Islamic Studies Teachers' Perceptions of Using a Blended Approach for Teaching Islamic Education Modules in Primary Schools in Saudi Arabia

By

Maram Mohammed Jannah

Thesis submitted to Durham University in fulfilment of the requirements for the degree of Doctor of Philosophy

Faculty of Social Sciences and Health

School of Education

Durham University, UK

2017

Abstract

This study examines Islamic studies teachers' perception of the effectiveness of using a blended learning approach in teaching Islamic education modules in girls' primary schools. Furthermore, it investigates participants' perspectives on whether a blended approach is suitable for teaching all Islamic education modules or if only traditional methods are ideal for teaching some of them.

A mixed-methods approach was used for data collection in this study, including qualitative (lesson observations and interviews) and quantitative (online questionnaires) methods. In the data analysis phase, both a thematic analysis and a descriptive statistics analysis including factor analysis using the Statistical Package for the Social Sciences (SPSS) was employed to facilitate the interpretation of quantitative data.

The blended approach was thought to be suitable to use in teaching all subjects of the Islamic education curriculum. However, the frequency of using such method depends on the content of the lesson and the subject that teachers want it to teach. Moreover, Islamic studies teachers believed that using a blended learning approach increased their productivity when preparing for their lessons and they believed that such methods helped them to achieve curriculum objectives. On the other hand, as a result of applying a blended approach teachers may face difficulty in completing the given unit in one lesson and teachers may experience difficulty in retaking control of the class, particularly after applying one of the active learning strategies. Also, using too many examples of active learning strategies may distract students. The study also revealed that the key factors which may encourage Islamic studies teachers to use a blended approach include the nature of the curriculum and teachers' desire and hope of achieving curriculum objectives and the availability of the teaching aids related to each unit in a student's textbook. Teacher workload, a lack of effective training and a lack of information and communication technology (ICT) tools together with Islamic studies teachers' fear of undermining the respected status of the academic content were thought to be some of the key obstacles that may prohibit Islamic studies teachers from applying a blended learning approach.

This study provides Islamic studies teachers with a blended learning model, along with identification of some of its benefits to both teachers and students. Finally, the blended learning model may be considered a contribution to research in pedagogy, and future researchers may further develop or evaluate the effectiveness of the blended learning model for use in teaching other subjects.

I

Declaration

This thesis is as a result of my research and has not be been submitted for any other degree in any other university.

Statement of Copyright

The copyright of this thesis rests with the author. No quotation from it should be published without the author's prior written consent and information derived from it should be acknowledged.

Publication List

The following publications were produced during the course of this thesis:

Conferences

Jannah, M. & Higgins, S. (2016). The Implications of Blended Learning Strategies for Teaching Islamic Education Modules in Primary and Intermediate Schools in Jeddah, Saudi Arabia. *9th Saudi students Conference, Birmingham, UK, 13 - 14 Feb 2016*

Jannah, M. & Higgins, S. (2016). The Implications of Using a Blended Approach for Teaching Islamic Education Modules in Girls' Schools in Saudi Arabia. *International Conference on Social Science, Literature, Economic and Education,* Dubai- United Arab Emirates, 20th – 22nd July 2016

Jannah, M. & Higgins, S. (2017). Islamic Studies Teachers' Perceptions of Using a Blended Teaching Approach for Teaching the Islamic Education Curriculum in Saudi Arabia. *STORIES (Students' Ongoing Research in Education Studies) Conference, Doing Education Differently, Oxford, UK, 14-15 March 2017*

Jannah, M. & Higgins, S. (2017). Blended learning in Saudi schools: benefits and obstacles. *Second Annual Early Stage Researcher Conference, Durham, UK, 21th June 2017*

Journal Paper

Jannah, M. & Higgins, S. (2017). The Implications of Using a Blended Approach for Teaching Islamic Education Modules in Girls' Schools in Saudi Arabia. *Canadian International Journal of Social Science and Education, 10,* 327-341. http://media.wix.com/ugd/b2629b_f0b0ca2bc54e474b8eee6c6482187435.pdf

Acknowledgements

In the Name of Allah, the Most Beneficent, the Most Merciful

I first express my gratitude to Allah for giving me the motivation, strength, guidance, knowledge and support to conduct this research study and to complete this thesis.

It would not have been possible to undertake and complete this study without the generous support and guidance of the people below:

First, it gives me great pleasure to express my thanks and appreciation to my first supervisor **Professor Steve Higgins** for giving me all the support that I needed during the entire PhD journey and for his guidance and encouragement. He has been of great help in terms of giving the whole process a sense of direction, and contributed immensely to the success of this research. I was lucky indeed to be supervised by him. My thanks and appreciation are also extended to my second supervisor, **Dr Vanessa Kind**, for her contributions and cooperation throughout this project.

I express my heartfelt gratitude to my beloved parents: my departed father Mohammed and my mother, Hayat, for her generous support and prayers, and for taking care of my children despite her illness. She was a great source of encouragement. I would also like to extend my thanks to my brother and sisters, especially my oldest sister Najlaa. I cannot be sufficiently grateful to them for their great support during my PhD journey.

I would also like to express my deep appreciation to my beloved children, Hassan and Mirna, for their patience while I was away from them.

I gratefully acknowledge the Saudi Ministry of Higher Education for the scholarship. I would also like to express my thanks and gratitude to all the staff at the School of Education at Durham University for offering me the chance to pursue a PhD degree, to complete my PhD thesis, and for all their help and support.

Finally, I offer my regards and blessing to the school principals for allowing me to carry out this exploratory study and to the study participants for their time and willingness to share their views. Further thanks and appreciation go to everyone who indirectly or directly made this research possible.

Table of Contents

List of Tables

List of Figures

List of Abbreviations

EFA   Exploratory Factor Analysis

IWB   Interactive Whiteboard

ICT   Information and Communication Technology

IT   Information Technology

KSA   Kingdom of Saudi Arabia

LMS   Learning Management System

PCA   Principal Component Analysis

RE   Religious Education

SACB   Saudi Arabian Cultural Bureau

VLI   Virtual Learning Environment

WebCT   Web Course Tools

Chapter One: Introduction

1.1   Introduction

Education acts as an essential channel for learners in terms of improvement, understanding, and comprehension, involving them to become an operational part of an educated society (Allan, 2007). Teachers in the educational division are encouraged to deliver competent studying atmosphere and to instruct their learners. Thus, they are always searching for methods to make their teaching techniques more efficient (Hsu and Wolfe, 2003). Moreover, teachers are now more conscious of the advantages and disadvantages of using numerous conventional techniques whilst delivering knowledge to the learners and gaining the most probable advantages of employing their instructional skills. Hence, the teachers have been altering their methods to make full use of the new educational procedures (Feinstein et al., 2005). Instructional methods like multimedia presentations, online programs, and computer-based learning are now very commonly employed (Yamauchi, 2008).

As a result of the escalating use of technology, some of the methods of teaching have changed from basic to methods that are not only sophisticated but are more interactive (Sethy, 2008; Al-Shathri, 2016). However, the use of ICT tools alone is insufficient: they lack the advantages of traditional face-to-face interaction (Tayebinik and Puteh, 2012). This difficulty has resulted in the idea of blended learning which may solve the lack of physical interaction with the instructor, which is associated with online learning (Luca, 2006; López-Pérez et al., 2011; Smyth et al., 2012). The use of some forms of new technology such as interactive whiteboards (IWBs) and new teaching methods, such as collaborative learning with face-to-face interaction, may help teachers to achieve specific curriculum objectives and ensure that their students not only understand new knowledge but also reflect on such learning and apply it correspondingly in their daily lives.

Researchers from around the world have examined the effectiveness of using blended learning in schools and universities in many countries and for teaching different subjects, such as geography, science, and mathematics (Al-Shehri, 2009; Korkmaz and Karakus, 2009; Alsharidah, 2012; Yapici and Akbayin, 2012). They have observed many benefits and weaknesses associated with applying such teaching approach (Shivetts, 2011; Smyth et al., 2012; Jokinen and Mikkonen, 2013). The numerous advantages include increasing students' motivation to learn Jokinen and Mikkonen (2013) and providing interactivity to the learning environment (Wang et al., 2009; Smyth et al., 2012). It also facilitates access to the learning materials (Alebaikan, 2010). Moreover, recent research in this area has revealed that, due to the

use of multiple delivery methods, blended learning has become useful for learners, and student satisfaction was slightly higher in blended learning compared to online learning (Akyol and Garrison, 2011). Furthermore, by taking advantage of digital media with face-to-face interaction, educators may harness the potential of the technology and use multiple modes of presentation. Doing so may make it easier to engage the interest of students in a lesson and make the learning environment itself more enjoyable and interactive (Mayer, 2009). On the other hand, the weaknesses in applying blended learning include technical problems (Shivetts, 2011), lack of sources, and the learners' and teacher's training needs (Jokinen and Mikkonen, 2013).

1.2   Definitions of Terms

1.2.1   Islamic Education Modules

An Islamic education involves presenting the Islamic religion to the learners in a way that simplifies its facets and interprets them in a manner that is demonstrative and 'alive', thus revealing the greatness of the religion and instilling pride in it (Al-Shafei, 2009).

In Saudi Arabia, the Islamic educational curriculum serves as one of the most important curricula taught to students in international and non-international schools and in private and state schools (Al-Shafei, 2009). In addition, the Islamic education curriculum differs from that of other fields of education in a number of important ways:

1. The student comes to school already possessing significant knowledge of Islam, having been taught the religion from an early age at home by their parents and other family members. Therefore, while at school, they build upon and expand their knowledge of Islam.

2. What the students learn at school contains a firm and clear link to the way in which they behave and live. The moral education they receive is put into practice in their daily life (Kurdi, 2007).

The objectives of Islamic education curriculum are manifestly displayed through the Islamic education modules (Qur'an and Tajweed, Tawhid, Hadith, and Fiqh) in schools. The *Qur'an* is the literal word of God revealed by the angel Gabriel to the prophet Muhammad over a period of 23 years. The ***Qur'an*** is recited in worship and describes the creation of even the smallest of its chapters as a miracle. Besides, the Qur'an is the central religious text of Islam. Muslims believe the Qur'an to be the book of divine guidance and direction for mankind. ***Hadith***, 'Sayings of the Prophet', is the second reference from which the Muslim nation can learn right from wrong and can source the answers to many questions they may have concerning Islamic

culture. It serves as an important tool for understanding the Qur'an by providing clarification on various issues that are mentioned briefly in the Qur'an. *Tawheed*, 'Doctrine of Oneness', deals with the study of various issues regarding the first pillar of Islam (belief in the oneness of God and acceptance of Muhammad as God's prophet). *Fiqh*, 'Islamic Jurisprudence', expands upon the issues of conduct outlined in the Qur'an. It also considers how humans can interact with each other while still observing Islamic morals (Al-Khaleefah and Hashem, 2010). Thus, all the elements of the Islamic education curriculum integrate with one another, whilst also being integrated with other specialties, so as to attain the overarching objective of achieving servitude to Allah.

1.3   Statement of the Problem

Due to the social isolation associated with online teaching and learning environments, on their own, they may be insufficient to impart knowledge and understanding to students (Smyth et al., 2012; Alqahtani and Higgins, 2013). For instance, teaching students to recite the Qur'an in the absence of physical interaction with an instructor could be very difficult because the students are in a mere online virtual environment and may not be able to interact effectively with a teacher who can monitor their understanding and give feedback to improve their performance in reciting and memorising the Qur'an verses. Moreover, teachers must strive to ensure that their students learn from and understand the lessons in religious subjects (Wood, 2008).

Secondly, having observed and interviewed Islamic studies teachers, it was found that a large number of students experienced difficulty in reciting and memorising the Qur'an. Also, routine and inertia are associated with Islamic education lessons. This could be attributed to the poor preparation and the subsequent drop in the standard of teaching, which may result in a lack of understanding by students, who might consequently not care about their Islamic lessons. Thus, the way of teaching Islamic education modules need to be more enjoyable, and it is worth conducting a study to investigate whether applying a blended learning approach would improve the teaching of Islamic education modules or whether the traditional method is the ideal and the only way to teach some of these modules.

1.4   Context of the Study

The primary aim of teaching Islamic education modules is not to increase students' knowledge of different religions, but to teach them about the Islamic religion, in the hope of helping them to become better followers of Islam – people whose words and actions are influenced by Islamic principles and values. Additionally, Islamic education teachers have a duty to inspire students

to practise what they have learned (Kurdi, 2007). This context inspired the idea of applying a blended approach – a combination of different forms of technology (such as computers, laptops, interactive whiteboard, and an overhead projector), teaching methods, and teaching aids with collaborative learning and active learning – to teaching Islamic education modules (see figure 1.1). The use of such method may help teachers to achieve specific curriculum objectives and provide the interactivity that has been lacking in the traditional learning environment and the face-to-face interaction that has been lacking in the mere online learning environment.

The next section will explain the four dimensions of a blended learning approach used in this study and justifies the rationale for selecting these four elements.

1.5   Blended Learning Approach

According to Singh (2003), in order to create a blended learning model, the designer needs to address several factors. These include institutional, pedagogical, technological, and resource support. The *institutional* element deals with issues relating to administrative, academic matters and student services. Additionally, the *pedagogical* element deals with issues in relation to the content to be taught, students' needs and learning objectives. The *technological* factor examines issues of technology infrastructure in learning environments, which includes infrastructure planning, hardware, and software; and the *resource support* factor is concerned with providing learners with a variety of resources as well as organising them to foster meaningful learning.

In this study, before developing the blended learning model the researcher visited primary schools in Jeddah, Saudi Arabia, to find out what form of digital technology, such as computers and interactive whiteboard, are available for Islamic studies teachers in schools in general and the classroom in particular. The researcher also looked at their accessibility and the ability of both students and teachers to use them. Moreover, the researcher observed some teachers to discover what teaching methods and teaching aids teachers used to deliver the lessons. That was followed by conducting focus group interviews with Islamic studies teachers to explore and to understand more the current methods teachers use in teaching the Islamic education curriculum. Moreover, the classroom observations and interviews also aimed to reveal teachers' and learners' needs.

Having understood the current methods of teaching Islamic education and knowing learners' and teachers' needs, as well as the nature of the Islamic education curriculum, the researcher then developed the blended learning model, to evaluate the effectiveness of such a teaching

approach and to investigate Islamic studies teachers' perceptions regarding its use in teaching the Islamic education curriculum.

The next section will summarise the sources of the four dimensions and explain the rationale for choosing each dimension.

