘clear picture after training programme,’ ‘example from Saudi system for training’. For illustration purposes, this step permitted the identification of a particular similarity between Teacher A and Teacher B leading to a confirmation of a theme that was not only significant for both teachers but was one both could relate to in a range of ways across the duration of the study.

By comparing the themes which emerged from using constant comparison in this research with the existing literature it was found some themes were similar to the existing literature, for instance, planning for cooperative learning (Sharan and Sharan, 1992), the shift from directed pedagogy (Rolheiser and Stevahn, 1998), physical layout

(Kagan and Kagan, 1994), active supervision and monitoring (Brody and Davidson, 1998; Alkanem et al., 2005), importance of training (Angelides, 2002; Gillies, 2004, b; Roux and Ferreira, 2005) and peer teaching and pupil involvement (Johnson and Johnson, 2006). However, there are some themes that can be regarded as ‘new’ that emerged from this thesis such as, but not limited, to freedom and the feeling of nearness expressed by teachers and pupils respectively.

In conclusion, for each research question, this iterative process resulted in a number of themes that emerged from the data and which were those that participants deemed to be significant and/or which offered an emerging explanation of the phenomenon. In line with Boeije (2002) the practical example above was intended to show how the data were analysed descriptively using one approach to analysing qualitative data [constant comparison methods] by coding the data, grouping them together and generating themes, in this instance the ‘Importance of Training’.

#### **4.7 Ethical Issues**

Ethical concerns can be extremely complex. Ethical issues depend on the nature of the research and the purpose of data collection. In the observation method, for example, there are ethical issues that should be taken into account, for instance, the privacy of subjects, who did not know that they were being observed. In addition, when covert research is necessary to access some fields, some subjects would not be involved (Cohen *et al.*, 2008). Interviewing also has some ethical issues, concerning interpersonal interactions and information on personal condition; in addition, in interviews, there are three main areas of ethical issues, namely informed consent, confidentiality and the consequences of interviews (McNamee, 2002).

On the matter of ethical issues, a number of official arrangements were made. Firstly, a letter from the School of Education at the University of Southampton was sent by the researcher to the Saudi Culture Office in London in order to obtain approval from the researcher's sponsor to carry out the fieldwork. Secondly, after receiving approval from the Saudi Culture Office, including the approval from the researcher's sponsor, an approval was sought and received from the Local Education Authority in the region to allow the researcher to enter the school. This approval was obtained by sending a letter from the sponsoring university (College of Education) to the president of the Local Education Authority. Then the LEA informed the school (the head teacher and the teachers).

Thirdly, when the researcher arrived at the school, he introduced himself to the head teacher and explained to him the aim, the processes, and the expected time framework of the research and also the area within the secondary curriculum (Islamic culture curriculum). Consequently, the head teacher called all the teachers who were going to teach Islamic culture curriculum in that summer (two teachers) and introduced the researcher to them.

The researcher was then introduced to the teachers by the head teacher. The researcher explained the aims and the purpose of the research, the two phases of the research (training stage and implementation of training stage), and the time-line of the intended study. Both teachers agreed and gave their consent to participate. The head teacher gave his agreement that the pupils would take part in the study.

Both the teachers and pupils were given the freedom to withdraw from the project at any time without penalty. They were also informed by the researcher that the data

collected would be anonymous and confidential and used just for the purpose of the research. Finally, all necessary ethics checklists / documentation and research governance matters were completed and approved at the University of Southampton and some documents were signed before leaving to undertake the fieldwork in Saudi.

The data collected were stored in a safe place and were only accessible to the researcher during the data collection and later to the thesis supervisors during the writing-up. In addition, the anonymity of the participants (teachers and pupils) and the school were protected. The researcher did not use real names or any other personal means of identification.

#### **4.8 Validity and Reliability**

Validity and reliability are very important issues that should be taken into account by researchers. According to Cohen *et al.* (2008) validity has a key effect on research, which might otherwise be worthless. Validity is thus a requirement for both qualitative and quantitative research. Validity in qualitative research can be addressed through honesty, depth, richness and scope of data achieved from the participants in the research and the triangulation of data collection methods (Cohen *et al.*, 2008).

Reliability, according to Golafshani (2003), is a concept used for testing or evaluating the results of quantitative research through reduplicating the same process to obtain the same result for the purpose of 'explaining'. Reliability can be used in qualitative research by testing the quality of the research, which depends on the purpose of 'generating understanding'. Although there is a debate about the relevance of reliability in qualitative research, Moss (1994) and Golafshani (2003) state that there is no validity without reliability, and the concept 'validity' is sufficient to establish the concept of

'reliability', which means that reliability is a consequence of validity in any study. Chioncel *et al.* (2003) and Cohen *et al.* (2008) both state that validity and reliability in qualitative research can be reached by minimizing the amount of bias as much as possible, which, indeed, can be achieved by triangulating several methods and addressing trustworthiness. Accordingly, this research triangulated multiple methods, interviews, observation, reflective journal and focus group interviews, as a way of supporting research validity and reliability.

In addition, the supervisor engaged in a form of 'peer debriefing', which is as Cohen *et al.* (2008) state "review the data to suggest if the researcher is being too selective (e.g. of individuals, of data, of inference) to check biases or absences in reconstructions" (p.188). Moreover, Merriam (1998) states that research methods texts advocate peer debriefing as a process to enhance the credibility or validity of qualitative research. Furthermore, the major purpose of peer debriefing, according to Lincoln and Guba (1985), is to enhance the credibility, or truth value, of a qualitative study, by providing "an external check on the inquiry process" (p. 301). Specifically, in this study supervisors regularly played 'devil's advocate' and challenged initial interpretations of the data to help the researcher become aware of what they subjectively brought to the research, be these merits or potential pitfalls.

In addition, the researcher acknowledged and recognized the potential influences of the Hawthorne Effect in the study, in that improvement in participant performance could result from an awareness that efforts are being made to bring about an improvement through the attention participants believe is being received from the researcher. This study did not employ a control group design for reasons as previously explained, however, the researcher spent an extensive time with the participants in the setting (that

was equivalent to other published qualitative work looking at the development of group learning, e.g. Hastie (1998)) and efforts to triangulate this qualitative study findings across individuals, data collection methods, and over time served to enhance the trustworthiness of the findings (e.g. Glesne & Peshkin, 1992; Merriam, 1998; Cohen *et al.*)

#### **4.9 Summary**

This chapter has described the research methodology for the present investigation. Some examples of qualitative and quantitative research were presented, as well as details of data collection methods, the triangulation method and its use in the current research. In addition, this chapter has described the setting of the present research and the procedural tool used for data analysis, and discussed ethical issues. In the next chapters, the findings of the research are presented for the three research questions.

# CHAPTER FIVE

## DATA ANALYSIS

### 5.1 Introduction

The research questions were:

1. What were Saudi teachers' perceptions of cooperative learning as an approach to teaching and learning both during and following their professional development?
2. In what ways did Saudi students respond to cooperative learning in their classroom?
3. To what extent has experience with cooperative learning influenced teachers' classroom practice?

To answer these questions, data were collected through interviews, a focus group, and observation. In addition, short segments of some lessons were videoed and teachers kept an audio reflective log.

This chapter presents the findings of the research, and they will be presented according to the main research questions stated above. All the relevant data from all methods were triangulated to provide a collective answer to each research question. In this empirical study, the data were analysed descriptively using the inductive approach of analysing qualitative data and constant comparison methods, by coding the data, grouping them together and generating themes crossing all cases. This strategy of analysing data and generating themes was used to try to answer all the questions.

## **5.2 Research Question 1**

The first question:

What were Saudi teachers' perceptions of cooperative learning as an approach to teaching and learning both during and following their professional development?

As a way of answering this question, a total of four individual interviews were conducted with the two teachers who participated in the research during two stages (training stage and implementation of training stage), as set out in the methodology chapter (see section 4.5.3.1). The aims of these interviews were to explore the teachers' perspectives before and after their professional development and before, during and after implementing the new teaching and learning approach (cooperative learning) in their classes. In addition, both teachers kept an audio reflective log during the implementation stage (see section 4.5.3.4) to allow them to further document their ongoing impressions about implementing cooperative learning in their classrooms. Both teachers made eight entries, which lasted on average between one minute and three minutes.

### **5.2.1 The Teachers**

The following sub-sections present the major themes that emerged from the data collected from the teachers, which they believed to be significant.

#### **5.2.1.1 Importance of Training**

During the first interview teachers discussed training in a number of ways. Teacher A had had a lack of training in cooperative learning during both his pre-service and in-service education. The teacher said "... practically, there was insufficient pre-service training. I went to one school and I gave just two lessons for teacher training" (Teacher

A, Interview 1).

More generally, an absence of relevant continuous professional development (in-service part) was also evident in the following statement:

“There is a lack in in-service training programmes and I can call that inability...on the other hand, some of the programmes of training presented by Local Education Authorities (LEA) are not appropriate for the teachers and the reality in schools, for example, they gave a course about a week in ‘Quality in Education’ which was good, but I believe that giving training in teaching methods is the priority that teachers need....training is very important....the teachers need training on cooperative learning – we do not understand the method of cooperative learning” (Teacher A, interview 1).

Teacher B explained the limited alignment between training need and supply:

“There is a discord and a gap between teachers in schools and the department of training in the Local Education Authority (LEA). This department forces all teachers to participate in some training programmes, but teachers refused because they are not convinced of these programmes” (Teacher B, interview 1).

On the topic of developing different teaching and learning approaches, at the end of first interview, the teacher said:

“We need more training and clarification about cooperative learning methods and the ways that assist teachers in applying them in their classes” (Teacher A, interview 1).

Although both teachers were fascinated by learning the cooperative learning method, they were worried and concerned about taking any forward step before understanding and being trained on how this method should be implemented. Teacher B set out what he hoped to gain from the cooperative learning training programme:

“I want to know everything about this method before I use it. Also I need

anything that might help me to implement it correctly. The important issue here is ‘the training’ on how to implement this method and that is what I need” (Teacher B, Interview 1).

After attending the three day (10 hour) training programme on cooperative learning, both teachers made reference to the training programme that they had received. They also indicated some helpful points and expressed their views about the new issues that they learned through the training programme. Teacher A highlighted that:

“The training programme was good. It needs more time in the practical part, the theoretical part is enough and brilliant - but in the matter of practical we need more ...the training programme added much new information to me.... almost all the information that I got from the training programme was new comparing with what I knew regarding cooperative learning” (Teacher A, interview 2).

Teacher B showed his reflection on the training program:

“The training programme was very good. I felt I benefited from it. I know now the meaning of cooperative learning methods and how they should be used correctly. Also, the training programme added to me that there are several methods of cooperative learning and more than one style...the training programme added to me also that there are many ways of transferring information to pupils, which are better than the traditional method and lead to a more active lesson. The literature [in the handout] that indicated the benefits of using cooperative learning in the west were very useful to me, which persuaded me and pushed me more to implement this method in the classroom...the types of cooperative learning methods were very interesting, because they seem easy to me and applicable. Also, the video parts were very exciting and they gave us the opportunity to see real practice of cooperative learning and that is very important to see the success of this method practically not just theoretically” (Teacher B, interview 2).

The video clips that were used in the training programme were also well-received by Teacher A:

“The video parts that we saw were very interesting and wonderful. If they were in Arabic and from our educational environment it would be better, because of the obstacle of language” (Teacher A, interview 2).

The interview allowed the teachers the opportunity to talk about the merits and the concerns of the training programme. The following statement is an illustration:

“The advantages were many; however, the disadvantages were that the theoretical part was so long. It would be better if we gave the types of cooperative learning methods and the practical part more time because we need more practice” (Teacher A, interview 2).

After the training programme the teachers described what they believed cooperative learning was about. Teacher A described his idea of cooperative learning as follows:

“After the training programmes my vision to the concept of cooperative learning became unambiguous. It was there an idea about it but it was not clear enough like now...the idea that we did have about cooperative learning was just grouping pupils and leaving them alone; but now we know how to divide the groups, to put the rules for the pupils, the skills that they should achieve, connect all the pupils in each group with each other in winning and losing ...” (Teacher A, interview 2).

In the same way, Teacher B acknowledged that the training programme he had received clarified cooperative learning to him:

“In fact, I had nothing about cooperative learning methods before the training programme, but now I think the concept of cooperative learning is much clearer in my mind” (Teacher B, interview 2).

Teacher A admitted that changing his teaching method to another would need support and self-confidence, which he claimed came from the training:

“It was there, a self-confidence, and I feel confident now to practise the new method, but after the training programme the level of confidence is much higher;

because implementing something with a clear picture is not like implementing it vaguely” (Teacher A, interview 2).

Towards the middle of the implementation stage, Teacher A reflected on his work. Referring again to the training he had received, he described some of the new features in his classroom:

“The idea of designing groups and giving everyone a part to play, [the] types of cooperative learning methods and the comments in each method were very useful for me in the last two weeks. [In addition] ...the experience so far is excellent and I am really admiring the style of rewarding” (Teacher A, interview 3).

The notion of enthusiasm and reflection on the project was evident:

“We need everything that had been shown in this project to be gathered in on file as a ‘training case’, which all the teachers, in this school or in other schools, can benefit from. I believe that teachers’ continued development is necessary and such a method [cooperative learning] can be implemented easily.....and now I have an idea of transferring my experience with cooperative learning to the rest of the teachers in this school and I am thinking to publish a leaflet on cooperative learning methods to persuade the teachers to employ these methods in their classes. Because persuasion is needed and very important; any teacher who is not persuaded by these methods will not use them” (Teacher A, interview 3).

In the final interview, which aimed to explore the teachers overall perceptions regarding cooperative learning method, Teacher A described the training programme as stimulating a great change for him:

“As a matter of fact, the training programme was a great shift for me; I had little information about cooperative learning but the picture was not clear to me like now after the training and the application” (Teacher A, interview 4).

Teacher B summed up his views on the training he had received prior to implementation:

“For me as a teacher the training programme added many things to me such as that I discover a new method that can be used to deliver information to the pupils correctly. In addition, class management is another issue that I benefit from such a method ... the implementation stage is very useful, because it allowed us to practise the new method correctly.... for developing the project in the future, I think training, especially with practice, will work effectively. In addition, teachers need live examples like in the video parts that you showed us, and I think after doing that no teacher can reject or find an excuse to not use cooperative learning” (Teacher B, interview 4).

At the end of the implementation stage Teacher A wished to see ‘live’ examples in many subjects from the Saudi educational environment:

“I wish to see examples from our educational system, because of the obstacle of language in those video parts that we saw in the training programme....and I wish to see examples of using cooperative learning in more subjects, not just in Islamic culture courses. Why I am saying that is because I want those teachers who claim to be using cooperative learning in their classes to see the real practice of such methods in the classroom, which is not just putting pupils in groups and that is it” (Teacher A, interview 4).

#### **5.2.1.2 Changing roles, responsibilities and relationships**

Both teachers admitted that their instructional role prior to implementing cooperative learning was to transmit information and direct the learning toward the pupils, so that when the lesson’s topic is new to the pupils, then it is the teachers’ responsibility to explain everything to them. The pupils’ role in the traditional method was to listen, pay attention and receive the new information.

Referring to their established approach of teaching and learning, Teacher A explained

his role in the class, when communicating with pupils:

“My position in the classroom depends on the lesson itself. If pupils have already got the information, my role is to reorganise the information and link them with each other. If the lesson topic is new to the pupils, then it is my responsibility to explain the lesson from A to Z” (Teacher A, interview 1).

Teacher B also described his and his pupils’ roles in the traditional method:

“.... In fact, my role in the classroom is to transfer information to my pupils ... [...the pupils’ roles, from Teacher B’s point of view are that] .... Listening and receiving information and implementing this in their daily life” (Teacher B, interview 1).

Teacher A also clarified pupils’ roles in the class:

“If they already know the information then their roles are to recall the information and participate in the lesson through discussion and answering questions. If they do not know anything about the new topic, then their roles are listening and receiving information” (Teacher A, interview 1).

When teachers attempt to introduce cooperative learning methods in their classes, it is expected that they play some specific roles. A move to a more facilitating role became evident in the following comments:

“My role in the class now is just to give every group a part to play and observe and watch them and give them my advice when they ask for help” (Teacher A, interview 3).

By the middle of the implementation stage, the teachers illustrated that their roles in the classes became different:

“I was watching the pupils to know who was participating, who was attentive, also I was looking for the skills, which I wrote on the board, if they are employed or not, such as listening skills, communication skills, and working as a team” (Teacher A, interview 3).

Teacher B also explained the change in his role in the classroom within the cooperative learning style of teaching:

“I was concentrating on who was participating, who was not, who was playing a part with his group and who was not. Also, I was looking for interactions between the pupils in each group” (Teacher B, interview 3).

Teacher B also showed his growing understanding of cooperative learning by moving to a more facilitating role, evident also in the following remark:

“The important issue for me now in the implementation stage is to link the pupils with each other, to encourage them to depend on each other and not to get back to me unless they have a problem” (Teacher B, interview 3).

Teacher A also described how time was now being used differently, regarding his role in the classroom. He said:

“Now I have time to know my pupils’ characteristics, their skills, their academic levels and so on. Also, I have the time now to evaluate each pupil sufficiently, for example, if I concentrate everyday on just one pupil from each group, then I would say I assessed them well” (Teacher A, interview 3).

When using cooperative learning methods, pupils are encouraged to take turn on specific duties for their groups / teams. The inclusion of specific team-based roles was mentioned by Teacher A:

“In the first two weeks, there were some students who did not participate completely and they were a little bit passive, but with the Jigsaw method all of them worked and participated” (Teacher A, interview 4).

Compared with the traditional method, teachers described the emerging responsibilities in some pupils:

“Pupils in the lecture method were passive and inactive, but when they realised that they have to play the teacher part and the pupils’ part, and they have to

understand the topic and explain it to their class mates, they changed. They changed by taking responsibility, communicating with each other, and by learning many new skills, such as standing in front of the class and presenting their team part, interaction, listening skills and critical thinking” (Teacher A, interview 4).

Teacher B reflected on the positive impact of the cooperative learning method, regarding responsibility and relationship, on his pupils:

“There is a big change in my pupils and they are moving forward, through participation, interaction in both the sub-group and in the original group. Pupils are doing their best to transfer what they got to their classmates. The important issue that I noticed is that the feeling of embarrassment started to disappear. Also, some statements start to appear between the group members such as (I did not understand you. Could you repeat that please ... what do you mean by that, ...could you explain more please ..)” (Teacher B, Reflective journal/log No.4)

The use of specific roles that encouraged responsibility enabled the teachers to discover new skills in their pupils; that were seen as very valuable in forming new relationships:

“..... I know who is appropriate for leadership, who is the writer and who is the presenter...one of the benefits of using cooperative learning is motivating pupils to search for new information. Also, pupils value information that they gain themselves. This method ends weariness and tediousness in class and through using [cooperative learning] many skills can be discovered” (Teacher A, interview 3).

Teacher B also offered an account of what he believed to be the most significant shift in teacher and pupils in class roles.

“My role in the class now is just an organiser and a facilitator and if there is anything not clear to the pupils my role is to clarify it for them....through cooperative learning I felt that I am nearer my pupils more than the situation in the lecture method. In the traditional method, I explain the lesson many times but I cannot say that this satisfies my conscience, but with the cooperative

learning method, I pass by all the groups, I observe and watch them. I can know the performance of each group through listening to them sitting with them, which gives me more contact with my pupils” (Teacher B, interview 4).

The concept of ‘emerging pupil interdependency’ became evident as pupils started to adjust to the expectations of cooperative learning:

“There are several benefits for my pupils. For instance, pupils started to depend on themselves and that is very clear. In addition, they start to build a confidence in themselves and they felt that they can do something inside the classroom. The level of comprehension increased in a short time. Moreover, standing pupils in front of the class and then talking and presenting some of the materials needs a high level of skills. In fact, when we continue to use cooperative learning, I think pupils can manage to learn the lesson completely themselves and this is also high level, compared with the past, when they were passive, just listening” (Teacher A, interview 3).

Teacher A also emphasised the high level of communication skills that his pupils gained from using the cooperative learning method:

“the pupils start to stand up in front of the class and present the lesson to their classmates normally and confidently, which is, indeed, high level of skills...the pupils start to present the lesson to the whole class clearly and they write on the board confidently” (Teacher A, Reflective journal/log N.5)

Teacher B further illustrated some of the major changes in his pupils’ relationships:

“I noticed that many pupils were free from fear of standing and presenting part of the lesson in front of their classmates. Also the concept of working together and winning together was spread among them” (Teacher B, interview 3).

### **5.2.1.3 Emerging Clarity**

By putting the theories that were given in the training programme into practice, both teachers and pupils progressively understood the method and its features clearly and

recognised the benefits that they can achieve. This section, according to the data, highlights to what extent the cooperative learning method and its features became clearer to both teachers.

A limited use of alternative teaching methods, particularly cooperative learning, was an issue that was pointed out by the teachers, before implementing the lessons:

“You can say that the method that I use usually is lecture and that is because it is mainstream in schools to use such method and also because we have only been taught by this method” (Teacher A, interview 1).

Teacher B also outlined the instructional method that he normally used and the reason behind this preference:

“Usually I used the lecture method and sometimes I try to use discussion method. I felt that the discussion method is useful for the pupils and they do like it. In fact, I believe it is better than the lecture method ... the reason that has driven me to use the lecture method is sometimes because the nature of the curriculum [so long] or the lesson which does not allow time for discussion, also teaching load is another reason” (Teacher B, interview 1).

Before, involvement in the project, Teacher B gave his explanation of the concept of cooperative learning:

“I do not exactly know what you mean, but I think the concept of cooperative learning includes the idea of learning from more than one way” (Teacher B, interview 1).

The teachers discussed their lack of familiarity with cooperative learning. Teacher A admitted that his initial understanding was incomplete:

“All the information that I got from the training programme about cooperative learning was new to me ... many visions now about cooperative learning became clearer in my mind; it was there a picture in my mind about cooperative learning

but it was not as clear as it is now” (Teacher A, interview 2).

After the training programme that he had received, Teacher B acknowledged that the concept of cooperative learning became clear:

“.... now I think the concept of cooperative learning is clear in my mind” (Teacher B, interview 2).

The importance of a good understanding of this approach for anyone who attempts cooperative learning was very evident in Teacher A’s account:

“When you implement something [cooperative learning] with a clear idea about it, is not like implementing it with a vague view. Indeed ... some of the teachers have tried to implement cooperative learning methods in this school but without a full picture about it ... they have an idea about cooperative learning, which is just putting students in groups and leaving them alone, which is, in fact, not cooperative learning” (Teacher A, interview 2).

While reflecting upon his classroom teaching to date, the teachers acknowledged that the project served to add considerable new information and knowledge:

“From participating in this project I discovered that we are unaware of lots of things, which pushed me to learn, and I admit that 19 years of teaching is only an experience of one year repeated 19 times, which means that what I did in the first year is the same that I am doing in year 19<sup>th</sup> ..... but by using cooperative learning I now feel the urgent need of training and continued development” (Teacher A, interview 4).

For Teacher A, greater knowledge of cooperative learning, was evident but it also served to identify some confusion and misunderstanding with this pedagogical approach. He commented on other teachers’ practice of cooperative learning in the school saying that:

“Some teachers in the school implement cooperative learning incorrectly and

with an incomplete picture. They have an idea of cooperative learning, but they do not know the basic principles of it, its methods, what is suitable for today or for tomorrow, how to motivate pupils, how to locate them in groups in heterogeneous or homogeneous ways .... more teachers need to be re-prepared in all parts, on how to teach skills to the pupils such as listening skills, working as a team, generating dialogue, respecting others' ideas. Teachers need to master these skills first then familiarise their pupils with them, also they need to know how to motivate and encourage pupils to work together" (Teacher A, interview 2).

Having specific in-class expectations for pupils was not only praised by Teacher A, but also demonstrated his increasing knowledge of this strategy:

"The rule that said every pupil is responsible about the lesson was so effective, because pupils started to understand that they can play the teacher's part and the learner's part at the same time ... Playing parts in each team is still a little weak; I think they need more training on that. Group 2 was the best group last week and because of that I gave them a reward. They were active, they had a leader, and there was a harmony between them" (Teacher A, Interview 3).

Teacher A also reflected on the reward style that he used to encourage pupils to work cooperatively:

"My impression today about my class was wonderful, and the style of rewarding was excellent and effective on the pupils. It encouraged them to work more cooperatively" (Teacher A, reflective journal N.4).

Both teachers revealed many positive outcomes as pupils began to adjust to the expectation and new arrangements. Teacher A, in particular, revealed what he saw:

"When the picture became clearer to the pupils about cooperative learning, they benefited from it and they communicated with each other successfully... The pupils realised that they were playing their part in the lesson and their self-esteem increased. Moreover, the matter of passiveness disappeared, which I noticed today comparing with last week. When pupils, also, understand the

cooperative learning methods more broadly, they will achieve more but that needs teachers to be patient until pupils learn the new idea, understand it and carry on with it (Teacher A, interview 2).

As a further emerging clarity, the change in pupils' participation was highlighted particularly. The teachers described this change:

“In the past the pupils were participating with me in the lesson but those participations were just seconds or minutes. Now, with cooperative learning, the pupils themselves are searching for the information and share them with group mates, then they discuss that information together, then they choose one of them to stand up and present it to the rest of the class. All of these actions are positive change happening in my class today” (Teacher B, interview 3).

Teacher A showed to what extent he understood the idea of cooperative learning. He acknowledged that pupils needed time to become comfortable in the classroom, but were, successful as lessons passed:

“Sometimes there is no harmony between the pupils and I think that is because they are still unfamiliar with the new method of learning; also I think they need more practice on working cooperatively. When I asked them to use one book, the matter of cooperation moves forward and they worked as a team..... there are improvements, every day is better than the day before and the idea of cooperative learning started to become clearer to the pupils. Lessons in the end of last week were wonderful because the idea became unambiguous in pupils' minds” (Teachers A, interview 3).

As indication of the level of understanding and clarity, the teachers saw some parts of cooperative learning where pupils needed more experience. Teacher A, mainly, gave some comments on the pupils' performance in the Jigsaw method:

“The pupils still need training in working in the sub-group in terms of their roles what should they do. On the other hand, when the pupils get back to their original group they work actively and the majority of them tried to explain their

part of the lesson to their group mates correctly. But in general they still need more training in that” (Teacher A, Reflective journal N.7).

In the final interview, clarity about the impact of cooperative learning method upon the pupils was addressed. Teacher A revealed that:

“One of the importance advantages of this method is the concentration on the skills that pupils should achieve, not just information” (Teacher A, interview 4).

Teacher B also became clearer about the positive impact of cooperative learning upon the atmosphere inside classroom. He said:

“With this method, the nearness between the teacher and the pupils increases and they become closer to each other” (Teacher B, interview 4).

At the end of the project, with a clear picture, the teachers emphasised the possibility of using cooperative learning in the Islamic culture curriculum. Teacher B indicated:

“Yes, the Islamic culture curriculum can be taught by cooperative learning methods easily .... I think teaching Islamic culture curriculum through cooperative learning is like any other curriculum and there are many lessons that can be taught by cooperative learning and some lessons need the traditional method. I think, also, there is no privacy for the Islamic culture curriculum which might prevent using cooperative learning. Absolutely, it is possible to the teach Islamic culture curriculum via this method” (Teacher B, interview 4).

In addition, after the experience of using the cooperative learning method in the Al-Fiqh curriculum, Teacher A gave clear statements that this approach is very suitable for much of the curriculum content, but not all:

“The Islamic culture curriculum might be a suitable curriculum that can be taught through cooperative learning methods. There is no problem of using such a method even in teaching the Holy Quran, Al-Hadith or Al-Fiqh. All of them can be taught by cooperative learning (Teacher A, interview 3). contact Regarding if cooperative learning methods are suitable for Islamic culture

courses or not, the answer is yes definitely, they are fitting the entire Islamic culture curriculum and teachers can teach every lesson through CL. However, there are some lessons should not be taught by this method because pupils might find them so difficult, for instance, lessons about the ‘law of distribution of estates’. In fact, it is a theoretical part that should be explained by the teacher, because it is very difficult, but the practical part I think can be taught by CL. (Teacher A, Interview 4).

At the end of the project, the teacher referred to an emerging confidence in his ability to innovate in the classroom and was secure in his view as to how his teaching now compared to that previously:

“The project was a good experience for me as a teacher and I discovered that I can change my teaching style to deliver lessons successfully without using traditional methods, which some teachers regard as the only method that can be used” (Teacher B, interview 4).

#### **5.2.1.4 Inevitable Constraints: Some Hesitancy Remains**

Teachers predicted and / or described some difficulties and challenges that faced them during either the training or the implementation stage, which might prevent them from continuing to use this new method in the future. These difficulties and challenges can be classified under four sub-issues, which are: a) Support; b) Contextual factors; c) Pupil adjustment; and d) Reverting to lecture.

##### **A) Support**

Interviews revealed several perceived challenges in getting ready to use cooperative learning plus a call for further support and training,

“Implementing such methods needs support, materials and training from the Local Education Authority (LEA).....[In addition] we need more about cooperative learning methods and the ways that assist teachers in applying them in our classes” (Teacher A, Interview 2).

Initially, Teacher B also identified many potential challenges to using cooperative learning, which would require more support and training. He also was unsure if the pupils could cope:

“The reason why I did not use cooperative learning is because we do not have confidence in ourselves as teachers to implement such a method. Also, we can not delegate the class to the pupils completely. The pupils do not have the ability to manage themselves and they might not understand the lesson correctly. In addition, this method contains disorder. So, I think if we want to implement it in our classes, then we need a long time until we get familiar with it” (Teacher B, interview 1).

Teacher B illustrated some hesitancy and in particular emphasised the importance of clarification on the meaning of the new method before he started to use it:

“I want to have a full background about cooperative learning method before I implement it” (Teacher B, interview 1).

Teacher A believed prospective teachers, in order to attempt cooperative learning, needed input on a number of teaching and learning skills including class management, lesson planning and students’ evaluation, and how to enable students to work cooperatively in groups, listen and communicate. He was more specific about the need for support and preparation:

“We need as teachers re-preparation especially in these skills before we transfer them to our students... [He added]...Teachers need to master these skills first, then they can educate them to their students” (Teacher A, Interview 4).

While motivated to attempt implementation of cooperative learning, Teacher B saw some additional input necessary:

“My comment on the training programme is that we still need more discussion and training on this method, because we want to understand it well and to implement it correctly” (Teacher B, interview 2).

After two weeks of experience of cooperative learning, Teacher B still needed help on implementation:

“I need anything new that might serve implementing cooperative learning. Also, if you [the researcher] have any comments or recommendations on my implementation please give it to me” (Teacher B, interview 3).

## **B) Contextual factors**

From Teacher B’s point of view, classroom size and the context of the curriculum in terms of amount of content were potential challenges that might also prevent some teachers from using cooperative learning:

“Some of the challenges that I see here are the classroom size, which is not appropriate. Also, we have to complete the curriculum from A to Z; therefore, using cooperative learning with that might be difficult” (Teacher B, interview 1).

Current teaching load was identified as another problem that might prevent some teachers from changing their teaching style. This related mostly to planning time:

“Teachers who have 24 lessons per a week will not be able to use other approaches such as cooperative learning methods because preparing lessons with these methods is more difficult; it is not like preparing lessons in the traditional method [lecture]” (Teacher A, interview 1).

Although over time cooperative learning methods received support from both teachers, it was still deemed to need additional planning load:

“From my point of view, I see cooperative learning as a successful method, though it adds a new heavy load on teachers and this is a fact. Teachers, who use cooperative learning, need to work more in advance to prepare lessons, if they wish to have good quality of lessons, which is different from the traditional method.....nevertheless I believe cooperative learning is very good method” (teacher A, interview 2).

The benefits of cooperative learning method, however, might be faced by potential challenge as evident in the following:

“Cooperative learning is a wonderful idea and very useful for students just if all obstacles, for example, students’ numbers, classroom size and teachers’ loads have been solved” (Teacher A, interview 3)

Teacher B also showed some hesitancy and anticipated some constraints about using cooperative learning methods with big size classes,

“Classroom size and pupil numbers [between 35- 45 pupils in each class] are difficulties” (Teacher B, interview 4).

### **C) Pupils adjustment**

Teachers also indicated some difficulties that they and their pupils faced at the beginning of the unit especially the developing cooperation between some group members and their developing working relationships:

“The beginning of the project was difficult. There was not any integration between the group’s members and the cooperation concept and the relationship concept was a little weak. In addition, in the early lessons in the project, the pupils’ response to the new method was not good, but now I think this situation has disappeared” (Teacher B, interview 3).

Teacher A also pointed to some initial difficulties that he faced in terms of both grouping and pupils adjusting:

“One of the difficulties of implementing cooperative learning is that the pupils have not had any correct experience of using such a method before. In addition, training students in the new method and on their roles is difficult, because some of them understand the new method quickly and some need more time until they understand it.... Another challenge we face is that the pupils were unfamiliar with the new method, and I think we overcame this problem by the end of the first week, which means we lost 25% of the project time until pupils understood it. Designing the groups in the beginning was also difficult, because I did not

know the pupils' exact levels" (Teacher A, interview 4).

Disorder is one of the very minor challenges that Teacher B faced in the first part of the implementation stage from a few pupils:

"It was there, a small disorder inside the classroom in the beginning of the project and it was a problem but that can be controlled by the groups. In general, as a way of controlling such a method, teachers have to prepare lessons well" (Teacher B, interview 3).

Teacher B pointed out another challenge of using cooperative learning, that some information might not be shared accurately by pupils:

"The challenge is that with this method, some information might be missed in each lesson and this is a problem. For example, the lesson that was about 'interest', I feel that the pupils did not understand it" (Teacher B, interview 3).

Managing and controlling the cooperative classroom might be a problem. However both teachers illustrated how using cooperative learning helped them in these matters:

"Honestly, I had the feeling of losing control if I conducted such a method. It was in my mind that this method contains disorder and it needs more efforts from a teacher to keep the class on track, but when the method was conducted correctly, I found, fortunately, all those feelings were illusions. It is clear that from using cooperative learning method the class becomes obvious to me as a teacher, that I can see and know everything that happened in the class and also I felt that the class was under my control because all pupils are working together in the activities that they were given" (Teacher B, interview 4).

Regarding the same issue, Teacher A commented that:

"Cooperative learning helps teachers to control classes, because the pupils are busy all the time and they can not find time to play. What is more, pupils are also controlled by group mates, because they know that they win together or lose together: therefore pupils take care about their group mates' behaviour"

(Teacher A, Interview 3).

#### **D) Reverting to lecture**

Teacher A explained the reason for some hesitancy in some lessons during the implementation stage and the continued use of the lecture method:

“I used the lecture during the project because there were some topics that needed more clarification. Even when pupils studied these topics in groups, the teachers must clarify for them because they are difficult. Also, there are some concepts in these topics that pupils should learn, which pupils could not discover by themselves” (Teacher A, interview 4).

Specifically, regarding the shift from using the lecture to using cooperative learning, Teacher A explained why he used lectures during the implementation stage, saying that some pupils were still dependent on him:

“Because we are still in the beginning of the project, pupils do not know the new method clearly and they do not understand their roles in cooperative learning yet...we need to go slowly in the beginning especially in this week [first week of the implementation stage] until the pupils assimilate the new method and they should work as a team by winning together or losing together. I anticipate that within days they will understand the idea, particularly with the reward style” (Teacher A, interview 2).

In the final interview, Teacher B showed some hesitancy about being in charge of delivering content to pupils:

“One of the difficulties that I faced is the issue of feeling sure that pupils got the information correctly. Also, did they benefit from this method or not; indeed, this issue made a big challenge to me as a teacher (Teacher B, interview 4).

#### **5.2.1.5 Some Differences between Teachers A and B**

Many differences emerged between the two teachers during the interviews. Teacher A

had some 19 years of teaching experience in secondary school, while Teacher B had 12 years experience, but only five at secondary level. Teacher A was more familiar with the curriculum, having taught it three times. However, this was the first time Teacher B had taught the curriculum (Field note, lesson 19).

Teacher A had a basic understanding of cooperative learning, whereas Teacher B appeared the method. The training programme helped Teacher A to implement cooperative learning in the classroom and made the meaning of cooperative learning much clearer. The training programme also served to persuade Teacher B to use cooperative learning.

During the implementation stage, Teacher A concentrated more on the developing social skills that pupils should learn and achieve from using cooperative learning. However, Teacher B seemed to concentrate more on the information that pupils should learn and achieve from the curriculum. Teacher A appeared more independent and more self-reliant in terms of accessing materials and planning the lesson. A field note in week 4 recorded that: "Teacher A knows his roles in cooperative learning very well and started to plan his lessons based on that. Also, he divided the materials to be suitable for all groups and observing time. In addition, he never asked for help regarding that or asking what shall I do. In addition, when teacher A faced a problem with the absence of some pupils, he changed the groups temporarily and reorganised the materials upon that".

Teacher B, on the other hand, was more dependent on the researcher and less able to manage and divide the groups: "Teacher B showed that he needed support all the time, as he asked for that in interviews 2, 3 and 4. Moreover, in many days during the

implementation stage he came to me [the researcher] and asked what shall I do today. In addition, sometimes he asked the researcher, inside the class and during the lesson, what he should do in some situations and he asked if he was in the correct way”. In addition, in one lesson, some pupils were absent and Teacher B did not know what he should do, so he asked the researcher to help him to divide the groups temporarily (Field notes, lesson 6 Teacher B).

Teacher A tried to facilitate cooperative learning in his classroom and began to progressively delegate the learning to his pupils. However, Teacher B was less secure in how to facilitate cooperative learning in his classroom and demonstrated greater hesitancy: “He had a real problem that he sometimes goes back to using the lecture method. In addition, he had not mastered the fundamental rules of cooperative learning, and he did not write these rules on the board until the researcher asked him to do that. He just asked the pupils to participate and work cooperatively. The teacher sometimes did not have a clear picture about managing the class cooperatively. He was sometimes not able to manage controlling activities with time (Field note, lesson 4, Teacher B)

### **5.2.3 Summary**

This section of this chapter highlighted the teachers’ perceptions on using cooperative learning, which covered four themes emerging from the teachers’ interviews. These were based around the importance of training, emerging benefits, emerging clarity and inevitable constraints and some remaining hesitancy. The section ended with a comparison between Teacher A and Teacher B and presented some similarities and differences between them. The next section presents an extensive description of the pupils’ perspectives regarding the use of cooperative learning in their classrooms.

## **5.3 Research Question 2**

The second question that the current research tried to answer was:

In what ways did Saudi students respond to cooperative learning in their classroom?

### **5.3.1 Introduction**

Over four weeks, some cooperative learning methods were implemented in one secondary school in Saudi Arabia with a class of thirty-nine pupils. Data were collected from the pupils across the implementation stage of the project using focus group interviews. This section considers the major themes that emerged from these focus interviews, which these pupils believed to be significant.

### **5.3.2 Unclear and Uneasy at the Start**

Most pupils prior to implementing cooperative learning in their classroom claimed that they had had some experience of working in groups. The following is one small description:

“The meaning of working in a group is that after doing an exam, the teacher distributes the answer sheets to us and each pupil corrects his class mate’s sheet and gives him a score” (P1/G1/Interview 1).

The interviews also provided the pupils the opportunity to discuss some of their previous concerns when working in groups:

“The teacher sometimes divides the group randomly and unfortunately I am located occasionally with lazy pupils who do not want to work or to participate. So, anyone with enthusiasm to work in a group will lose it. Usually in such a situation, a pupil who has a high grade in the group will do the whole work alone with no-one to help him. On the other hand, the pupil with the high grade sees himself as the best one in the group and believes that the others do not understand the work, so he refuses to allow them to participate or prefers to do

all the work on behalf of the others (P6/G2/Interview 1). [Another pupil made the point that] one of the disadvantages of working in groups is that the whole group grade will be affected by the careless pupil's mistakes" (P9/G2/Interview 1).

Being passive in the group and doing the work alone without the participation of others were reasons that shaped the prior negative experiences for several pupils. The following statement is an illustration:

"I had a poor experience with group-work: sometimes the group members are passive and they do not want to work cooperatively" (P12/G3/Interview 1). [Another pupil added that] one of the disadvantages of group work is when one of the members in the group does the whole work and understands it but the rest of the group do not understand anything" (P13/G3/Interview 1).

About working in groups in the future and participating in the project through the implementation stage, some of the pupils showed willingness, if the groups were divided fairly:

"I do not have a problem, I can work in a group, but dividing the pupils into groups must be fair and equal. Not to put the high grade pupils in one group and the rest in other groups, the best way is to mix them" (P5/G1/Interview 1).

The interviews showed that not all the pupils were enthusiastic about working in groups and that some of the pupils had negative experiences of working in groups, which gave them a bad impression; therefore, they preferred to be taught by lecture. The following statement is an illustration:

"I prefer to be taught by lecture which allows me to decide my academic level myself (P8/G2/Interview 1). [Another pupil added that] working in group is not fair for pupils who are hard workers, because in a group style if you are in a group and its members are academically of a high level then you are lucky because your academic level will be high with them, and vice versa; if luck puts you with pupils who are careless about academic achievement, then your

academic level will decrease” (P7/G2/Interview 1).

Before the implementation stage, the pupils described what they understood about cooperative learning in terms of their previous experience:

“The role of the teacher in cooperative learning is to give an idea about the topic, then he leaves us to work together to understand the topic by ourselves (P16/G4/Interview 1). [Another pupil added that] in some cases the teacher explains the topic, then at the end of the lesson we work together to answer some questions which are at the end of each topic in the book” (P17/G4/Interview 1).

In the middle of the implementation stage, the data showed that a few pupils were still unclear about their roles and still less confident with working in group. The following is an illustration:

“Our group is not helpful (P13/G3/Interview 2). [Another pupil added] this guy does not help; he is sluggish and because of that this group does not encourage me to cooperate (P12/G3/Interview 2). [A third pupil said] if we work cooperatively I think the situation will change. The problem is that every one of us is still waiting for the others to do the work” (P15/G3/Interview 2).

However, the basic notion of cooperative learning did become a little clearer in time, as the following quotes demonstrate:

“Approximately after one week I started to understand the idea of cooperative learning and what should I do with my group (P14/G3/Interview 3).. [Another pupil added that] because it is the first time for us to use such a method, we took about a week to understand it” (P15/G3/Interview 3).

“We understood the idea of working in group and our roles after one week (P17/G4/Interview 3). [Another pupil added that] yes, in the first week we got the idea of the new method” (P20/G4/Interview 3).

### **5.3.3 Feeling more comfortable, confident and courageous**

With time, the pupils became familiar with the new approach and they understood their roles in the classrooms, which made them more comfortable, confident and courageous as a result of working in groups.

After implementing cooperative learning for two weeks, the pupils noticed a number of changes in the classroom and they welcomed them. The following demonstrates:

“There is an obvious change. The pupils start to play a part in the lesson and every pupil is now participating (P18/G4/Interview 2). [Another pupil added that their] ... roles and the teacher roles have been changed” (P19/G4/Interview 2).

The majority of the pupils showed their support for the new method. They claimed to have learned new skills, such as presenting in front of their classmates, as the following quotes illustrate:

“One of the great advantages that I gain from this method is standing in front of the whole class and presenting my group topic” (P13/G3/Interview 2).

“We got some skills from working in groups, such as standing up in front of the class and presenting some materials. In fact, we started to get with that” (P18/G4/Interview 2).

Pupils were generally of the view that standing in front of the class and presenting was interesting. This opportunity was very new and the pupils were excited at the chance to speak in front of other classmates:

“Standing in front of the class and explaining the topic is the best thing in this method; in fact, it is incredible that we have been given the opportunity to do that” (P4/G1/Interview 2).

Besides enjoying the presentation experience, some pupils also pointed out that the

perceived barriers between themselves and the teacher started to break. The following provides one example of this observation from a group:

“With this style, we got encouraged, especially when we stand up and talk in front of our mates during the presentation (P7/G2/Interview 2). [Another pupil claimed that] the barriers between us and the teacher were broken by using this method and there is a freedom in the classroom and nearness with the teacher that we can ask him any question at any time. Also we have a role to play now in the lesson (P6/G2/Interview 2). [A third pupil added:] Presenting in front of the classroom is amazing and a very good skill (P9/G2/Interview 2). [Another pupil commented:] Presenting in front of the class is a new skill and for me this was the first time that I talked in front of people (P8/G2/Interview 2). [Also a pupil added that:] This method allows us to listen and hear our friends’ opinions” (P10/G2/Interview 2).

Most pupils were comfortable with presenting in front of the class. As the following demonstrates: “the important skill that I achieved from this method is presentation skills, that I can talk now fearlessly and with courage” (P33/G7/Interview 2).

During the interviews many pupils highlighted a number of new skills that they gained from the new method. Here are the comments from one group:

“Pupil22: Communication skills.

Pupil 23: Presentation skills

Pupil 24: Ways of explaining the topic to my group mates and self-confidence, I feel more confident now

Pupil 25: For me, working in group was very important skill. Also I learn how to search and to find information needed

Pupil 26: Researching skills was good for me” (G5/Interview 2).

In addition, pupils in another group highlighted that:

“From working in a group I got enthusiasm from taking responsibility (P2/G1/Interview 2). [Another pupil added that] Standing in front of other pupils in the

class and presenting is a skill that we learn from using the cooperative learning method and, in fact, it is a very important skill ” (P4/G1/Interview 2).

At the end of the implementation stage, pupils reflected on the cooperative learning method and the benefits for them:

“The Jigsaw method taught me more about how I can explain the topic to my mates well (P23/G5/ Interview 3). [Another pupil added:] This method increased my self-confidence and taught me individual responsibility (P24/G5/ Interview 3). [A third pupil emphasised:] I agree with my friend that in the Jigsaw method I feel responsible about the lesson especially when I go to the sub-group to bring that part of the lesson to my original group mates” (P25/G5/Interview 3).

Pupils highlighted that the STAD method in particular broke the fear of public speaking. As the following illustrates:

“Working in groups helped to break the barrier of fear when we stood up and talked in front of the class, which gave us the courage to talk whenever and wherever” (P22/G5/Interview 3).

Some of the pupils saw the cooperative learning method as contributing to an improvement in academic achievement:

“The Jigsaw method taught us the spirit of cooperation (P17/G4/ Interview 3). [Another pupil highlighted the fact that:] ... with the Jigsaw method, my academic achievement increased especially, the personal learning, and my individual responsibility also increased. I am responsible for part of the lesson. I have to go to the sub-group and master it and come back to my mates and teach it to them” (P19/G4/Interview 3).

At the end of the implementation stage, the pupils kept praising the method for the skills that they could obtain from it, particularly the presentation skills. The following quote is an illustration:

“The important skill that I achieved is presenting skills and I got rid of the fear

of public speaking (P6/G2/Interview 3). [Another pupil added that:] Presenting and standing confidently in front of the class is an essential achievement that I got from this method” (P11/G2/Interview 3).

#### **5.3.4 Freedom and Being in Charge**

Moving to a cooperative learning approach in the classroom allowed the pupils the opportunity to see differences between teaching styles. Some had enjoyed previous lessons when the teacher lectured from the beginning of the lesson until the end and did not allow them the opportunity to talk or participate. Some of the pupils regarded that as a ‘plundering of their freedom’. The following quotes illustrate what previous teaching had been like and what the possible consequences would be:

“Some teachers usually keep talking from the beginning of the lesson until the end and they do not allow us to talk or to participate. From my point of view they are talking a lot without benefits (P12/G3/Interview 1). [Another pupil added:] I agree with my friend. They just talk and fill the board with some writing and we just listen and copy that writing (P15/G3/ Interview 1). [A third pupil said] I want the freedom to be given to the pupils in classroom” (P14/G3/Interview 1).

“Some teachers keep talking from the first minute in the lesson until the end, which causes boredom and leads to absentmindedness” (P16/G4/Interview 1).

The pupils continued to show some objections to the traditional method that teachers previously used and they described some of the possible advantages using the cooperative learning approach:

“If the teacher put us in a group it might be better in that we can work together which will cut the silence, stagnation and encourage activeness in the classroom” (P17/G4/Interview 1).

After experiencing the new method, the pupils began comparing the lessons with cooperative learning to other paths of the curriculum and they commented positively on

the new-found freedom in the class:

“This style of teaching is very good, as we got freedom, we can talk, participate and explain the topic and we can also laugh (P4/G1/ Interview 2).

“[A pupil commented that] there is a freedom now in the class. There is a possibility of discussion, dialogue and interaction. We are comfortable in the class now, compared with the past, when we were just sitting and listening” (P35/G7/Interview 2).

The pupils described some features of cooperative learning that enabled them to experience ‘freedom’ in the classroom:

“The freedom, feeling comfortable and enjoying the lesson are advantages of using this method compared with the past, when lessons were boring, routine and stagnant (P3/G1/Interview 2). [Another pupil added:] In the past, the silence was attending in the classroom; now you can see the movement and the activity in the classroom. All the groups are working and participating (P1/G1/Interview 2). [Another pupil added that] The Al-Fiqh class is the best class in my day I found freedom in it” (P2/G1/Interview 2).

By changing the teaching and learning style, the pupils understood that this freedom brought with it some responsibility for their learning, as the following shows:

“Yes, there is a change in the lesson, we are in charge today; we have to accomplish the activities required in the cards (P12/G3/Interview 2). [Another pupil added] In the past the teacher was responsible for the lesson, now the pupils have to carry out the responsibility for many things such as understanding the topic and presenting it to the whole class (P13/G3/Interview 2). [Another pupil added that] Now if you do not understand any part of the lesson, then it is your group mates’ responsibility” (P14/G3/Interview 2).

Some pupils began to see the relevance of the skills in the classroom to what might be required in later life such as personal responsibility and caring about others:

“Everyone of us feels that he is responsible for his group’s level and also their understanding, because we need everyone to win (P1/G1/Interview 2). [Another pupil commented that:] Working in a group in the classroom is a small picture for the whole life that you may find people that you do not know and you have to work with them. So, this method gives every one of us experience for the future (P3/G1/Interview 2). [Another pupil added that] The individual responsibility exists in me and I care about my mates’ understanding” (P4/G1/Interview 2).

Midway through, the pupils highlighted the fact that they felt more in charge in the classroom and they had praise for the idea of reversing roles:

“Now in the classroom we are in charge. We are responsible for the lesson, not the teacher. He became a supervisor and adviser (P29/G6/Interview 2). [Another pupil added that:] We start working with the concept of ‘we’ not ‘I’ and, because of that, we feel that we (as a group) are responsible about the lesson” (P30/G6/Interview 2).

The pupils also began to recognise how cooperative learning places learners at the centre of the learning experience:

“The important issue here is that the pupil is the centre of the learning process now. Nothing is received from the teacher; the pupil is the one in charge” (P10/G2/Interview 2). Some evidence of a climate of caring develops in the classroom: “my responsibility now is to understand the topic and take care about my group mates’ understanding as well (P31/G6/Interview 2). [Another pupil added:] My role is to participate with my mates and interact with them” (P34/G7/Interview 2).

In summary, the pupils described the positive impact of being responsible, about the learning processes, and the notion of interdependency was developed among the groups.

The following demonstrates:

“When I went to the sub-group to bring the part of my group topic that gave me motivation to work hard and to understand the topic well, because I know

already that I have to go back to them and explain that part (P24/G5/Interview 3). [Another pupil added:] Everyone of us realised that he has to be on the responsibility level, so he goes to the sub-group and brings his part well and also not cause any academic problem to the group members (P23/G5/Interview 3). [A third pupil added:] Yes I feel responsible about my part in front of my group mates (P25/G5/Interview 3). [Another pupil pointed out that] We felt the responsibility as a group that in one day we sent one of our group mates to bring a part of the topic from one sub-group so he did not do well and we did not understand that part because of him, therefore, the next day we did not allow him to go alone; we sent another mate to be sure that we got all the parts correctly” (P22/G5/Interview 3).

### **5.3.5 Playing New Roles**

The implementation of cooperative learning methods allowed pupils to take on new roles in the classroom. Pupils in the traditional method were expected to listen to the teacher and to receive information passively. Roles were not something pupils understood in an active sense:

“The role of the pupils in the classroom is to receive the information that comes from the teacher (P8/G2/Interview1). [Another pupil commented] My role is to respect the teacher, because the information will not be delivered if there is no respect for the teacher (P10/G2/Interview1). [A third pupil added that] What I have to do in the classroom is to benefit from the lesson and from teacher’s explanation” (P9/G2/Interview 1).

Teaching tended to operate in one direction (teachers to pupils) as a transmission mode. From the pupils’ point of views, the teacher’s roles in the traditional method were just to transfer knowledge and information to them and they saw that as the teacher’s responsibility:

“The role of the teacher is to transfer information to the pupils by using the easiest way (P6/G2/Interview1). [Another pupil added that] He has to succeed in transferring information to the pupils until the pupils understand it

(P7/G2/Interview1). [A third pupil said that] The teacher's role is to use several methods of teaching to deliver information to the pupils" (P10/G2/Interview 1).

Teacher centred learning, individual efforts and memorising lessons were the traditional methods, from the pupils' point of view:

"My role is to listen to the teacher, follow his explanation of the topic and write some comments and notes in the book. When I get home I start to revise the topic and memorize it (P13/G3/Interview1). [Another pupil said that] I learn from the teacher directly, I pay attention to him and if there is something I missed in the lesson then when I get home I usually make a revision to cover what I have missed (P14/G3/Interview1). [A pupil admitted that] Participating with the teacher and paying attention to his explanation is my role in the classroom (P12/G3/Interview1). [Another pupil said:] For me I do what the teacher wants me to do, for example, listen to him and memorize the lesson" (P15/G3/Interview1).

Using cooperative learning in the classroom placed the pupils in a different position, which required them to play new roles such as presenter, time controller, writer and leader. Therefore, after two weeks of implementation, the pupils started to recognise their new roles, and new skills emerged as a consequence. The following demonstrates:

"When the teacher gives us the card activities, everyone has to participate and give his opinion ... I perceived in this group that when one of us starts to talk, the others listen to him (P12/G3/Interview2). [Another pupil said:] We notice the change and we started to play a part in the lesson (P13/G3/Interview2). [One other pupil added:] Yes, there is cooperation in our group and we can agree this cooperation is still in the early stages ... For me I am very comfortable in this group" (P15/G3/Interview2).