The blended learning model used in this study consists of four dimensions, and draws upon several sources and considerations: 1) classroom observations; 2) interviews with Islamic studies teachers; and 3) considering the curriculum's objectives, the requirements of the Pedagogical Planning and Development Administration, as well as teachers' and learners' needs (see figure 1.1 and table 1.1).
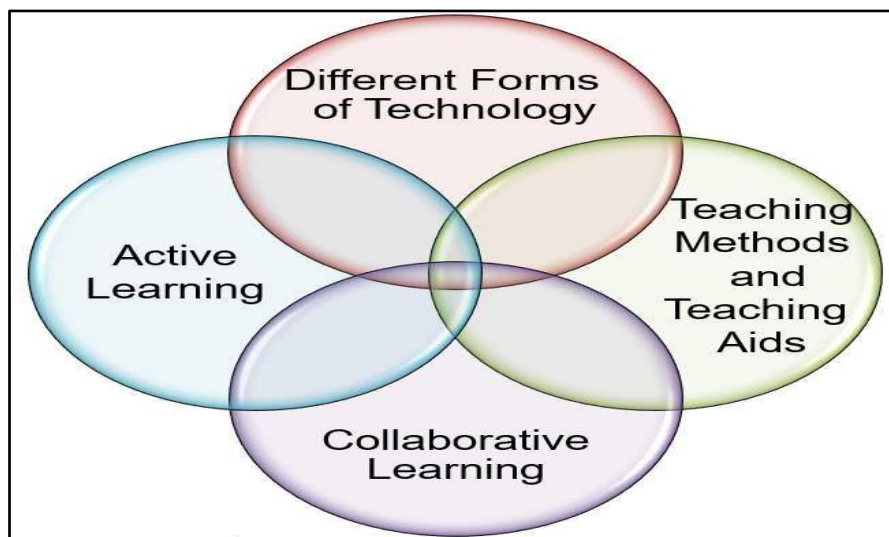
Figure 1.1: Elements of a Blended Learning Model

Dimensions	Descriptions
Different forms of technology	This dimension does not specify a particular form of digital technology and leaves it for teacher to choose which form is available to her in school and which would suit the lesson objectives
Teaching methods and teaching aids	This dimension mainly considers the use of different traditional teaching methods and techniques, such as the lecture method or deductive method, and using different examples of teaching aids, such as video and images
Collaborative learning	This dimension deals with students working in a group to achieve a unified curriculum objective, and most of the time the collaborative activity ends with students producing something such as summarising part of the lesson in a mind map. The role of the teacher is to evaluate what the learners have come up with and to give feedback
Active learning strategies	This dimension deals with using examples of active learning approaches such as Hot Seat, Brainstorming, Think-Pair-Share, and Lollipop Sticks to either introduce the new lesson or to teach new information during the lesson as well as at the end of the lesson to assess students' understanding (see Chapter 3 for further information)

Table 1.1: Dimensions of a Blended Learning Approach

1.5.1 Rationale of the Chosen Dimensions

1.5.1.1 Different Forms of Technology

Information and communication technology (ICT) influences people in many areas (Becta, 2008). Moreover, technologies have become an essential part of everyday life; millions of people regularly use social networking to keep in touch with their friends and families, as well as to share ideas. Technology can be used to support teaching and learning. For instance, technology can be used to enhance the teaching and learning experience and, as a result, it enhances the knowledge being delivered or acquired. In addition, it can be used to improve planning and the development of lesson content and to improve assessment and learning activities (Allan, 2007). Consequently, educational institutions must also make this technology accessible to all the students to attain equitable results (Becta, 2008). Moreover, a previous study on students' achievement and attitudes in a course on Islamic culture revealed that using a blended learning resulted in a statistically significant difference in students' achievement between traditional learning and e-learning compared to a blended learning group (Alqahtani,

2010). Additionally, Al-Caderi (2008) found that using some computer programs resulted in a dramatic increase in student skills in reciting the Qur'an.

Having illustrated that the use of ICT is beneficial in teaching Islamic education, using different forms of technology forms the first dimension in the blended learning model used in this study.

1.5.1.2 Teaching Methods and Teaching Aids

Due to the nature of the Islamic education curriculum, it is also important to use traditional methods such as direct teaching, the deductive, dialogue, and demonstration methods, when teaching such modules, so as to help teachers to simplify lesson content for students and to achieve specific curriculum objectives (Taweelah, 2000; Kurdi, 2007). Teaching aids are also needed to enhance and simplify the lesson content in student textbooks. For example, when teaching students how to perform a prayer, the teacher could show the students a video or pictures comparing the right and the wrong position for Ruku, 'bowing down from the standing position while praying'. Accordingly, teaching methods and teaching aids form the second dimension in the blended learning model used in this study.

1.5.1.3 Active Learning and Collaborative Learning

Mayer (2001) believes a meaningful learning outcome depends on the learner's cognitive activity during learning rather than on the learner's behavioural activity during learning, such as engaging in hands-on activities. In a study conducted by Akyol and Garrison (2011), both teachers and learners emphasise the importance of resources and learning activities, in order to develop deep approaches to learning. Similarly, Singh (2003) highlighted the importance of providing learners with a variety of resources as well as organising them to foster meaningful learning.

In active learning as well as collaborative learning, students learn from one another, and their learning occurs through cognitive activity in the learning process and through interaction with others. Accordingly, research suggest that particularly these two dimensions can lead teachers to achieve meaningful learning when teaching aspects of the Islamic education curriculum. Also, both active learning and collaborative learning may help students to exchange knowledge while learning from one another and actively engaging in the learning environment (Mayer, 2001; Kerry, 2004).

Singh (2003) recommended that prior to developing a blended learning framework it is essential to consider issues related to organisational and administrative matters.

Additionally, my interviews with Islamic studies teachers before developing the blended learning model indicated that all teachers are required by their academic supervisor to use at least three examples of active learning strategies when teaching the Islamic education curriculum. Thus, to make sure that the blended learning model is in line with the requirement of the academic supervisors in the Pedagogical Planning and Development Administration in Saudi Arabia, the active learning strategies form the fourth dimension in the blended learning model.

In addition to the researcher's knowledge, these two dimensions of the blended learning model are in line with the constructivist learning theory. In constructivism, students have greater ownership of their learning, which means that they share ideas, discuss concepts, ask questions, and revise their thinking. Moreover, they are encouraged to be responsible for their learning; they manage their activities, their learning, and whatever they choose to do (Schunk, 2012). Thus, changing the roles played by students and teachers may contribute to enhanced learning outcomes (Miller, 2002; Chiang et al., 2010; Duffy and Jonassen, 2013).

In summary, the four dimensions of the blended learning model are rooted in different learning theories and teaching approaches. Collaborative learning, as well as active learning, are in line with constructivist learning theory. In addition, the selected teaching methods (explanation, interrogation, deductive, dialogue, demonstration, collaborative learning, and problem solving) respectively can be seen as moving from a teacher-centred approach toward a student-centred approach (further explanation to these methods, a teacher-centred and student-centred approach will be presented in chapter 3). Finally, the use of teaching aids such as the combination of images and text to promote a meaningful learning appear to be associated with multimedia learning theory.

1.6   Significance of the Study

The importance of this study arose from a call by previous researchers for further studies on the effectiveness of applying blended learning in teaching Islamic education in Saudi Arabia (Alebaikan, 2010; Alqahtani, 2010). Others have concluded that there is a need for further research to find out why Islamic studies teachers are continuing to use traditional methods (Al-Buraidi, 2006; Al-Matari, 2008). Jokinen and Mikkonen (2013), concluded that there is less research about teachers' experiences in planning and teaching in blended learning courses, compared to research examining the effectiveness of blended learning on students' learning outcomes. Alebaikan (2010), concluded that future studies will help us to locate the challenges when using different forms of technologies in blended learning courses in Saudi Arabia. Moreover, due to the lack of Arabic resources regarding blended learning, it is important continue to research and investigate the impact of blended learning in various Arabic frameworks (Alebaikan, 2010; Alqahtani and Higgins, 2013). Further to this, Stern (2006), claims that despite the fact that the Qur'an is an important source text for Muslim nations and that it has been used in the teaching of Islam, only limited research had been carried out on its use in the classroom. Additionally, Islamic studies teachers are required to ensure not only that their students understand the facts of the Qur'an, but also that they are applying this new knowledge effectively in their lives. Singh (2003, p.7) states that 'We are so early into the evolution of blended learning that little formal research exists on how to construct the most effective blended program designs'. Therefore, there is a need for the current study to fill these gaps in the literature.

1.7   Research Aims

This study seeks to examine Islamic studies teachers' perceptions of the effectiveness of using a blended learning approach (different forms of technology, traditional teaching methods and teaching aids, active learning strategies and collaborative learning) in teaching students Islamic education modules in girls' primary schools in Jeddah. Furthermore, it investigates participants' perspectives on whether a blended approach is suitable for teaching all Islamic education modules or if only traditional methods are ideal for teaching some of them. Also, it aims to identify the key factors which motivate Islamic studies teachers to use a blended learning approach. Moreover, it examines Islamic studies teachers' perceptions of the obstacles which could stand in the way of implementing a blended learning approach.

1.8   Research Questions

This study is conducted to answer the following research questions:

1. How effective do Islamic studies teachers in girls' primary schools believe using a blended learning approach is for teaching Islamic education modules (Qur'an and Tajweed, Hadith, Tawhid, and Fiqh)?

2. What are the factors that motivate Islamic studies teachers to use a blended learning approach when teaching Islamic education modules?

- Does using a blended learning approach in teaching aspects of the Islamic education curriculum change teachers' perceptions of their delivery of this curriculum?

- Do Islamic studies teachers believe that using a blended learning approach is suitable for teaching all Islamic education modules, or is it more applicable to one subject than it is to others?

- What are the main disadvantages of using a blended learning approach when teaching and learning Islamic education modules?

- What are the factors that inhibit Islamic studies teachers from implementing a blended learning approach?

The next section discussed the procedures and methods used to evaluate the effectiveness of the blended learning model.

1.9   Evaluating the Effectiveness of the Blended Learning Model

According to Singh (2003), the evaluation of a blended learning programme includes evaluation of the teaching methods and learning environment. In this study, the researcher used an online questionnaire, classroom observations, and interviews to evaluate the effectiveness of using the blended learning model and to explore the factors that most prevent teachers from using a blended learning approach. Thus, its goal is to answer the research questions and to provide teachers with ideas to improve the methods of teaching Islamic education curriculum as well as to help them to meet learners' needs. More importantly, it is also to provide the Ministry of Education in Saudi Arabia with knowledge of the factors that boost teachers to use innovative teaching methods as well as the factors that prevent Saudi female Islamic studies teachers from using a blended approach. Additionally, the blended learning model used in this study is different to other blended learning forms, which only combine face-to-face interaction with online learning, without specifying or giving examples of any traditional teaching methods that teachers may use to deliver the lesson. However, the researcher believes that giving teachers a

variety of modern and traditional teaching methods to choose from may increase their productivity when delivering the lessons. Moreover, not limiting teachers to use a specific form of technology makes this blended learning model different to other blended learning forms, in which the use of online learning is essential.

1.10 Rationale of the Research and Personal Goals

I wished to follow the program of Technology Enhanced Learning because I want to be among the women who will serve side by side with men in furthering the development of the education sector in Saudi Arabia, and because I believe that I have the scholastic standing and personal attitude needed to succeed in this program. What is more, technology is fundamental to the development of education, and there is a demand for positions that will manage and improve how technology can be used to support education and educational institutions. I believe that the Technology Enhanced Learning program will help me learn the knowledge, skills, and experience needed to perform the tasks of an expert in using different forms of technology for educational purposes. Understanding both the existing research and the theoretical perspectives on learning will, I believe, help me to develop better educational approaches in my context. Moreover, it will fulfil my personal goals of being among the women who will enhance education and to be an active and productive lecturer. I chose blended learning in particular because I want to be a creative teacher, to teach differently. I believe that the Saudi Ministry of Higher Education needs such innovative teaching methods as part of the Saudi education development plan. Finally, achieving this degree will provide me with the qualifications needed to achieve my career goals and to find the position I have long wished for.

1.11 Structure of the Thesis

This thesis consists of eight chapters, as follows:

Chapter 1: Provides a background to the study and includes research aims, research questions, and the significance of the study.

Chapter 2: Offers a background to the Islamic education curriculum in Saudi Arabia, including the sources of Islamic education modules and the objectives of Islamic Education in primary, intermediate, and secondary schools. The chapter also discusses the importance of preparation for teachers of Islamic studies, the characteristics of a successful Islamic studies teacher and various issues in teaching an Islamic Education in KSA.

Chapter 3: Offers a background on the relevant literature that has examined the use of blended learning, multimedia learning, and various teaching methods, with a focus on teaching the Islamic education curriculum.

Chapter 4: Provides a review of relevant studies include blended learning and the use of innovative teaching methods, with more focus on Saudi Arabia.

Chapter 5: Explains the methods used in collecting and analysing the qualitative and quantitative data, as well as a justification for the rationale of the chosen methods. Moreover, it explains the role of the researcher, followed by the validity and reliability of the research instruments.

Chapter 6: Presents the findings of the study. The chapter begins by analysing the demographic information of the participants, current teaching methods, and computer and Internet usage, followed by Islamic studies teachers' perception of using a blended learning approach and the factors that prevent them from applying a blended learning approach. Secondly, the findings of the interviews are presented. Finally, the results of the classroom observations are presented**.**

Chapter 7: Discusses the findings and compares and contrasts the new findings with existing similar results in the field.

Chapter 8: Presents the conclusions of the findings and offers some recommendations for stakeholders and future researchers. It also explains the strengths and weaknesses of the study as well as the contributions of the study.

Chapter Two: Islamic Education in the KSA School Curriculum

2.1   Introduction

Although Islamic Education occupies a significant position in Saudi Arabia school curriculum, the literature regarding the nature of the Islamic education curriculum in Saudi Arabia, including curriculum objectives and the role of the Islamic studies teachers are rarely questioned (Al-Buraidi, 2006; Almatari, 2008; Alsharidah, 2012). More importantly, as this study examines Islamic studies teachers' perceptions of the effectiveness of using a blended learning approach in teaching students Islamic education modules, it is important to provide a background about the unique features of Islamic Education and the aim of teaching an Islamic Education curriculum in schools, so as to understand the Islamic Education in Saudi Arabian education system. For these reasons, this chapter is crucial for this thesis.

The chapter will begin with a brief explanation about various approaches to religious education with more focus on the approaches to teaching Islamic Education in Saudi Arabia, followed by a detailed explanation about the Islamic Education curriculum in Saudi Arabia. The detailed explanation covers many aspects related to this curriculum, including the sources of Islamic Education, religious education as it applies to girls, and the objectives of Islamic Education in primary, intermediate, and secondary schools in relation to knowledge, scientific thinking, skills, values, and directions for conducting daily life. The chapter also discusses the importance of preparation for teachers of Islamic studies and the characteristics of a successful Islamic studies teacher. Finally, it addresses various issues in teaching an Islamic Education in KSA.

2.2   Approaches to Religious Education

There are a range of approaches to teaching religious education in schools and one way of thinking about this is to think about educating *into* a faith, educating *about* a religion, or learning *from* religion (Schreiner, 2013; Hella and Wright, 2009).

Educating students *into* religion means introducing them to one specific faith tradition. In the majority of countries, this has not been seen as a task of schools, but rather as one for families and religious communities (Jackson et al., 2007; Schreiner, 2013).

Learning *about* religion refers to acquiring religious knowledge through religious study. In addition, investigating the nature of religion with students focuses especially on beliefs, teachings, practices, ways of life and forms of religious expression, a process that will bring them face-to-face with questions that require interpretation, analysing and explanation

(Schreiner, 2013; Hella & Wright, 2009). Hella & Wright (2009) add that as students learn *about* religion, they experience a range of alternative accounts of reality, and they must necessarily learn *from* religion by considering the relationship between their own worldview and the worldview of the religious or secular tradition they are studying. Furthermore, learning *from* religion focuses on developing personal skills. When learning *from* religion, students are expected to reflect on and respond appropriately to their own experiences in light of their exploration of religion. Schreiner (2013) adds that the students' identities and experiences are at the centre of teaching and learning. Hella & Wright (2009) emphasize that unless a clear understanding of the relationship between learning *about* religion and learning *from* religion is first established, neither task can be carried out successfully. In other words, students can make informed judgements about their beliefs and values (learning *from* religion) only by engaging with the truth claims of various religious and secular traditions (learning *about* religion). Similarly, students can achieve a deep understanding of religion (learning *about* religion) only by relating such understanding to their own belief system (learning *from* religion).

Schreiner (2013) highlights the reasons for the differences among countries in approaches to religious education, including the country's religious landscape, the role and value of religion in the society, the relationship between the state and religion, the structure of the country's education system and the country's underlying philosophical assumptions, history and politics.

In Saudi Arabia, Islamic studies teachers should only educate students into Islam as it is the main religious tradition in the country and it is part of the state religion (Al-Shafei, 2009). Other religions are not included in the curriculum. The role of Islamic studies teachers is to teach students the Islamic religion and to enable learners to achieve the broader goal of becoming better Muslims by correctly adopting what they have learned in their lives inside and outside school. That is because the aim of teaching Islamic education modules is not to increase students' knowledge, but to teach them about the Islamic religion, in hopes of helping them to become better followers of Islam — people whose words and actions are influenced by Islamic principles and values.

2.3   Religious Education Curriculum in Saudi Arabia

In Saudi education, religion refers to Islam and Islamic Education is the name used for religious education curriculum in schools.

Al-Hashmee (1997) explains the meaning of Islam:

> The root of the word Islam in Arabic is "*silm,*" which means "peace," and denotes peace with God (Allah) and mankind. Islam is the religion that asks for a complete submission to God and obedience to his orders. Thus "Islam," by definition, means obedience to God, and implies the unity of all human beings and the brotherhood of all races (p.65).

The primary tasks that were assigned to the Messenger were to *convey* and *clarify* the Message of Islam. As for the first task, Allah said:

"O Messenger, announce that which has been revealed to you from your Lord, and if you do not then you have not conveyed His message" [Qur'an 5:67].

And as for the second task, Allah said addressing His Messenger, "...And we revealed to you the message [i.e., the Qur'an] that you may make clear to the people what was sent down to them and that they might give thought" [Qur'an 16:44].

Therefore, everything the Prophet said or did, goes back to these two tasks (Hishaam, 1990).

An Islamic education involves presenting the Islamic Religion to the learners in a way that simplifies its facets and interprets them in a manner that is demonstrative and 'alive', thus revealing the greatness of the religion and instilling pride in it (Al-Shafei, 2009). The Islamic education curriculum is compulsory for all students and serves as one of the most important curricula taught to students in international and non-international schools and private and state schools (Al-Aqeel, 20005; Al-Shafei, 2009). In addition, the Islamic education curriculum differs from that of other fields of education in a number of important ways:

> 1. The student comes to school already possessing significant knowledge of Islam, having been taught the religion from an early age at home by their parents and other family members. Therefore, while at school, they build upon and expand their knowledge of Islam.
> 2. What the students learn at school contains a firm and clear link to the way in which they behave and live. The moral education they receive is put into practice in their daily life (Kurdi, 2007; Alavi, 2007).

2.3.1   Islamic Education Modules in Girls' Primary Schools in Saudi Arabia

The Islamic education curriculum in Girls' primary schools consists of four subjects which are 1) Qur'an and Tajweed; 2) Hadith; 3) Tawheed, and 4) Fiqh. The ministry of education requires that each class receives ten Islamic lessons a week. Due to the unequal lengths of each individual subject the ten teaching lessons are split as: six lessons dedicated to the teaching of the Qur'an and Tajweed, one for Islamic Jurisprudence, one for the Doctrine of Oneness and two for the teaching of the Hadith (Al-Caderi, 2008; Al-Shafei, 2009). In keeping with these regulations, each primary school teacher will usually take two sets of classes per week, totalling twenty teaching classes (Al-Caderi, 2008; Al-Shafei, 2009). Moreover, the syllabus for each of this module is determined by the government and the ministry of higher education in line with Islamic values, rules and regulation and it is unified in the entire kingdom (Al-Aqeel, 2005). Additionally, the objectives of Islamic education are manifestly displayed through the Islamic education modules in schools. The *Qur'an and Tajweed* classes allow learners to reach the mastery level of recitation and conservation as well as providing an understanding of the general meaning of the verses. The objective with regard to teaching the *Hadith* 'Sayings of the Prophet' is to attain knowledge of the teachings of the Prophet's words and to memorise his texts and Prophetic rhetoric. The teaching of *Tawheed* 'Doctrine of Oneness' is aimed at illustrating the correct doctrinal beliefs. *Fiqh* 'Islamic Jurisprudence' classes are aimed at making the learner proficient in the way she worships (Kurdi, 2007; Al-Khaleefah & Hashem, 2010). Thus, all the elements of the Islamic educational curriculum integrate with one another, whilst also being integrated with other specialties, so as to attain the overarching objective of achieving servitude to Allah (Ali et al., 2004; Kurdi, 2007).

2.3.2   Sources for Islamic Education Curriculum

Prophet Mohammed said "I have left between you something which by adhering to it, you won't ever be misleading after me: The Holy Qur'an and my Sunnah". Thus, the only main sources for legislating in Islam (Islamic law) are the Holy Qur'an and the Sunnah (Traditions of the Prophet).

2.3.2.1   The First Source: The Holy Qur'an
2.3.2.1.1   Definition of Qur'an

Linguistically, Qur'an is an infinitive of the verb Qara`a (قرأ) which means 'to recite'. Al-Jawhary said: Qur'an means 'The Recital'.

Abu `Ubaidah said: It was called 'The Qur'an' because it gathers the chapters and conjoins them together.

In Islamic terminology, Qur'an means, the literal word of Allah revealed by the angel Jibreel (Gabriel) to the Prophet Muhammad, peace be upon him; over a period of twenty-three years as appropriate to occasions, situations, and events. The Qur'an is recited in worshipping and the creation of even the smallest of its Suras (chapters) is a miracle. In addition, the Qur'an is the central religious text of Islam. Muslims believe the Qur'an to be the book of divine guidance and direction for mankind (Hishaam, 1990).

2.3.2.1.2 The Principles of Reciting the Holy Qur'an

- The Qur'an should be read with understanding, reflection and an attentive heart.
- The Qur'an should not be read in dirty places; in bathrooms, for instance.
- One should seek Allah's protection against the accursed Satan prior to reading it.
- Each Sura should be started by saying." *In the name of Allah, the Compassionate, the Merciful* "
- One should read the Qur'an in the best voice possible.
- The Qur'an should be read with the intention of following its instructions, and it should be read as if Allah is speaking directly to the reader with its words.
- The Qur'an should be read with consideration to the provisions of intonation (Hishaam, 1990; Al-Shafei, 2009).

2.3.2.2 The Second Source: Traditions of the Prophet (Sunnah)

As previously mentioned, Hadith refers to the curriculum taught in schools, and the traditions of the prophet, hereinafter referred to as Sunnah, is the sources that the curriculum is based on.

The great knowledge of the religion was established during the life of the Prophet. He used to recite the Qur'an to his companions and make speeches that were not Qur'an. The companions used to verbally transmit this knowledge, but some used to write it down. At first, the Prophet ordered them not to write down his speech so that it didn't get mixed up with the Qur'an. Then later he permitted them to write it down (Al-Shafei, 2009).

In Islamic terminology, Hadith means: a report attributed to the Prophet Mohammed peace be upon him describing his sayings or actions (Hishaam, 1990).

2.3.2.2.1   The Relation of the Prophet's Sunnah to the Holy Qur'an

This section sets out the relationship between the Holy Qur'an and the Prophet's Sunnah as follows:

2.3.2.2.1.1   The Sunnah details what is concise in the Qur'an (clarifies what is obscure in the Qur'an):

The verses of the Qur'an, with regard to many issues, are concise. The Prophet detailed and fully described them through his words and actions. For example, in the Qur'an, Allah said: "And establish Prayer and give alms (Zakah) and obey the Messenger – that you may receive mercy" [Qur'an 24:56]. In the Prophet Tradition, the Prophet taught the companion who performed his prayer badly by saying, "If you stand to pray say *Allaahu*-Akbar "Allah is the greatest", then recite from that which you have of the Qur'an. Then bow until you are tranquil in that position. Then rise until you stand up straight. Then prostrate until you are tranquil in that position. Then sit up until you are tranquil in that position. Then prostrate until you are tranquil in that position. Then do that in the rest of your prayer". Moreover, the Prophet informed his companions to pray in the same way they saw him praying. This is an example of details given by the Prophet regarding some concise verses and is one way by which the Prophet's Sunnah can clarify the Qur'an. (Zayno, 1997).

2.3.2.2.1.2   The Sunnah specifies what is generalised in the Qur'an:

In the Qur'an, Allah said: "Prohibited to you are dead creatures, blood..." [Qur'an 5:3]. The verse generally prohibits the consumption of dead creatures and blood. The Prophet excluded some specific animals and blood from this general rule. He said, "Two kinds of dead creatures and two kinds of blood have been permitted to us. The two kinds of dead creatures are fish and locusts, and the two kinds of blood are the liver and spleen" He also said about the sea, "Its water is pure and its dead are permissible" (Zayno, 1997).

2.3.2.2.1.3   The Sunnah restricts what is unrestricted in the Qur'an:

In the Qur'an, Allah said: "As for the thief, both male and female, amputate their *hands* in recompense for what they earned [i.e., committed] as a deterrent [punishment] from Allah. And Allah is Exalted in Might and Wise" [Qur'an 5:38]. The word '*hands*' in the Arabic language could mean the whole arm or parts of it, such as the upper or lower arm, or the hand. The verse does not restrict it to a specific part. The Traditions of the Prophet, through actions and words, restricted the punishment only to the right hand from the wrist (Zayno, 1997). This emphasises the importance of interpretation in this aspect of Islamic education.

2.3.2.2.1.4 The Sunnah legislates laws that are not mentioned in the Qur'an:

An example of this case is the saying of the Prophet when commenting on gold and silk that he was holding in his right and left hands: "These two are prohibited for the males of my nation and permissible for its females" (Zayno, 1997).

Among the evidence that shows that the Qur'an and the Traditions of the Prophet 'Sunnah' are the two primary sources is that Allah ordered us to refer to them whenever there is a dispute over any religious ruling. In addition, the Sunnah is the theoretical and applied approach to Islam, for we cannot know what Allah requires from his servants except through it. For example, the detailed rulings that pertain to the obligations to pray, fast, give alms and make pilgrimages, among others, are found only in the Sunnah. The Qur'an mentions these obligations generally, without details. Therefore, Muslims are obliged to obey the commands of the Sunnah, and the Traditions of the Prophet cannot be disregarded. Furthermore, the moral norm in Islamic education is set by the Qur'an and the Sunnah of the Prophet Mohammed, which draws its honour from the fact that it is about the life of the Messenger. Thus, to do something immoral means violating the God-given and, hence, committing a sin. It is clear that in Islam, morality and religion are not segregated into two distinct units, suggesting that the Islamic education curriculum in Saudi Arabia has a very strong moral dimension (Ashraf & Hirst, 1994). This in turn, means that the aim of the Islamic education curriculum is not only to expand students' knowledge about Islamic rules and regulations, but also to encourage them to implement these morals' correctly in their words and actions (Baharith, 2003; Kurdi, 2007).

The next section will explain a set of objectives related to knowledge and scientific thinking, values and directions and objectives related to skills as well as the schools (Primary, Intermediate, and Secondary) objectives which will help Islamic studies teachers to achieve the primary aim of teaching the Islamic education curriculum in Saudi classrooms.

2.3.3 The Objectives of Teaching Islamic Education in Saudi Arabia

This section is divided into three parts. First, objectives related to knowledge and scientific thinking, then objectives related to values and directions, followed by objectives related to skills.

2.3.3.1 Objectives Related to Knowledge and Scientific Thinking

These are called cognitive objectives and they have a great importance in Islamic education because they deal with Islamic heritage which is an essential component. They shape and correct how the student views herself, her environment and her life and it aims to provide a

guide for her behaviour. Furthermore, it will help her to be trained in a scientific approach to thinking. Among these objectives are the following:

1. Supporting the student in understanding the concepts and terms of the religion.

2. Achieving the correct understanding by the student of the nature of different human relations and the basis of interactions in the Muslim community.

3. Developing mature and open-minded Muslims.

4. Giving the student various knowledge's about the universe, life and what is behind this life, supported with intellectual and religious evidences (Ali et al., 2004; Al-Khaleefah & Hashem, 2010).

2.3.3.2   Objectives Related to Values and Directions

These are called affective objectives and they have a great importance in Islamic education, for they remind the teacher about the exploitation of the knowledge the student receives in guiding her behaviour and equips her with the great values of Islamic manners and should drive her to implement them with satisfaction and motivation. Among these objectives are the following:

1. Equipping the student with the values that regulate her behaviour.

2. Equipping the student with customs and hobbies that will contribute to the building of their personality and guide their behaviour.

3. Supporting the sense of unity of the Muslim nation in the students, to stir up their involvement with Muslims in different parts of the world and to provide support for them and also to take an interest in their problems (Ashraf & Hirst, 1994; Al-Shafei, 2009).

2.3.3.3   Objectives Related to Skills

These are called skill objectives and have a great importance in Islamic Education. If they are achieved, the student will reach a state of perfection and innovation in their work, worship and all other skills. There are many objectives that come under this category. The most distinguished are:

1. Preparing the student to take responsibility and fulfil their duties.

2. Preparing students to take responsibilities towards their society, in particular in enjoining good and forbidding evil.

3. Developing the skills of the students (mental, social and professional skills) based on what is possible from different activities (Kurdi, 2007; Al-Khaleefah & Hashem, 2010).

These are the general objectives of teaching Islamic education curriculum which were written and explained by educators and although they differ in number and content in different books

they are similar in themes (Ali et al., 2004; Kurdi, 2007). Furthermore, there are objectives for each level: Primary, Intermediate and Secondary. All of these school objectives which will be explained next are belong to the aforementioned primary objectives (Kurdi, 2007) as these are most relevant to this study.

2.3.3.4   Schools Objectives

2.3.3.4.1   The Primary School

A key objective for the primary phase is to ensure sound mental preparation of the student to suit her natural instincts and fulfil her Islamic education requirements to become both righteous and a role model in faith, worship and morals. To achieve this objective, it was taken into consideration that the Islamic education curriculum encapsulates the general principles that the basis of the creed and worship of the Muslim are built on (Al-Khaleefah & Hashem, 2010; Al-Hamid, 2012).

2.3.3.4.2   The Intermediate School

1. Equipping learners with sufficient Islamic Knowledge to enable them to have the correct creed, worship in the right manner and motivate them to seek the Pleasure of Allah in every matter.

2. Developing the feeling of honour towards their religion, this will protect them from tribulations and any internal deviated ideologies.

3. Making students aware of the requirements and noble objectives of the Muslim nation in order to contribute in preserving its heritage and attaining a leading role in the civilised world (Al-Aqeel, 2005; Al-Hamid, 2012).

2.3.3.4.3   The Secondary School

 1. Improving students' knowledge on Islamic creed to enable them to be loyal and sincere to Allah and steadfast upon his wise Law.

2. Direct students towards achieving the aim of Islamic Education, which is to prepare a righteous female Muslim in her own self and a reformer in her community.

3. Developing a scientific way of thinking and the spirit of research in learners.

4. Spreading awareness of Islamic Family Law to achieve the building of happy Muslim families by learners.

5. The formation of correct Islamic awareness that will help students to confront destructive ideas and deviant ideologies (Al-Khaleefah & Hashem, 2010; Al-Hamid, 2012).

To sum up, the role of Islamic studies teacher in Saudi primary school is to equip students with skills to practise Islamic religion as well as develop their knowledge and understanding only about Islamic religion. Following this, in intermediate and secondary schools, the Islamic education curriculum builds on this knowledge and experience in primary education. For instance, in intermediate level, Islamic studies teacher equip learners with sufficient Islamic knowledge to enable them to have the correct creed, worship in the right manner and motivate them to seek the pleasure of Allah in every matter. In secondary school, an Islamic studies teacher is required to direct students towards achieving the aim of Islamic Education, which is to prepare a righteous female Muslim in her own self and as a reformer in her community.

2.3.4   The Importance of Islamic Studies Teachers Preparation

Belief in the importance of the teacher and her leading role in the educational process inside and outside the classroom has become one of the primary principles on which the theory and practice of education are built. Therefore, a great effort has been made to prepare and train teachers; refine their personalities; develop their skills and prepare them psychologically, religiously and cognitively (Al-Aqeel, 2005). This is to help them to best fulfil their role which requires them to be mission-oriented teachers rather than job-oriented teachers. In other words, to make her a role model so that students learn from her actions more than her theoretical teaching and from her behaviour more than her admonition (Emad, 2002; Kurdi, 2007). Additionally, the teacher is considered as a cornerstone in the educational process. A good teacher is an important factor in the success of education in general and, in contrast, an ineffective teacher is a prime cause for hindering the educational process and the achievement of its various objectives. This is because the competent teacher can identify many aspects of the shortcomings of other elements of education, such as the curriculum, teaching aids or even the school setting and buildings (Kurdi, 2007).