The pupils explained how the different roles were assigned within their respective groups:

"We divided the roles between us (P1/G1/Interview2). [Another pupil added:]

The interesting part was that we divided the roles among us, such as presenter, time controller, writer and leader” (P4/G1/Interview 2).

With the new method, the pupils began to explain their new roles and what was expected from these individual roles:

“My role now in cooperative learning is to get the information and share it with my mates (P3/G1/Interview 2). [Another pupil said that] We have to understand the topic and transfer it to our mates (P2/G1/Interview 2). [A third pupil added that] We tried to choose the best way to transfer the information to each other” (P1/G1/Interview 2).

As a consequence of experiencing cooperative learning, pupils noticed some changes in the teacher’s roles. From their points of view, the teacher’s roles progressively became watching, observing, monitoring, advising and organising the lesson. The following is an illustration of these new duties:

“The teacher’s role now is to divide the topic among the groups and to clarify some points in the lesson if necessary (P6/G2/Interview 2). [Another pupil added that] The teacher is just an organiser and he prepares the card activities beforehand (P9/G2/Interview 2). [A third pupil commented that] The role of the teacher now is good, that he just helps us, when we need, to understand some ambiguous points in the lesson (P11/G2/Interview 2). [In addition, a pupil said that] His role now is to be sure that everyone is working and participating. Also, he observes and watches us to see if we work well and correctly and if we need help that he may give” (P7/G2/Interview 2).

When the pupils understood cooperative learning, they became more motivated in the class compared with the past. Also they realised that achieving the benefits of the new approach requires working hard in the lesson, supporting and helping their group mates.

The following demonstrates:

“In the traditional method, I usually sleep in the class, but now I am talking, searching and studying the topic in the book with my mates. My point of view is

that I learn more (P13/G3/Interview 2). [Another pupil commented that] Our role in the class is to discuss the topic with each other in the group and understand it and support each other in that (P12/G3/Interview 2). [A third pupil highlighted the fact that] Now the role of the teacher is just to be an organiser and facilitator, and if there is any information not clear, he has to clarify it to us (P15/G3/Interview 2). [Another pupil added:] I regarded myself as a teacher to my friends” (P14/G3/Interview 2).

Interaction and participation between the pupils became important issues, which they highlighted several times in their interviews. The pupils also shared how they used these roles to promote better interaction. The following quotes show this:

“The interaction between us was excellent. Also, it was there a writer, summariser, researcher and presenter and we rotated the presenter job in each lesson (P18/G4/Interview 2). [Another pupil added:] Our role in our group is to explain and transfer the information to each other (P16/G4/Interview 2). [A third pupil commented:] I am playing the role of the teacher in the past, now I have to understand the topic and discuss it with my friends and explain it if it is not clear to any of them” (P17/G4/Interview 2).

In time, when the pupils became familiar with the new method and they understood their roles in it, some of the elements of group work improved among the pupils and the ice among the group members was broken. The following statement is an illustration:

“The interaction in the beginning was weak but now it is ok (P6/G2/Interview 2). [Another pupil added that] In the beginning, we were shy and did not want to talk. There were just one or two who were active, but now we are [all] talking, participating, and effort comes from all members (P10/G2/Interview 2). [One pupil said that] Roles such as presenter, writer and time controller cycle between us daily” (P8/G2/Interview 2).

Less than positive views were confined to a small number of pupils, who complained that not all members of their group were willing to engage in the tasks and play their

new roles. The following is an illustration:

“There is an interaction between us, although there are still some pupils who do not want to participate (P22/G5/Interview 2). [Another pupil added: I think they did not participate because they still feel shy (P25/G5/Interview 2). [A third pupil commented that] There is an interaction and discussion among us and sometimes when we have more than one opinion we discuss with each other until we agreed on one” (P26/G5/Interview 2).

As a result of playing new roles, the pupils identified some cooperative aspects that led to better understanding of the topics:

“Working in groups is a brilliant idea. It helped me to understand more (P3/G5/Interview 3). [Another pupil added that] We feel we are cooperating with each other (P24/G5/Interview 3). [A third pupil said that] There is a cooperation between us as a group, one of us is writing, one is searching, one is ready to present and so on” (P25/G5/Interview 3).

### **5.3.6 Improved my/our learning**

When the pupils were involved in cooperative learning and working in their groups, their general perspectives were positive in that cooperative learning enhanced their learning. For some pupils, cooperative learning, from their point of view, allowed them to learn more.

“The advantages of this method are many; it encourages us to learn more (P22/G5/Interview 2). [Another pupil added that] Working in group increased my understanding of the curriculum” (P26/G5/Interview 2).

The pupils indicated that they understood more from their classmates, as the following shows:

“I learn more and well from my classmates (P9/G2/Interview 3). [Another pupil supported that] No doubt that, when I discuss something with one of my classmates, I

understand it better (P10/G2/Interview 3). [A third pupil commented that] Now it is better. I feel that I learn more from my group” (P11/G2/Interview 3).

The pupils indicated that using cooperative learning method connected them more to the curriculum and granted them better understanding of the curriculum. The following demonstrates:

“The interesting part of this method is that it compelled me everyday to read the topic of the lesson (P20/G4/Interview 3). [Another pupil added that ] I agree with my friend that this method connected me with the curriculum” (P21/G4/Interview 3).

The pupils pointed out that cooperative learning increased their comprehension and they also believed that cooperative learning motivated them to learn more. The following quotes illustrate:

“Yes working in a group motivates me to learn more and pushes me to play a part in finding information, understanding it, and transferring it to my mates (P1/G1/Interview 2). [Another pupil commented that] The group increased our motivation, interaction and cooperation. In fact, locating a good academic pupil in each group is very important, because I found that helped me to learn more through the discussion with him” (P3/G1/Interview 2).

“I noticed that my comprehension increased with the group style. For example in the divorce topic, I used to know that there is a one type of divorce, but after the discussion with my group mates I discovered that there are several types of it” (P9/G2/Interview 2).

Being in groups helped most pupils to learn more from group mates, to be active and intuitive all the time, and, in their opinion, it increased their achievements:

“I understood from my mates more (P22/G5/Interview 2). [Another pupil added that] The group has an effective power that with the group we work more and we are active and every one is participating, which increased our comprehension of the topic” (P24/G5/Interview 2).

“I become intuitive with this method and my understanding of the topics increased (P25/G5/Interview 3). [Another added] there is a big interaction with this method which tagged me to the topic and increased my understanding. It also tagged me to the group and make me feel belong to it” (P23/G5/Interview 3).

Many pupils highlighted that cooperative learning granted them the same independency from the teacher and gave them the opportunity to work by themselves and engage in the learning processes. It also made the pupils more reliance on each other and spread the notion of interdependency among them. The following demonstrates:

“The interesting part in this method is that we depend on ourselves (P17/G4/Interview 2). [Another pupil added] the good thing in this method is that we have been given the opportunity to work together” (P18/G4/Interview 2).

“The interesting issue here is that the teacher is not talking that much like before and we are working together as a team (P8/G2/Interview 2). [Another pupil added] there is no place for weariness with this method” (P7/G2/Interview 2).

The pupils were involved more in learning and they understood the new method and its aspects better:

“The important issue here is that the teacher started to trust us and he started to delegate the class to us” (P26/G5/Interview 2).

“This method grew in me individual accountability (P32/G7/Interview 2). [Another pupil added that] Through working in groups, we started to learn good behaviour from each other and I noticed that I learned from my mates more academically and some skills as well” (P35/G7/Interview 2).

From the pupils’ point of views, using cooperative learning changed a number of routines in the classroom and also enhanced some learning skills:

“The benefit from this method is that the routine in the class has been changed,

which was that the teacher talked and the pupil listened (P17/G4/Interview 2). [Another pupil added that] Working in groups taught us to listen to other opinions and give them the opportunity to express their views” (P16/G4/Interview 2).

The pupils pointed out some academic and social skills that they achieved from working in groups, as the following illustrate:

“The skill of summarising our topic in 10 minutes is an advantage of this method (P27/G6/Interview 2). [Another pupil added that] Communication skills is another advantage of working in groups; we started to listen to each other” (P28/G6/Interview 2).

“I got many skills from studying by this method such as communication skills, presentation skills and also the feeling of confidence in myself increased (P23/G5/Interview 3). [Another pupil added:] I feel accountable about my learning with this method” (P22/G5/Interview 3).

Many pupils across the final interviews expressed their desire to continue to study through cooperative learning and they claimed that they would protest if their teachers went back to using the traditional method:

“This method is much better and I want to continue to study by this method (P3/G1/Interview 2). [Another pupil added that] The teacher should carry on using this method; we do not want to go back to the traditional method” (P4/G1/Interview 2).

“If the teacher wants to go back and use the old method we will do our best to convince him not to do (P22/G5/Interview 3). [Another pupil added that] If he refuses and wants to use the traditional method, we will complain” (P25/G5/Interview 3).

### **5.3.7 The methods themselves and the curriculum**

At the end of the implementation stage, pupils reflected positively and described their experiences with some of the cooperative learning methods (STAD method and Jigsaw method). Data suggested that many pupils preferred to study through the Jigsaw method:

“From my point of view, the Jigsaw method is better than the STAD method because in Jigsaw we have all the parts of the topic in our group and we understand the whole topic; but in the STAD method we just master our group part and we miss three parts of the lesson, which are the other groups’ topics; we do not understand from them (P22/G5/Interview 3). [Another pupil added:] I agree that the second method [Jigsaw] is better because there is more interaction” (P24/G5/Interview 3).

Other pupils enjoyed the STAD method and the skills that they obtained from this technique:

“I prefer to study with the STAD method because I felt that I understand more, especially the part given to my group. Some pupils do not know how to explain and transfer the information to their mates (P16/G4/Interview 3). [Another pupil added that] In the STAD, method we do understand our group topic but not other groups’ topics” (P19/G4/Interview 3). [also a pupil added that] For me the STAD method is better because I achieved fantastic skills from it such as presentation skills and public speaking” (P18/G4/Interview 3).

The final interviews also allowed the pupils to indicate if they felt the content of the curriculum could be learned using cooperative learning approaches. The majority of them agreed that the Islamic culture curriculum can be taught by cooperative learning methods. The following quotes demonstrate that:

“Yes, the Islamic culture curriculum can be taught by cooperative learning’ (23/G5/Interview 3).

“The best way of teaching the Islamic culture curriculum is to use cooperative learning methods (P6/G2/Interview 3). [Another pupil added:] it is suitable to teach the Islamic curriculum by cooperative learning” (P7/G2/Interview 3).

Although the majority of the pupils indicated that the Islamic culture curriculum can be taught by cooperative learning, they highlighted that this method might not be suitable for all topics:

“In my point of view, yes, Islamic curriculum can be taught by cooperative learning methods, but I think there are some topics that should not be taught by this method, because these topics might not be understood or understood incorrectly (P9/G2/Interview 3). [Another pupil added:] I agree that some topics should be taught by the traditional method and explained by the teacher himself, for example, all the issues about divorce, business and finance treatments, because we did not understand them well” (P10/G2/Interview 3).

### **5.3.8 Knowing each other better**

In the first interviews, the pupils explained that in the teacher-centred learning style the source of knowledge within the classroom was the teacher and, therefore, pupils claimed that they only learned from the teachers. The pupils pointed out that they might learn from their high achieving classmates, if they could not understand the information from the teacher:

“No doubt I understand from the teacher more than my classmates (P8/G2/Interview 1). [Another pupil added:] It depends on your relationship with your classmates if it is ok then in this situation you learn from him more (P9/G2/Interview 1). [A third pupil indicated that] If my friend has a high level academically, then I can learn from him (P10/G2/Interview 1). [Another pupil added that] Sometimes, if the topic is too long, the teachers, might not be able to deliver all the information to us. Therefore, I usually ask some pupils in the class about this information; but I am sure if the teacher explains them to us it would be better” (P6/G2/Interview 1).

The first interview with the pupils demonstrated some barriers between the pupils and the teachers. In addition, it showed that the pupils could benefit more from their classmates:

“For me I learn from the teacher more but sometimes it is difficult to ask the teacher about everything, so, in this situation I asked some classmates and I sometimes understand the topic more from them (P16/G4/Interview 1). [Another pupil added:] I agree that the teachers sometimes are busy, for example I went to the maths teacher and I asked him to clarify some points to me. He said come to me tomorrow. When I went to him the next day, he said can you ask one of your friends about it. For me, I feel comfortable in asking my friends more than asking the teacher (P18/G4/Interview 1). [A third pupil commented:] For me, I understand more from the teacher, not from my classmates” (P19/G4/Interview 1).

The majority of the pupils highlighted that cooperative learning methods allowed them to make new friends and develop new relationships, which they believed helped them in their learning. Also, some pupils indicated that they got to know some of the pupils in their groups for the first time:

“Although working in a group is something new for me, I felt the support from my friends (P14/G3/Interview 2). [Another pupil said:] My relationship with the group members increased (P13/G3/Interview 2). [A pupil added:] In reality, half of my group mates I did not know them before this time and now my relationship with them is very good (P15/G3/Interview 2). [A pupil indicated:] I want to add that working in a group helped me to know my group mates’ disposition and their characters and roles that they can be expert in” (P12/G4/Interview 2).

“The cooperation between us was the big benefit. It taught me to work with anyone without being selfish. In fact, this is the first time for me to work with these pupils (P2/G1/Interview 2). [Another pupil added:] my relationship with some pupils increased by working in this group (P1/G1/Interview 2). [A pupil said that] This method makes us closer to each other and I start to know my

mates better (P3/G1/Interview 2). [Another pupil claimed that] This method allows me to get to know my friends' frame of mind, personalities and characters better" (P4/G1/Interview 2).

Although pupils made new friendships with their group mates, working with new pupils was still difficult for a few, as the following quote shows:

"Working with pupils who you did not know before is so difficult, not like working with those who you know already (P11/G2/Interview 3). [Another pupil added:] I agree that working with someone you don't know needs flexibility and patience, which can be regarded as training for the future" (P7/G2/Interview 3).

Using the Jigsaw method in the classroom usually required pupils to work through sub-groups first then they go back to their main groups. Therefore, the pupils found that there were still some barriers between them and the 'new mates' in the sub-groups, which needed time to be removed, although some of the pupils still emphasised that they still made new relationships in their sub-groups:

"When I moved to the sub-groups, I found some barriers between me and other pupils are still standing. That is because we do not know each other well, compared with my mates in the main group, who I know well (P23/G5/Interview 3). [Another pupil added that] One of the important issues in the sub-group is that I got new friends. Although there was conflict between us at the beginning, in the end we got on with each other (P25/G5/Interview 3). [A third pupil claimed that] In the traditional method I was just knowing my close friends, but with this method I got many friends" (P24/G5/Interview 3).

The pupils indicated that cooperative learning granted them some skills that help them to improve their relationships and friendships with their classmates.

"[A pupil said that] Cooperative learning taught me the skills of communicating with others, which helped me to break the barrier of shyness (P22/G5/Interview 2). [Another pupil added that] All these pupils I did not know before and now they are my best friends (P23/G5/Interview 2). [One added that] By cooperative

learning, we come to care about the group's benefits, not individual benefits (P24/G5/Interview 2). [A pupil claimed that] Cooperative learning methods taught us some skills, such as communication skills and listening skills, which makes our relationships better than before. In my group, we were five pupils and I only knew one of them; now I know all of them well (P25/G5/Interview 2). [Another pupil pointed out that] By this method, every pupil can build good relationships with whoever" (P26/G5/Interview 2).

### **5.3.9 Did not work for all**

In the previous sections the large majority of pupils revealed the advantages and many benefits that they achieved from using cooperative learning methods in their classroom. However, these positive experiences and outcomes did not work for all pupils and some of them showed concerns about the new approach.

The data showed that dividing groups inappropriately may counter the objectives of group work. This emphasises the importance of training pupils in cooperative learning beforehand:

“There is one mate in my group who we do not like and he does not like us either. We are working cooperatively but not with him. The problem everyday is increasing with him” (P31/G6/Interview 2).

“In the sub-group there is stagnation and no one wanted to take the first step; everyone is waiting for other pupils to start” (P7/G2/Interview 3).

After two weeks of working in groups, some pupils showed that they were not willing to work cooperatively with their group members:

“The annoying issue here is that one of our group mates does not work with us and he does not want to cooperate (P13/G3/Interview 2). [A pupil commented that] It is a problem, if there is, in one group, more pupils whose academic levels are low (P14/G3/Interview 2). [Another pupil added that] There is a problem in dividing the groups and in fact I am not happy in my group and I want to change

my group please” (P15/G3/Interview 2).

In addition a minority of pupils, who were generally unsociable, showed some resistance to the group style and preferred to study individually rather than working in groups:

“For me, I am not convinced with this method and in my opinion it does not work for everyone. There are some pupils who are sociable, who can affiliate with all and there are some pupils want to study alone. In fact, working did not affect me negatively but also it did not make a difference for me. In the traditional method, I studied by myself and I understood the topic, and in this method I understand it as well and I know I will get some skills by working in a group, but in general there is no big difference. I worked in this group because I know the pupils in advance. If they were new to me I would not work with them” (P12/G3/Interview 2).

Pupils were concerned about how they might be assessed in groups and they were worried about losing marks and how they might be affected by the poor performance of some of their group mates. Some asked that the teacher go back and use the lecture method. Efforts to get a few particularly reluctant pupils involved in group-based work were largely unsuccessful:

“There is a pupil who does not care about the group and its level of achievement, which caused worried among the group’s members upon the scores, especially if the teacher is going to use the means style [each member score depends on the average of the whole groups scores] that he told us (P22/G5/Interview 2). [Another pupil added:] We have one pupil who did not work well with us, and we tried to encourage him to participate but it was no hope” (P25/G5/Interview 2).

Although he showed his acceptance of cooperative learning in the previous interviews, one pupil, in the final interview, expressed his resistance to using cooperative learning methods in the future and showed his wish to be taught by the lecture method:

“For myself, I do not want the teacher to use such a method next term, because I am coming to the school to take the information and leave. Why I am saying that because I wonder what is the teacher’s role now? The teacher is responsible for the lesson and the understanding of the pupils; it is not my responsibility to explain the topics to my classmates” (P21/G4/Interview 3).

In addition, a few pupils claimed that implementing the new method in the summer term was a problem, perhaps due to the hot weather in Saudi Arabia:

“Sometimes I do not care about my group because I come to the class when I am so tired. I know this is going to affect my group’s level negatively, but what can I do. It is summer time” (P2/G1/Interview 2).

Pupils were able to recognise that, from their point of view, cooperative learning did not work and not suitable with some topics in the curriculum:

“Some topics we did not understand, such as the chapter about selling, banking cards and Visa card, because it is so long and difficult. Therefore, the cooperative learning method should not be used with such topics (P18/G4/Interview 3). [Another pupil added that] The problem is not in the method but in the curriculum, it is difficult (P19/G4/Interview 3). [A third pupil commented that] The time in the lesson is not enough to cover these activities that the teacher gives us, especially with the Jigsaw method” (P20/G4/Interview 3).

In the final interviews, some pupils claimed that they resisted taking any responsibility in the classroom and they also expressed that explaining the elements of the curriculum is the teacher’s responsibility. The following is an illustration:

“When some friends realised that they have to be responsible about part of the topic, they show some resistance and they do not want to participate” (P22/G5/Interview 3).

“One of my friends told me that the explanation of the lesson is the teacher’s responsibility, not the pupils’ responsibility” (P6/G2/Interview 3).

### **5.3.10 Summary**

This section of the chapter highlighted the pupils' perceptions about using cooperative learning. It provided a detailed description of the data collected through the interviews with the pupils. This involved nine major themes that emerged from the data, which were: unclear and uneasiness at the start; feeling more comfortable, confident, and courageous; freedom and being in charge; playing new roles; improved learning; the methods and the curriculum; knowing each other better; did not work for me. The next section presents a description of the influence of the cooperative learning approach upon the teachers' practices in these two classrooms.

### **5.4 Research Question 3**

In what ways did experience with cooperative learning influence the teachers' classroom practice?

#### **5.4.1 Introduction**

To answer this research question, data were collected from field notes gathered during observation of lessons, from segments of lessons collected via videotape (which were then added to the field notes), from interviews conducted with the teachers and from reflective journals.

This question concentrated on describing and seeking the teachers' opinions on aspects of their practices (instructional, organizational, and managerial) within the taught lessons. The following elements emerged following an inductive analysis of the data. The headings best illustrate some key changes in teachers' practice following the introduction of cooperative learning in their classrooms.

#### **5.4.2 Planning for Cooperative learning (Resources)**

During the interviews, both teachers highlighted the change in their classroom practice in several areas, one of them lesson planning. They claimed that their approach to lesson planning and preparation for cooperative learning sessions was now different compared with how they had taught the curriculum using a more traditional method; as Teacher B mentioned:

“Lesson preparation is now different comparing with the past. In the past I was just concerned about intellectual preparation and I just attended the class and talked for about 40 minutes and that is it, but now the situation is different. It is necessary to prepare the lesson beforehand, and prepare all the material needed, such as cards and dividing the class to suit the groups and the lesson time”

(Teacher B, interview 3).

Teacher A also described a change in how planning time was used for cooperative learning opportunities:

“Teachers, who want to use cooperative learning, need to work more in advance to prepare lessons, if they wish to have a good quality of lesson, which is different from the traditional method.... compared with the past, yes, my lesson planning has changed; I can say it changed by 70% in the preparation of the lessons” (Teacher A, interview 3).

It was very rare that the teachers prepared any resources for traditionally taught lessons. Designing activities suitable for a cooperative learning approach required much thought and preparation. Prior to the implementation stage, Teacher A and Teacher B sat together to consider and adjust the content of the curriculum to align with cooperative learning in their classrooms. In the first day of the implementation stage, teachers A and B sat down with each other for about two hours to convert and divide the Al-Fiqh curriculum content to be suitable for cooperative learning methods. The curriculum had 11 units to be covered in seven weeks. They decided to cover two units per week and week seven was left for revision of all units (Field Note, Week 1).

Many examples emerged that demonstrated both teachers' efforts to convert the content of the curriculum in such a way as to be appropriate for cooperative learning. The following statement is an illustration (Teacher A's use of resource cards):

“In lesson 19 in Teacher A's class, the topic of the lesson was about rentals [hiring out] and the rules about them in Islam. The teacher prepared the lesson's activities in advance on four cards. Card one stated: with your group mates find out the definition of rentals and the rules in Islamic. Card two stated that: By working cooperatively with your group find out the conditions of hiring and the commitments of landlord and tenants. Card three stated: Work with your group

to find out the types of tenants and what are the Islamic legal rules about the tenant selling the property. Card four stated: Find the answers with your group mates: in renting, what are the rights of each party to a contract [such as a lawyer and his client] from the Islamic point of view. Also, is it allowed to hire someone to do the work on your behalf?" (Field Note, Lesson 19, Teacher A).

Teacher B also prepared a number of resources. In one of his lessons, which focused on family and marital home rules, he designed a number of task cards to enable pupils to discuss topics, including Islamic rules concerning spending money on parents and children and giving charity to relatives.

Whilst resource preparation was a new feature of planning, teachers also shared how planning for the division of time in lessons had become significant:

"One of my roles now is to prepare the lesson in advance and divide the topic equally, especially with the lesson time. Each group is given an appropriate part from the topic to finish it on time" (Teacher A, interview 3).

Teacher A reflected positively on the new method that had encouraged him to change his lesson planning and preparation:

"This method encourages teachers to prepare lessons well and in advance, which is not like the traditional method, which just depends on lecturing the topic to the pupils. In cooperative learning, for example, the topic should be divided to match the number of groups and the lesson time should be taken into account. In addition, dividing the pupils into groups and what time [during the lesson] the card activities should be given to them are necessary matters in the cooperative learning method. Sometimes the order of the content should be changed to fit cooperative learning" (Teacher A, interview 4).

As well as interviews, Teacher A used his journal as an opportunity to reflect on his lesson planning and what plans did work and which did not:

“One of the important issues is to give the pupils a brief idea about the new topic that they are going to discuss, just to allow them to understand the new terminologies and ideas in that topic. Also the teacher should take time in the planning of each lesson, to cover all the matters that might not be covered or that need more clarification” (Teacher A, Reflective journal/log No.8).

The extent to which the classes were able to cover the planned content became a cause of some reflection on lesson planning, in that teachers discovered some mistakes in their plans, which needed to be changed in the future:

“I discover a disadvantage today in my class, that the quantity of the content that I gave each group is not appropriate to the time that they were given. So, that will be taken into account in planning the lessons in future” (Teacher B, Reflective journal, No.6)

At the end of the implementation stage, Teacher B admitted that he did not always plan some lessons well, which he believed caused some difficulties for his pupils:

“One of the problems that I faced during this project is that the content load in each lesson is too much. In fact, a number of pupils complained about that and because of that the topic might need to be explained by the teacher again to be understood” (Teacher B, Reflective journal/log No. 8).

### **5.4.3 The shift from directed pedagogy**

In the traditional lecturing method, Teacher A and Teacher B both developed their lessons in several steps which were: revision of last lesson topic, lecturing on the new topic, evaluating pupils’ understanding by asking factual/ recall questions and then giving pupils the opportunity to ask any questions for clarification. The following offers one such example of Teacher A’s practice during lesson one:

“Teacher A entered the classroom and pupils were sitting in rows. The teacher started with some questions about last lesson (as a revision), then he tried to explain what materials should be covered during the current term (about 10

weeks). After that, he started to explain the syllabus. Then he lectured for about 25 minutes on the new lesson topic, which was ‘The meaning of Al-Fiqh and its places in Islamic culture’. Then he asked some questions about what he had just explained and a couple of pupils answered. The teacher wrote the main points of the lesson on the board. He asked the pupils if they had questions or wanted him to clarify any point that might not have been understood. No-one asked” (Field notes, Lesson 1, Teacher A).

During lesson one, Teacher B also delivered his lesson using a similar traditional method relying on lecture and reading from a text-book. The pupils rarely participated in spite of the teachers’ efforts to encourage them.

Midway through the unit, some differences in the two classrooms emerged, in that both teachers started to implement aspects of cooperative learning in their classrooms by dividing the pupils into groups and asking them to work together in specific tasks. The following is an illustration:

“Teacher A entered the classroom and wrote the topic of the lesson on the board, which was about ‘the conditions of marriage in Islam’, and the pupils were sitting in groups. The Teacher started the lesson by announcing some rules of working in groups, which were working as a team; everyone has to play a part using communication skills. After that the teacher provided an introduction to the topic of the lesson, then he asked each group to draw a diagram of ‘Women and men who are forbidden in Islam to marry their relatives’. He gave them five minutes to finish the activity – the pupils started to work together. The teacher after that asked each group some questions about what they had achieved and he wrote down their answers on the board. For example, he wrote about some conditions of marriage in Islam, such as that both the bride and the bridegroom have to accept marriage and its conditions beforehand and that two witnesses attend and sign the contract between the bride and the bridegroom. Teacher A summarised the lesson by connecting all the elements, which were identified by the group, with each other” (Field Note, Lesson 3, Teacher A).

In Teacher B's class, the pupils also had the opportunity to talk about and present some material in front of their classmates and be more responsible about the learning process:

“In Lesson 4, Teacher B entered the classroom and the pupils were sitting in four groups of five or six pupils in each group. He started the lesson by distributing the card activities to the groups about ‘*The Rules of Divorce in Islam*’. The teacher asks the pupils to work together cooperatively and he gave them 10 minutes to do that. While the pupils worked on the activities, the teacher started moving around the groups, observing them and listening to their discussions. The teacher asked one pupil from each group to stand up in front of the class and present what they had done and what they learned as a group, which the teacher wrote on the board (e.g. the wisdom beyond divorce in Islam, the steps that should be taken by both the wife and the husband before divorce, and types of divorce). Teacher A then linked all these elements, which came from the groups, together” (Field Note, Lesson 5, Teacher B).

By the end of the implementation stage, both teachers continued to demonstrate efforts to move away from the traditional approach by structuring the lesson topics and tasks and activities to meet specific cooperative learning strategies and enable groups to work together:

“Using the Jigsaw method, Teacher A came into the classroom and asked the pupils to move to their sub-groups. He announced the topic for the day: ‘Rules on competitions in Islam’. The teacher had prepared card activities, divided into four parts, with each sub-group having one part. Sub-group No.1 had ‘The definition of competition in Islam and the legal ruling on it’; sub-group No.2 had ‘The wisdom of allowing competition in Islam’; sub-group No.3 had ‘The conditions for competition in Islam’; finally, sub-group No.4 had ‘Giving prizes and Islamic legal ruling’. The pupils worked together and the teacher watched and observed; he answered their questions. After working for ten minutes, the teacher asked all pupils to go back to their main groups. The pupils started to explain their parts to their groups-mates in the main groups. The teacher continued to move around the classroom to watch them, their interaction, their discussions and their communications. In the final ten minutes, the teacher, with the pupils, made a summary of the topic and the main elements were written on

the board. Competition is allowed in Islam Three types are accepted, some are forbidden or accepted under some conditions and giving prizes, also under some conditions” (Field Note, Lesson 20, Teacher A).

#### **5.4.4 Specifying Lesson Objectives**

Lessons objectives are an essential part of any lesson, which may shape all the activities in the classroom and set up the assessment of the lesson. The adoption of cooperative learning led to a change in both the way the teachers used lesson objectives, and the content of those objectives. The objectives in Teacher A’s class initially concentrated on academic achievement:

“Teacher A started his lesson by some revision of the information that pupils covered in the last lesson. Then he moved to the current lesson topic by writing the purposes of the lesson on the board, which included the definition of Al-Fiqh, the rules of *sharia* that are extracted from the Holy Quran and how Al-Fiqh as a science started up” (Field Note, Lesson 1, Teacher A).

Over time, Teacher A began to concentrate on social and personal development as new desirable objectives for his lessons, which he typically communicated to the class. The following statement is an illustration:

“Teacher A started lesson 5 by giving a brief idea about the new topic which is about the Islamic rules about wedding parties, birth control and abortion. He gave each group a task to discuss the topic. During that time, the teacher started observing the groups and answering questions. He ask that pupils work together, listen to each other, interact, and use their communication skills. He announced many times that understanding the topic is the pupils’ responsibility and he encourages them to give their group-mates the opportunity to talk and to participate in the discussion” (Field Note, Lesson 5, Teacher A).

In the final lesson in the unit, Teacher A saw the key objective of the lesson being the importance of pupils working cooperatively:

“In lesson 20, Teacher A distributed the card activities to the groups and he asked them to work cooperatively in both the sub-groups and in the main group. He started to watch the discussions, the interactions and participations in groups. The pupils were working cooperatively and they interacted, discussed, listened and participated with each other. He reminded the pupils to take into account the rules that he had written on the board, such as group based roles (writer, leader, presenter and timer), working as a team, and communication skills” (Field Note, Lesson 20, Teacher A).

Teacher A in his third interview clarified that he was now looking in his lesson for other objectives and outcomes and not just concentrating on academic achievement; as this quote highlights:

“I was watching the pupils to see who was participating, who was attentive, also I was looking for the skills, which I wrote on the board, if they are employed or not, such as listening skills, communication skills, and working as a team” (Teacher A, interview 3).

Similar change in the use and focus of lessons objectives also appeared in Teacher B’s classes. He too initially focused on the understanding of the material and academic achievement:

“The teacher started lesson 2 by asking the pupils some questions regarding the last lesson. Then, he wrote the new topic and its elements on the board and the purpose of the lesson was the reasons of variance among pupils in the topic of Al-Fiqh Rules in Islam. The teacher clarified the lesson elements to the pupils, lecturing them one by one. He then asked the pupils some questions” (Field Note, Lesson 2, Teacher B).

Similarly, Teacher B also began to slowly concentrate on other objectives in his lesson, such as the achievement of social communication and affective skills:

“Teacher B began his lesson by writing the topic on the board (which was about understanding the rules of divorce in Islam). He asked his pupils to be in their

groups and to be ready for the day's activities. The activities were distributed and the pupils worked on them for ten minutes in their groups. The teacher then asked each group to identify one of the team and to stand up in front of the class and present their work" (Field Note, Lesson 6, Teacher B).

For Teacher B, at the end of the implementation stage, new objectives had emerged in the lessons such as interaction, listening skills, participation and communication skills.

During interviews with Teacher B, he corroborated the observed shift in focus of the lesson objectives over time. In the first interview, he stated what he viewed as the purpose of his lesson:

"The best thing that teachers wish from their pupils is to understand lessons and employ the material in their lives. In fact, my role and purpose in the classroom is to transfer information to my pupils" (Teacher B, interview 1).

Through moving to the cooperative learning method, teachers began to think more widely about the broader range of lesson objectives possible through using this approach:

My role in the class now is an organiser and a facilitator and if there is anything not clear to the pupils my role is to clarify this to them...In the traditional method I explained the lesson many times but I cannot say that satisfied my conscience, but with the cooperative learning method, I supervise all the groups, I observe and watch them. I know the performance of each group through listening to them, sitting with them, which has granted me more contact with my pupils [and he emphasised the importance of communication]" (Teacher B, interview 4).

#### **5.4.5 Physical Layout**

A further change in practice that emerged as a consequence of implementing cooperative learning in both Teachers A and B's classes was the alterations to the

physical layout of the classroom. Pupils taught in the traditional methods usually sat at individual desks in rows looking at the board. Teacher B's class was similar to Teacher A in that the pupils sat in rows and listened to the lecture:

“Teacher B started the lesson lecturing the pupils sitting in rows and listening to the lecture.... After 25 minutes the teacher was still talking and the pupils continued to listen. The pupils were sitting in 4 rows with 6 pupils in each row” (Field Note, Lesson 2, Teacher B).

In readiness for the implementation of the training stage, both teachers re-arranged their classrooms for cooperative learning, as the pupils needed to sit closer together to share materials, discuss, participate and cooperate in activities. When delivering lessons using cooperative learning, the layout of the classroom was changed:

“At the end of lesson two, Teacher A gave his pupils an outline of the new method to be used in the following four weeks. At the end of lesson, the teacher started to change the layout of the classroom by grouping the tables and he removed unneeded chairs and tables placing them outside the classroom. They made four table groups with four pupils in each group” (Field Note, Lesson 2, Teacher A).

In developing cooperative learning in the classrooms, both teachers followed the agreed structure (See Appendix D), which included many new features such as classroom layout. The teachers, through the implementation stage, referred to this change over time:

“The change in my classroom is obvious from many things such as the layout of the classroom, the learning style, the discussion and the dialogue .... Everything inside the class has been changed” (Teacher B, interview 3).

Teacher A also highlighted some benefits of this change in classroom layout on his pupils' interaction, cooperation and their general work as a group:

“Changing the classroom layout to groups makes the pupils more active and

helps them to work as a team. By working in groups they look much closer to each other and they benefit from each other” (Teacher A, Reflective journal/log No.4).

Changing the classroom layout, from Teacher B’s point of view, granted the pupils the opportunity to move forward to achieve more in both academic and personal skills, which also allowed them more opportunities to move away from the front of the class and be more active in watching, monitoring, and observing the classroom:

“By locating the pupils in groups they started to get the information more easily and they learn several skills from each other which were not available in the traditional method. With the group style, the pupils talk, discuss and use dialogue with their mates. They also learn as a group the research skills and how to look for the information as a group” (Teacher B, interview 3).

#### **5.4.6 Broadening Lesson Outcomes**

Pupils were continuously evaluated informally inside the classroom in the traditional method through the use of questions regarding the lesson topic which were asked by the teacher to check their understanding at the end of the lesson. Both Teacher A and B employed this strategy of evaluation to assess pupils’ understanding of the new material. Replying to these questions gave an indication of the extent to which the teacher was successful in delivering the lesson and achieving the intended outcomes:

“In lesson two, Teacher B explained the new topic to his pupils, which was (the reasons of variances between the scholars in the AL-Fiqh Rules in Islam). He lectured to his pupils for about 25 minutes. After that he asked the pupils some questions to be sure if they understood the topic of the lesson or not as an evaluation approach. He asked, for example, what were the reasons of the variance between scholars ... give me three examples of the accepted variance between them and what are our attitudes from the variances between the scholars” (Field Note, Teacher B, Lesson 2).

In a lesson using cooperative learning methods, teachers used some alternative approaches to evaluation as a means to check for pupils' understanding. Both Teacher A and B implemented the Students Teams-Achievement Divisions (STAD) method. In some lessons pupils stood up and presented to the rest of the class. Here is an example from one of Teacher A's lessons:

“In lesson seven, Teacher A used the Students Teams-Achievement Divisions (STAD) method and wrote four topics on the board (which were the rules of spending money upon wives in Islam; the rules of spending money upon parents and children in Islam; spending money upon relatives; and the Islamic wisdom beyond the requirement of spending money upon our relatives). One topic was for each group in the activity. At the end of the lesson, the teacher chose one pupil from each group to stand up in front of the class and present the group topic to the rest of the class. For example, one pupil wrote on the board that 1) it is the husbands' obligation to spend money upon their wives (even if the wives are rich, the husbands have to pay for their needs); 2) the spending depends on how rich or poor you are, and 3) the pupil wrote some evidence supporting that from the Holy Quran and from the prophet sayings. The teacher said that he chose the presenters randomly to be sure that pupils were understanding their topic” (Field Note, Teacher A, Lesson 7).

The focus of the evaluation inside classroom also changed as a function of using cooperative learning methods. Teachers not only concentrated on academic achievement but also on social and personal skills, which pupils were expected to learn and practise in their groups. Using the STAD method, Teacher B changed his evaluation approach by not just asking content questions to the pupils, but also by observing and watching his pupils' performance:

“Teacher B started his lesson by distributing the card activities to all the groups and the pupils started to work together as a group (the topic of the lesson was an introduction to selling and trade rules in Islam). He spent about 2-3 minutes watching and observing each group. At the end of the lesson the teacher asked each group to choose one person to stand up in front of the class to present the

group's work to the class. The teacher announced that presenting well and delivering the group's topic clearly to the whole class will be regarded as the evaluation criteria of the group performance and their understanding of the topic" (Field Note, Teacher B, Lesson 8).

Both teachers used the Jigsaw method in their classes. Teacher B used a strategy that involved choosing one pupil randomly from each group to be asked some questions regarding his group mates topics, as a way of evaluation:

"In a lesson about competition in Islam, Teacher B asked his pupils to move to the sub-groups and he gave them the card activities, which include the tasks that they have to cover in that lesson in each group. He asked them to finish these activities within 10 minutes, while walked around the classroom. The teacher at the end of the lesson chose one pupil from each group and asked him some questions about their group mates topics (not his own) to evaluate his understanding and to evaluate the group's performance in understanding and transferring information to their mates. For example, he asked a pupil in group one 'What is the meaning of *'the Sabq'* or competition in Islam', and the pupil answered. The teacher praised him and thanked him. The teacher asked if anyone could add anything (no one responded), then he said 'When I passed by group four I heard a better definition than what your mate has just said'. The teacher chose a pupil from group three and asked him what was the Islamic wisdom about supporting competition, and the pupil answered and the teacher thanked him" (Field Note, Teacher B, Lesson 20)

During the interviews, the teachers revealed some benefits of cooperative learning methods related to evaluation:

"With this method there is an investment in time inside the classroom. The pupils get the information from more than one way, such as their group mates, the teacher, and by research/ books. Furthermore, there is a massive change in the lesson today contrasting with the lesson before the project, that the pupils start to acquire some skills, also their attention and interaction has increased. Now I have time to know my pupils' characteristics, their skills, their academic levels and so on. Also, I have the time now to evaluate each pupil sufficiently,

for example, if I concentrate everyday on just one pupil from each group, then I would say I assessed them well” (Teacher A, interview 3).

Teachers also wrote about evaluating pupils’ performances in their journals:

“The pupils start to stand up in front of the class and present the lesson to their classmates normally and confidently, which is, indeed, a high level of skill...the pupils start to present the lesson to the whole class clearly and they write on the board confidently” (Teacher A, Reflective journal/log N.5)

In the final interviews, Teacher B reflected on his previous teaching approach. He also outlined the positive impact upon his new found practice and also upon his pupils’ performance:

“In the traditional method I explained the lesson many times but I cannot say that this satisfied my conscience, but with the cooperative learning method, I passed by all the groups, I observed and watched them. I can know the performance of each group through listening to them, sitting with them, which granted me contact with more pupils” (Teacher B, interview 4)

#### **5.4.7 Active Supervision and Monitoring**

Before introducing cooperative learning, both teachers remained at the front of the class. They would explain the topic to the pupils whilst trying to gain and maintain their interest, as the following statement illustrates:

“While he was standing in front of the class and moving beside the board, the teacher kept asking questions from time to time to attract his pupils’ attention. He repeated some words many times such as ‘pay attention to me’, ‘look here’, and ‘listen to me’” (Field Note, Teacher A, Lesson 1)

Similarly, Teacher B remained at the front for the entire lesson and lectured the topic of the lesson to the pupils, often asking some questions regularly such as: Is that correct? What do you think? Is this point obvious to you? The purpose of these questions seemed

to be to keep pupils' attention.

When both Teachers A and B began to implement cooperative learning in their classes, some aspects of practice changed. Firstly both teachers began to move around the classroom to and between groups. They often stood by each group, watched them for a few minutes and at other times sat with them and listened to their discussion and interaction. They often interacted with their pupils individually and as groups, typically asking the pupils to remind everyone of the aims of the lesson and the skills being emphasised. Teacher A for example in lesson 15 (which was about bank loans and bank credit cards) kept asking his pupils to share the time between them, to share their ideas/knowledge, and to finish their task and activity on time. At the same time the teacher was walking around the groups observing them, listening to them and monitoring them:

“After asking the pupils to move to their sub-groups [Jigsaw method], Teacher A distributed the card activities to the groups. After 10 minutes, he asked them to go back to the main groups. While they were doing that, the teacher was moving around the classroom and between the groups observing his pupils, asking them to participate and asked the timekeeper in each group to give 2.5 minutes to each member to talk. He also asked the pupils to do their best to transfer their parts of the topic to their group mates. He requested them to use one book as a way to encourage them to cooperate” (Field Note, Teacher A, Lesson 15).

In lesson 13, the topic of the lesson was about the rules of buying and selling in Islam, Teacher B moved within the classroom between the groups, observing his pupils and their performance, and answering their questions. He kept reminding the pupils to take greater responsibility for understanding their part and to transfer it clearly to their group mates. He also reminded the pupils several times of the importance of communication skills.

In the interviews, both teachers referred to the new behaviour inside the classroom, whilst the pupils were working in groups. Teachers mentioned the importance of observation, watching and monitoring pupils' performance in terms of understanding the content and how groups were able to practise skills such as communication and working as a team. Teacher A pointed out:

“I was watching the pupils to see who was participating, who was attentive; also I was looking for the skills, which I wrote on the board, if they are employed or not, such as listening, communication skills, and working as a team” (Teacher A, interview 3).

Teacher A shared his opinion on a perceived change in his teaching role in the classroom when using cooperative learning:

“My role in the class now is just to give every group a part to play and observe and watch them and give them my advice when they ask for help” (Teacher A, interview 3).

The following statement summarised what Teacher B said he was now doing in the classroom at the same time as his pupils were working in their groups:

“My job in the class now is organiser and facilitator and if there is anything not clear to the pupils my job also is to clarify it to them.....I observe and watch them. I can know the performance of each group through listening to them, and sometimes sitting with them, which allowed me more contact with my pupils” (Teacher B, interview 4).

#### **5.4.8 Holding Pupils Accountable**

Individual accountability in a cooperative learning method requires that every pupil has to learn his part of the lesson and has to help his group members to learn it. Also individuals are responsible for the success and the failure of the group. This concept also emerged in both teachers' classes over the time of using cooperative learning.

Pupils were held accountable in the traditional method for listening to the teachers and paying attention to the information presented, answering questions if asked. Teacher A illustrated these initial expectations of his pupils in that “If they do not know anything about the new topic, then their roles are to listen and receive information” (Teacher A, interview 1).

In addition, Teacher B in his first interview also claimed it was the pupils’ responsibility in the classroom to “listen and receive information and implement this in their daily life” (Teacher B, interview 1). He also judged a good lesson to be “when pupils paid attention to the lesson and listen to me” (Teacher B, interview 1). The traditional style of teaching saw both teachers in charge of all aspects of the lesson and in control of everything in the classroom. Pupils were passive, listened and sometimes participated when asked. A few pupils spoke of some disengagement evident with learners choosing to do other activities unrelated to the lesson such as resting their head on their desk:

“In lesson two, Teacher A wrote the topic of the lesson on the board (which was about the reasons of variance between scholars in *Sharia* and our attitude to that). The teacher asked some questions about the previous topic then he moved to explain the new topic to the pupils. Some pupils were looking at the teacher and listening to the information and others were not paying attention to the lesson, for example, one pupil was playing on his mobile and another was writing in his book” (Field Note, Teacher A, Lesson 2).

The pupils in Teacher B’s classes were also mostly passive and remained silent for almost the whole time in the lesson. The only voice to be heard was that of the teacher.

During implementation of cooperative learning, pupils in both classes slowly began to show some responsibility for their learning. Pupils were held accountable for work in

groups through the use of public presentation to the entire class. The following is an illustration:

“The topic in lesson 6 was about The Rules of Divorce in Islam. Teacher A started his lesson by giving the card activities to the groups and he wrote some rules on the board to tell pupils that they are in charge and more responsible about the lesson such as every group wins together or loses together; understanding the topic is the group members’ responsibility. The pupils started working together for 10 minutes to understand their parts of the topic. The teacher was observing them, answering their questions and watching the groups’ performance to be sure all groups members were working correctly. After 10 minutes, every group nominated one member to be responsible for presenting their part of the topic to the rest of the class. When the presenters stood in front of the classroom, the teacher encouraged them to talk confidently and also corrected any misunderstanding of the topic. The following conversation between Teacher A and one pupil is an instance: The pupil stood up and explained to the whole class the steps that should be taken by the husbands before going to divorce; the teacher said: ‘Can you talk loudly because your classmates want to hear you?’ The pupil said: The husband and his wife should open a dialogue between them if there is any problem; The teacher said: Yah good....this is the first step - what is the second? The pupil: The second is that the husband should not sleep in the same bedroom for several days, which might help to solve the problem. The teacher: Excellent, can you write that on the board?” (Field Note, Teacher A, Lesson 6).

Teacher A posted some cooperative group learning rules publicly on the board. These included working as a group, who is the writer, the presenter and the time controller and the need to use communication skills. The teacher commented that these rules encouraged pupils to take greater ownership of the learning process, which he discussed when comparing his teaching with early lessons in the project:

“The rule that said every pupil is responsible about the lesson was so effective, because pupils started to understand that they can play the teacher’s part and the learner’s part at the same time...[he added that].. Playing parts inside each team

is still a little weak; I think they need more training on that. Group 2 was the best group last week and because of that I gave them a reward. They were active, they had a leader, and there was a harmony between them” (Teacher A, Interview 3).

Teacher B also spoke positively of his efforts to promote a change in pupil accountability through moving from lecture method to a more cooperative learning method:

“Pupils in the lecture method were passive and inactive, but when they realised that they have to play the teacher part and the pupils’ part, and they have to understand the topic and explain it to their class mates, they changed. They changed by taking the responsibility for their learning, by communicating with each other, and by learning many new skills such as standing in front of the class and presenting their team topic, interacting, listening skills and critical thinking” (Teacher B, interview 4).

Teacher A in his final journal entry outlined his impression about the improvement in his pupils’ responsibility for their learning across the lessons:

“My impression in this week is that the pupils are moving forward in their understanding of the method [Jigsaw method] and they realised their responsibility in the class and in their groups. They work hard to transfer what they got to their groups mates” (Teacher A, Reflective journal No.7).

#### **5.4.9 Delegation of Power, Authority, and Control of the class**

Delegating authority in the classroom and giving the pupils greater power to learn by themselves are essential features in developing the cooperative learning method. This issue began to emerge in both classes during the shift from using a traditional teaching method to using some methods of cooperative learning. In the traditional method Teacher A controlled the classroom and held the authority and power. In such a lesson no pupil could talk unless he was asked a question.

During lessons using cooperative strategies, Teacher A started to delegate some power and authority to his pupils. The pupils gradually started to be more in charge of their learning. Specifically, pupils were given the freedom to talk in the group, to discuss and also to occasionally stand up and present some materials to their team or to the whole class:

“The teacher asked the groups to point out a presenter to stand up and present their topic to the rest of the class. Four pupils stood up (one from each group) and started to present the groups’ topics to the classmates. They spoke confidently, were free to talk, to answer any question, and they wrote the elements of the topics on the board. For example, group 1 wrote the steps that should be taken before going to divorce such as, the husband and his wife should discuss the problem together, or staying away from each other for a while till they might desire for each other, also, they might ask some of her or his relatives to solve the problem between them” (Field Note, Teacher A, Lesson 6).

Teacher A concurred that as a function of cooperative learning pupils started to be more independent and have increased power and control of their learning. He believed this method granted pupils greater confidence and that continuing to use this method would allow pupils in time to manage their learning more completely:

“There are several benefits for my pupils with this method, for instance, pupils started to depend on themselves and that is very clear. In addition, they started to build a confidence in themselves and they felt that they can do something inside the classroom. Moreover, standing pupils in front of the class and then talking and presenting some of the materials require high level of skills. In fact, when we continue to use cooperative learning, I think pupils can manage to learn almost completely by themselves and this is also high level comparing with the past when they were passive just listening” (Teacher A, interview 3).

Teacher A also claimed that giving the pupils freedom to learn in a cooperative learning method was essential, and that this did not disrupt classroom order:

“One of the important issues in cooperative leaning is to give pupils a freedom

inside the classroom and when I did that actually I did not lose the control as might be expected” (Teacher A, interview 4).

Implementing cooperative learning in Teacher B classroom also invited the pupils to become more involved in the learning process. By this method the pupils had increased power to participate more actively (the freedom to talk and discuss and give their opinions) in their learning and the opportunity to make some decisions.

Delegating some authority to pupils was initially a difficult step for both teachers. In the first interview with Teacher B, he explained his reason for not delegating authority in the classroom to the pupils,

“The reason why I did not use cooperative learning is because we do not have confidence in ourselves as teachers to implement such a method. Also, we cannot completely delegate the class to the pupils because the pupils do not have the ability to manage themselves, they might not understand the lesson correctly. In addition, this method might lead to disorder” (Teacher B, interview 1).

However, with increased experience with cooperative learning, the teachers became less concerned and were happy to give the pupils more power to manage behaviour themselves: “It was there a small disorder inside the classroom in the beginning of the project, but that can be controlled by the groups” (Teacher B, interview 3).

By the middle of the implementation stage, Teacher B positively highlighted the pupils’ ability to work together, to show responsibility when they were given the power, and to learn more when they are given greater freedom in the classroom:

“In the past the pupils were participating with me in the lesson but those participants were just seconds or minutes. Now with cooperative learning the pupils themselves are searching for the information and sharing this with their groups’ mates, then they discuss that information together then they choose one

of them to stand up and present it to the rest of the class. All of these actions are positive change happening in my class today” (Teacher B, interview 3).

Teacher B admitted that classroom control was not lost by delegating responsibility to the pupils:

“I noticed that many pupils were not afraid of standing and presenting in front of their classmates. I did not lose control over my class. It is the opposite. This method gave me a big comfort because all the pupils were working and busy all the time, so no one had time to disturb or play around and that helps in class control” (Teacher B, interview 4).

In addition, Teacher B in the end of the project acknowledged that the fear from giving pupils the power, the control of authority and the freedom in classroom was unfounded:

“Honestly, I had the feeling of losing control if I used such a method. It was in my mind that this method contains disorder and it needs more efforts from the teacher to keep the class on track, but when the method was conducted correctly I found, fortunately, all those feelings were illusions. Everything that happened in the class is under control because all pupils are working and busy with the activities that they were given” (Teacher B, interview 4).

#### **5.4.10 Peer Teaching and Pupil involvement**

Teachers shared their views on how cooperative learning influenced the pupils’ position in the classroom. Pupils in the traditional method were mostly inactive and rarely participated in the learning process. However, the cooperative learning methods involved them more completely in their learning.

Some changes were evident in the pupils’ roles during implementation of the cooperative learning method in that they started to participate, interact with each other, discuss and involve themselves more in the learning process. This was very evident in the Students Teams-Achievement Division (STAD) method which allowed pupils to

play more of a central part inside the classroom:

“Some groups determined the leaders for the group, speakers, writers and a time controller. The end of the lesson, Teacher A required the speakers to stand up and explain their groups’ topics to the rest of the class. Group two was asked a question to suggest some solutions of the problem of squandering (in food and money) in wedding parties. One pupil from the group answered that question on behalf of his group” (Field Note, Teacher A, Lesson 5).

Through the use of the Jigsaw method, the pupils in class A also continued to be involved in the learning process and help each other to understand the topic of the lesson and the interdependence increased between them, as the following is an illustration:

“The topic of lesson 11 (in Jigsaw method) was about sales in instalments. Teacher A asked his pupils to move to the sub-group and he gave each group its activities that should be covered. Group 1 activity was to find the definition of instalments and its rule in Islam; Group 2 activity was to give some examples of the sale in instalments. Group 3 activity was to clarify the conditions of the sale in instalments. Group 4 activity was to give types of instalment sales that are not accepted from the Islamic point of view. The pupils worked cooperatively in their groups about 10 minutes and there was a discussion and an interaction in each group. The teacher, then, asked the pupils to go back to the original groups. Each pupil in the original group started to explain and transfer the knowledge and the information that he got in the sub-group to his group mates. The teacher was supervising them and watching their performance of transferring the topics to their group mates” (Field Note, Teacher A, Lesson 11).

Teacher A in his fourth interview claimed that the pupils in cooperative learning lessons were more involved in their learning and became more responsible for it:

“Pupils in the lecture method were passive and inactive, but when they realised that they had to play the teacher part and the pupils’ part, and they had to understand the topic and explain it to their class mates, they changed. They changed by taking responsibility, communicating with others, and by learning

many new skills, such as standing in front of the class and presenting their team's part, interaction, listening skills and critical thinking" (Teacher A, interview 4).