2.3.5   The Aspects of Preparing Islamic Studies Teachers

Each aspect of preparing Islamic studies teachers has its own importance for building the personality of the teacher in the future and qualifying her for succeeding in fulfilling the noble mission of education (Kurdi, 2007). The following aspects have been gathered by looking at the curriculums taught at universities and institutes for training teachers (Emad, 2002; Kurdi, 2007).

The first aspect is related to preparing the teacher to be informative in many subjects such as, general culture which will widen her perception, connect her to her environment and civilisation and enable her to learn from the various cultures that surround her.

The second aspect focuses on the cognitive aspect in a specific field which is in her case, the specialised Islamic sciences.

The third aspect focuses on training the teacher in teaching methods; assessment; the art of using teaching aids and identifying the characteristics of learners, their psychological needs and how to deal with them. The subjects in this aspect are called educational training subjects or pedagogical and psychological subjects (Kurdi, 2007).

2.3.6   The Characteristics of a Successful Islamic Studies Teacher

According to Ali et al. (2004) Islamic studies teachers should be aware of the characteristics of a successful Islamic studies teacher, so to reflect these characteristics in their words and actions.

This section is divided into two parts. First, personal characteristics, followed by professional characteristics.

2.3.6.1   Personal Characteristics

As it been mentioned earlier that Islamic studies teachers should be mission-oriented teachers rather than job-oriented teachers. The following are some of the most important personality traits:

1. To be an example in her sincerity, behaviour and way of thinking: teaching religion with what it contains of outer and inner aspects requires the teacher to be a role model in whom students can see the implementation of its concepts. When teachers from the righteous generations were like that their teaching was successful and its fruits were apparent.

2. To love her job and her learners, for there is no motivation better than love. The teacher who realizes the good she will get from these learners despite her struggle with them, will have affections towards them which will lead her to be patient with them and have pity on them. This will lead her to treat them well under all circumstances (Kurdi, 2007).

3. To be emotionally balanced so that she cannot be easily agitated. She should not be shy to the extent that she cannot confront different situations. She should not be anxious or moody so that she erupts for trivial causes and is unable to control herself. Her balance should allow her to be stable and tranquil in dealing with sudden situations.

4. To take care of her cleanliness and outward appearance. Her good smell and good appearance without exaggeration is a means for earning the respect of students and will help in teaching some important Islamic aspects (Emad, 2002).

5. To be eloquent and logical. The clarity of her voice, continuity of her speech, variation of her tone to suit the meanings and absence of any speech defects will help her a lot in the success of the educational process. This is because for the meaning to be understood speech should be clear.

6. Intelligence and acumen. This will give her an open-mindedness and alertness that will help her to solve problems, understand her different students and so deal with them in the best manner in different situations and enable her to choose the right and most beneficial method to suit the contents of the lesson. This characteristic has a great effect in understanding the dimension of the contents of the curriculum and correctly analysing it (Al-Hashmee, 1997; Al-Zabalawy, 2000).

2.3.6.2   Professional Characteristics

   The most important professional characteristics are:

1. Competence in the subject which requires erudition and extensive study of the content of the lesson before presenting it to the students: A personal library that includes specialised and educational references will help the Islamic studies teacher in this aspect. Furthermore, looking at specialised or generalised magazines that cover constructively topics such as smoking, the Hijab, gambling, contemplation on the Qur'an and Hadith, will also help the teacher (Al-Zabalawy, 2000).

2. Punctuality and respecting the regulations of the school: Time is valuable in all aspects of life, in particular during a school day. Therefore, teachers should manage it for the benefit of the student, as the time of the lesson is short and is insufficient to achieve objectives, simplify ideas and develop abilities. How then can a teacher waste some of the lesson time by coming late or leaving early? Being punctual shows the honesty and reliability of the teacher, trains students and stresses the importance of time (Kurdi, 2007).

3. Acquaintance with teaching methods: This is the tool she uses to present what she has of knowledge and emotions. Moreover, it is a proof of her creativity and excellence (Emad, 2002).

4. Understanding the peculiarities of the different levels that she teaches and how to best deal with them, because each level has its needs (Emad, 2002).

5. The effective use of teaching aids that enrich the learning situation, increase its benefit and help information to be retained longer (Yeh & Wang, 2003; Kurdi, 2007). It is from the basics of education that learning is most effective when multiple methods are used to deliver information (Mayer, 2005; Kurdi, 2007). For example, information perceived through hearing is more likely to be forgotten than information perceived through listening and seeing (Kurdi, 2007; Mayer, 2009). More effective than the latter is when the student lives and practises what they have learned (Al-Zabalawy, 2000; DeWinstanley & Bjork, 2002; Thornbury, 2006; Kurdi, 2007).

All these skills, such as teaching, planning, operational and evaluative skills can be considered as professional characteristics that a successful Islamic studies teacher should possess. Each teacher should measure her success in the job based on her competence in these various skills (Kurdi, 2007).

The next section explains various issues in teaching an Islamic Education in KSA.

2.4   Issues in Teaching Islamic Education in KSA

This section sets out to discuss issues in teaching Islamic Education in KSA. The section is divided into four sub-sections, as follows**:**

2.4.1   Features of the Islamic Education Curriculum

As previously mentioned that the aim of teaching Islamic Education curriculum in Saudi Arabia is not teaching simply for theoretical knowledge or learning for learning's sake, but the primary aim of teaching Islamic Education in the KSA schools is that students will practically apply what they have learnt. Therefore, the Islamic nature of the primary school curriculum is held in very high regard in Saudi Arabia. Also, one of the unique features of the Islamic Education curriculum is the specialist nature of the teacher. A female Islamic studies teacher in Saudi Arabia will study for Bachelors' Degree in Islamic studies for four years, which enables her to teach the four subjects of the Islamic Education system (Kurdi, 2007). More importantly, for Islamic Education to bear its fruits, it needs a behavioural implementation for learners to see, for they learn by example and action more than theoretical knowledge acquisition. Therefore, Islamic Education teacher needs to be role models who practise the principles of the religion and its rulings before theoretically presenting them to the students (Al-Shafei, 2009).

2.4.2   The Close Interlink Between Different Subjects within the Islamic Education Curriculum and other Subjects in the KSA School Curriculum

Although the Islamic Education curriculum in primary schools comprises of four subjects (Qur'an, Tawheed, Hadith and Fiqh), they are not treated as entirely separate from one another. For example, a teacher teaching Islamic Jurisprudence may use a quote from the Qur'an in order to explain her point further. Teachers may also use concepts that have been taught previously in one subject to introduce a new topic (Al-Hamid, 2012). The Doctrine of Oneness 'Tawheed' lesson, for example, is most effective if the teacher is well prepared and link their points to the Qur'an and the traditions of the prophet "Hadith". As mentioned earlier that the Sunnah "the traditions of the prophet" supplements the Qur'an, the teacher must be familiar with both texts so that they can be cited if necessary within the context of the different subjects of the Islamic Education curriculum.

Furthermore, the use of Islam as a tool to aid teaching is not limited to these four subjects alone. In other words, Islam is given prominence within all school subjects, as it is not only the four subjects that make up the Islamic Education system. For example, every school assembly begins with the recitation of verses from the Qur'an. Also, a Science lesson may be explained further using the Islamic philosophy, or a Science teacher may use some quotations from the Qur'an to support her point when explaining the story of Creation. The humanities might focus on the history of Islamic civilisation or the story of the Prophet and His Companions. In addition to this, the verses of the Qur'an are instrumental in the teaching of Arabic grammar (Al-Matari, 2008; Al-Shafei, 2009; Al-Hamid, 2012).

2.4.3   Teaching Approaches

The content of the Islamic lesson plays a significant role in deducing which teaching methods are most appropriate to use, so as to achieve the aim of teaching the Islamic Education curriculum which enables students to understand the lesson taught and apply what they have learned in their daily lives. In other words, the method of teaching an Islamic Education differ from one subject to another within the Islamic Education curriculum, depending on the content of the lesson and the specific objectives which students should master in a given lesson. Thus, different teaching methods are required when teaching Islamic Education modules due to the diverse nature of the Islamic Education curriculum. These include: Explanation, Interrogation, Deductive, Dialogue, Demonstration, Collaborative Learning, Problem Solving, Literary, and Historical Method (Kurdi, 2007; Moore, 2010). The different teaching methods (explanation, interrogation, deductive, dialogue, demonstration, collaborative learning, problem solving, literary, and historical method will be discussed in Chapter 3).

2.4.4   Learning Environment

Although students receive ten lessons per week, there are many lessons which students do not necessarily enjoy. This could be as a result of the methods of teaching the content of the lesson and the classroom activities for assessing students' understanding. The difficulties associated with engaging and motivating students may result in teachers not achieving the curriculum objectives or students not caring about/losing interests in their Islamic lessons. More importantly, a lack of engagement and motivation may make it difficult to implement the principles of Islam and therefore, it is cornered as mere theoretical knowledge. For these reasons, I designed a blended learning model consisting of four dimensions, as using multiple methods when teaching aspects of the Islamic Education may help Islamic studies teachers to be more creative, and to conduct lessons more dynamically. Also, a blended learning approach may help to solve the problems associated with the lack of motivation in students. More importantly, a blended learning approach may help in achieving the curriculum objectives. It should be noted that the four dimensions have been selected after considering issues related to institutional, pedagogical, technological, organisational, and administrative matters to ensure that the blended learning model is suitable to use in the Saudi context. And also to assure that nothing in this blended approach is disrespectful for instructors or students and to ensure that applying such method will not decrease the quality of teaching provided.

From the preceding discussion, it is clear that the Islamic aspect of the education system in Saudi Arabia is significantly positioned culturally and morally. Consequently, the approach to teaching Islamic lessons is a moral approach, and there is a high importance placed on the preparation and training of Islamic studies teachers. Furthermore, the methods of teaching an Islamic education differ from one subject to another within the Islamic Education curriculum, depending on the content of the lesson and the objective which the Islamic studies teachers seek to achieve. Thus, different skills are required for the effective teaching of each of the four subjects within the Islamic Education curriculum. Moreover, the different subjects in the Islamic Education curriculum should be viewed as parts of an integrated system rather than subjects that are entirely separate from one another. Also, there is a relationship between the Islamic Education curriculum, Natural Sciences, and other various subjects that students are taught in school. A good teacher may draw from the evidence provided by these different sciences in order to promote the quality of the Islamic Education that students will receive. Conclusively, this allows them to convert abstract theories into tangible concepts, and in doing

so clarifies the correct application of Islamic beliefs which will contribute to building the character of the student.

2.5   Conclusion

There are many approaches to teaching religious education. For example, students can be educated into religion, learn about religion and learn from religion. In Saudi Arabia, the approach is to educate students into Islamic religion with the intention of helping them to become better followers of Islam – people whose words and actions are influenced by Islamic principles and values. The Holy Qur'an and the Sunnah (Traditions of the Prophet) are the primary sources of Islamic education curriculum in Saudi education. The Sunnah supplements the Qur'an: it expands concise details; clarifies the ambiguous; gives specifics for generalities; explains how (and when) to perform the obligations; and, above all, codifies new laws.

It is a key principle that teachers of Islamic studies should inspire students to practise what they have learned; they must strive to ensure that their students fully understand and learn from their lessons in religious subjects. A teacher of Islamic studies should therefore possess professional characteristics that will enable her to refine the talent she has and equip her with skills to compensate for the talent she lacks. She needs distinct personality traits and an Islamic identity that is reflected in the clothes she wears as well as in her speech and movement. She will combine seriousness with cheerfulness, calmness with vitality, strictness with flexibility and knowledge with humility and good manners. They should comprehend the dimensions of the education role that they have undertaken. This is an important perspective in relation to the focus of this study. Although the focus is on the potential of a blended approach in teaching Islamic Education, it is important to understand the nature and role of Islamic studies in both the curriculum in KSA, but also in terms of the culture.

2.6   Chapter Summary

This chapter has briefly explained some different approaches to religious education, presenting an overview of the way Islamic education is taught in Saudi Arabia. The role of Islamic studies teachers, as they leading by example, compared to the role of religious education teachers. As it is a way to influence student, it is not only knowledge it is believe and behaviour. The chapter has discussed the issues in teaching Islamic Education. The next chapter provides a background of the literature examining a blended learning approach and other literature relevant to the current study, with a focus on teaching the Islamic education curriculum.

Chapter Three: Literature Review

3.1   Introduction

The value of various forms of media, such as visual and audio files, when presenting classroom lessons was recognised even before the advent of digital media. However, these files' use was not easily achieved, since, for many years, there were not enough forms of media from which to choose. Teachers had to rely on using traditional presentation forms, such as textbooks, writing on a blackboard and oral discussions. It was not until digital technology became mature and various other forms of digital technology became available, that using new presentation approaches truly became a viable option for many classrooms (Mayer, 2009).

This chapter offers a background on the relevant literature that has examined the use of e-learning, blended learning, multimedia learning and various teaching methods, with a focus on teaching the Islamic education curriculum. Due to the complexity of this study as a blended learning model consisting of four dimensions (different forms of technology, teaching methods and teaching aids, active learning and collaborative learning), there is a need to collect data on many aspects regarding the effectiveness of using such methods to teach the Islamic education curriculum. A narrative literature review approach has been taken to offer a comprehensive background to understand the notions of the current research including a blended learning approach and to highlight the importance of the current study which is Islamic studies teachers' perceptions of the effectiveness of using a blended learning approach (Cronin et al., 2008).

The chapter includes several sections beginning with explanations of e-learning and blended learning, followed by an analysis of the four dimensions of a blended learning approach used in this study. This analysis gives some examples of the internet-based programmes for teaching students to recite the Qur'an and presents some advantages and disadvantages of using different forms of technology such as computers, laptops and interactive whiteboards, for the students or for the teaching process. The analysis also provides examples of some of the teaching methods and active learning strategies used by Islamic studies teachers. This analysis is followed by a brief explanation of the multimedia learning theory, which includes working memory and the impact of applying multimedia learning in teaching and learning processes. Finally, the advantages of considering different teaching and learning preferences along with its criticisms are provided.

3.2   E-learning

The desire for education of many people across the globe has resulted in a rise in student enrolment. This rise has been witnessed despite the demographic and educational landscape changes, and these people would like to study without traditional restrictions of time and place: at anytime and anywhere (Boulmetis and Dutwin, 2005). To keep up with this pressure in enrolment and to meet the number of willing students, due to limited spaces in the classroom, the e-learning concept has found increased significance (Boulmetis and Dutwin, 2005; Al-Shathri, 2016).

Urdan and Weggen (2000) define e-learning as "the delivery of content via all electronic media, including the internet, intranets, extranets, satellite broadcast, audio/video tape, interactive TV, and CD-ROM" (p.11).

Khan (2005) defines e-learning as,

> "an innovative approach for delivering well-designed, learner-centred, interactive, and facilitated learning environment to anyone, anyplace, anytime by utilizing the attributes and resources of various digital technologies along with other forms of learning materials suited for open, flexible, and distributed learning environment" (p3).

Summarily, in the context of Saudi Arabia, the ministry of education determined e-learning was a possible solution to overcome the problem associated with the limited capacity in the public universities to accept all students who were eligible to study in higher education. As regards to it benefits to women, e-learning may help to facilitate education for females who live outside urban centres and who are not allowed to drive (Al-Shathri, 2016).

From the foregoing discussion, it can be concluded that, e-learning is a method of gaining new knowledge through the use of technologies. Additionally, the demands of our society have created a need for obtaining knowledge in this way, as it is fast and convenient (Boulmetis and Dutwin, 2005). However, perhaps due to the social isolation associated with online learning environments, on its own, it may be insufficient to develop students' knowledge and to achieve the desired objectives (So and Brush, 2008; Smyth et al., 2012; Alqahtani and Higgins, 2013). Sorden and Ramírez-Romero also emphasise,

"Distance education can hardly provide the affective and relational components needed between students and teachers and among students themselves that face-to-face education provides…and that many students still need a person to guide and advise them as well as a structure that helps them organize their time, among other arguments" (Sorden and Ramírez-Romero 2012, p.129).