In the same way, the pupils in class B had been equally passive at the beginning of the project, where the traditional method was used. They also did not involve themselves in the learning process and they usually kept silent while the teacher was lecturing and explaining the lesson to them. A few might ask questions or might participate when they were asked by the teacher:

"In lesson two it was there about 23 pupils in the class and Teacher B asked several questions about the previous lesson; some pupils participated and answered those questions such as, one pupil gave the definition of Al-Fiqh and another pupil explained the meaning of the prophet's sayings. Then Teacher B moved to explain the current lesson topic which was about the famous scholars in the sharia field and the reasons of variances between them in the AL-Fiqh Rules in Islam. The teacher lectured the topic for more than 30 minutes and the pupils were silent; some of them were inattentive. Three of the pupils were veiled with scarves and looked sleepy. The majority of the pupils were listening and looking at the teacher and the classroom was quiet except the voice of the teacher" (Field Note, Teacher B, Lesson 2).

The pupils' positions progressively changed with using the cooperative learning method, they became more active and started to learn themselves. They became more involved in the learning process and helped each other to understand the lesson topic. In addition, the teacher roles changed; as the following statement demonstrates:

"Teacher B, in lesson 16, which was about The Legal Islamic Rules of Selling, asked the pupils to move to their sub-groups then he gave them the activities cards. The pupils started to work together and all the pupils in each group were active, interactional and working cooperatively. The teacher was moving around and between the groups observing, monitoring and advising them. After 10 minutes of working in their sub-groups, the pupils went back to their original

groups. Each member in each original group started to transfer his part to his group mates. There was interaction between the pupils and the pupils listening to their mates. For example, group 1 performance such as interaction, listening, communication, participating and involving can be noticed by the fact that they helped each other to understand the topic and all the members in the group participated and looked attentive and they gave the speaker time to make his point clear” (Field Note, Teacher B, Lesson 16).

Teacher B highlighted the difference in his pupils’ practice and performance in the classroom between the traditional method and cooperative learning method by the following statement:

“In the past there were pupils who did not participate but with this method they become active and hard workers.....in the past the pupils were participating with me in the lesson but those participating were just seconds or minutes. Now with cooperative learning the pupils themselves search for the information and share this with their group mates, then they discuss that information together, then choose one of them to stand up and present it to the rest of the class. All of these actions are positive changes happening in my class today” (Teacher B, interview 3).

#### **5.4.11 Using Summary/Plenary**

A further change in instructional practice was evident in how the teachers, in the form of a plenary, summarised lessons when using cooperative learning. Usually in the traditional method, the teachers explained the topic of the lesson and asked pupils if there was any part of the topic that needed more clarification. At the end of the lesson, the teachers usually asked the pupils a couple of questions to check if they understood the material. Pupils did not always answer these questions.

During lessons where aspects of cooperative learning were emphasized, Teacher A used the last 10 minutes in each lesson to summarise the lesson’s topic and to cover any part

that might be missed by the pupils:

“In the last 10 minutes in the lesson, the teacher linked and summarised the whole topic through the elements that the pupils wrote on the board such as, the definition of the divorce, the rules of divorce in Islam, types of divorce, the Islamic wisdom of divorce, and the options and the steps that should be taken before going to divorce” (Field Note, Teacher A, Lesson 6).

Teacher A also talked about how he viewed the conclusion of a lesson in his reflective diary:

“One of the important issues of implementing the cooperative learning method is to give time at the end of each lesson to summarise the topic and to cover the issues that might be forgotten” (Teacher A, Reflective journal N.8)

Teacher B also used the last 10 minutes in some lessons to summarise the topic and link the main points, which had been generated by the groups, together as a way of checking that all the elements of the content had been covered and explained to the pupils:

“In lesson 19, which was about hiring out and its rules in Islam, in the last 10 minutes of the lesson the teacher summarised the topic with his pupils and he asked each group to give a summary of one part of the lesson and wrote what they said on the board. Group 1 summarised the definition of hiring from the Islamic point of view and its legal rules in Islam, group 2 summarised the conditions of hiring in Islam, group 3 summarised the types of hiring in general and group 4 summarised the Islamic point of view to hiring someone to do the work. As a result of that, namely all the main elements and points of the lesson were not completely written on the board” (Field Note, Teacher B, Lesson 19).

The teacher illustrated his usage of the final minutes at the end of the lesson as a summary of the topic and to check that all the elements of the lesson were covered and nothing was missed or forgotten:

“The disadvantage that I noticed with this method is that some information might be missed in each lesson and this is a problem. So, I used the last 10

minutes to summarise the topic and to link all the elements together, because sometimes the pupils could not understand some topics, for example, the lesson that was about ‘interest’. I felt that the pupils did not understand it” (Teacher B, interview 3).

#### **5.4.12 Chapter Summary**

This research question has attempted to both describe and seek the opinions from teachers or perceived changes to their classroom practice that occurred during lessons taught using cooperative learning methods. These changes related to lesson planning, specifically the objective of lessons, the physical layout of the classroom, how lesson outcomes are evaluated, the roles of teachers and pupils inside the classroom, and delegation of power and authority to pupils. Collectively these accounts offer a sense of the extent to which teacher was able to introduce and develop some features of a cooperative learning environment with pupils. The following chapter provides a discussion of the results presented in this chapter, making due reference to the existing literature.

# CHAPTER SIX

## GENERAL DISCUSSION

### 6.1 Introduction

The purpose of this chapter is to discuss the findings presented in Chapter five in relation to the literature reviewed in earlier chapters. This study investigated Saudi teachers' and pupils' perspectives on the implementation of cooperative learning in two Islamic curriculum classrooms. The discussion is organized around a number of headings, which are: training and CPD; shifting concern; role shifts; freedom; nearness; resistance; and cooperative learning and the Islamic curriculum.

### 6.2 Training and CPD

The importance of and need for training and CPD (pre-service and in-service) in cooperative learning is one of the significant findings highlighted by this study (Hargreaves, 1994; Brody and Davidson, 1998; Shallcross *et al.*, 2006). Although in Saudi Arabia there are some CPD programmes (e.g. quality management), these programmes tend to not equip teachers with suitable knowledge and understanding of other teaching and learning approaches (Fullan, 2001; Alhogail, 2003; Alhammed *et al.*, 2004; Aldeep, 2004; Alkanem *et al.*, 2005). Both teachers in this study had experienced little CPD in their careers, which is similar to Almutairi (2006), who also revealed a lack of training for teachers on different teaching methods (such as cooperative learning) which prevented them from using other teaching approaches with their pupils.

While both a lack of knowledge and practice of cooperative learning were initially expressed by both teachers, the data demonstrated that they benefited substantially from the training programme, and made progress in a number of areas related to classroom practice (Shallcross *et al.*, 2006). Although, the training programme concentrated more

on increasing the teachers' knowledge and information regarding cooperative learning (Algarfi, 2005), it was from the teachers' point of view significant in enabling cooperative learning to be genuinely attempted in both classes. In addition, both teachers claimed that the training programme raised their confidence, self-awareness, and equally importantly improved their knowledge and understanding of this particular approach to teaching and learning (Sharan and Sharan, 1992; Cohen, 1994; Farivar and Webb, 1998; Roy, 1998; Alharbi, 2005).

By the end of the training programme, the teachers felt reasonably confident to continue to implement what they had learned in their classrooms. However, their initial attempts to put cooperative learning into practice were not as straightforward as initially thought and it took a little time to get some groups going (Farivar and Weeb, 1998). Across the sessions teachers indicated that they needed further CPD in other cooperative learning methods, in classroom management, lesson planning, and time management. These findings might be attributed to: 1) the training programme not satisfying all the teachers' needs; 2) some of the training programme materials that were given to the teachers may not have either been read or understood; and 3) teachers' roles might have been misunderstood by the teachers especially when using the Jigsaw method. Therefore, these issues at the very least should be taken into account when developing further training in cooperative learning in the future in Saudi Arabia (Kennedy, 2005). The training programme might give some thought to these topics in the future for use with other Saudi teachers.

The teachers' efforts to introduce cooperative learning in their classroom (i.e. delegation, responsibility, facilitating, rearranging curriculum content to reflect cooperative learning, and dividing groups) did from both observation and teachers'

opinions reveal the presence of many key features of cooperative learning but also suggested more development was needed. Research does suggest that changing teachers' classroom practice often requires additional work in teaching skills, classroom climate and professional characteristics (Sharan and Sharan, 1992; Fullan, 2001; Gillies, 2003), and indeed, this was the case with the two Saudi teachers.

It must be remembered, this study was conducted with two Saudi teachers, who had 19 and 12 years of teaching experience respectively and who had admitted their teaching approach had not changed during this period. However, many positive changes in the pupils and classroom practices were evident, which shows the transformative potential of cooperative learning to this specific content and context. The question remains, does this lack of knowledge of alternative teaching approaches and of access to relevant CPD training reflect the situation of all the teachers in Saudi (about half a million teachers)? If the answer is yes, there may be implications for both the Saudi government and educators in Saudi to carefully revise teacher preparation programmes (pre-service) and available CPD programmes (in-service), if they seek the reform and change attempted in these two classes in this one school. Concentrating and developing training programmes, as this research tried, is the key that might enable the reform and the change to take place in Saudi schools.

The negative experience some pupils had with group-based learning (with other teachers in the school) was likely due to some initial anxiety at the thought of participating in a new approach. This anxiety, as described, disappeared for the majority by the end of the implementation of the training stage, which suggests the teachers did employ cooperative learning methods (STAD and Jigsaw) to the satisfaction of the pupils. It might also confirm that the pupils' recollection was arguably not cooperative

learning. Both teachers had claimed that some of their colleagues, who were of a view they were using cooperative learning, were, in reality, not doing so.

Training pupils in ‘pupil centred-learning’ and its skills is essential for better implementation and understanding, which is consistent with Johnson and Johnson (2006), who argued that group members have to be trained to conceptually understand what they are supposed to do. In effect, while the teachers here were trained, it would be worth asking whether similar work is necessary for pupils, given that the learning process expected was different to how they had been previously taught. Implementing cooperative learning in the two classrooms was like a training programme for pupils, which, by the end of the implementation stage, made the picture of the new approach much clearer in the majority of the pupils’ minds. This supports the notion of ‘learning by doing’, highlighted by Cohen (1994). It was encouraging that by the end the majority of pupils were able to distinguish between topics within the curriculum, which might or might not be taught by cooperative learning, and they were mostly able to reflect on the extent to which they understood the new approach and its key characteristics and requirements.

In the main, the training programme contributed to a significant shift in using cooperative learning in both classrooms. The training helped both teachers understand the nature of the new approach and its requirements, such as delegation, giving the pupils the chance to learn themselves, becoming a facilitator, and reshaping teacher and pupil roles. Both teachers and pupils discovered and supported the benefits of cooperative learning for both themselves and their pupils, which maintained their enthusiasm to sustain the approach in their classes. Indeed, Fullan (2001) claimed that allowing change to take place can be done by sharing the meaning of the change and

making it clear for everyone. In the same way, Hargreaves (1994) argued that teacher beliefs, thinking and assumptions have a powerful implication for the change process. In addition, Brody (1998) highlighted that, teachers' knowledge and knowing, their beliefs regarding control and authority and the nature of conceptions of the teachers' roles in teaching and learning have the greatest impact on what teachers do in the classroom. This, indeed, reflects the situation with these two teachers in their classes that the information, knowledge and the skills that they had from the training programme tried to change their belief regarding cooperative learning and also tried to increase their confidence in implementing cooperative learning. This did not just make their practice much better with the time, but also made their belief in cooperative learning method and its benefits stronger. In reality, that was clear from the enthusiasm that both teachers showed in the end that they intended to train their colleagues on such method. It consists with what Mansour, (2006) states that teacher experience, knowledge and beliefs should be taken as the starting point for introducing new concepts or changing pedagogies in the classroom.

The teachers' practices did not entirely reflect the 'ideal', particularly in the use of facilitation, plenaries, keeping the pupils responsible, especially in the sub-group in the Jigsaw method and time management. It is therefore suggested that training is both needed and necessary pre-service and in-service, not just for the implementation of cooperative learning, but also for any other teaching and learning approaches such as e-learning, use of ICT and personalised learning (Angelides, 2002; Poole, 2003; Gillies, 2004; Alhammed *et al.*, 2004; Roux and Ferreira, 2005).

### **6.3 Shifting concerns**

Change, whether, 'good' or 'bad' can be stressful and our natural reactions are often fear, anxiety or resistance, which can explain why we sometimes think about change and do nothing (Paton and McCalman, 2000). Although both teachers expressed their desire to change their direct-teaching style, data from the study showed that they had some concerns regarding the proposed change in their teaching method. This concern appeared in many forms before, during and after using cooperative learning.

Fullan, (2001) claimed that the lack of the skills needed and the lack of the knowledge about the need of change are two significant barriers that might prevent from achieving any attempt at educational change. Significant educational change consists of a change in sensibility and a shift in fundamental assumptions and beliefs about learning, knowing and authority (Brody, 1998; Brody and Nagel, 2004; Lyman and Davidson, 2004). In this study, providing the teachers with the information and building their knowledge regarding cooperative learning convinced them to use the approach. The lack of knowledge about cooperative learning methods and how this approach might be implemented in the classroom was a significant, but understandable concern for both teachers in this study. Given the very limited CPD opportunities of teachers and an admittance that they had taught the same way for many years, they consistently reported their need for further information and knowledge about cooperative learning before moving to the implementation stage. On reflection, the training programme delivered by the researcher concentrated more on the theory of cooperative learning in an attempt to fill this gap. Although the teachers were of the view this had been achieved, it appeared, in the end, that the teachers needed greater practical information and details on how to employ cooperative learning in classroom. That the videos clips shown to the teachers in the training programme were in a different language [English] and environment,

somewhat compounded this issue (see section 4.5.2). This finding supports what Alhammed *et al.* (2004) claimed, that teachers have both a limited knowledge of learners' needs and a narrow range of current educational approaches to achieve desired aims. Thus greater attention should be given to these areas for any CPD programmes that are developed in the future.

However, the many changes in the two teachers' practices in their classrooms during the implementation stage demonstrated the extent to which they learned and understood cooperative learning methods and illustrated their shift to a more pupil-centred approach. Both teachers by the end of that stage had largely positive views and positive experiences of the new method and they were enthusiastic to continue to use it in the future, as were their pupils. They were also enthusiastic to transfer their experiences not just for their colleagues in the same schools, but also for other teachers in other schools.

Johnson and Johnson, (1998) claimed that continued support for long term use of cooperative learning is important and needed for teachers who desire to make changes in their instructional practices, as teachers do tend to benefit better from that change in the second and the third years. Data have showed that both teachers were still worried about the support that they may need if they were going to continue to use cooperative learning methods in the future, such as access to relevant materials, advice and help for solving problems, which is necessary for any change in the classroom (Cohen *et al.*, 2004). This shortage of such support currently in Saudi might explain the teachers concern when the researcher left the setting as it was likely no immediate on-going help would be available. Therefore, any efforts to reform or develop classroom practice in the general education sector in Saudi should consider these issues, not just when implementing cooperative learning methods, but also for any other approaches. This

finding agreed with what Abrami *et al.* (2004) believe, that, although some teachers employ cooperative learning in their classes successfully, there are several factors that might prevent them from doing so in the future, such as teachers' fears about inadequacy of additional training, follow-up support, the on-going influence of the principal, and the school climate or community culture. In fact, training (CPD), and follow-up support were emphasised several times by the data. The Ministry of Education in Saudi might concentrate more upon these two factors (CPD, and support), which are, indeed, important factors that may allow such change to continue in classrooms, especially after announcing the programme of King Abdullah for developing the general educational sector in Saudi, which was established at the beginning of 2008.

A limited level of expertise and support for cooperative learning was evident during the implementation stage. Supervisors from the Local Authority of Education (LEA), who are charged with supporting teacher professional development, visited the setting for this research and asked the researcher if they could have the same training as the participant teachers on cooperative learning. Rather than giving support to teachers, this would appear to illustrate the lack of knowledge with new teaching and learning approaches, new technology and new learning theories at a local level, which might be of interest to the Ministry of Education, who oversee the whole Saudi educational system, should they see cooperative learning as one way forward.

When considering the educational change examined in this research, classroom control was an issue that initially concerned the two Saudi teachers. Indeed, Fullan (2001) states that the issue of classroom control and discipline are major preoccupations among teachers considering change. Teachers expend considerable time and energy attempting

to control their classrooms in order to produce the certainty that may enhance order in the classroom (Sparkes, 1991). In this study, both teachers believed that using cooperative learning and developing group-based discussion in the classroom would likely cause some loss of control (Fox, 1995). In fact both teachers, in the beginning, were quite fearful of disorder in their classroom. However, this study demonstrated that cooperative learning methods did not contribute to a loss of control in the classrooms. They discovered that cooperative learning allowed them to not only reconstruct their practice but also retain notions of control and authority (Brody, 1998). The teachers' fear (of losing control or disorder) did not materialise and misbehaviour, even very minor, did not exist in both classes. This may be because of the novelty effect of the new method, pupils' enjoyment of the new approach and its expectations for learning and participation. It should be remembered these pupils have been required to be quiet, to sit in rows, to pay attention and show respect to their teachers. Quite possibly these pupils would have behaved regardless of the new ideas. It might be also because of the attendance of the researcher and the camera in the classroom (Wajnryb, 1992).

Both Johnson and Johnson (1998) and Sharan (1994) state that when students have been involved in one of the cooperative learning methods, the misbehaviour of some students will be dealt with by the group, without requiring the teacher's help. Bad behaviour from one member can negatively affect the whole team's achievements. Indeed, the fear of losing scores and not achieving the weekly reward were motives that prevented misbehaviour among some Saudi pupils. Data showed that group members helped to control and change misbehaviour in their groups, which indirectly assisted in maintaining order in the classroom.

The teachers were naturally concerned about attempting a new approach and they at

first showed some hesitancy, which they justified by a lack of self-confidence of using the new method. For teachers this lack of confidence can be attributed to knowledge and the very limited information they had regarding cooperative learning. This lack of self-confidence seemed to somewhat disappear after the training programme and more so after implementing cooperative learning practically. Therefore, teachers like these should be given as much time as they need to acquire competence and confidence in conducting cooperative learning methods (Sharan and Sharan, 1992).

This study demonstrated that the teachers were worried about letting the pupils study the material alone and fearful that the pupils might misunderstand the lesson content. This was a major change from established practices for these two teachers. Further, Saudi teachers are accountable to the head of their school and the Local Authority of Education (LAE) to cover the whole curriculum during the expected period. Delegation to the pupils to learn from and with each other is at odds with the philosophy of the whole system in Saudi, which is characterised by centralisation. Here teachers are seen as central to the learning processes and are responsible for delivering the content to the pupils. However, the teachers in this study discovered by the end of the implementation stage that the pupils understand the content themselves and they were able to cover the planned curriculum. Claims from interviews with the pupils suggested that they understood the content via cooperative learning methods better than with the traditional lecture method.

Teachers were of the view that compared with the traditional method, learning the task in cooperative learning takes more lesson time. As a result of that the pupils who use cooperative learning methods have more limited coverage of material than other pupils studying by themselves (Slavin, 1996). In addition, understanding the processes of the

cooperative learning method and its use in classroom does require time for both teachers and pupils from the teachers' point of view. This finding supports Watson, *et al.*, (1998) who claimed that learning new approaches of teaching is an extremely challenging task that requires time, commitment, repeated practice and a network of support, encouragement, and feedback.

Given the high numbers of the pupils in each class [between 35 and 45 in each class] during the year terms is potentially a problem from the teachers' point of view that might prevent other Saudi teachers from using cooperative learning. By the end of this study this problem was not found, because the number of the pupils in the summer terms was not high (16 with Teacher A and 23 with Teacher B). It was found that with up to 30 pupils in each class in this school, cooperative learning still can be used; however, it might be difficult to use such methods if the number of the pupils increased beyond that.

Teachers' timetable load (20 classes per a week) was considered another challenge that might make extended use of cooperative learning difficult. Both teachers admitted using a traditional lecture method for their teaching career to date where lesson planning was straightforward. When they changed to cooperative learning they reported that attempting such a method increased planning time to prepare everything needed for the activities in the lessons. Although the teachers were happy with the new method and indicated that they wished to continue to use it in the future, they argued that teacher load might be one factor that requests some attention, particularly after seeing the efforts that the change required. However, the Ministry of Education in Saudi might wish to review teachers' load, if they want to consider reforming the whole general education system (including curriculum, teacher training, teaching methods, teaching

instruments, school management and school buildings) and to meet the need of preparing the Saudi pupils with the skills needed for the future of the nation (Alkanem *et al.*, 2005).

Preparing the tasks of the lessons and the activities poorly might be one of the factors that shaped the teachers' concern of using cooperative learning (Alhammed *et al.*, 2004). This might be explained by the lack of knowledge and understanding that the teachers still have during the implementation stage. Almutairi (2006) found that 76% of 133 teachers did not use cooperative learning in their teaching which they attributed to a lack of knowledge about cooperative learning method, the high number of the pupils in each class and teachers' load. The teachers in this thesis also saw such factors as significant in the continued use and development of cooperative learning in their school setting. This requires a continued support and help (before, during and after) to the teachers to enable the change to take place in the classroom, which supports the claim by Hargreaves, (1994) that continued professional development (CPD) is an essential ingredient in supporting or stimulating a successful level of change and development in school.

This study showed that both teachers realised the need for re-preparing and re-organising the materials to be appropriate for the group-centred learning activities (Sharan, 1994). Comparing with their role in the traditional method, the change in the teachers' role in planning lessons was noticeable, that both of them prepared the card activities in advance and passed them to the pupils in each lesson (Johnson and Johnson, 2004).

The pupils concerns might be because teachers (in the past) located the pupils into

groups and asked them to work with each other without applying the rules of working in groups (Mandel, 2003), such as assigning a specific task to be studied (Brubacher, 2004). Pupils naturally expressed concerns at the beginning of the lesson about the need for establishing equal groups, which might be due to poor previous experience where their teachers divided the groups homogeneously not heterogeneously (Veenman *et al.*, 2000; Jacobs *et al.*, 2002). In this study, some pupils indicated that dividing the groups heterogeneously allowed them to benefit more from the more able pupils, which supports what Jacobs *et al.* (2002) believe in, that using heterogeneous grouping made the pupils appreciate the benefits of working with others from different backgrounds and with different level of academic knowledge.

## **6.4 Role Shifts**

Moving from the traditional lecture method where the teacher is in a position of authority and provider of learning (teacher-centred learning) with pupils passive receivers of learning, to cooperative learning (pupils-centred learning) requires a change in teacher and pupil roles. This section discusses to what extent the change in roles appeared in both classes.

### **A) Teacher roles**

Data revealed that the process of learning in the classroom was changed through using cooperative learning. Teachers in the traditional method transmitted information to their pupils. In addition, it was the teachers' obligation to ensure pupils understood this information and they attempted this by asking one or two questions at the end of each lesson. Teachers used the traditional method because they themselves had been taught by the same method, and had rarely wished to change their style and leave their 'comfort zone' (Radinsky, 2008). However, both teachers saw a need for change and

made a genuine effort to try cooperative learning in their classes. The two teachers became observers, watchers, facilitators, advisers and monitors rather than the main source of knowledge (Gillies, 2003; Brody and Nagel, 2004). Both teachers also recognised that, in cooperative learning classes, they tend not to engage primarily in the transmission of information to students according to predetermined criteria of quantity and pace of instruction or primarily in maintaining discipline; their main role was to facilitate the academic work of teams of pupils, who might participate in choosing the content and procedures of their investigative efforts (Sharan, 1994).

Brubacher (2004) pointed out that the teachers' roles in cooperative learning are giving direction, establishing roles, training the students to use norms for cooperation, allocating students to groups, delegating authority to those students who are to play special roles, and most importantly, holding groups accountable for the product of their work. Similarly, the data from this study showed that both teachers were able to achieve many of these and employed these roles in their classes, although no one can claim that their implementation were perfect in this first attempt.

In this study, it was evident that cooperative learning method changed the teachers' roles and practices quite considerably which consist with what Foote *et al* (2004) state that, in cooperative learning, watching and correcting every mistake in the classroom was not any longer the teachers' responsibility. In addition, the authority in these two classrooms was delegated to pupils, who became more responsible for their learning,

Although the teachers remained in charge of ensuring that the aims of lesson had been achieved and that learners in the classrooms received the help they needed (Cohen, 1994), the new approach opened the teachers' eyes in their classroom. The teachers

became more aware about the learning and the wider achievements and disposition of their pupils, which may have never been revealed if the teachers had persisted with their normal style of instruction. They discovered many new skills in their pupils (e.g. leaders, presenters, and writers), and they found that pupils could learn by themselves. The data revealed that cooperative learning method made the teachers informally better observers and assessors of their pupils (socially and affectively) and their performance in their groups. It also made them good observers of the learning process (Brody and Nagel, 2004).

Although it was, sometimes, difficult for the teachers to delegate greater responsibility to pupils, playing such a role was very important to allow the progressive shift from 'teacher centred-learning' to 'pupil centred-learning'. It established new places for both the teachers and the pupils. Brody (1998) claims that this shift in places requires new skills especially in teaching behaviours, their understanding about the pupils, how the pupils learn and are motivated to learn. In addition, progress was made during these lessons, when the teachers' efforts helped their pupils become caring, fair and responsible people, as well as learners. These findings support the need for revising teaching methods in Saudi (in both sectors general and higher education), which might help in preparing a new generation of learners for the future needs of the nation, to take place in classroom (Alkanem *et al.*, 2005).

Watson, *et al.*, (1998) state that learning new behaviours, roles and approaches of teaching is an extremely challenging task, which requires time, commitment, repeated practice and a network of support, encouragement, and feedback. The present study found this to be true in that the teachers were a little frustrated about the shortage of the time in the implementation stage (just over four weeks) which may have not allowed

them to reach a satisfying level of implementing cooperative learning (from their point of view). Both teachers claimed that if they implemented cooperative learning method in the whole term, the benefits for them and their pupils would have been even greater. This might open the gate for new studies to examine the use of cooperative learning methods in Saudi classes for the whole term not just for the Islamic Culture curriculum but also for other subjects.

Although the educational system in Saudi depends on centralism, which provides all the schools with their needs (curriculum, books, training programmes, materials, stuff, and technology), this study suggests the teacher should be given greater freedom to identify a wider variety of resources for learning beyond textbooks assignments. For example, pupils might be involved in planning topics for their lessons, and enable them to develop information freely. This might encourage pupils' mutual help, and maximum their participation (Brubacher, 2004). By moving to cooperative learning, both teachers played their roles in the classrooms actively that they established rules such as pupils have to work cooperatively, interact with others, listen to others ideas, use communication skills and understanding the topic is the pupils responsibility, win together or loss together and the pupils have to point out as a group their leader, speaker, writer and time-controller (Veenman *et al.*, 2000). In addition, they structured the classroom layout (tables and chairs) and the lesson materials to support group work; and they structured the learning processes in a way that pupils could achieve social and personal skills while they were doing their class activities (Reigeluth, 1999; Damron and Mott, 2005). Moreover, after the training programme it was the teachers who decided to use the Jigsaw method and STAD method as the most appropriate models of cooperative learning for their teaching and contexts (Kagan and Kagan, 1994).

This study revealed that using cooperative learning changed the goals and the aims of the lessons from transferring information to pupils to concentrating upon academic achievements as well as social and personal skills, which might help in preparing the pupils for Saudi future economic need (Alharbi, 2005). In addition, using cooperative learning methods changed both teachers practice in plenary at the end of the lessons. In the traditional method, the teachers tended to ask some questions at the end to be sure that the pupils understood the topic and that might be because the teachers are responsible in front of the head of the school and the Local Authority of Education (LAE) about transferring the curriculum to the pupils. However, in cooperative learning method, the plenary did become different in that the teachers role adjusted to drawing out the learning, to refer back to the lesson objectives, and to reflect on what the pupils had been learning as a result of their working in groups (DfES, 2004).

### **B) Pupil roles**

In the main, the data in this present study indicated that cooperative learning was received very positively by the majority of pupils in both classes (Ghaith, 2002), which allowed the pupils to be at the centre of the learning process. Similar to Artzt and Newman (1993), it was shown that cooperative learning established a switch in the teaching style from ‘teachers to pupils’ to ‘pupils to pupils’ by involving the pupils in small groups of learners who worked together as a team to solve problems, complete a task, achieve common goals and become more responsible about their learning and that of other.

The data showed that cooperative learning contributed to a significant change in the roles of the Saudi pupils in both classrooms. The pupils during this change, moved from being passive, who listened and received information in the traditional method, to

becoming more active learners, who in their view, created and exchanged information and promoted a deeper learning through interaction (Ravenscroft *et al.*, 1999). This change was very new to them as a 'process of learning'. In the same way, the data demonstrated that using cooperative learning method placed these pupils in a new position in the classrooms (Cohen, 1994). It was found that 'learning' which was based on group activity encouraged interaction, positive achievement, motivation, increased self-esteem and enabled new of a range of social skills among the pupils in both classes, which supports the claim made by Johnson and Johnson, (2004). Pupils (with their new in-class roles) were more willing to work with each other as groups, listen to what their team mates had to say and share ideas and information (Gillies, 2004). In doing so, they demonstrated their interdependence and leadership as individuals and as a group and shared the sense of one community (Slavin, 1996). Pupils realised the importance of the new method, such as learning social and affective skills, self-confidence, taking on new roles and positions in the classroom (leader, writer, presenter and time-controller), feeling in charge, making new friends and valuing a greater sense of freedom in the classroom. This, indeed, might explain the pupils' happiness with this new method and might also explain their rapid acceptance of it.

Moreover, these benefits might illustrate the pupils' rejection of the traditional method. This is quite possible that this was first time these pupils had been consulted in what learning is/ was like in the traditional approach. The data showed that the pupils found cooperative learning approaches more beneficial in terms of developing a wide range of skills, such as working in teams, communicating, listening, and feeling some level of accountability. Interestingly, they viewed this as necessary for their future career that might equip them for workplaces and lifelong learning (Ballantine and Larres, 2007). Indeed, social skills including trust, mutual respect, positive self-esteem, self-

confidence can aid an understanding of what it means to be a member of a group as well as the confidence to work openly with others in that group (Baines *et al.*, 2009). This generally consist with the findings by other Saudi studies that cooperative learning promotes the pupils' skills. For example, Hakeem (2006) found that cooperative learning method increased, obviously, the pupils' abilities of creativities and Alqahtani (2006) also found that working in a group encouraged the pupils to learn more by shearing information and interaction with each other. In addition, Alinizi (2006) in his study found that cooperative learning influenced the pupils' scientific thinking skills positively, encouraged them to interact with each other and also pushed them to participate in the process of learning.

Although cooperative learning is an approach that tries to remove a lecturing style in the classroom, data from the present study illustrated that pupils were initially very anxious about learning presentation skills and being giving the opportunity for practicing them in the classroom. Interestingly, in time the majority of pupils endorsed the opportunity to stand and present to their classmates, and these opportunities seemed to break the fear of public speaking for nearly all of them (Lotan, 2008). Teachers also appreciated the chance to see some of their learners demonstrate these new skills. One can argue that it took considerable courage for these pupils to speak in front of the class, which had not been available to be learned for several years in the traditional approach.

In sum, increasing pupils' skills whether social or personal were significant benefits that the pupils achieved from the cooperative methods and from the voices of both teachers these were revealed for the very first time in a lesson. Although interaction skills and communication skills were very new skills practiced in both classrooms, the pupils showed positive attitude towards working in groups and interact with each other

positively to promote and to enhance their learning and achievements (Slavin, 1996; Ravenscroft *et al.*, 1999; Tarhan, 2008).

According to Katzenbach and Smith (2001) establishing some rules of working in groups helps ensure better interactions among pupils and minimises the unwanted behaviours or not paying attention. In this study, both teachers developed some rules (such as 'respecting others' ideas', 'win together or loss together', 'listen when your mate talking' and 'each member should talk not more than two minutes') to move the learners forward to interact successfully with their group mates. Indeed, teaching the pupils the skills needed for effective interaction can help to provide the foundation of success at school and life (Mills *et al.*, 2006). In these two Saudi classes, these rules encouraged the feeling of 'belonging to the group' among the majority of the pupils who saw themselves part of their groups and who claimed they made every effort to give help, information and knowledge that they have. Indeed, a feeling of belonging is a powerful motivator that increases values, respect and self-esteem amongst the pupils and might makes an extended team whose members work together to ensure mutual success (Wild *et al.*, 2008).

It must be acknowledged that in this study no quantitative measures of academic achievement were conducted pre and post lessons. However, this study showed that, when cooperative leaning methods were used, both teachers and pupils perceived greater achievements and understanding of the content comparing with the traditional method (Putnam, 1998; Veenman *et al.*, 2000; Aldeep, 2004; Baines *et al.*, 2009). It was found in several Saudi quantitative studies by Alkaribi (2007), Fodah (1999), Alnaser (2001), Alhusaini (2002), and Alqahtani (2006) that cooperative learning method increased pupils' achievements in the respective experimental groups.

It was also evident that cooperative learning made the pupils more responsible about (their's and their mates) learning, which, from the pupils' point of view, led to an active, social and interesting learning inside the classroom (Johnson and Johnson, 2008). Choosing the representative or the presenter of each group randomly was an important reason that encouraged and increased individual accountability, because the pupils did not know who was going to be chosen. Moreover, giving a 'title' to each pupil established a 'reason or purpose' in each group (such as leader, presenter, writer and time controllers), which appeared to be a motivation that made the learning more interesting, and which increased the pupils' interest in Al-Fiqh curriculum more than other curricula. It might be one reason that pushed the pupils in both classes to learn more and be more active learners. It could be speculated that, in the past, the pupils may have had no reason to attend class other than to sit and listen to the teacher talk. This finding endorses the work of Alnaser (2001), Alqahtani (2006), and Hakeem (2006) in that cooperative learning was a factor in positively changing pupils' attitudes toward the curriculum.

Pupils need to be able to develop close supportive relationships with everyone in the classroom not just with preferred friends. The data showed that cooperative learning promoted more positive and supportive relationships and more friendships between the majority of the pupils in both classes where the pupils got to know and work with other which they did not previously know. Johnson and Johnson (1998) believe that cooperative learning has been found to encourage and promote interpersonal relationships even when team members originally do not like each other. This cooperative experience promoted new friendships. Although, the pupils in the traditional method were studying the same curriculum with the same teachers in the same classrooms, the data demonstrated that they did not know each other any better.

However, placing the pupils in groups granted them the opportunity to make new relationships, new friendships and allowed them to know each other better than before (Huber and Huber, 2008; Wild *et al.*, 2008).

The activities in lessons were designed to develop social skills, to encourage the pupils to see situations from other people's perspectives. It also encouraged them to work together, to interact, and to build positive relationships between them, which might help in increasing the groups' achievements and their social skills (Baines *et al.*, 2009). According to Baines *et al.* (2009) building up relationships, trust, and respect between group members through the activities will not happen if the groups are frequently changed. Similarly, it was found in the present study that the relationships among the pupils in the main groups become strong. Groups designed in the beginning of the implementation stage did 'persist' (Wynne and Walberg, 1994). However, the relationships and the friendships were found to be weaker among the pupils in the sub-groups especially in the Jigsaw method and that might be because the pupils were located in new groups with pupils from other groups who they might not know well (Wynne and Walberg, 1994).

This significant shift in the teachers and pupils' roles in the classroom made by cooperative learning approach is supporting the need of the Ministry of Education in Saudi of preparing learners for the future and providing them with the skills needed (Alsonbl *et al* 2004). In addition, this positive shift from the centralism idea, which allowed the pupils a voice in these two classes, might also positively influence the wider school environment and the whole general educational system in Saudi.

## 6.5 Freedom

An important theme that appeared from the data was feeling a sense of ‘freedom’ in the classroom, which was highlighted by nearly all pupils in both classes. It is speculated that, in the traditional method, these pupils had little if any freedom and that learning as a process was directed by their teachers through lecture. Expectations of pupils in the traditional method were watching and listening, to the teachers talk, which reflects the notion of the centralised system in Saudi education from the base (classroom) to the top of the pyramid (Alhammed *et al.*, 2004). In the main, cooperative learning, from the pupils’ point of views, appeared to grant them new opportunities to take on new positions that allowed them to ‘see and taste’ some freedom in classroom.

Pupils began to take some decisions over their learning and were able to talk; the classroom became noisy. From the researcher’s experience, when one enters any Saudi school he/she will usually notice that the school is a very quiet place, except for the voices of the teachers in their classes. This reflects the ‘centralist’ notion that controls the country’s educational system, which expects the head teacher of the school to manage and control the school effectively, who would expect quietness. If a head teacher heard noise in any classroom this might effect a teacher’s annual evaluation report and noise could be regarded a sign of poor class control or indicate an inappropriate use of the lesson time. In this study, the head teacher had been given permission by the LEA to allow this study to take place in the school. In fact, while supportive of the study, he wanted more of his teachers to be trained in cooperative learning.

When cooperative learning was used in these two classes, pupils in their interviews described how they were able to talk with each other freely in the classroom and discuss

the topic themselves, which was not observed when teachers were using the traditional methods. Buckridge and Guest, (2007) claim that lecturing offers little degree of freedom for pupils whose job is just to listen, to take notes, and to memorise facts for evaluation questions.

Teaching and learning in Saudi require pupils to remain in their seats. In the interviews, pupils indicated another aspect of freedom was that by using cooperative learning they were able to walk and move from one place to another inside the classroom during the lesson, especially with the Jigsaw method when they moved from the main-groups to the sub-groups (Sharan, 1994), and when the pupils had opportunities to teach the class from the front.

According to Buckridge and Guest (2007) a greater freedom in learning might help pupils eventually reach higher-level objectives or desired learning outcomes than they otherwise would have done in limited degrees-of-freedom contexts. In this study, both pupils and teachers perceived achieving more sophisticated skills and outcomes through the greater freedom that cooperative learning granted. For instance, pupils revealed that they had learned some skills of presenting and they at interview also talked of developing the courage to speak publicly and confidently, which they had never tried before given the limited freedom in the traditional method. Moreover, the majority of the pupils in this study indicated that this freedom in the classroom allowed them to discuss, to interact with others, which they believed helped them to understand the content better.

Greater freedom for learning through a cooperative approach was received well by nearly all pupils in both classes. This shift did ask the pupils to become more

responsible about their learning. This finding is consistent with what Sharan (1994) claims that rather than perceiving learning as imposed by others, cooperative learning attempts to enable pupils to assume a high level of responsibility for their own learning. In addition, cooperative learning puts these pupils in the centre of the learning processes which made them feel that they have their 'spaces' in the classroom. Pupils felt a sense of being 'in charge' by playing the pupils' roles as well as the teachers' roles. This feeling of 'in charge' appeared to promote the pupils self-esteem and they recognised a new-found trust from the teachers, space in the classroom, and that they were empowered. Their comments at interviews revealed a confidence to talk in front of each other, to make decisions and put forward their opinions freely, which may, indeed, have consolidated the pupils' self-esteem (Putnam, 1998).

Feeling independent from the teacher was another factor in the freedom these pupils felt. Pupils became more independent in their learning, more independent in a shifting of roles between them and more independent in making decisions in each group. This independency allowed them to discover their own skills, and their friends' skills and personalities. It also, allowed them to distinguish between teaching approaches and become more knowledgeable about the advantages and disadvantages of each approach. Moreover, this feeling of independence from the teacher stimulated an interdependency within the groups. This might signify to what extent the teachers structured lesson activities that enabled the pupils to reach high level of understanding of the features of cooperative learning and their roles in it (Brody and Davidson, 1998; Alkanem *et al.*, 2005). The freedom that the pupils expressed from implementing cooperative learning in these two classrooms allowed them to perceive several issues (teaching and learning style, their roles, their teachers' roles, their ability and skills) from different angles which may help them to better develop their critical skills and may inform them of the

different ways in which content can be taught.

Although teachers remain in charge of ensuring that the aims of the lessons have been achieved and the pupils receive the help they need (Cohen, 1994), delegating some authority to the pupils in this study played an essential part in this freedom that the pupils experienced in both classrooms (Brubacher (2004). This delegation of the authority was, in the beginning, at the centre of the teachers' concerns because they are accountable to the school and the LEA for the pupils' learning. However, by the end of the implementation stage both teachers emphasised that instead of causing problems, delegating the authority to the pupils allowed the teachers to discover their new places in the classroom and also it allowed the pupils to discover their personal and social skills (Rolheiser and Stevahn, 1998). Observation of the short lesson segments on video showed little if any observable pupil misbehaviour. In this study, delegation of authority, indeed, developed a sense of trust between the teachers and the pupils that the teachers were happy about their pupils' performance. Moreover, by the end, they both agreed that the pupils were mature enough to manage their learning themselves (Cohen, 1994; Johnson and Johnson, 2006).

## **6.6 Nearness**

In the traditional approach, some barriers were built in relationships between the teachers and their pupils and also among the pupils themselves. Relationships between pupils and teachers in Saudi schools are usually built on high levels of respect. This is largely because of the culture in Saudi in general and that relationships among people in particular are controlled by Islamic rules in that young must respect their elders, children must respect their parents, and pupils must respect their teachers. Teachers have the power in the classroom particularly on all matters of exams, test scores and the

grades at the end. These two issues, besides the central system in Saudi, may be the reasons that shaped these barriers between the pupils and the teachers. In addition, the traditional teaching approach that shaped the teachers' roles by just transmitting information to the pupils (Alkanem *et al.*, 2005) might also be another reason that strengthens these barriers between the teachers and their pupils. As pupils talked about their previous time in class before cooperative learning, the data indicated that barriers were found between the pupils themselves. In fact, the majority of them revealed that, before using cooperative learning, they knew few of their classmates, which can be explained by the seating plan (sitting in the classrooms in rows) which usually minimised opportunities to make new relationships or develop friendships with their mates. However, using cooperative learning generated new positions for both the teachers and the pupils in these two classes, which allowed them to create new relationships (Johnson and Johnson, 2006). With cooperative learning, the teacher was no longer the main source of knowledge. This change opened the gate for the pupils to access other sources of knowledge to help them in their learning; namely their team mates, which developed relationships and the new friendships among the pupils in each group (Johnson and Johnson, 2006). From the pupils' point of views, their new positions in the classroom created the notion of 'nearness' in that they became nearer to each other, whether physically (by sitting in groups), intellectually (learning more about what each knew or did not know), and emotionally (how each responded to the social and affective expectation).

The majority of the pupils in both classes felt that cooperative learning allowed them to become more independent from the teachers (Jacobs *et al.*, 2002) and, in time, this independency made nearly all the pupils in the groups more interdependent. Thus, pupils helped each other, shared information, clarified difficult points and interacted

with each other. This allowed the pupils to examine the benefit that they may obtain from their group mates and it also established the feeling of 'win-win' among each group member and it seemed to reduce the competition among some pupils. This supports the claim by Graves (1994) that, in several schools today competition is not welcomed by most students, because the majority of them find it a problem and they look forward to leaving schools to work in a more cooperative environment.

The notion of independent, interdependent and win-win might be the main issue that enhanced and strengthened the relationships between the pupils and created the feeling of the 'nearness' among them. This new position in the classroom might be the first step of preparing the pupils with the skills needed for the future in the Saudi labour market (Alkanem *et al.*, 2005). On the other hand, changing the learning processes in these two classrooms from teacher-centred learning to pupils-centred learning granted the teachers occasion to become observers, watchers and monitors (Brody and Nagel, 2004). These new places allowed both teachers to discover their pupils' personalities, their skills and know them better as individuals. This new position also enabled the teachers, from their point of view, to become closer to their pupils and they felt that they also became nearer to them. In the same way, the pupils noticed that cooperative learning provided them with the opportunity and the time to ask the teachers questions which was severely lacking in the traditional method (Poole, 2003).

So in summary, the data revealed that the majority of the pupils in both classes saw themselves independent and closer to their group mates. On the other hand, the teachers with their new places in the classrooms found themselves nearer to their pupils by knowing more about them and their individual needs. This might be because the pupils did not notice any direct involvement for the teachers in the processes of their learning

and the teachers may declare that because they may have more time, (rather than transmitting information) to understand their pupils better and discover new skills about them.

## **6.7 Resistance**

Although implementing cooperative learning in both classrooms was received positively by both teachers and the majority of the pupils, the results of the study revealed that cooperative learning was not welcomed by all the pupils. A very small minority showed some resistance to using this new method. Ashman and Gillies, (2003) state that changing teaching and learning approaches in some formal education settings might disadvantage some and can lead to cases of learner resistance.

The interviews with the pupils, before implementing cooperative learning, indicated some resistance regarding this method, which, as the data showed, was largely down to negative experiences that the pupils had with other teachers in the schools who claimed to be using cooperative learning. It might also be because this method was new for these pupils who do not want to change their learning style that they are both familiar and more comfortable with.

The reason these teachers did not employ new assessment strategies was because of the very limited freedom that is given to them (by the LEA) to use alternative strategies beyond the summative exam. Although neither teachers applied for the final exams, any alternative assessment strategies that could have depended on the average of each group members' performance and on winning together or losing together, assessment did provoke some that were used inside both classes during the implementation stage provoked concerns among some pupils regarding a possible impact on the level of their

achievements in the end-of-term final exams.

By the end of the study, a small number of pupils claimed the evaluation and assessment issue to be the main reason for their resistance to a continued use of cooperative learning, which they believed might result in lower scores and a dropping of their overall level of achievement. This resistance, as Johnson and Johnson (2004) illustrate, was not because of the use of group work, which has a strong power to involve pupils in its activities, which it did have, but because of the impact of the traditional classroom learning style that made these pupils believe that they would be evaluated and rewarded individually, which it seemed for some led to minimise the idea of helping and sharing. A small handful of pupils in some groups did not participate, which is one of the common problems in cooperative learning (Cohen, 1994). Poor or non-participation by a few pupils was seen as a feature that might affect other pupils' scores and grades, which led to resistance from the rest of the group members.

Moreover, according to Gillies (2004), the absence of communication and social skills among the pupils who are working in groups might allow some of them to bully others and not allow them to participate, or become passive and not play their part, or criticize others in hurtful ways. This study found that a few pupils were not happy in their groups which disrupted the harmony among them and their groups' mates and led to some unwilling participation in the activities with their groups. The absence of harmony among team members and being unhappy might cause failure of the whole team and might also prevent them from achieving the team goals. Indeed, this may highlight the importance of locating pupils in groups and dividing them fairly (Brubacher, 2004). In addition, it may emphasise the importance of the teachers' roles of revising groups from time to time to be sure that all the pupils are involved with their groups and find out the

reasons if not and try to find a solution (Rachel Hertz-Lazarowitz , 2008).

Although the majority of pupils regarded cooperative learning as a road map to improving their learning processes and increasing their social and academic achievements, some also viewed the approach as a way of preventing them from reaching high levels of attainment in the ‘ladder of competition’ that is shaped by the examination system in Saudi schools. According to Battistich and Weston (2003), pupils who learn cooperation skills and try to interact successfully with their group mates tend to be accepted by their peers, while pupils who fail or do not wish to learn such skills tend to be rejected by their group mates. Similarly and because of that, in this study, one pupil was rejected by his group mates, which led to a swap with another pupil in other group. This atmosphere based on competition can push some pupils to achieve more than other in the exams. It is possible some pupils may have ‘hidden’ some information from their classmates and spread selfishness among them.

Clearly, the ‘individualistic’ approach of learning was still be seen as more important and desirable. A small number of pupils expressed the view that explaining the lesson was still the teachers’ responsibility not the pupils’ responsibility. They also emphasised their fear of ‘being responsible’ about the learning of others. These pupils according to the teachers were academically at a high level who seemed less interested in such a learning method, which supports Shachr, (2003) in that some high level pupils did not derive any significant benefits from cooperative learning because they liked methods that compared them with others. It appeared that these pupils saw working cooperatively under the group method as not helping them pass the final exam, which is ‘the gate for their future in Saudi’. This finding might also indicate that these pupils were not willing to support the benefits that they may obtain from studying

cooperatively. In addition, it might indicate that these pupils are less sociable and would not communicate well with others, because usually cooperative learning as an active learning approach does not only provide improvements in achievement, but also in social skills (Tarhan, 2008).

Although no one can claim that ‘centralism’ is always negative, some pupils’ resistance to cooperative learning might reflect the influence of it in the educational system in Saudi. Therefore, preparing pupils with the skills that they might need for their future is necessary, which might not take place in the shadow of this ‘centralism’. For example, thinking skills, working critically and cooperatively, problem solving skills, creativity and invention, cooperative skills and working in teams, communication skills, technological skills and self-learning (Alkanem *et al.*, 2005).

## **6.8 Cooperative learning and the Islamic Curriculum**

After the training programme, both teachers agreed to use two methods of cooperative learning approach, which were ‘STAD’ method and Jigsaw method. Each method was applied during the implementation stage. This study showed that some pupils preferred to study by the STAD method because, as they claimed, they did understand their group part better than when in Jigsaw method. On the other hand, the majority of the pupils claimed that with the STAD method they did not understand other groups’ parts well, because, from their perspectives, the representatives of these groups who stood up and explained their parts did not explain them well. This may be because this is the first opportunity for all the pupils to stand up in front of the whole class and speak publicly, which, naturally, may indicate some anxiety and mistakes. It might also indicate that the pupils did not pay attention to the one who stood up and presented his group’s part, because the other groups were preparing themselves for presenting their parts. It might

illustrate some problems in the teachers' classroom management and it might reflect the limitations of the teachers understanding of their roles in their aspect of cooperative learning.

The data illustrated that the majority of the pupils were happy with the Jigsaw method because all parts of the topic were together in their main group. Some pupils, as the data demonstrated, highlighted some problems that they faced in Jigsaw method such as some of the pupils did not understand the part, which they should bring from the sub-groups and also the relationships among the pupils in the sub-group were not strong. In fact, because it was the first time that the pupils played these roles in the classrooms, all these mistakes might be expected and they may need more time to understand their roles well especially in Jigsaw method.

Such mistakes from pupils in both methods suggest the need for more training for both the teachers and the pupils. Indeed, the pupils need more training on presentation skills, carrying out roles in the sub-groups. Moreover, the teachers still need more training on planning lessons, time management, and supervising some elements of group work in the two approaches. Therefore, these issues need to be taken into account for future research or any further training on cooperative learning in Saudi (both pre-service and in-service).

Pupils mentioned some topics which they believed should not be taught by cooperative learning. The data showed that the teachers and the pupils strongly agreed that Islamic culture courses in general are suitable to be taught by cooperative learning methods. This might eliminate any fear or doubt which may prevent researchers from implementing new approaches upon religious curriculum especially Islam. However,

from the researcher's experience, some topics in Islamic religion cannot be opened up for debate inside the classroom in terms of accepting and rejecting, such as 1) the five pillars of Islam, which are to testify that none has the right to be worshipped but Allah and Muhammad is Allah's messenger; to offer the (compulsory congregational) prayers dutifully and perfectly, to pay Zakat (i.e. obligatory charity); to perform Hajj (i.e. Pilgrimage to Mecca); and to observe fast during the month of Ramadan (Al-albani, 1986); and 2) The Six Pillars of Iman which are: belief in Allah; belief in the angels; belief in the revealed books; belief in the commissioned Messengers (peace be upon them); belief in the resurrection and the events of Qiyamah (day of judgments); and belief in the predestination by Allah of all things, both the (seemingly) good and the (seemingly) bad (Al-albani, 1986).

According to Tarhan (2008) large number of pupils in many studies believed that cooperative learning made positive impact on their achievements and social and personal skills, which the majority of the pupils, in this study, agreed on. Although the researchers during collecting data discovered that some of the activities in Al-Fiqh pupils' handbook were designed to serve group work, developing new materials in all subjects in Saudi schools based on cooperative learning methods might be a necessary step that should be taken by the Ministry of Education in Saudi if we want to move forward.

In summary, cooperative learning contributed to some significant changes or 'shift' in these two classes in Saudi. Teachers and pupils both described a shift of learning style from teacher-centred learning to pupil-centred learning, granting the pupils a degree of freedom and independency from the teacher, and some authority in classrooms. In addition, would continuing this method in schools oppose the 'centralism' idea that the

educational system in Saudi is built upon? Moreover, does this style of learning offer wide benefits to the Saudi society as a whole in the long term? Such questions may open the gate to lines of research, and encourage other Saudis to investigate these issues and find out the impact of them, positively or negatively, upon the Saudi educational system as well as the whole Saudi society. Some of these matters are considered in the conclusion of this thesis.

## **CHAPTER SEVEN**

### **CONCLUSION AND RECOMMENDATIONS**

#### **7.1 Introduction**

Cooperative learning is an instructional model that has been researched extensively in the last three decades and which has demonstrated positive impact on teachers' classroom practices and their pupils' achievements (e.g. Gillies and Ashman, 2003; Cohen *et al.*, 2004). However, cooperative learning is a relatively new pedagogical approach in the Arabic world, especially in Saudi Arabia where empirical research focusing on its implementation is not extensive (Mansour and Alhodithy, 2007, a & b). Therefore, it is important to examine the positive outcomes of cooperative learning demonstrated by research in other parts of the world and to use this knowledge to inform suitable transfer and implementation of cooperative learning in Saudi. This study has tried to contribute to such early research and practice.

The research presented in the previous chapters has outlined the use of cooperative learning in the classroom and revealed the increasing interest in the Saudi contexts. The intention of this study was to examine the implementation of cooperative learning and investigate Saudi teachers and pupils' perceptions of this approach. In the south west of Saudi Arabia two teachers, following some professional development, implemented cooperative learning over a period of twenty lessons. The teachers' and pupils' views were collected by means of individual and focus group interviews. Teachers also kept a reflective journal. Field notes were taken of observed lessons and segments of lessons were videotaped that were added to the field notes and which formed the basis of describing and unearthing teachers' opinions on their instructional practice across the set of lessons.

The thesis employed a qualitative approach and asked the following questions;

- 1) What were Saudi teachers' perceptions of cooperative learning as an approach of teaching and learning both during and following their professional development?
- 2) In what ways did Saudi students respond to cooperative learning in their classroom?
- 3) To what extent has experience with cooperative learning influenced teachers' classroom practice?

In this chapter, the main conclusions are presented in order to summarise the study's contribution to both research and practice. The chapter considers some wider issues which arose from the research for pre-and in-service education in Saudi specifically, and for the education system more generally. The chapter will also highlight some limitations of the research and offer some suggestions and recommendations for further research.