For instance, teaching English vocabulary using an e-learning scenario would be very difficult because the students are in a virtual environment and may not be able to interact effectively. Language use is difficult to teach in the absence of a face-to-face instructor who can monitor a student's understanding and language production (Sorden and Ramírez-Romero, 2012). Similarly, teaching Islamic education modules would be very difficult without face-to-face interaction between students and their instructor, as the primary aim for teaching Islamic education in Saudi Arabia is not to increase student knowledge about different religious but, to induct students into the Islamic religion in order to become a better Muslim whose words and actions are influenced by Islamic principles and values (Kurdi, 2007). The idea of blended learning may help to solve the lack of face-to-face interaction associated with online learning Luca (2006) and perhaps blended learning may help Islamic studies teachers to achieve specific curriculum objectives.

The next section will explain different definitions of blended learning and some of the factors that may lead to a successful implementation of blended learning, along with the advantages and disadvantages of using blended learning.

3.3   Blended Learning

3.3.1   History and Definitions

Allan (2007) states that since 2000, blended learning has come into popularity and has been used in a variety of ways in both science and literature. On the other hand, Sharpe et al. (2006) asserts that the expression "blended learning" has been in use for more than 15 years, and during this period, its meaning has been in constant change. Similarly, MacDonald (2008) states that although blended learning has become popular, everyone believes it to have a different meaning. Moskal et al. (2012) states that "Universities are struggling with defining blended learning as well as implementing this hybrid modality" (Moskal et al., 2012, p.17). While, Sharpe et al. (2006) emphasise that "Despite some concerns over poor definition and use of jargon, the term blended learning has become ubiquitous" (p. 20).

According to MacDonald (2008) blended learning is commonly associated with the introduction of online media into a course, while still recognising that there is merit in retaining face-to-face contact and other traditional approaches to support students. Blended learning is also defined as the use of various forms of technology and online learning along with traditional methods (Al-Ghamdi, 2011). Jackson (2003) defines blended learning as a solution that combines the best of traditional learning and the best of online learning in order to improve the delivery of the lesson and to reduce class seat time. Bended learning is also defined as a mix of traditional learning and synchronous e-learning (Al-Ghamdi, 2011). From another point of view, Allan (2007) reports that blended learning is a mix of face-to-face interaction and e-learning, such as internet-based tools, chat rooms, discussion groups and self-assessment, which are likely to support a traditional course. On the other hand, Vaughan (2007) argues that the mere enhancement of a face-to-face course with online learning is not blended learning.

According to Driscoll (2002), blended learning can be defined as a combination of the following:

1. Mixed modes of web-based technology, such as a live virtual classroom, collaborative learning, and streaming video, audio, and text to achieve an educational aim.
2. Various pedagogical approaches, for example, constructivism, behaviourism, and cognitivism, to generate the best learning outcome.
3. Any form of instructional technology, such as videotape, CD-ROM, web-based training, and film, with face-to-face instructor-led training.
4. Instructional technology with actual job tasks in order to create an effective blend of learning and working.

Sharpe et al. (2006) identify various aspects of teaching and learning that may mix together to create a blended learning environment:

1. Time, such as synchronous and asynchronous learning.
2. The place where learning take place, for instance, studying on-campus or off-campus.
3. The types of learning and the relationship between students and their peers in the learning process, for example, collaborative learning and individual learning.
4. Using various forms of information communication technology, such as CDs/DVDs or Web 2.0 tools
5. Pedagogy, for example, behaviourist or constructivist pedagogy.

Sharpe et al. (2006) also suggests three different forms that can be used to integrate blended learning into the teaching environment. The first is blended learning as an enhancement and supplement to traditional programmers, for example, providing additional learning materials through a virtual learning environment (VLI) or using Web 2.0 tools, such as discussion boards and chat rooms. The second form is a transformative method in which the teacher can design a new program or redesign the previous one in order to incorporate a range of methods that are relevant to students and to the content being taught. The third form is the learner-led form, which is holistic and typified by the use of a wide range of technologies, including mobile phones and iPods (Sharpe et al. 2006, p. 7).

In this study's context, a blended learning is defined as a solution that combines different forms of technology, teaching methods and teaching aids, collaborative learning and active learning. To improve the methods of teaching Islamic education curriculum and to help the teachers of Islamic studies achieve specific curriculum objectives.

To sum up, blended learning occurs when asynchronous media, such as email, wiki, blogs and forums, or synchronous technologies, such as chat or radio, are deployed in conjunction with face-to-face interaction. Thus, online learning has merit in a blended learning environment. However, the major difference between blended learning and mere e-learning is the face-to face interaction between teacher-student and student-student. This sense of belonging to a community, which is absent in online learning, may disturb improvement of common emotions and feelings among students and teachers (McMillan and Chavis, 1986, p.9). In the context of Saudi Arabia, the lack of face-to-face interaction in e-learning courses is also problematic. Al-Shathri (2016) states that despite the great advantages of the e-learning programme, the absence of face-to-face interaction is considered as the major negative aspect of online learning, particularly for Saudi students who lack the experience in using internet-based learning and have not had any experience in self-learning as well as distance learning. Smyth et al. (2012) claim that "students may become frustrated and anxious by poor communication and delayed feedback from educators" (p.465). Moreover, Hameed et al. (2008) states that e-learning courses are more demanding for teachers and more time commitment is expected of the instructors. On the other hand, in a blended leaning environment, the feeling of isolation is removed, as face-to-face interaction is present between teachers-learners and learners-learners (Tayebinik and Puteh, 2012). Similarly, Al-Shathri (2016) concluded that "blended learning facilitates both direct physical contact between the teachers and students and indirect contact

between them through the use of internet tools and virtual learning environments" (p.91). Tayebinik and Puteh (2012) justified that the face-to-face interaction between learners and teachers is crucial, due to the important effect of facial expressions, tone of voice, body language and eye contact on communication between students-teachers.

The next section will discuss the factors that may lead to a successful implementation of blended learning.

3.3.2 The Factors That Lead to the Success of Blended Learning

In order to develop a successful blended learning module, there is a need to divide the learning contents and activities into three groups. First, there are things that a student can do alone, such as reading lesson content. Second, there are things that are benefitted by the presence of teachers, for example, solving problems and gaining feedback during classroom activities. Finally, there are aspects that require face-to-face interaction, for instance, giving individual feedback and providing equipment demonstrations (Mohammad, 2009).

An Islamic study teacher may first read the verses out loud for students and ask each student to read the required verses silently alone. Following this, teacher divide students into groups and assign a student called the "young teacher" for each group (see chapter six for more detail). While the students are reading, the teacher walks around the classroom and monitors the learners whilst they recite the Qur'an and encourages the students to work in groups. This also allows the teacher to ensure the students are behaving well. Finally, the teacher chooses some students to read the verses out loud and the role of the teacher is to lesson to students and to correct any mistakes in intonation rules (the teacher uses the blackboard or interactive whiteboard to display and highlight all the mistakes the student makes) to give learner feedback to improve the students' performance in reciting the Qur'an.

Moreover, in order to ensure that a blended course will be efficient in meeting teaching and learning objectives, Alebaikan (2010) suggests that instructors and students first assess their technical skills in order to gain the required training before they enroll in a blended learning course. MacDonald (2008) supports the notion that acceptable blended learning courses will depend on the overall teaching environment. This includes curriculum design and accessibility issues in the campus or distance learning environment. Additionally, choosing the appropriate media will lead to higher achievement in teaching and learning objectives (Mohammad, 2009; Singh, 2003; Allan, 2007; MacDonald, 2008). Additionally, community, organizational and

individual needs should be considered when developing blended learning courses. Moreover, student satisfaction with the new teaching approaches is the key factor in the successful implementation of a blended learning module (Naaj et al., 2012). In addition, teachers need to consider rebuilding the course materials, and they should not just add on the use of new technology (Talay-Ongan, 2003; Sharpe et al., 2006). Teachers need to professionally develop the course for a sufficient time and with the careful consideration on teachers' workloads. Finally, the strengths and weaknesses of online learning and traditional learning should be understood, and the appropriateness of the choice for the learners involved needs to be considered (Stacey and Gerbic, 2008).

Having discussed the factors that may lead to a successful implementation of blended learning, the next section will present some of the advantages and disadvantages of using blended learning in teaching different subjects.

3.3.3   The Pros and Cons of Utilising Blended Learning in Educational Environments

Applying blended learning strategies that integrate both online synchronous, or asynchronous, and traditional learning approaches with the use of a range of media in individual and collaborative learning forms will provide the flexibility needed to support individuality and diversity in the learning environment (Allan, 2007; Littlejohn and Pegler, 2007; MacDonald, 2008). Studying in such an environment gives teachers more flexibility with their lessons, which is not likely to be achieved in traditional learning or online learning. It also provides flexibility to students and increases student interaction with the lesson and learning activities, and their engagement will have increased accordingly (Chen and Looi, 2007) In addition, blended learning environments are suited to students with different levels of academic ability and social and cultural backgrounds (Moskal et al., 2012). Moreover, blended learning gives students a variety of choices and provides a wide range of teaching methods for teachers, as well as providing access to varied up-to-date resources for teachers and students (Page et al., 2008). Such learning methods have been found to be helpful in providing interactivity in the classroom, reducing classroom seat time and enhancing the delivery of the lesson (Singh, 2003; Littlejohn & Pegler, 2007; Mohammad, 2009). Additionally, it helps learners to focus on the content being taught, especially complex or difficult to understand topics and can help students to build relationships, make decision and brainstorm, particularly in group work activities (Smyth et al., 2012). According to Köse (2010), due to the combination of diverse educational methods and technologies, blended learning is likely to improve students' academic

achievements (Alqahtani, 2010). Moreover, learners in a blended course will be able to access the knowledge they need wherever and whenever they need it during the day (Köse, 2010; Moskal et al., 2012). In addition, many students reported that studying in a blended environment enabled them to learn more than if they were in a traditional learning environment (Köse, 2010; Smyth et al., 2012; Moskal et al., 2012; Alqahtani & Higgins, 2013). Finally, postgraduate participants in a blended learning programme at the school of nursing and midwifery emphasized that face-to-face interaction helps to clarify concerns and consolidate learning. More importantly, face-to-face interaction provides an opportunity for the learner to meet with their peers (Smyth et al., 2012).

Although applying blended learning has many advantages, it has a number of limitations, for example, the need to train teachers to use the best traditional and e-learning methods and acquire new teaching and information technology skills (Littlejohn and Pegler, 2007; Mohammad, 2009; Al-Ghamdi, 2011; Alhawiti, 2013). In addition, the availability of computers and the internet and teacher overload must be considered (Al-Alwani, 2005; MacDonald, 2008; Al-Malki and Williams, 2012; Alhawiti, 2013). Furthermore, "participants highlighted how the on-line component was invasive in their everyday lives, as there was no differentiation between college and home time" (Smyth et al., 2012, p. 466). In addition, access and the speed of the internet were found to be an issue, particularly in areas where there was a slow dialup network connection (Allan, 2007; Afshari et al., 2009). However, to address this problem, Moskal et al. (2012) suggested that institutions must carefully ensure that the capacities of their networks are sufficient to meet faculty and student needs, especially during peak times such as during final exams. Moreover, in designing and planning for blended learning, technical issues are challenging for teachers (Allan, 2007; Afshari et al., 2009; Khan et al., 2012). New approaches may add a layer of difficulty for all educators who are preparing for blended learning, and due to the new methods of interaction and the free exchange of information, ethical issues must be carefully considered (Littlejohn and Pegler, 2007; Algarfi, 2010).

Next section explains the four elements of a blended learning approach used in this study.

3.4   The Notion of a Blended Learning Approach Used in This Study

This section offers a background and the evidence of the effectiveness of each element of a blended approach, as follows:

3.4.1   First Element: Different Forms of Technology

In this generation, technology has affected and influenced various groups, institutions, organizations and cultural processes. One of the many areas that have been truly modified by technology is education (Sime & Priestley, 2005). Today, technological innovations, such as radio, television, computers, laptops and interactive whiteboards, are used by instructors for teaching students (Ponnusamy et al., 2009; McDonald & Kolderie, 2009). Finally, even though the expertise required to maintain computers vary from the one needed for radios or televisions, the assurances to modernize educational procedures remain the same (Mayer, 2005).

This section provides examples of the uses of digital technologies in the teaching and learning process. Furthermore, it sheds light on their advantages and disadvantages, particularly for teaching purposes. Moreover, this section gives examples of some websites and online applications that may improve learners' performance when reciting the Qur'an. It also illustrates the potential obstacles that may stand in the way of integrating technology, and provides some suggestions to integrate and improve the use of digital technologies in Saudi schools.

3.4.1.1   Uses of Digital Technologies

In the current education setting, more and more educators are using technological media to transmit information in the classroom (Hoic-Bozic et al., 2009). Using technology for teaching and learning purposes enhances knowledge delivery and its acquisition. Additionally, it can be used to improve the planning and the development of lessons' content as well as the assessment and learning activities (Allan, 2007). Islamic studies teachers may use technology to develop students' critical thinking skills and to enhance religious knowledge or to simplify the Islamic terms by accessing online materials, such as recitations from the Qur'an or websites such as IslamiCity.com (Taweelah, 2000; Adebayo, 2010). Moreover, while teaching the Qur'an lessons. Islamic studies teachers may use audio recordings that play and reply to the Qur'an verses to help students master the recitation of the selected verses (Alsharidah, 2012).

The next section provides examples of the websites and online applications that are designed to teach students recite the Qur'an verses.

3.4.1.1.1 Internet and Software Applications

3.4.1.1.1.1 Websites

There are many websites and software applications to help learners master the recitation of the Qur'an verses and understand the intonation rules. These websites have many advantages and disadvantages. The advantages include round the clock availability and accessibility, as it is possible to access such a website anytime. Some of these websites provide a one-to-one tutorial for participants with the option to choose from different reciters. The participants can also join different learning groups, such as women and girls, children and Qur'an learning facilities for all family members. Moreover, the participants can register for a one-week trial on some sites or a three-day on others. In case the learners are satisfied with the free trial, they can buy and enrol for a certain course using a secure payment method. After that, the learners will be able to create their own account and add courses. In addition, the learners can benefit from a group class in a synchronous and asynchronous virtual classroom learning the Qur'an and intonation rules. Some of these websites provide word-for-word translation, audio, recitation and iteration. Some of these websites consider the learners' preferences by providing a series of videos by a well-known reciter, so that the users can choose the reciter as per their listening preferences. In addition to learning the Qur'an verses, some websites even provide the users with information about Islam and a full definition of the meaning and the value of the Qur'an. Some also have free Islamic books, articles, wallpapers and questions with answers to download. However, some of these sites are not free, but they are affordable and convenient (see Appendix A for some examples).

The disadvantages of using websites to master reciting the Qur'an include less potential for interactivity than in conventional face-to-face classes; this may discourage the learners to participate. Some web designers have not considered a number of accessibility issues, such as careful use of colour and font size to make the sites more accessible for the colour blind and those with poor eyesight. In addition, some sites are not user-friendly and lack a site map, thereby making it difficult to search for certain information. Jelev and Minkova (2008) suggested that the structure and navigation of a website is an important factor to consider in making the site easy to navigate. In addition, the website design should also avoid "disorientation", which is the tendency to lose one's sense of location and direction in a nonlinear document (Ahuja & Webster, 2001). Finally, website designers need to make the websites user-friendly and accessible for different learners with different abilities (Chapman & Chapman, 2006; Eyadat & Fisher, 2007).

3.4.1.1.1.2 Applications

In addition to these websites, there are various types of applications available for teaching students to recite and memorise the Qur'an. Some of these examples and their features are as follows:

Memorizing the Qur'an is a program that provides the ability to create a user profile with an avatar and a name, where the user can mark each verse as memorised and specify options for rewinding or playing all the verses. It also includes a memorising progress indicator, fast accessible chapters and verses, high quality audio recited by a well-known reciter, high quality graphics, easily creatable playlists to focus on specific verses and the ability to pause between recited verses (short-breaks after recitation to repeat the verse). However, the program is chargeable and the full version costs £7. On the other hand, another program called *Learn Qur'an* is free and has a quiz aligned with each lesson. This feature provides an interactive element in terms of designing an e-learning and educational system (Brinkman et al., 2007). In addition, the user's data is saved between application re-runs. This program is not just about helping the learner recite the Qur'an, but also help them understand the meaning of the verses. However, users cannot choose between many reciters and there is only one way of reading and displaying the verses.

Qur'an Explorer has three versions in the form of a website for PC users: a paid version and a free version. The features of the free version are complete Qur'an Arabic text with options to display side-by-side English translations and complete audio recitation from famous reciters with highlighted verses. Moreover, high resolution retina displays and scalable font sizes with zoom features to change the font size are components of this application.

Qur'an Voice, as its name suggests, only provides a recorded audio track for all chapters of the Qur'an. Thus, the reader cannot read verses while listening to them. On the other hand, *The Noble Qur'an* application enables the users to read while listening to the entire Qur'an recitations from the best reciters known to the world. In addition, it allows the users to download some chapters of the Qur'an for offline listening. However, the application requires an internet connection with WiFi or 3G to listen to the verses or download the chapters for the offline listening.

iQur'an is one of the first smartphone software types to offer illustratively colour-coded intonation rules. However, because it is free it only supports the last chapter of the Qur'an. It

also supports only the English translations compared to the other 34 translations in different languages, while the meaning interpretation is available in the program's paid version.

iQur'an HD is like *iQur'an*, but what makes it more accessible than *iQur'an* is its ability to read the complete Qur'an in the Uthmani font (the font used in the printed Qur'an) along with five configurable font sizes (small, normal, big, large, and huge full-screen) for both Arabic script and translations. In addition, it provides advanced audio repeat options and controls to help with memorisation, such as repeat a single verse multiple times.

Finally, *Muhaffith Alwahyain* allows the students to memorise the Qur'an, read the interpretation of the selected verses, and listen to 15 different reciters while using the Uthmani Script (the font used in the printed Qur'an). Additionally, it allows the students to control the speed of the recitation and record their voice. After recording, the application shows the verses along with the user's recorded voice, so that the learners can compare it and know how to correct their mistakes in either the intonation or the pronunciation. This application is available in smartphones and iPads as well as on websites, and it supports many languages, including Arabic and English.

The applications mentioned above aim in helping the learners easily recite the Qur'an and enjoy various features, such as creating profiles, progress indicators and pauses between the recited verses. Most of these applications enable users to select the verses to be read and provide a list of reciters to choose from. The user can also choose the way each verse is read; for example, reading it continuously or reading and pausing after each verse. This application is available for Apple users. In other words, these applications are compatible with most types of iPhones and iPads. However, some of these applications seem rather sophisticated to use and there is a need for instructions to guide the user in operating the program correctly. Only then can the user gain the intended benefit from such applications.

Using only electronic applications to master the recitation of the Qur'anic verses is not as effective as a face to face interaction between teacher and students. The advantage that this real-life interaction has over the use of electronic applications, is the ability of the teacher to tailor feedback to the specific errors of individual students. The teacher can determine the specific error the student is making while reciting and can then ask the student to repeat the word, phrase or entire verse with which they are having difficulty. This process makes it much more likely that students will remain aware of past errors and can continue to make progress in their

recitation. Another positive feature of teacher-student interaction is the praise the teacher can choose to bestow upon high performing students. Students who receive positive feedback, particularly in front of other classmates, will feel proud of their achievements and as a result will be more motivated to continue studying hard at home in order to maintain the same high standard. This is a feature that online applications cannot provide in the same way. In addition to this, the student may benefit from this approach (repeating single words or entire verses thrice) when practicing the verses at home as it is likely that they will use repetition to memorise the verses themselves. One of the challenges here is that although memorisation may be successful the students may incorrectly learn the intonation as this can be hard to recognise oneself.

3.4.1.2   Advantages and Disadvantages of Using Digital Technologies

Technology has changed the way education is provided to the students. Radio and television were among the first technologies to be integrated with classroom teaching (Dunmire, 2010). Educational radio stations were established in schools and universities to improve the instruction method (Russell, 2006). In addition, this medium can also be used for teaching languages to students as radios can be used to play and replay words and sentences to master pronunciation. Despite its benefits in instruction and learning, its full use was considered a failure because it was difficult to maintain, along with accessing difficulties. On the other hand, televisions were observed to have provided more benefits. Since television possesses audio and visual aspects, it is a powerful learning tool because students can see and hear lessons and are better empowered to grasp the important concepts (Blankenship, 1998).

Computers, laptops and digital technology such as interactive whiteboards provide various functions that can help in education not just in terms of instruction but also in learning (Blankenship,1998). The use of computer-based learning may help to deliver a lesson that suits different learning preferences of the students (Allan, 2007; Becta, 2008; Littlejohn & Pegler, 2007). Computers also play a role in teaching, especially with computer-assisted instruction. This type of instruction uses the computer for source material and as an electronic visual aid. Furthermore, computers can instruct, command, and evaluate students' work. This method is also proven to improve learning through computer-assisted drills and practices. A study showed that a computer-assisted six-day drill on basic arithmetic operations improved the students' responses by 90% (Suppes, 2000). The effect of laptops on students was also evaluated by conducting an experiment study using the "Lecture Tools". Students revealed that the questions posted by their teachers on the Lecture Tools enabled them to focus better on their lessons.

They also found it easier to take notes by typing on their laptops rather than writing them down. (Zhu et al., 2011). Mercier and Higgins (2013) conducted a mixed methods quasi-experimental study to investigate whether using NumberNet can support the development of fluency and flexibility in mathematical calculations, when compared with students undertaking a comparison activity (paper-based). The participants were 86 students who were divided into two groups; 44 students used NumberNet in a multi-touch classroom, while 42 used a paper-based comparison activity. The multi-touch classroom was equipped with video, audio and screen capture equipment. The pre-tests and posttests were used to compare the outcomes between the students who used NumberNet and the students who used paper-based to complete the "make up some questions" task (In both conditions, students worked in groups). The findings of the study revealed that, after completing the learning activities both groups had increased fluency. However, the students who used NumberNet also had increased flexibility in mathematics.

Likewise, using the interactive whiteboards is potentially beneficial to the instructional system in many ways. It eases the presentation of the lesson, especially for a huge class and allows the learners to easily understand the lesson (Brown, 2003). Moreover, it was observed that lessons became lively and exciting when this facility was utilised in teaching and learning literacy and mathematics (Wood and Ashfield, 2008). In addition, it enables the instructors to incorporate various materials such as text, pictures, video and audio in one presentation. The teacher's workload is likely to reduce by the introduction of the IWB, as it enables her to save and reuse materials not only for single teacher but extend this benefit by sharing materials amongst other teachers when they are connected to the internet (Higgins et al., 2007). Furthermore, it can develop instructors' creative teaching as they use their imagination in choosing and using resources to make the lessons captivating for the students (Morgan, 2010; Knight et al., 2005; Braham, 2006).

However, limitations and restrictions must be set regarding the computers' use to avoid the students from being distracted in class. If computer use in class is not monitored, students may just end up doing non-course related activities. They may browse the internet and visit Facebook, Twitter and other entertainment websites instead of listening to the lecture. These activities may not only affect the one using the computer for these purposes, but also the nearby students may get distracted (Russell et al., 2004). Moreover, implementing the integration of computers with education is not easy since the teachers have to be trained in using them in their

lessons and instructional plans. Software must be carefully chosen to maximize the benefits that can be obtained without compromising the curriculum. After that, students must be trained to use computers in the educational context. Lastly, the institutions must be able to devise a measurement to evaluate the effect of computer integration. If all these are well-established, the classroom instruction method can be expected to improve (McDonald & Kolderie, 2009). Like other technologies, using interactive whiteboards also comes with certain disadvantages. These include the high cost of the system compared to other technologies, high maintenance of the equipment (Moss et al., 2007; Higgins et al., 2007; Braham, 2006), possibility of over-complex information and risks of the intrusion of disruptive comments and pictures since remote access is possible (Moss et al., 2007; Braham, 2006). Higgins et al., (2007) concluded that "although the IWB may alter the way that learning takes place, and that the motivation of teachers and pupils may be increased, yet this may have no significant or measurable impact on achievement" (p.221). Moreover, to avoid the difficulties caused by sunlight or seating arrangements, they should be positioned at the right place inside the classroom for the confidant use such that teachers and students can use them confidently. For the teachers to use the IWB and to choose the most appropriate software, they need training and on-going support (Higgins et al., 2007).

Having discussed some of the advantages and disadvantages of using different forms of technology, the next section will discuss the obstacles which may stand in the way of using ICT in Saudi schools.

3.4.1.3   The Obstacles to the Implantation of ICT in Saudi Schools

Alsharidah (2012), conducted a study to investigate the factors that affect the use of ICT when it comes to the teachers of the Islamic studies in boys' intermediate schools. These included available technological resources, the teachers' current practices in delivering the curriculum, and the factors that influence the use of technology. The data was collected using a mixed method, which included a written questionnaire and semi-structured interviews. Moreover, the data analysis was done by using a descriptive statistic, Pearson correlation, t-test, analysis of variance (ANOVA), and multivariate analysis of variance (MANOVA).

The findings of this study revealed that, the main reasons which contributed to a lack of using ICT by the Islamic teachers were the teacher level and the school-level issues.

Teacher level issues included:
- Inadequate technological skills
- Limited self-efficacy

- Cultural and religious concerns

School-level issues included:
- Insufficient equipment and technical support
- Difficulty in accessing the equipment in rented school buildings
- Few educational resources centre
- School environment problems (for example, large number of students in classrooms, no long-term school policy for encouraging the use of ICT, and lack of time to prepare lessons that involve ICT use)
- Limited professional development

According to Al-Mulhim (2014),

> "the most important and common teacher level barriers are: teachers' attitude towards technology, teachers' resistance to change, lack of time, teachers' lack of confidence in using technology, and lack of knowledge and skills in using technology, while school level obstacles are: lack of access to technology, lack of effective training, lack of technical support, the high cost of hardware and software" (p.487).

He concludes that the factors which prevent teachers in Saudi Arabia from using ICT in their teaching include: lack of access to technology, lack of effective training, and lack of time.

Some strategies to integrate and improve the use of ICT in the Saudi schools will be summarised below.

3.4.1.4   Suggestions to Integrate and Improve the Use of ICT in Saudi Arabia

For successfully employing the application of ICT in the KSA's primary schools, a well organised set of strategies are imperative. The attainment in improving of ICT practise may result in the inclusion of ICT into classrooms. For the teacher career development programs, basic ICT training should be introduced by the ministry, which includes materials such as 'technology-supported-pedagogy knowledge' that may assist in planning to integrate ICT in the classrooms (Al-Malki and Williams, 2012). Al- Mulhim (2014) adds that ICT trainings particularly for the teachers should be offered at the school-level according to the school requirements, thus determining the subjects to be taken. Similarly, Oyaid (2009) recommended that as part of teacher development, the pedagogical Planning and Development Administration should offer training courses in using ICT. Furthermore, formation of discussion groups should be encouraged within teachers, to discuss and share ideas regarding integration of ICT into

classes. A timetable needs to be prepared which facilitates the teachers by reducing their workload to include time for preparing teaching materials and to provide learners with teaching materials which uses ICT, trying to bring innovation in teaching technique in ICT environment, and lastly thinking for improvement of pedagogical practices (Al-Mulhim, 2014). Additionally, principals of the schools should be trained as well for improvement in leadership qualities in order to ensure successful integration of ICT. Also, the schools' principals need to hire staff for ICT technical support, which may encourage the teachers to use ICT (Al-Malki and Williams, 2012). Furthermore, Oyaid (2009) recommended that teachers and students should develop a positive perception of ICT's value, which will motivate them for the ICT usage. As the teachers' perception may assist the decision makers i.e. the government or school principal, to plan according to the teacher's adaptability to ICT for teaching. Al-Malki and Williams (2012) suggested that the government is required to support research for the development of a low-cost interactive whiteboard, which is used for improving the students' learning abilities as well as for motivating them to take part in the learning process in the classroom. Finally, Alsharidah (2012) concluded that, in order to increase the use of technology in the Islamic classrooms of the Saudi schools, the policy makers should increase the availability of suitable hardware and software programs, enhance levels of professional development and improve the educational environment.

The previous sections discuss the use of different forms of technology along with their advantages and disadvantages. However, the uses of different forms of technology alone are insufficient to achieve the aim of teaching Islamic education curriculum in Saudi Arabia (Kurdi, 2007). Therefore, the Islamic studies teachers need to use traditional teaching methods such as, lecture method, along with using some examples of teaching aids like, picture to simplify the Islamic terms when teaching different aspects of the Islamic education curriculum, to foster learners' understanding and to help the teachers to achieve the specific curriculum objectives.

The next section give some examples of the teaching methods (explanation, interrogation, deductive, dialogue, demonstration, and problem-solving methods), which forms the second diminution in the blended learning model used in this study. Also, the evidence of the effectiveness of using these methods in teaching different subjects will be presented.

3.4.2   Second Element: Teaching Methods

The method of teaching is the link between the teachers, the content taught, and the student (Kurdi, 2007), pedagogy is how the teacher connects the curriculum to the students (Knowles, 1980). Specialists in the curriculum and the teaching process have developed several types of methods each has elements that can be used by a religion teacher to achieve effective teaching (Kurdi, 2007). In addition to the teaching methods, there are two approaches to classroom learning that can be used by a teacher to deliver knowledge to the students. The first is called teacher-centred and mainly focuses on the transmission of knowledge to the learner and involves more talking by the teachers than the students' questions (Schuh, 2004). Consequently, in this mode, the teacher may concentrate more on the content than on the students' knowledge and understanding (Kathy, 2003; Acat & Dönmez, 2009). In contrast, the second approach is learner-centred, where students are responsible for their own learning, and it gives them the opportunity to engage in their learning environment more so than if they were in a traditional classroom (Schuh, 2004; Keengwe et al., 2009). Chiang et al., (2010) adds that, "the learner-centred approach has the potential to advance student learning not only through the fostering of higher order thinking and learning skills, but also through the promotion of the ability to comprehend and apply knowledge to real life situations" (p. 1). The most common teaching methods which the Islamic studies teachers integrated with digital technologies when delivering the Islamic lessons includes explanation, interrogation, deductive, dialogue, demonstration, collaborative learning and problem-solving methods (Kurdi, 2007). These selected methods which will be explained next can be seen as moving from a teacher-centred perspective towards a student-centred environment.

3.4.2.1   The Explaining Method

This is also called the 'lecture method or direct teaching' (Brown & Race, 2002; Exley & Dennick, 2004). It is one of the oldest, and still the most important and most common method used by many teachers on different levels in schools (Kurdi, 2007).

Exley and Dennick (2004), defined lecture method as a teaching approach in which the teachers are telling the students what he/she wants them to know or achieve. According to Kurdi (2007), lecture method means that the teacher verbally delivers the information directly to her students using explanation, demonstration, and illustration.

3.4.2.1.1 Factors to the Successful Implantation of Explaining Method

Wragg and Brown (2001) stated that teachers need to use intact linguistic structures and accurate sentences to express meaning. Moreover, the teacher should supplement explanations with body language and take into account the use of appropriate sound levels, commensurate with the meanings and the content of the lesson. Al-Shafei (2009) argued that using lecture methods requires good expressive skills on the part of the teacher in order to be able to use the language as a means to demonstrate the various knowledge domains and to explain their meanings. The teacher also needs to be skilful in memorising the ideas and arranging them logically. Kurdi (2007) suggested that there should not be more than seven consecutive minutes of verbal explanation. Additionally, if the lesson requires more than that amount of time, the lecture method must be interspersed with questions and discussion.