## **7.2 Key Findings and the Contributions of This Study**

The findings in this study revealed that the perceptions of cooperative learning from both the two teachers and their pupils were largely positive, which supports findings in other research (Sharan and Sharan, 1992; Slavin, 1996; Veenman *et al.*, 2000; Johnson and Johnson, 2004; Gillies, 2004; Shaaban, 2006; Ballantine and Larres, 2007; Akdeniz, 2008; Tarhan, 2008). The shift in these two classrooms illustrated the robustness and veracity of the cooperative learning approach.

According to the teachers and pupils, the implementation of cooperative learning in these two Saudi classes led to a number of positive cognitive and social outcomes. It

permitted several features of cooperative learning, such as working as a team, peer interaction, affiliation, trust, self-confidence, independency and communication skills, to emerge in the classroom. Teachers both demonstrated and shared opinions on some new aspects of their practice, characteristic of cooperative learning. Both teachers and pupils were able to see their new places in the classroom and reflect upon these changing roles and responsibilities. Cooperative learning granted the pupils chance to explore new social skills and experience, for the first time, sense of choice and freedom in these classrooms.

That there was limited expertise in cooperative learning in the region was to an extent confused during the field work in that the researcher received a number of requests from supervisors from the Local Authority of Education to be trained in cooperative learning.

This study demonstrated that the training programme (CPD), delivered by the researcher on cooperative learning methods was a key first step for these teachers to attempt 'shifts' in their practice in these two classrooms. The teachers were largely positive about the CPD programme and specifically how it developed their knowledge and theoretical background on cooperative learning approach. Developing similar CPD programmes in the future should concentrate even more upon the practiced application of using this approach, and make suitable link with member of the LEA to extend this work to other practitioners.

Providing materials with the training programmes that are based on the Saudi context and Saudi culture will be important in helping future teachers to understand and to visualise the possibilities of instructional change in their classrooms. The challenges faced in the implementation stage in this study clarified one shortcoming in the training

programme, which was the over-emphasis on the theoretical elements. Both observation opinions from the teachers revealed less development in their practice related to facilitation of group work and specifically their roles during such work.

In time, teachers felt more successful and became more confident as they implemented the approach in their classrooms and saw the mostly positive responses of their pupils. As this study showed, support will be necessary for future teachers before, during and after the implementation stage, which should include a) providing feedback based on observations of their classroom, b) helping practitioners to solve problems and c) giving teachers encouragement. Both teachers wished to continue using the approach, which was pleasing. Indeed an informal telephone conversation with one of the teachers some months after the field work confirmed that he was still using the cooperative learning approaches in his classes.

Implementing cooperative learning in these two classrooms changed the existing learning process and resulted in some new learning outcomes. Such change aligns with the broader ambition of the Saudi government, as represented by the Ministry of Education, to prepare a new generation of learners to meet future employability needs driven by the economic revolution in Saudi. The present Saudi labour market has a noticeable shortage in government jobs, and there is an urgent need in the private sector for qualified workers who have relevant social and communication skills, especially given new economic cities in Saudi such as King Abdullah economic city, launched in 2007.

This study revealed a considerable need in Saudi for a wider range of appropriate training programmes in alternative pedagogies at both pre-service and in-service.

Although the teachers had long experience (Teacher A 19 years and Teacher B 12 years), their teaching style was initially very traditional which might represent what most teachers in Saudi use. Updating teaching and learning approaches in Saudi schools to include new methods such as cooperative learning, e-learning, personalised learning, and using ICT, appear essential if such a workforce is to be realised. The pre-service programmes in Saudi institutions, such as Teachers' Colleges and School of Education at universities that prepare teachers might be revised and modified to respond to the possibilities for approaches mentioned in Saudi classrooms. Teachers in this study claimed considerable limitation in in-service programmes (CPD) in Saudi, especially in cooperative learning methods. This has implications for the Ministry of Education in Saudi to offer more attention and resources to CPD programmes tailored to the need of teachers, which is essential for any reform.

Both teachers and the vast majority of pupils were comfortable with and applauded the changes that they experienced in the classrooms and as a result wished to continue with cooperative learning in the future. However, there are some potential difficulties and challenges facing such changes developing on a wider scale. There would seem to be a role for the Ministry of Education in Saudi to help teachers overcome issues identified by teachers in this study such as teacher load, class size, and the amount of content in the curriculum that must be covered in each lesson. Indeed, such support from the Ministry of Education is essential for any development or reform in schools given its control of the whole system of education. This study used the down-up strategy which equipped the change in these two classes successfully, however, this change may not continue unless the Saudi governments has the intention of complimenting this effort by employing central resources to support classroom-initiated efforts. On a smaller scale, developing links with the LEA is essential as without the support and permission from

the LEA in the south west region of Saudi this study would not have gone ahead. Such support would need to be secured so that research into curricula/ pedagogical change remains a further possibility.

It was clear that the pupils' ability to critique their learning was developed through cooperative learning in that they in the main understood their obligations within the new method and were more able to distinguish between which parts in the curriculum did or did not work with cooperative learning. Prior to this approach it could be argued that these pupils only knew one method of teaching. The changes in the classroom reported in this thesis made the lessons more attractive for the vast majority of pupils and allowed them to discover and develop their presentation skills, social skills, communication skills, interaction, and cooperation skills. In addition, self-esteem, confidence, and behaviour were claimed to have been positively served by cooperative learning.

Although cooperative learning in the main resulted in a number of positive changes in these two classes, there was still some resistance from some pupils. From field notes of videoed segments and observation of lessons this resistance would best be described as private (Kinchin and O'Sullivan, 2003), no public examples of pupils resistance were seen.

This study reveals that dividing the pupils into groups correctly was an important factor that helped the pupils to work as a successful team. Therefore, using a heterogeneous or homogeneous style in dividing groups may not be entirely essential as long as harmony exists among team members. It is acknowledged that heterogeneous groups are preferred in the literature on group work (Cohen, 1994).

The educational system in Saudi is based on centralism and the examination system can lead to a notion of competition among the pupils. However, studying in a more cooperative environment allowed most pupils and both teachers to, in their view; achieve more, which may not only reflect positively on the education system but also perhaps upon the Saudi society in the long term. However, there was some evidence that a few pupils would prefer to be taught in an individualistic way. Not only were some worried about exam performance, but they also raised issues of procedures for assessing pupils in group.

Despite the huge number of the teachers in Saudi (some half a million teachers - male and female), re-preparing these teachers to use some alternative models of teaching and learning is an enormous task. Therefore, the Ministry of Education, the educational colleges, the centres of training and the educators in Saudi should work together and unite their efforts to generate and to develop several programmes to serve this demand. The training programme used in this study might present one resource to help these efforts, in addition, to share the experiences and voices of the teachers and pupils in this study.

Although the Saudi system is quite anxious about the notion of delegation to pupils, this study demonstrated that delegating the learning in the classroom to pupils was possible, largely positive and led to a broader range of outcomes being achieved. In addition, the delegation seems to increase the quality of learning and motivated the pupils to engage with the content. Furthermore, delegating the learning processes permitted the pupils to feel more responsible for their learning and allowed them to experience some new skills. Moreover, this shift freed the teachers from some of their direct instruction obligations in the classroom and gave them the opportunity to address the quality of

learning and social interaction in their classes, by observing these pupils in groups and learning more about individual strategies and dispositions.

Although cooperative learning emphasises the delegation concept, which can lead to some loss of control in the classroom, this study revealed that both teachers maintained their control of these two classes. This would be explained by the effect of the novelty of the new method, or might reflect the impact of the Saudi culture that emphasises pupil respect for their teachers. The attendance of the researcher and occasionally the camera in the classroom may have been further factors.

Enabling change in classrooms and specifically in teaching and learning styles needs time and patience to be effective. In this study, after just over four weeks of using cooperative learning methods the teachers and the pupils experienced the new method and understood its features and benefits. Freedom was one of the important and very 'new' benefits that cooperative learning granted to these pupils. This freedom allowed the pupils' skills to appear at the surface and to be observed. This freedom also enabled the pupils to develop new relationships and make new friends, in an environment where the class had more than just the teacher's voice present.

Cooperative learning is the core of the democracy system, which shapes the western countries political system that starts directly or indirectly from the classroom. This may open the door in front of big and very important questions as to what extent cooperative learning can have a place in an environment that is controlled by the centralism idea that control the whole Saudi system. Can cooperative learning serve centralism or are there conflicts between them. On the other hand, the ideal political system from the Islamic point of view is *Shura* (which depends upon the opinions and experiences of the expert

peoples (not the public) in each field, who make decisions and elect leaders), therefore, to what extent could cooperative learning harmonise within the *Shura* system. Such questions may form a path of further research and debate.

### **7.3 Limitations of the Study**

This research was also subject to certain limitations. As discussed earlier interest in cooperative learning as an area of research is still in its infancy in the Arabic world, especially in Saudi. Given that all possible efforts were made by the researcher to consider and to develop appropriate training programme materials for the Saudi context, some video clips were shown in English, which needed translating. While the researcher attempted to address all the teachers' needs and requirements regarding an initial attempt at using cooperative learning, it is not possible to claim that the training programme addressed all issues related to cooperative learning implementation.

The study was of a qualitative design. No quantitative data were gathered. Given this one could not assert that because of cooperative learning pupils' achievements increased. Although suggestions of increased achievement were only obtained through self reporting of pupils and teachers, the picture is a mostly positive one. As indicated several factors determined that an experimental design was rejected. Instead this qualitative study sought to investigate perceptions on implementation of cooperative learning in two Saudi classrooms.

This study did not examine pupil evaluation and assessment because the central examination system in Saudi prevents any changes to procedures for assessment. A number of pupils raised the issue of assessment in group-based work. These concerns regarding their assessment will need to be both debated and considered as a further

factor connected with wider development of cooperative learning in Saudi. Sources do exist that might inform efforts to examine the issue of alternative assessment of pupils in groups (Johnson and Johnson, 2004).

Time for the study was a further limitation that prevented the researcher remaining in the school for longer, which was just for six weeks. Both teachers wanted more tries to implement the model, however, the decision to develop a 20-day unit does fit other research where cooperative learning/ group work has been implemented at the secondary level (e.g. Hastie, 1996; 1998).

As previously indicated, data were collected from the field in the summer time, where only Al-Fiqh was timetabled. The major limitation here was the limited number of schools working in the summer in Saudi. Therefore, the perceptions gathered from the participants in this study reflect pupils and teachers in this summer-class setting. The summer setting also allowed the class size to be manageable [16 and 23], and is likely not to reflect other Saudi classes, which can have up to 40 pupils.

#### **7.4 Future Research Directions**

This study reported a range of positive outcomes before and during implementation of cooperative learning in this school from the teachers' and the pupils' perspective. A range of new instructional practices developed in both classes. Further research is needed to extend the work in this study not just within other elements of the Islamic culture curriculum but also in all other subjects. Furthermore, conducting similar studies in secondary schools and also in middle and primary school would be worth presenting. This study was conducted in an all boys' school in Saudi which might, therefore, call for further research in all girls' classrooms.

If cooperative learning is to find a place in Saudi schools then pre-service teacher education programmes need to attend to this instructional model, so that prospective student teachers have opportunity to attempt the approach while on teaching practice under the supervision of in-service setting, who have completed CPD training not unlike that used in this research.

Developing further training programmes for both teachers and their pupils not just in cooperative learning methods but also other teaching methods including e-learning, the used of ICT, and personalised learning are also required and to study these innovations in practice.

Another area of empirical research is the potential relationship between cooperative learning and Saudi society on a wider scale. In addition, investigations might focus on the extent to which cooperative learning harmonises with the Islamic political system (*Shura* system). As mentioned earlier, cooperative learning helped learners in this study to achieve several skills which fit with the desired change in the future of Saudi, in particular those under the influence of the economy and employment needs and skills.

As mentioned, this study did not report the impact of cooperative learning upon pupils' achievements gains from a quantitative view. Therefore, further studies may be necessary to discover any impact of implementing cooperative learning upon learning gain (pre- and post implementation).

## **7.5 Final remarks**

In summary, the study did report perceptions from teachers and pupils on their

experiences with cooperative learning with both in agreement that this method is both beneficial and empowering. Both teachers also spoke enthusiastically about a number of aspects of their instructional practices that were apparent in their efforts to teach the lessons using cooperative learning. The present research has contributed to current knowledge on cooperative learning but more so on in its possibilities in the Saudi context. This study has contributed specifically to the emerging literature base regarding the use of cooperative learning in the Islamic culture curriculum and has established some ground for more future research and development in these settings.

## References

- Abrami, P., Poulsen, C. and Chambers, B. (2004) Teacher Motivation to implement an Educational Innovation: Factors differentiating users and non-users of cooperative learning. *Educational Psychology Journal*, 24, (2), 201-216.
- Aggarwal, A. K. (2003) A Guide to E-Course Management: The Stakeholders' perspective, IN: Aggarwal, A. K., *Web-Based Education: Learning from Experience*, USA: IPM Press.
- Akdeniz, K., T., F., (2008), The effective of cooperative learning on Turkish elementary students' mathematics achievement and attitude towards mathematics using TAI and STAD methods. *Educ Stud Math*, 67, 77-91.
- Al-albani, (1986) *The Great open (Alfateh Al-Kabeer)*. 3<sup>rd</sup> ed. Beirut: Islamic Office. (In Arabic)
- Alamro, A. R., (2003) *The Effectiveness Of Using Cooperative Learning In Improving Pupils Skills In Learning Art In Meddle School*. Unpublished dissertation (M. A. (Ed)), Umm Al-Qura University.
- Al-Baadi, H. (1985) Saudi Arabia: System of Education" in Husen, T. et al. *The International encyclopaedia of Education: Research and Studies*, 8: 4386-92.
- Albahr, F. A., (2003) *Developing Teaching Arabic Language By Using Cooperative Learning And Its Impact Upon The Pupils' Achievements In Grad 9 - Suggestion Programme*. Unpublished Thesis (PhD), Al Imam University.
- Aldeeb, M. (2004) *Studies in the Methods of Cooperative Learning*. Cairo: Alame Alkotob. (in Arabic).
- Alexander, S. (2001) E-learning developments and experiences. *Journal of Education Training*, 43 (4), 240-248.
- Algamody, S. (2004) *The Change*. 3<sup>rd</sup> ed. Beirut: Arabic Spread Association [alintishar]. (In Arabic)
- Algarfi, A. (2005) *Investigating The Possibilities Of Cooperative Learning Within The School System Of Saudi Arabia: The Perceptions Of Teachers*. Unpublished dissertation (M. A. (Ed)), University of Southampton.
- Alhaidari, M., (2006) *The Effectiveness of Using cooperative Learning to Promote Reading Comprehension, Vocabulary, and Fluency Achievement Scores of Fourth-and Fifth-Grade Students in A Saudi Arabia School - in the Islamic Saudi Academy in Washington*. Dissertation (PhD) available from: <http://etda.libraries.psu.edu/theses/approved/WorldWideIndex/ETD-1292/index.html> [27-8-2009].
- Alhammed, M., Zeadah, M., Alotaiby, B. and Motawaly, N. (2004) *The Learning in Saudi Arabia "sight of the present and preparing for future*. Riyadh: Alroshed. (in Arabic).

- Alhogail, S (2003) *The Law and strategies of Learning in Saudi Arabia*. Riyadh: Alroshed. (in Arabic).
- Alhusaini, J. (2002). *The impact of teaching science through cooperative learning upon girls achievements in year 4* unpublished dissertation (M.A. (Ed) King Saud University.
- Ali, A. Y., (2003) *The Meaning of The Holy Quran*. 1<sup>st</sup> ed. USA: Amana publications.
- Alinizi, M. (2006). *Comparing the impact of using discussion and cooperative learning method on increasing thinking skills in biology curriculum in secondary school in Saudi* Unpublished dissertation (M.A. (Ed)), King Saud University.
- Aljarf, R. S. (2005) *Connecting Students across Universities in Saudi Arabia. Paper presented the 4th Asia CALL Conference*. Sorabol College, Geongju, South Korea. November 10-12, 2005.
- Aljaser, S. M. (2002) *The Impact Of Using Cooperative Learning Upon The Achievements Of The Student In Maths In Teacher College In Arar City In Saudi* unpublished dissertation (M. A. (Ed)), Umm Al-Qura University.
- Alkanem, K. & Alsaleh, B. & Almogbel, A. & Alruais, A. (2005) *Procedural Guide of Composition schools books*, 1<sup>st</sup> ed. Ministry of Education in Saudi Arabia: Educational Development Department. (In Arabic)
- Alkaribi, N. (2007). *The impact of using cooperative learning strategy upon girls achievements in the Holy Quran in year 7* unpublished dissertation (M. A. (Ed)), King Saud University.
- Almaliki, A. M., (2002) *The Impact Of Using Cooperative Learning On Teaching Maths Upon The Achievement Of The Pupils In Grad Eight In Jeddah* unpublished dissertation (M. A. (Ed)), Umm Al-Qura University.
- Almufadda, S. S. A., (2006) *The impact of using cooperative learning on the achievement of Grad 11 in Al-Fiqh curriculum*. Available from: <http://faculty.ksu.edu.sa/5345/default.aspx> [27-8-2009].
- Almulla, N. M.,(2005) *Enabling The Student-Teachers To Master The Teaching skills through the Use of Cooperative Learning- suggestion programme* unpublished Thesis (PhD), King Saud University.
- Almutairi, F. F., (2006) *The Obstacles of Using Cooperative Learning in Teaching the Islamic Culture Curriculum in the Middle School from the Teachers' and The Supervisors' Perspectives* unpublished dissertation (M. A. (Ed)), King Saud University.
- Alnasir, I. M., (2001) *The Impact Of Using Cooperative Learning On The Pupils' Achievement And Attitudes In Grad 11 Toward The Physics Curriculum*. Unpublished dissertation (M. A. (Ed)), King Saud University.

- Alqahtani, S. (2006). *The impact of cooperative learning upon girls' achievements and attitudes in geography in year 7* unpublished dissertation (M.A. (Ed)), King Saud university.
- Alrasheed, A., Basahi, A. Alowais, A., Alrwaished, M. Alrwaily, M and Alsuaik, H. (2003) *Study of Teaching science in both elementary and Middle schools stages in Boys and Girls schools in Saudi Arabi*. Riyadh: King Abdulaziz City for Science and Technology.
- Alsaleh, B. A. (2004) *the future of Educational Technology and its Roles of Establishing Quality of Change in Teaching and Learning*. Riyadh: King Saud University. (In Arabic).
- Alsonble, A., Alkateep, M., Motoaly, M. and Abduljawad, N. (2004) *System Of Education In Kingdom of Saudi Arabia*. 1<sup>st</sup> ed. Riyadh: Daar Alkhareji. (In Arabic).
- Al-Zuhaili, W. (1989) *Al-Fiqh al-Islam wa 'Adillatuh*, Vol. 4. Damascus: Dar al-Fikr.
- Angelides, P. (2002) A Collaborative Approach for Teachers' In-Service Training. *Journal of Education for Teaching*, 28, (1), 81-82.
- Artzt, A. and Newman, C. M. (1993) *How to Use Cooperative Learning In the Mathematic Class*. 2<sup>nd</sup> ed. New York: The National Council of Teachers Mathematics.
- Bagarsh.S. S. and Alsubhi, A. M. (1996) *Foundations of general and Islamic education* 2 ed : Dar Alandalus. (in Arabic).
- Baines, Ed., Blatchford, P., Kutnick, P., Chowne, A., Ota, C., and Berdondini, L. (2009) *Promoting effective group work in the primary classroom: A handbook for teachers and practitioners*. London: Routledge.
- Ballantine, J. and Larres, P., M. (2007), Cooperative learning: a pedagogy to improve students' generic skills. *Education and training journal*, 49, (2), 126-137.
- Bassey, M. (1998) Action Research for Improving Practice, IN: Halsall, R. ed., *Teacher Research and School Improvement: Opening Doors from the Inside*. Buckingham: Open University Press.
- Bates, R. (2002) Australian teacher education: some background observation. *Journal of Education of Teaching*, 38. (3), 217-220.
- Battistich, V. and Waston, M. (2003) Fostering Social Development in Preschool and the Early elementary Grades trough Cooperative Learning, IN: Gilles, et al., *Cooperative Learning: the Social and Intellectual Outcomes of Learning in Groups*, London: Routledgefalmer.
- Bednarz, N., (1998), Constructivism And Education Beyond Epistemological Correctness, IN: Laroche et al., *Constructivism And Education*, Cambridge: Cambridge University.

- Bell, J. (1999) *Doing Your Research Project: A Guide for First-Time Researchers in Education and Social Science*. 3<sup>rd</sup> ed. Buckingham: Open University Press.
- Berg, B. (2004) *Qualitative Research Methods for the Social Sciences* 5<sup>th</sup> ed. USA: Pearson Education, Inc.
- Bitter, G. G. and Pierson, M. P. (1999) *Using Technology in the Classroom*. Boston: Allyn and Bacon.
- Blaxter, L., Hughes, C. and Tight, M. (2001) *How to Research*. 2<sup>nd</sup> ed. Buckingham: Open University Press.
- Boehm, A., E. and Weinberg, R., A. (1987) *The Classroom Observer: Developing Observation Skills In Early Childhood Settings*. New York: Teachers college, Columbia University.
- Boeije, H. (2002) A Purposeful Approach to the Constant Comparison Method in the Analysis of Qualitative Interviews. *Quality & Quantity*, 36, 391-409.
- Bogdan, R. C. and bilken, R. K. (1992). *Qualitative Research for Education: An Introduction to Theory and Methods*. Boston, Mass.: Allyn and Bacon.
- Bolin, F. (1988) Helping Students Teacher Think about Teaching. *Journal of Teacher Education*, 39, (2), 2-8.
- Borich, G., D. (1999) *Observation Skills For Effective Teaching*. London: Prentice-Hall International.
- Boud, D. & Keogh, R. & Walker, D. (1985) *Reflection: Turning Experience into Learning*. London: Kogan Page.
- Boyd, H. W., Westfall, R. L. and Stasch, S. F. (1985) *Marketing research: text and cases*, R.D. Irwin, 1985, Homewood, Ill.
- Brannen, J. (1995) *Mixing methods: qualitative and quantitative research*, Ashgate: Aldershot.
- Brody, C. M and Davidson, N. (1998) *Professional Development for Cooperative Learning: Issues and Approaches*. USA: State University of New York Press.
- Brody, C. M. (1998) The significance of Teacher Beliefs for Professional Development and Cooperative Learning, IN: Brody, C. M and Davidson, N., *Professional Development for Cooperative Learning: Issues and Approaches*, USA: State University of New York Press, 25-48.
- Brody, C. M. and Nagel, N. G (2004) Teacher Decision Making for Cooperative Learning in a Perspective Master's Program, IN: Cohen, E. G. , Brody, C.M. and Sapon-Shevin, *Teaching Cooperative Learning: The challenge for Teacher Education*, USA: State University of New York Press, 31-46.
- Brookfield, S. D. and Preskill, S.(1999) *Discussion as a Way of Teaching: Tools and Techniques for University Teachers*, Britain: SRHE and Open University.

- Brown, S. and Race, P., (2002) *Lecturing: A Practical Guide*, Britain: Kogan Page.
- Brubacher, M. (2004) The Role of the Classroom Teacher In Teacher Education”, in a Perspective Master’s Program, IN: Cohen, E. G., Brody, C.M. and Sapon-Shevin, *Teaching Cooperative Learning: The challenge for Teacher Education*, USA: State University of New York Press 211-217.
- Bryman, A. (1988) *Quantity And Quality In Social Research*, London: Unwin Hyman.
- Buckridge, M. and Guest, R. (2007), A conversation about pedagogical responses to increased diversity in university classrooms. *Higher Education Research & Development*, 26 ( 2), 133–146
- Chioncel, N. E., Veen, R.G.W., Wildemeersch, D. and Jarvis, P. (2003) The Validity and Reliability of Focus Group as a Research Method in Adult Education. *International Journal of Lifelong Education*, 22, (5), 495-517.
- Churchill, G. A. (1995) *Marketing research: methodological foundations*, Chicago: Dryden Press,.
- Cohen, E. G., Brody, C.M. and Sapon-Shevin, (2004) *Teaching Cooperative Learning: The challenge for Teacher Education*, 1<sup>st</sup> ed. USA: State University of New York Press.
- Cohen, L (1994) *Designing Groupwork: strategies for the Heterogeneous Classroom*, 2<sup>nd</sup> ed. New York: Teachers College Press.
- Cohen, L.& Manion, L. & Morrison, K. (2008) *Research Methods in Education*, 6<sup>th</sup> ed. London: Routledge falmer.
- Creswell, J. (1998) *Qualitative Inquiry and Research Design: choosing among five traditions*, London: SAGE Publications.
- Creswell, J. W. (1994) *Research design: qualitative & quantitative approaches*, London: Sage Publications.
- Damron, D. and Mott, J. (2005) Creating an Interactive Classroom: Enhancing Student Engagement and Learning in Political Science Courses. *Journal of Political Science Education*, 1, 367-383.
- Denzin, N. and Lincoln, Y. (1994) *Hand book of Qualitative Research*, London: SAGE Publications.
- Denzin, N. and Lincoln, Y. (1998) *Strategies of Qualitative Inquiry*, London: SAGE Publications.
- Denzin, N. and Lincoln, Y. (2003) *Collecting and Interpreting Qualitative Materials*, London: SAGE Publications.
- Desautels, J. (1998) Constructivism-In-Action: Students Examine Their Idea Of Science, IN: Laroche et al., *Constructivism And Education*, Cambridge: Cambridge University.

- Deshpande, C. D. (1983) *A survey of research in physical geography*.
- Pedagogy and Practice: Teaching and Learning in Secondary Schools* (2004) A DVD. Directed by DfES. London: Ref: 0446-2004 GDVD.
- DfES, (2004) *A National Conversation about Personalised Learning, Department for Education and Skills*, available from: [www.standards.dfes.gov.uk/personalisedlearning](http://www.standards.dfes.gov.uk/personalisedlearning)
- Dirkx, J. M. (1997). Nurturing soul in adult learning. In P. Cranton (Ed.), *Transformative learning in action*. San Francisco: Jossey-Bass.
- Dretske, F., (2006) *Perception without Awareness*, IN: Gendler, T. S. and Hawthorne, J. *Perceptual Experience*, Oxford: Clarendon Press.
- Ellis, E. S. and Feldman, R. K. (1994) Creating "Thought-Full" Classroom: Fostering Cognitive Literacy Via Cooperative Learning and Integrated Strategies Instruction, IN: Sharan, S. (1) *Cooperative Learning methods*, New York: Praeger Publishers.
- Exley, K. and Dennick, R. (2004) *giving a lecture from presenting to teaching*, London: Routledgefalmer.
- Ezzy, D. (2002) *Qualitative Analysis: practice and innovation*, London: Routledge.
- Farivar, S. and Webb, N. (1998) Preparing Teachers d Students for Coopeartive Work: Building Communication and Helping Skills, IN: Brody, C. M and Davidson, N., *Professional Development for Cooperative Learning: Issues and Approaches*, USA: (State University of New York Press.
- Finkbeiner, C. (2004) Cooperative and Collaborative in a Foreign Language Teacher Training Program: The LMR-Pluse Model, in a Perspective Master's Program, IN: Cohen, E. G. , Brody, C.M. and Sapon-Shevin, *Teaching Cooperative Learning: The challenge for Teacher Education*, 1<sup>st</sup> ed. USA: State University of New York Press.
- Flavell, J. H., Miller, P. H. and Miller, S. A., (2002) *Cognitive Development*, 4<sup>th</sup> ed. London: Prentice Hall.
- Flick, U. (2002) *An Introduction to Qualitative Research*, London, SAGE Publications.
- Fodah, O. M., (1999) the Effect of Competitive Learning versus Traditional Education on Learning Computer Concepts and Programming in the College of Education for Girls. *King Saud Journal for Educational and Humanities Study*, 11 (2), 101-122.
- Foote, C. J. Vermette, P. J., Wilson-Bridgman, J., Sheeran, T. J., Erwin, R. and Murray, M. (2004) Preparing Secondary Teachers to Use Cooperative Learning Strategies, in a Perspective Master's Program, IN: Cohen, E. G. , Brody, C.M. and Sapon-Shevin, *Teaching Cooperative Learning: The challenge for Teacher Education*, 1<sup>st</sup> ed. USA: State University of New York Press.