3.4.2.1.2 Rationale and Evidence of Effectiveness

According to Wragg and Brown (2001), the explaining method helps the students to identify the relationship between cause and effect. In addition, it helps the teachers to satisfactorily deliver information to the students (Dunkin, 1983). According to Al-Shafei (2009), the lecture method suits some situations where the teachers cannot divide students into groups or students cannot discuss. These situations include the high number of students in some Saudi classrooms or the length of the syllabus with lesson that lasts 45 minutes. According to Kurdi (2007), the significant disadvantages of using this method is the passivity of the learners, as the teachers verbally deliver the information and the role of student is to listen, which is contrary to the effective teaching and meaningful learning. If the verbal explanation was too long without intervals for discussion or questions, it may cause the feeling of boredom among the students. Consequently, the students may lose their attention and be unable to follow their teacher. Merino and Abel (2003) compared the effectiveness of computer tutorials and traditional lecturing in teaching accounting topics, and found that there were no significant differences in student achievement between the two methods of teaching. On the other hand, the study of Gulpinar and Yegen (2005) showed that a combination of methods including traditional lectures and different forms of question-based and problem-solving approaches had positive results. In their study, a template was developed in order to show the central regulation of growth hormone release and its peripheral effects. After the lecture, the students were given a survey in order to determine their satisfaction. The students preferred such a methodology to the traditional lecturing method. Also, the students' achievement and problem-solving skills were improved compared to a class where the traditional method of lecturing was used. In addition, student

motivation and level of attention were increased during the lecture (Gulpinar & Yegen, 2005). Another study, which used the same style of teaching, found that this method helped meet diverse approach to learning, and increase student interaction and learning responsibility (Keyser, 2001).

3.4.2.2   The Interrogatory or Question Method

According to Kurdi, (2007) using this method, the teacher asks a direct question to her students, and their answers represent one of the lesson's objectives. Moreover, this method requires definite and clear formulation of questions to enable the students to remember a previously studied concept, but it can also be used to teach a new concept. However, the questions should be preceded by a lecture or by examples, or they should proceed from known to unknown information (Kurdi, 2007; Baharith, 2003).

3.4.2.2.1 Uses of the Interrogatory Method in Islamic Education Lessons

Islamic studies teachers sometimes used interrogatory method at the lesson's beginning to assess the students' knowledge from the previous lesson. Moreover, it can be used during the lesson when students are required to give some examples from their daily lives. Additionally, it can be used at the lesson's conclusion. The teacher needs to use such a method to diversify her teaching approach, to verify the gains of the students from previously taught lessons, and to raise students' interest. This method is also a good way to evaluate one's memory retention (Al-Khaleefah & Hashem, 2010).

3.4.2.2.2 Factors to the Successful Implantation of this Method

To effectively use this method**,** Kurdi, (2007) and Baharith (2003), suggested the following ideas:

- Diversify questions between the ones that test memory and the ones that pique interest
- Questions with self-evident answers should be avoided
- The teacher should be skilled in asking the questions, and receiving the answers
- The teacher needs to try to involve as many students as possible, particularly students with low ability, in answering the easy questions

3.4.2.2.3 Rationale and Evidence of Effectiveness

According to Kerry (2004), the benefit of using the question-based approaches is that the emphasis shifts from the teachers to the students, which helps awaken curiosity and keeps the students interested. Additionally, it fosters interest in the student's outlook and feelings, and

helps students to think creatively. It is also likely to help students externalise and verbalise knowledge. Furthermore, it helps the students to learn from each other, and it deepens thinking and improves conceptualisation (Kerry, 2004). It helps the students to progress in thinking stages until they reach higher-order thinking stages. Regarding its usefulness for teachers, it helps the teachers to find out what the students already know at the lesson's beginning and to involve them in the lesson accordingly. At the lesson's end, it helps the teacher to review and re-emphasise important points, and to check whether the students understand the lesson or not (Hatton & Brown, 1982).

3.4.2.3   The Deductive Method
Under this method, the teacher derives the information from the students through encouraging them to think through a series of questions. Answers to these serial questions are related to the following questions, so the answer to the last question will be the targeted information. Alternatively, the teacher may use different examples or consecutive experiments leading to the information to be taught to the students (Baharith, 2003). The advantages of using this method include training the student in logical thinking, construction, and analysis (Kurdi, 2007).

3.4.2.3.1 Uses of the Deductive Method in Islamic Education Lessons
Islamic studies teachers use deductive method to work out both literal and idiomatic meanings through questions, and to give a positive or a negative statement on any topic in the Islamic culture. The deductive method is a vital part of the religion classes, since the information deduced by the student on her own is likely to be stable in long-term memory, meaning the student will remember that information longer. Thus, the deductive method is used to present knowledge that is intended to be stable, and upon which the student's system of thought can be based (Baharith, 2003).

3.4.2.3.2 Factors for the Successful Implantation of this Method
According to Kurdi (2007), a correct analysis of the facts and information contained in the curriculum is required in order to prepare appropriate questions or to give related examples and convincing evidence. It also requires a close follow-up of the students' participation and smart guidance of the students towards the information that they need to deduce.

3.4.2.4   The Dialogue and Discussion Method
In this method, the teacher chooses a subject to be discussed, describes its main points and then asks specific questions that clarify these points. The teacher is provisionally neutral while

guiding her students until they reach the correct answers; then she reinforces them, provides a summary, and then ends the discussion (Taweelah, 2000). On one hand, the dialogue method is an educational scientific method that reinforces the relationship between the students and their teachers; on other hand, among the students themselves in a way that achieves many educational, learning, behavioural, and social objectives (Kurdi, 2007).

3.4.2.4.1   Rationale and Evidence of Effectiveness

Ipgrave (2001) found that applying the dialogue method in religious education lessons yielded positive results. It developed student interest and dialogical skills, and encouraged them to engage with their peers. Kerry (2004) adds that students will not start and engage effectively in the dialogue until they feel that what they are going to say is valuable and will interest other students. In addition, this method leads to an improvement in students' creative thinking and social skills. In the course of a dialogue, new ideas that increase student's religious knowledge or that can be explored in future discussions can be identified. Also, using the dialogue method helps students to learn from one another and helps the individual students to change their outlook and understanding (Ipgrave, 2001). According to Kurdi (2007), dialogue helps the teachers to know the amounts of students' prior knowledge about the topic to be taught. However, it takes a lot of the allocated time (45 minutes) for each lesson and is likely to prevent teachers from finishing the unit in one lesson.

3.4.2.5   The Demonstration Method

This method is also called the "representation" method. The teacher or certain students work on a previously practised exercise to personify an example or to represent a part of the lesson, through which they apply, in practice, the knowledge to be taught to others (Al-Shafei, 2009).

3.4.2.5.1 Factors for the Successful Implantation of This Method

According to Kurdi (2007), the key to effectively use the demonstration method are as follows: 1) the performance must be impeccable, with no faults; otherwise, the learning process will be reversed. In other words, teach a student something wrong and it will always be in her mind; 2) the performance should be in a clearly visible place for all the students: and 3) the performance must focus on the parts to be taught.

3.4.2.6   The Problem-Solving Method

According to Posamentier and Krulik (2015), a problem is "a situation that confronts the individual that requires resolution, and for which no path to the answer is readily known" (p.5).

Another definition is that a "problem is an obstacle that stands in the way of achieving a desired goal" (Butterfield, 2017 p.7). Al-Shafei (2009) stated that problem solving based on making a hypothesis of the problem and then testing that hypothesis to find the correct solution (Kurdi, 2007). Posamentier and Krulik (2015) explained that the four-step plan to solving a problem is as follows: 1) understanding a problem; 2) planning; 3) carrying out the plan; 4) looking back. Moreover, the plan usually involves reading the problem, selecting an appropriate strategy, solving the problem and reflecting on the solution. Another problem-solving step includes identifying the problem, gathering information, clarifying the problem, considering the possible solutions, selecting the pest option and making a decision and monitoring the solution (Butterfield, 2017). According to Kurdi (2007), the problem-solving method is one of the commonly teaching methods used by the Islamic studies teachers, and it focuses on developing multiple skills that are useful in life.

3.4.2.6.1 Factors to the Successful Implantation of this Method

In order to effectively use the problem-solving method, the teacher needs to carefully identify the problem, increase the students' awareness about how this problem is important and divide the problems into several parts, for example, the size of the problem, its causes, and its possible effects. Additionally, the teacher divides the students into groups to seek for these parts. Thus, the key to the whole process is choosing a proper strategy to solve the problem (Kurdi, 2007).

3.4.2.6.2 Rationale and Evidence of Effectiveness

Applying a problem solving-method in learning and teaching is supportive for both students and teachers. Problem solving emphasises the learners' ability to make sense of subject concepts, such as mathematical problems. When solving problems, learners explore the issue within context instead of as an abstract problem. Problem solving offers current information that can support teachers in providing instructional decisions. In addition, recording discussions on problem solving provides a significant source of information regarding subject understanding and knowledge of the students. It provides the students with an opportunity to think outside the box and improve their self-confidence (Kramarski, 2009).

In an online program, the teacher can allocate five or six students a same case study. Students can discuss the case through the online devices they select, such as e-mail, instant messaging, social media and threaded discussion, or through web search, group discussion and assessment. Furthermore, students participating in an online learning course can post their solutions and conclusions. Mainly, they post the processes they used to achieve their solution and conclusion.

The students' involvement is recorded and accessible to other participants. In this way, even students who do not participate in the chat communication or discussion forums will be able to follow the discussions regarding the existing problem-solving work, and therefore adapt their behaviour accordingly. In addition, with every student posted their step-by-step methods, both teacher and students are likely to become familiar with a variety of potential effective and possibly ineffective ways to problem-solving (Hmelo-Silver, 2004). Furthermore, problem-solving within a group is significant since students have access to a broad range of perspectives and possible solutions (Kramarski, 2009). In addition, the standard problem-solving processes help the students encounter the real-world issues and manage by giving them a direction: they can choose the steps for solving a problem to demonstrate and explain the way they work it out (Salami & Aremu, 2006). What is more, students can use the problem-solving process anytime they encounter a challenge or want to achieve a goal (Salami & Aremu, 2006; Hmelo-Silver, 2004). It can be said that the problem-solving process is a valuable resource for students in every aspect of their lives, especially when they encounter challenging situations. In addition to these methods, there are also the literary and the historical methods which are used to teach religious education (Moore, 2010).

3.4.2.7   The Historical Method

This approach helps in delivering the religious context and how it has been developed in a historical perspective. Thus, learners will understand how the religion came about, how it has been followed by a number of people and how it has spread (Moore, 2010).

3.4.2.8   The Literary Method

This method is applied in most social studies, English and art classes. Students in these classes are expected to read religious texts, novels, stories and poetry focusing on religious topics. For instance, examining a particular story where religious expression is the subject matter is likely to help learners to see the specific ways that individuals experience their religion. This will help to support the idea that generalisations about religion are often uninformed (Moore, 2010). In another example, examining the idea of anger, like the story of Cain and Abel in Genesis, will encourage students to think through the causes, by drawing on their understanding of the narrative. Furthermore, examining a particular story is likely to reflect some of the emotional problems that students are going through, which will help them to see the connections between their experiences and what religious education can mean for their lives (Wood, 2008). Also, the use of stories in teaching RE will draw students' attention and make lessons more memorable;

not only that, but the use of stories is appreciated by students (Watson & Thompson, 2007). One of the challenges facing teachers when using the literary method is a lack of training in religious studies needed to explain the texts and provide appropriate and sufficient religious information related to the texts being taught to students (Moore, 2010).

In the context of the Islamic Education curriculum in the KSA, the historical method could be used when teaching students about the Year of Sorrow (the year in which Mohammad's wife and his uncle and protector, Abu Talib, died). Additionally, the teacher may use the historical method when explaining how the Qur'an was revealed verbally by God to the Prophet Mohammad through the angel Gabriel gradually over a period of twenty-three years, according to occasions, situations and events. Also, the teacher may use the historical approach to teach students how the Islamic religion spread. The literary method could be used when quoting poetry praising the Prophet Muhammad (peace be upon him).

Taking the nature of the Islamic Education curriculum and the specific objectives which learners should master into account, the next section gives more explicit examples of the teaching and learning theories implied in the current provision for teaching the Islamic Education modules (Qur'an, Tawheed, Hadith and Fiqh).

The Qur'an Lesson

Teachers often start the Qur'an lesson by assessing some students on the last verses studied; this is usually done by selecting some students to recite the previous verses. The role of the teacher during this part of the lesson is to listen to the student, correct them and give feedback, as well as to enter marks in the follow-up record. Following the assessment of some of the students on the previous verses, the teacher introduces the topic of the new verses, and one way of doing this could be by mentioning a Hadith of the Prophet Mohammed (peace be upon him) and a story or an incident that the students can relate to. Then, the teacher recites the verses out loud and the role of the students is to listen to the recitation. Some teachers may use a recording device to recite the verses and ask all the students to listen to the recitation. Then, the teacher recites a verse or part of a verse depending on the length of the verse, and the role of the students is to repeat that verse after her. Another way of reciting after the teacher could be by dividing students into groups (the teacher reads the verse and then each group individually reads the same verse once or three times after her, and the role of the teacher is to listen to the students and correct any mistakes they may make in intonation or pronunciation. For instance, if she hears a mistake in the pronunciation of short vowels, she will read that part again and ask the

students to repeat it three times. Next, the teacher selects a number of students to recite the verses and, usually during this stage, the teacher discusses the meaning of the verses with the students and tries to connect them to the students' reality. Finally, the teacher reminds the students about the importance of applying the commandments and prohibitions contained in the verses to their daily lives.

From the above example, it is clear that the Qur'an lessons are usually taught through repetition (repeating single words or entire verses three times). Also, learners are likely to master the recitation of the verses by emulating and copying the way their teacher recites the verses (practice). Furthermore, the feedback is significant in Qur'an lessons, because the teacher's comments on a student's mistakes may help the student to remember the mistake that she made and possibly apply the instructions which she received from her teacher to avoid making the same mistake again. More importantly, positive feedback, particularly in front of other classmates, is likely to encourage students to practise the recitation of the verses more often at home. In other words, students may master the recitation of the verses through reinforcement. Consequently, Islamic studies teachers are likely to achieve the aim of teaching the Qur'an lessons: enabling students to master the recitation of some chapters of the Qur'an and the memorisation of others with the correct application of the intonation rules (Al-Caderi, 2008). Gilley et al. (2001) emphasise that effective learning takes place through the environment and the control of behaviour through positive reward, whereas it is interfered with through negative reward. Moreover, Gilley et al. (2001) define behaviourism as "control, behaviour modification and learning through reinforcement" (p. 24). Hence, one could argue that the method of teaching the Qur'an lesson through repetition and feedback is in line with the behaviourist learning theory. Likewise, Al-Qurashi and Al-Thubaiti (2001) describe memorising religious texts, such as the Holy Qur'an, as a typical behaviourist style classroom, in which students react directly to stimuli, but otherwise remain quite passive in their response and way of behaving towards the teacher and lesson. This approach also has some similarities to Bandura's Social Learning Theory. This theory considers how people learn from one another, through observation, modelling and imitation, particularly for young children and adolescents. It includes the desire or motivation of the learner not just to copy the behaviour, but to want to emulate the person showing the behaviour. It therefore explains how modelling behaviours by the teacher enable the learners not just to copy but to internalise what is being learned. Bandura's theory has sometimes been seen as a bridge between behaviourist and cognitive theories of learning

because it involves learners' attention, their memory, and, importantly their motivation (Bandura, 1977; Bandura, 1986).

The Hadith Lesson

Before embarking on the topics of the lesson, the teacher usually gives an introduction that appeals to her students. This will become a good foundation for the topics of her lesson and learners will get an idea of the topic of the lesson. The teacher may prepare the student's mind to listen to the Hadith "sayings of the Prophet" by stating the importance of the Hadith and its topic and what the scholars have said about it. For example, she can tell them how Imam Malik used to respect the Hadiths and how he used to prepare himself for teaching them by wearing his best clothes and best perfume.