- Fox, R. (1995) *Teaching through Discussion*, IN: Desforges, C., *An introduction to Teaching: psychological perspectives*, Oxford: Blackwell.
- Frank, C. (1999) *Ethnographic eyes a Teachers Guide to Classroom Observation*, UK: Heinemann, Portsmouth.
- Fullan, M. (2001) *The New Meaning of Educational Change*, 3ed ed. USA: Teacher College, Columbia University.
- Gable, G. G. (1994) Integrating Case Study And Survey Research Methods: An Example In Information Systems. *European Journal Of Information Systems*, 3, 2-12.
- George, C., Cooper, F. and Douglas, (2002) A. Implementing the EFQM excellence model in a local authority. *Managerial Auditing Journal*, 18, (2), 122-127
- Ghaith, G. M. and Yaghi, H. M. (1998) Effect of Cooperative Learning on the Acquisition of Second Language Rules and Mechanics. *System Journal*, 28, 223-234.
- Ghaith, G., M. (2002), The relationship between cooperative learning perception of social support, and academic achievement. *Pergamon journal*, 30, 263-273.
- Gilles, R. M. (2003) Structuring Cooperative Learning Experience In primary School, IN: Gilles, et al., *Cooperative Learning: the Social and Intellectual Outcomes of Learning in Groups*, London: Routledgefalmer.
- Gilles, R. M. and Ashman, A (2003) *Cooperative Learning: the Social and Intellectual Outcomes of Learning in Groups*, London: Routledgefalmer.
- Gillies, R. (2004 a) The Effects of Cooperative Learning on Junior High Scools Students During Small Group Learning. *Learning and Instruction Journal*, 14, 197-213.
- Gillies, R. (2004 b) The Effects of Communication Training on Teachers' and Students' Verbal Behaviours During Cooperative Learning. *Educational Research Journal*, 41, 257-279.
- Glaser, B. G. (1996) Grounded theory; IN: Cohen, L.& Manion, L. & Morrison, K. (2008) *Research Methods in Education*, London: Routledge falmer.
- Glesne, C., & Peshkin, A. (1992). *Becoming qualitative researchers*, New York: Longman.
- Golafshani, N. (2003) Understanding Reliability and Validity in Qualitative Research, *The Qualitative Report*, 8 (4), 597-607.
- Gooddall, J., Day, C., Lindsay, G., Muijs, D. and Harris, A, (2005) *Evaluating the Impact of Continuing Professional Development (CPD)*, University of Warwick: Department for Education and Skills.

- Graves, L. N. (1994) Creating a Community Context From Cooperative Learning, IN: Sharan, S. *Cooperative Learning methods*, 1<sup>st</sup> ed. New York: Praeger Publishers, 283-300.
- Grisham, D. L. and Molinelli, P. M. (1995) *Cooperative Learning: professional's Guide*, London: Teachers Created Materials.
- Gupta, A. (2006) Experience and Knowledge, IN: Gendler, T. S. and Hawthorne, J. *Perceptual Experience*, Oxford: Clarendon Press.
- Hakeem, R. (2006). *The impact of using cooperative learning in developing creativity ability toward art curriculum in girls' school in year nine* unpublished dissertation (M. A. (Ed)), King Saud university.
- Hakim, C. (2000) *Research design: successful designs for social and economic research*, London: Routledge.
- Hamlyn, D. W., (1970) *the theory of knowledge*, London: Macmillan Press.
- Hargreaves, A. (1994) *Changing Teachers Changing time: teachers' work and culture in the postmodern age*, London: Cassell.
- Hastie, P. (1996) Student role involvement during a unit of sport education. *Journal of Teaching in Physical Education*, 16, 88-103.
- Hastie, P. (1998) The participation and perception of girls within a unit of sport education. *Journal of Teaching in Physical Education*, 17, 157-171.
- Hoban, G.F. (2002) *Teacher Learning for Educational Change*. Buckingham: Open University Press.
- Hopkins, D. (2002) *A Teacher's Guide to Classroom Research*. Buckingham: Open University Press.
- Huber, G., L. and Huber, A., A. (2008), Structuring Group Interaction to Promote Thinking and Learning During Small Group Learning in High School Settings, IN: Gillies R., M, Ashman, A. F and Terwel, J, *The Teacher's Role in Implementing Cooperative Learning in the Classroom*, 1<sup>st</sup> ed. Switzerland: Pierre Dillenbourg.
- Huberman, A. M. and Miles, M. B. (2002) *The qualitative researcher's companion*, London: Sage Publications.
- Hughes, M. (2006) *Change management: A critical perspective*, London: Chartered Institute of Personal and development.
- Hussey, J. and Hussey, R. (2003) *Business research: a practical guide to undergraduate and postgraduate students*, Basingstoke: Palgrave Macmillan.
- Ibn-Kather, A. A. (1999) *Interpretation of the Holy Quran*, Riyadh: Alroshed. (In Arabic).

- Ishler, A, Johnson, R and Johnson, D. W (1998), Long-Term Effectiveness of A Statewide Staff Development Program On Cooperative Learning. *Teaching and Teacher Education*, 14 (3), 273-281
- ISTE, International Society for Technology in Education (2000), *National Educational technology standard for teachers*, USA: ISTE.
- Jacobs, G. M., Power, M. A. and Inn, L. W. (2002) *The Teacher's Sourcebook for Cooperative Learning: Practical Techniques, Basic Principles, and Frequently Asked Questions*, California: Corwin Press.
- Johnson D., W. and Johnson R., T.(2008) Social Interdependence Theory and Cooperative Learning: The Teacher's Role, IN: Gillies R., M, Ashman, A. F and Terwel, J, *The Teacher's Role in Implementing Cooperative Learning in the Classroom*, 1<sup>st</sup> ed. Switzerland: Pierre Dillenbourg.
- Johnson, D. & Johnson, R. (2004) *Assessing Students In Groups: Promoting Group Responsibility and Individual Accountability*, California: Corwin Press.
- Johnson, D. W. and Johnson, F. P. (2006) *Joining Together: Group Theory and Group Skills*, USA: Pearson.
- Johnson, D. W. and Johnson, R. T. (1987) *Learning Together & Alone: Cooperative, Competitive, & Individualistic Learning*, 1<sup>st</sup> ed. USA: Prentice-Hall.
- Johnson, D. W. and Johnson, R. T. (1998) Culture Diversity and Cooperative Learning, IN: Putnam, J. W. (2) *Cooperative Learning and Strategies for Inclusion*, 2<sup>nd</sup> ed. Pennsylvania: Paul H. Brookes Publishing, 67-87.
- Johnson, D. W. and Johnson, R. T. (2003) Students Motivation In Cooperative Group: Social Interdependence Theory, IN: Gillies, R. M. and Ashman, A. F., *Cooperative Learning the: the social and intellectual outcomes of learning in group*, London: RoutledgeFalmer, 136-177.
- Johnson, D. W. and Johnson, R. T.(1994) Learning Together, IN: Sharan, S., *Cooperative Learning methods*, New York: Praeger Publishers, 51-66.
- Jolliffe, W. and Hutchinson, H. (2007) Implementing Cooperative Learning in a Networked Learning Community. *Journal of Education*, 35, (1), 5-15.
- Jonassen, D. H. and Land, S. M. (2000) *Theoretical Foundations of Learning Environments*, London: Lawrence Erlbaum Associates Publishers.
- Jones, J. H. (2006) Learning Instruction within Initial Teacher Training. *Journal of Education for Teaching*, 32, (3), 259-268.
- Kagan and Kagan, (1998) Staff Development and The Structural Approach to Cooperative Learning, IN: Brody, C. M and Davidson, N., *Professional Development for Cooperative Learning: Issues and Approaches*, USA: State University of New York Press, 103-123.

- Kagan, S. and Kagan, M. (1994) *The Structural Approach: Six Keys to Cooperative Learning*, IN: Sharan, S. *Handbook of Cooperative Learning methods*, New York: Praeger Publishers, 115-136.
- Kennedy, A. (2005) Models of Continuing Professional Development: a framework for analysis. *Journal of In-service Education*, 31, (2), 235-250.
- Kerlinger, F. N. (1986) *Foundations of behavioural research*, London: Rinehart and Winston.
- Kidder, L. H., Judd, C. M., Smith, E. R. and Seltiz, C. (1986) *Research methods in social relations*, Published for the Society for the Psychological Study of Social Issues (SPSSI), London Holt, Rinehart and Winston.
- Kinchin, G.D and O'Sullivan, M. (2003) Incidences of student support for and resistance to a curricular innovation in high school physical education. *Journal of Teaching in Physical Education*, 22 (3), 245-260.
- King, N. and Anderson, N. (1995) *Innovation and Change in Organizations*, London: Routledge.
- Kirk, J. and Miller, M. L. (1986) *Reliability and validity in qualitative research*, Beverly Hills: Sage Publications,
- Klassen, J. and Vogel, D. (2003) New issues Arising From E-Education, IN: Aggarwal, A., *Web-Based Education: learning from experience*, USA: IRM Press.
- Knowles, E., S. and Linn, J., A. (2008) *Resistance and Persuasion*, London: Lawrence Erlbaum Associates Publishers.
- Koshy, V., (2005) *Action Research for Improving Practice A Practical Guide*, London: Paul Chapman Publishing.
- Kruger, L. (2001) *Methods in pain research*, London, Boca Raton.
- Kyriacou, C. (1995) Direct Teaching, IN: Desforges, C., *An introduction to Teaching: psychological perspectives*, Oxford: Blackwell.
- Law, Y. (2008) Effective of cooperative learning on second grades' learning from text. *Educational psychology journal* 28, (5), 567-582.
- Lazarowitz, R., H.(2008) Beyond the Classroom and into the Community: The Role of the Teacher in Expanding the Pedagogy of Cooperation, IN: Gillies R., M, Ashman, A. F and Terwel, J, *The Teacher's Role in Implementing Cooperative Learning in the Classroom*, Switzerland: Pierre Dillenbourg.
- LeCompte, M. and Preissle, J. (1993): *Ethnography and Qualitative Design in Educational Research*. London: Academic Press Inc.
- Lerouge, C., Anton, J. E. and Kittner, M. (2004) A Causal Model for Using Collaborative Technologies to Facilitate Students Team Projects, *The Journal of Computer Information Systems*, 54. 1. pp. 30-37.

- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park: Sage
- Lotan, R., (2008) Developing Language and Mastering Content in Heterogeneous Classrooms, IN: Gillies R., M, Ashman, A. F and Terwel, J, *The Teacher's Role in Implementing Cooperative Learning in the Classroom*, Switzerland: Pierre Dillenbourg.
- Lyman, F. and Davidson, N. (2004) Cooperative learning in Perspective Teacher Education at University Of Maryland, In a Perspective Master's Program, IN: Cohen, E. G. , Brody, C.M. and Sapon-Shevin, *Teaching Cooperative Learning: The challenge for Teacher Education*, USA: State University of New York Press, 83-97.
- Macmillan,(2002) *English Dictionary for advance learners*, Oxford: Macmillan publisher.
- Madah, S. S, (2001) *The efficiency of using cooperative learning and mathematics laboratory in promoting the maths concepts for grad six in Makkah*. Unpublished dissertation (M.A. (ED)), Umm Al-Qura University.
- Mandel, S. M. (2003) *Cooperative Work Groups: Preparation Students for the Real Work*, California: Corwin Press.
- Mansour, N. & Alhodithy, A (2007- A) Cooperative Learning in Saudi Arabia schools: teachers' understanding and intentions. *A paper presented at the British Educational Research Association (BERA) annual conference at Institute of Education*, University of London, UK, 5th - 8th September.
- Mansour, N. & Alhodithy, A (2007- B), Teacher motivation to implement cooperative learning (CL) and social constraints in Saudi Arabia (SA) secondary schools. *A paper accepted at The Saudi Innovation Conference, University of Newcastle, Newcastle, UK, May 2007*.
- Mansour, N. (2006) Egyptian Science Teachers' Experiences as a Framework for Understanding the Shaping and Reshaping of Their Beliefs and Practices about Science-Technology-Society (Sts). *A paper presented at the European Educational Research Association, Genève, Switzerland*.
- Marshall, C. and Rossman, G. B. (1989) *Designing qualitative research*, London: Sage Publications.
- Mayer, R. H. (1999) *Designing Instruction for Constructivist Learning, In Instructional-Design Theories and Models: a New Paradigm of Instructional Theory*, (Volume II), London: Lawrence Erlbaum Associates Publishers.
- McDaniel, C. and Gates, R. (2002) *Marketing research: the impact of the internet*, New York: John Wiley.
- McNamee, M. (2002) *The ethics of Educational research*, Oxford: Blackwell.

- McNiff, J., and Whitehead, J. (2000) *Action Research in Organisations*, London: Routledge.
- Mcwhaw, K., Schnackenberg, H., Sclater, J. and Abrami, P. C. (2003) From Cooperative to Collaborative: helping students become collaborative learners, IN: Gilles, et al., *Cooperative Learning: the Social and Intellectual Outcomes of Learning in Groups*, London: RoutledgeFalmer, 69-87.
- Ments, M. V., (1990) *Active Talk: the Effective use of Discussion in Learning*, London: Kogan Page.
- Merebah, S. A. A. (1987) *Cooperative learning in science: a comparative study in Saudi Arabia*, Unpublished Thesis (PhD), Kansas State University.
- Merriam, S.B. (1998), *Qualitative Research and Case Studies Applications in Education*. San Francisco: Jossey-Bass Publications.
- Mezirow, J. (2000). *Learning as Transformation: Critical Perspectives on a Theory in Progress*. San Francisco: Jossey Bass.
- Millis, B. J. & Cottell, P.G. (1998) *Cooperative Learning For Higher Education Faculty*, Arizona: American Council On Education.
- Mills, R., Lawless, K. and Pratt, J. (2006) Training Groups of End Users: Examining Group Interactions in Computer-Based Learning Environment. *Journal of Computer Information System*, 46, (3), pp. 104-109.
- Morgan, G. and Smircich, L. (1980) The case for qualitative research, *Academy of management review*, 5, 491-500.
- Moss, P. (1994) Can There Be Validity without Reliability. *Educational Research Journal*, 23 (2), 5-12.
- Motoaly, M. (2004) The Theoretical Frame of the Educational System, IN: Alsonble, et al. *System Of Education In Kingdom of Saudi Arabia*, Riyadh: Daar Alkhareji. (In Arabic).
- Nachmias, C. and Nachmias, D. (1996) *Research methods in the social sciences*, London: Edward Arnold.
- NCSL (National College for School Leadership) (2006) *An Overview of The Summary Report Findings (spring, 2006), Special series on Personalised Learning*: Available from: [www.ncsl.org.uk](http://www.ncsl.org.uk) [accessed 20-5-2010].
- Neber, H., Finsterwald, M., and Urban, N. (2001) Cooperative Learning with Gifted and High-Achieving Students: A Review and Meta-Analyses of 12 Studies. *High Ability Studies*, 12, (2), 199-214.
- Neuman, W. L. (1997) *Social research methods: qualitative and quantitative approaches*, London: Allyn and Bacon, Boston, Mass.
- Nijhof and Kommers, (1985) An Analysis of cooperation in Relation to Cognitive Controversy, IN: Slavin, R., Sharan, S., Kagan, S., Lazarowitz, R. H., Webb, C.

- and Schmuck, R. *Learning to cooperate, cooperating to learn*, New York: Plenum.
- O'Leary, Z. (2004) *The Essential Guide to Doing Research*. London: Sage.
- Obaidat, T., Adass, A. and Abdulhaq, K. (2002) *The Scientific Research*, Riyadh: Osama Publications. (in Arabic).
- Oberg, A. (1990) Methods and Meaning in Action Research. *The Action Research Journal Theory into Practice*, 29, 214-221.
- Paton, R. A, and McCalman, J. (2000), *Change management: A guide to effective implementation*, London: SAGE Publication.
- Poole, (2003) *Effective Teaching with Technology in Higher Education: Foundation for Success*, Riyadh: Obeikan Publisher. (In Arabic).
- Putnam, J. W. (1998) *Cooperative Learning and Strategies for Inclusion*, Pennsylvania: Paul H. Brookes Publishing.
- Radinsky, J., (2008), Students' roles in group-work with visual data: A site of science learning. *Cognition and instruction journal*, 26, 154-194.
- Ravenscroft, S. P., Buckless, F. A. and Hassall, T. (1999) Cooperative Learning- a literature guide. *Journal of Accounting Education*, 8, (2) 163-176.
- Reason, P. and Bradbury, H. (2001) *Handbook of Action Research, (Participative Enquiry and Practice)*. London: Sage
- Reigeluth, C. M. (1999) *Instructional-Design Theories and Models: a New Paradigm of Instructional Theory*, (Volume II), London: Lawrence Erlbaum Associates Publishers.
- Remenyi, D. (1998) *Doing research in business and management: an introduction to process and method*, London: SAGE.
- Ritchie J and Lewis J (2003), *Qualitative Research Practice: A Guide for Social Science Students and Researchers'*. London: SAGE.
- Rittschof, k. a. and Griffin, B. W. (2001) Reciprocal Peer Tutoring: re-examining the value of a cooperative learning technique to college students and instructors. *Educational Psychology Journal*, 21(3), 313-331.
- Rolheiser, C and Stevahn, L (1998) The Role of Staff Developers in Promoting Effective Teacher Decision-Making, IN: Brody, C. M and Davidson, N., *Professional Development for Cooperative Learning: Issues and Approaches*, USA: State University of New York Press.
- Rolheiser, C. and Anderson, S. (2004) Practice In Teacher Education And Cooperative Learning At The University Of Toronto, IN: Cohen, E. G. , Brody, C.M. and Sapon-Shevin, *Teaching Cooperative Learning: The challenge for Teacher Education*, USA: State University of New York Press, 13-30.

- Rosenblit, S. (2002) A Top Down Strategy to Enhance Information Technologies into Israeli Higher Education. *International Review of Research in Open and Distance Learning*, 2, (2), 1-16.
- Roux, C. L., and Ferreira, G. (2005) Enhancing Environmental Education Teaching Skills Through In-Service Education and Training. *Journal of Education and Teaching*, 31, (1), 3-14.
- Roy, P (1998) Staff Development That Makes a Difference, IN: Brody, C. M and Davidson, N., *Professional Development for Cooperative Learning: Issues and Approaches*, USA: State University of New York Press, 79-102.
- Ryan, B., Scapens, R. W. and Theobald, M. (2002) *Research method and methodology in finance and accounting*, London: Thomson,
- Sapon-Shevin, M. and Cohen, E. G. (2004) Conclusion, IN: Cohen, E. G. , Brody, C.M. and Sapon-Shevin, *Teaching Cooperative Learning: The challenge for Teacher Education*, USA: State University of New York Press, 217-225.
- Saunders, M. N. K., Thornhill, A. and Lewis, P. (1997) *Research methods for business students*, London: Pitman.
- Schank, R. and Berman, T. R. (1999) Learning by Doing, IN: *Instructional-Design Theories and Models: a New Paradigm of Instructional Theory*, (Volume II), London: Lawrence Erlbaum Associates Publishers.
- Schmitt, F. F., (1992) *Knowledge and Belief*, London: Routledge.
- Schmuck, R. (1998) Mutually-Sustaining Relationships Between Organization Development and Cooperative Learning, IN: Brody, C. M and Davidson, N., *Professional Development for Cooperative Learning: Issues and Approaches*, USA: State University of New York Press, 243-254.
- Schunk, D. H. (2000) *Learning Theories An Educational Perspective*, USA: Prentice Hall.
- Selltiz, C. (1976) *Research methods in social relations*, Holt, Rinehart & Winston
- Shaaban, K. (2006) An Initial Study of the Effects of Cooperative Learning on Reading Comprehension Vocabulary Acquisition and Motivation to Read. *Reading Psychology Journal*, 27, 377-403.
- Shallcross, T., Loubser, C., Roux, C., O'Donoghue, R. and Lupele, J. (2006) Promoting Sustainable Development Trough Whole School Approaches: An International, Intercultural Teacher Education Research And Development Project. *Journal of Education for Teaching*, 32 (3), 283-301.
- Sharan, S. (1990) *Cooperative Learning: Theory and Research*, New York: Praeger Publishers.
- Sharan, S. (1994) *Handbook of Cooperative Learning methods*, New York: Praeger Publishers.

- Sharan, S. and Shaulov, A. (1990) Cooperative Learning, Motivation to Learn, and Academic Achievement, IN: Sharan, S., *Cooperative Learning: Theory and Research*, New York: Praeger Publishers.
- Sharan, Y. & Sharan, S. (1992) *Expanding Cooperative Learning through Group Investigation*, USA: Teacher College, Columbia University.
- Silverman, D. (2000) *Doing qualitative research: a practical handbook*, London: SAGE Publications.
- Skinner, B. F. (1990) *Can Psychology be Science of Mind?*. *American Psychology Journal*, 54, 1206-1210.
- Slavin, R. E (1994) Students Teams-Achievement Divisions, IN: Sharan, S. *Handbook of Cooperative Learning methods*, New York: Praeger Publishers, 3-18.
- Slavin, R. E. & Cooper, R. (1999) Improving Intergroup Relations: Lessons Learned From Cooperative Learning Programs. *Journal of Social Issues*, 55(4), 647-663.
- Slavin, R. E. (1995) *Cooperative Learning*, USA: Allyn and Bacon.
- Slavin, R. E. (1996) Research for the Future, Research on Cooperative Learning and Achievement : What We Know, What We Need to Know. *Journal of Contemporary Educationa*, 21, (4), 43-69.
- Smeyers, P. (2002) Qualitative Verses Quantitative Research Design: A Plea For Paradigmatic Tolerance In Educational Research, IN: McNamee, M., *The ethics of Educational research*, Oxford: Blackwell.
- Soanah, A. & Shalood, F. & Alageal, M. & Algarni, S. (2003) *Styles and Implementations of Educational Training* (second part) Ministry of Education in Saudi Arabia: Educational Training Department. (In Arabic)
- Somekh, B. and Lewin, C. (2005) *Research methods in the social sciences*, London: SAGE Publications.
- Sparkes, A., C. (1991) Exploring the subjective dimension of curriculum change, IN: Armstrong, N. and Sparkes, A., C. *Issues in physical education*, London: Cassell Educational Limited.
- Stake, R. E. (1995) *The Art of Case Study Research*, USA: Sage Publications.
- Stubbs, M. and Delamont, S. (1977) *Explorations in Classroom Observation*, New York: John Wiley and Sons.
- Suliman, S., M. (2005) *Coopertive learning: principals, strategies and implementations*, Cairo: Alame Alkotob. (in Arabic).
- Summerhill, W., R. and Taylor. C., L. (1992) Observation, Records, and Traces as Alternative to Direct Questioning in Collecting Evaluation Data. *Circular PE N. 20*, 1-13.

- T.L.R.P. Teaching and Learning Research Programme, E.S.R.C. Economic and Social Research Council, (2004) *Personalised Learning: A Commentary By the Teaching and Learning Research Programme*. Available from: [www.tlrp.org](http://www.tlrp.org) [Accessed 20-5-2010].
- Tarhan, B., A., L. (2008) Effective of cooperative learning on students' understanding of merallic bonding. *Springer science*, 38, 401-420.
- Tashakkori, A. and Teddlie, C. (1998) *Mixed methodology: combining qualitative and quantitative approaches*, London: Sage.
- The General educational Objectives Document, (2002), *Saudi Ministry of Education-Department of Development*, Riyadh. (In Arabic).
- Thomas, D., R. (2003), *A general inductive approach for qualitative data analysis*, University of Auckland: School of Population Health.
- Thomas, R. M. (2003) *Blending Qualitative and Quantitative Research Methods in Theses and Dissertations*, California, Corwin Press.
- Trilling, B. and Hood, P. (1999) Learning, Technology Reform in The Knowledge age, *Educational Technology Journal*, 39, (3), 5-17.
- Valsa Koshy (2005) *Action Research for Improving Practice: A Practical Guide*. London: Paul Chapman Publishing
- Veenman, S. and Denessen, E. (2005) Effects of a Cooperative learning Program on the Elaboration of Students During Help Seeking and Help Giving. *American Educational Research Journal*, 42, (1), 115-151
- Veenman, S., Kenter, B. and Post, K. (2000) Cooperative Learning in Dutch Primary Classrooms. *Journal of Educational Studies*, 26, (3), 281-302.
- Vermette, P., and Foote, C. (2001) Constructivist Philosophy and Cooperative Learning Practice: Toward Integration and Reconciliation in Secondary Classrooms. *American Secondary Education Journal*, 30, (1), 26-37.
- Wajnryb, R. (1992) *Classroom Observation Tasks*, UK, Cambridge University.
- Walter, R. and Gall Meredith, D. (1989) *Educational research: an introduction*, London: Longman.
- Watson, M., Kendzior, S., Dasho, S. Rutherford, S. and Solomon, D. (1998) A Social Constructivist Approach to Cooperative Learning and Staff Development: Idea from the Child Development Project, IN: Brody, C. M and Davidson, N., *Professional Development for Cooperative Learning: Issues and Approaches*, USA: State University of New York Press, 147-168.
- Wedge, E. (2002) Religious Education in the primary school classroom and cooperative learning. *Catholic school Studies*. October , 37-38.

- West-Burnham, J. and Coates, M., (2008) *Personalizing Learning: Transforming Education to Every Child*, London: Network Educational Press.
- Wild, M., D., Mayeaux, A., S. and Edmonds, K., P. (2008) *Team work: Setting the Standard for Collaborative Teaching, Grades 5–9*, Portland: Stenhouse Publishers.
- Yalajn, M. (2003) *Objectives of Islamic education and its aims* 3<sup>rd</sup> ed. Riyadh: Dar Alam Alkotop. (in Arabic).
- Yin, R. K. (2003) *Case Study Research Design and Methods*, USA: Publications.

### **Internet sources:-**

<http://www.kfcris.com> visited 20/5/2010.

<http://www.moe.gov.sa/openshare/moe/index.htm> visited 20/5/2010.

<http://www.hs.gov.sa/> visited 20/5/2010.

<http://www.tech-faq.com/change-management.shtml> visited 20/5/2010.

[www.prosci.com](http://www.prosci.com) visited 20/5/2010.

<http://www.tatweer.edu.sa/QuickBrief/Pages/ProjectTargets.aspx> 20/5/2010.

<http://www.moe.gov.sa/testbank/ContentAnalysis.aspx> 20/5/2010.

# Appendices