Next, the teacher writes the correct wording of the Hadith on the board or she may use a PowerPoint to present the Hadith. Following the presentation of the Hadith, the teacher reads the Hadith out loud and then gives the students the opportunity to read the Hadith and corrects them if necessary. The teacher then uses the explanation method to clarify the main ideas in the Hadith. She then explains the difficult terms and writes them on the board. Then she can start talking about the topic of the Hadith by relating it to a current issue and then suggests solutions to the issue from the Hadith. She can also use the Hadith to suggest solutions to global issues, such as fraternity, liberty, justice, equality and so forth. Additionally, a teacher may use dialogic methods in order to teach the Hadith. She may use role play in order to question a student on how they would react in certain situations (Al-Hashmee, 1997). This promotes dialogue and allows the student to apply the teachings contained within the Hadith to real life situations, thus presenting an opportunity for the application of what the student has learned.

At the lesson's conclusion, the teacher usually summarises all the aspects of her lesson and explains how the students can benefit from the Hadith in their lives. She also admonishes and reminds them about the importance of implementing what they have learned, such as how to handle anger from the Sunnah of the Prophet Mohammed or how he dealt with insults, because knowledge alone is not sufficient as learners are required to apply the Islamic manners and principles they have learned. After she finishes her lesson, the teacher may allow the students to comment on the meanings of the Hadith and its instructions, asking them questions or inviting individual students to comment.

The Tawheed "Doctrine of Oneness" Lesson

The Doctrine of Oneness (Tawheed) lessons are usually taught by establishing the doctrine through explanation and dialogue, as well as the presentation of problems that are incompatible with the doctrine. Also, the Islamic message is reinforced by using examples of the Prophet's behaviour, such as how he dealt with the house servants or housekeepers (Ali et al., 2004).

The Fiqh "Islamic Jurisprudence" Lesson

Islamic Jurisprudence (Fiqh) lessons are usually taught through practical or demonstrative methods, such as the application of ablutions (Al-Shafei, 2009).

As can be seen from the above examples, face-to-face interaction is present between teacher and learners as well as amongst learners. Moreover, during the discussion and dialogue, students are directed by their teacher. Also, using the interrogatory method can be another example of interaction between teacher and students. In summary, the teaching approaches include explanation, interrogation, discussion, dialogue, group work and interaction. It should be noted that while feedback is as important element in the Qur'an lesson, interaction between teacher and students and amongst students is crucial in Tawheed, Hadith and Fiqh lessons. This is because the Islamic Education in primary school builds upon and expands the knowledge of Islam that students are taught from an early age at home, through interaction and communication with their parents and other family members. Thus, the social interactions as well as the environment the child lives in play a significant role in their acquisition of Islamic knowledge and manners. This unique feature of the Islamic Education curriculum is relevant to Vygotsky's theory, which is known as socio-cultural theory and focuses more on how the environment the child grows up in, and his or her social interactions, influence the development of cognition (Vygotsky, 1978). Vygotsky, overall, believed that the community surrounding the child had a key role to play in the process of "making meanings" (Vygotsky, 1978, p. 89). Hence, on the basis of who influenced the child, Vygotsky thought that the cognitive development of the child was a guided process from the child's family and other people surrounding him. Also, culture would affect and shape the cognitive development of the person. However, it should be noted that, in the context of the KSA, only Islamic culture should influence the cognitive development of the student. This is because in the Saudi education system the approach is to educate students only into Islamic religion, with the intention of helping them to become better followers of Islam – people whose words and actions are influenced by Islamic principles and values.

In addition to the examples mentioned above, Figure 3.1 below illustrates the Islamic Education modules (Qur'an and Tajweed, Hadith, Tawheed and Fiqh) taught in girls' primary schools in Saudi Arabia and shows what are often considered the appropriate methods used by the majority of Islamic studies teachers in teaching such modules, taking into consideration the nature of the curriculum and the specific objectives which Islamic studies teachers seek to achieve.
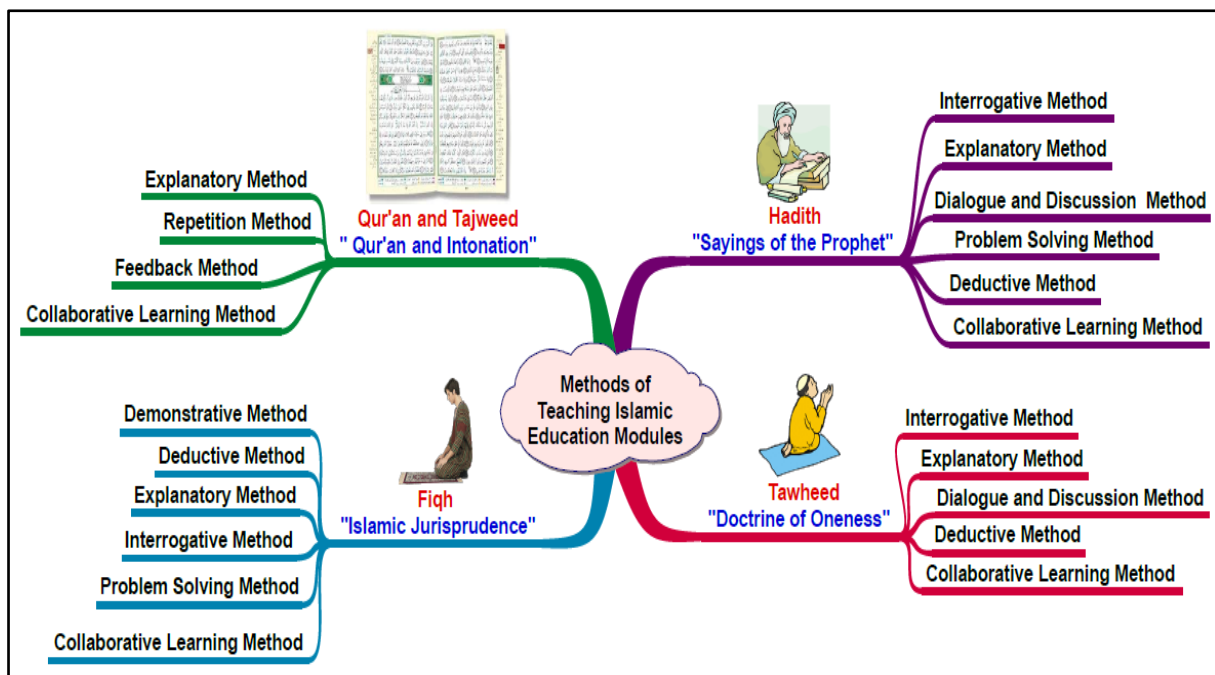
Figure 3.1: The Most Common Methods of Teaching Islamic Education Modules

To sum up, explanation, interrogation, deduction, dialogue, demonstration, collaborative learning and problem-solving methods are the range of pedagogies which Islamic studies teachers use for the effective teaching of different subjects within the Islamic Education curriculum. This is due to the complexity of the Islamic Education curriculum in Saudi Arabia, as the content of the lesson and the specific objectives which Islamic studies teachers seek to achieve (the skills that students should master) determine the way in which the subject is taught. More importantly, the way the Islamic lessons are taught in the KSA schools using explanation, interrogation, deduction, dialogue, demonstration, collaborative learning and problem solving methods should reflect the way it is practised or the methods of use in (as well as outside) school, because the aim of teaching an Islamic Education curriculum is not simply to increase students' knowledge about Islamic religion, but learners are required to correctly apply what they have learned (Al-Khaleefah & Hashem, 2010; Al-Hamid, 2012). For instance, the way students are taught to recite the Qur'an in school with the correct application of the intonation rules, such as the correct pronunciation of the short and long vowels, will be exactly the same way they will recite the Qur'an in a religious ceremony. In other words, the way that students

are taught to say it in school will be the way they will say it in a religious ceremony. This context of teaching an Islamic education in KSA schools is consistent with the signature pedagogies, given that Shulman (2005) defines signature pedagogies as "the types of teaching that organize the fundamental ways in which future practitioners are educated for their new professions." Also, he defines signature pedagogies as "the forms of instruction that leap to mind when we first think about the preparation of members of particular professions" (p. 52). Hence, the explanation, interrogation, deduction, dialogue, demonstration, collaborative learning and problem-solving methods are the signature pedagogies for the effective teaching of the Islamic Education curriculum in KSA schools. Furthermore, as illustrated earlier in this chapter, the range of pedagogies which are used for teaching an Islamic education in Saudi Arabia are rooted in different learning theories, including behaviourist theory and socio-cultural theory.

3.4.3   Third Element: Collaborative Learning

Islamic religion emphasises the spirit of working together. This section discusses the collaborative learning method which forms the third element of the blended learning approach used in this study. This section starts with explaining the concept of collaborative learning, gives example of collaborative learning in Qur'an lessons, followed by some of the evidence of the effectiveness from existing literature.

According to Algarfi (2010) and Beatty and Nunan (2004) collaborative learning and group work are usually used to express the meaning of 'working together'.

Dillenbourg (1999) defines collaborative learning as:

> "A situation in which particular forms of interaction among people are expected to occur, which would trigger learning mechanisms, but there is no guarantee that the expected interactions will actually occur. Hence, a general concern is to develop ways to increase the probability that some types of interaction occur" (P.5).

Gokhale (1995), states that collaborative learning is a teaching method, in which students work together in a small group to achieve a common goal. Moreover, each student in a group is responsible for his/her self as well as for one another. Consequently, the success of one student helps other students to be successful. Kurdi (2007), defines collaborative learning as a teaching

method that deals with the students' learning through their groups and helps the students become used to acting responsibly.

The definition used here is that collaborative learning is a teaching approach in which a group of 4 to 5 students are working together to achieve specific curriculum objectives, usually by completing a task or answering a question directed by their instructor.

3.4.3.1 Example of Collaborative Learning in a Qur'an Lesson

a. The teacher divides the students into groups of four to five students, with each group having a leader who can recite well. The role of a leader is to control the group, and take on the role of a teacher in evaluating the recitation of each member of the group.

b. The teacher reads all the verses.

c. Then teacher asks each leader to read the verses.

d. Each student is asked to read the verses under the supervision of the leader of the group, and teacher sets a time for this activity.

e. While the students are reading, the teacher walks around the room and monitors the learners whilst they recite the Qur'an, and encourages the students to work in groups. This also allows the teacher to ensure that the students are behaving well.

f. When it is time, the teacher uses the blackboard or the interactive whiteboard to display and highlight all the mistakes that the students made whilst they were reciting, and she then corrects those mistakes.

g. The teacher gives each group a task.

h. The teacher then listens to each group's answer and evaluates it.

3.4.3.2 Rationale and Evidence of Effectiveness

According to So and Brush (2008), collaborative learning helps the learners to take in and remember information longer than the students who work and study individually. Johnson and Johnson (1984) and Slavin (1987) concluded that collaborative learning is more effective in promoting student learning and achievement compared to individual learning methods. Additionally, collaborative learning helps the students to play an effective role in discussion and takes care of their own learning, which may lead them to thinking critically. Gokhale (1995) adds that different activities in group work such as discussion, clarification of ideas, and commenting on other ideas will help the students to learn from one another and will contribute strongly to the development of the students' critical thinking skills and social interaction skills (Smith, 1977; Goodsell, 1992). Such a method also enhances the students' self-esteem, which

is likely to increase student motivation to participate in the classroom (Goodsell, 1992). Higgins et al. (2012) add that "It is possible that increased engagement or motivation may help increase the time learners spend on learning activities, or the intensity with which they concentrate or their commitment and determination to complete a task" (p.6). New students in unfamiliar situations will benefit from collaborative learning, as it will reduce anxiety associated with being in a new class (Kerry, 2004). Moreover, learners in a collaborative learning environment feel respected and connected to each other (Alavi, 1994). Consequently, the students' social interaction skills will develop by the application of collaborative learning (Goodsell, 1992). Regarding its benefits for the teachers, collaborative learning helps the teachers understand student behaviour as students were given the opportunity to explain their actions and thoughts (Kerry, 2004).

Having discussed the collaborative learning and explained the advantages and disadvantages of applying collaborative learning in teaching different subjects, next section explains the definition of active learning and gives examples of the common active learning approaches used by the Islamic studies teachers in Saudi Arabia.

3.4.4   Fourth Element: Active Learning

Bonwell and Eison (1991) defined active learning as "involving students in doing things and thinking about what they are doing" (p.5). Millis (2012) stated that active learning could involve the students working cooperatively in pairs or groups. Similarly, Simons et al. (2000) defined active learning as "the extent to which the learner is challenged to use his or her mental abilities while learning" (p.21). Thus, the core element of active learning is dynamic student engagement in the learning process, which is different from that of traditional lectures where students passively receive information from the instructor (Prince, 2004; Whitehead, 2007). Furthermore, active learning requires the students to produce something and reflect on what they have done (Millis, 2012). For instance, Islamic studies teacher may ask the students to summarize what they have learned from the lesson in the form of a mind map. Then, a student from each group explains what they have designed.

3.4.4.1   Active Learning Approaches

In Saudi Arabia, the number of active learning strategies approved by the educational supervisors at the Pedagogical Planning and Development Administration is more than one hundred. These include brainstorming, Jigsaw 'puzzle solving', role playing, fault finding, Fishbowl and the One- Minute Paper (see Appendix B for some examples). However, these

strategies have not been classified, and most of them are more suitable for assessing the students on previous lessons or at the end of a new lesson. Consequently, the availability of so many strategies may make it difficult for the teacher to identify the suitable technique for each subject or topic she would like to teach.

From the Islamic studies teachers' point of view, this section explains the most common strategies used by the Islamic studies teachers when introducing a new lesson, delivering the content or assessing student learning outcomes.

3.4.4.1.1   Think-Pair-Share

The Steps of the Strategy

First: think alone

The student thinks on her own for two minutes without talking to her colleague and without helping her or asking for her or the teacher's help (Azlina, 2010; Al-Shammari, 2011).

Second: think with your colleague

Every student puts forward her idea to her colleagues and why she chose that idea or answer, for two minutes each, and then they agree on one answer.

Third: think with your group

A pair of students share their idea with another pair of students, giving their reason for choosing their answers (two minutes for each pair) (Azlina, 2010; Al-Shammari, 2011).

Fourth: share with the class

Each group has two minutes to share their answer when their turn comes, giving their answer and the reason for choosing it. The group chooses a spokesperson to do this step (Azlina, 2010; Al-Shammari, 2011; Millis, 2012).

Evidence of Effectiveness

Using this strategy encourages cooperative sharing and spurs on mutual learning between individuals. Also, it provides an opportunity for individual thinking without any interruption. Finally, it helps the teachers to ensure contributions by all students in the class (Whitehead, 2007; Azlina, 2010; Al-Shammari, 2011).

Uses of the Think-Pair-Share Strategy in Islamic Lessons

Some Islamic studies teachers use this strategy so that the student can acquire a piece of information that she was not taught previously. Others use it to revise the previous lesson or to introduce a specific point, such as the treatment of house servants or housekeepers:

- Every student thinks individually about examples of good treatment of servants as well as examples of bad treatment of servants.

- She then compares her answer with her colleague's.

- Then she shares her answer with the group until they reach a single answer that they all agree upon, and then one of them reads it aloud to the class.

3.4.4.1.2 Mind Maps and Concept Maps

Even though quite a few characteristics of concept maps and mind maps are same, but the design is fundamentally dissimilar. Colour and pictures are not incorporated in the concept map and a top-to-bottom hierarchy is formed. On the other hand, the mind maps in the centre of the page have a central theme and the categories and subcategories are branched peripherally, therefore them being truly non-linear. The students are able to contrast and compare information as cross-links among categories focus on their intrinsic relationships. Mind maps are multisensory in contrast to concept maps i.e. the colour and pictures are encouraged, which may help in converting the information from short-term to long-term memory (D'Antoni et al., 2010). According to Al-Shammari (2011), a mind map is a tool that assists in thinking and learning, and it is a fabulous method that involves drawing everything you want on a single piece of paper in an organised way, trying as far as possible to substitute words for a drawing that represents them. Moreover, putting everything on a single piece of paper will result in an outcome that is focused, summarised and easy to remember. When the Islamic studies teachers used the concept map the most general concepts (such as Prayer and Alms) are at the top of the hierarchy, and the most specific (such as Pillars of the Prayer and Obligations of the Prayer) are at the bottom of the hierarchy.
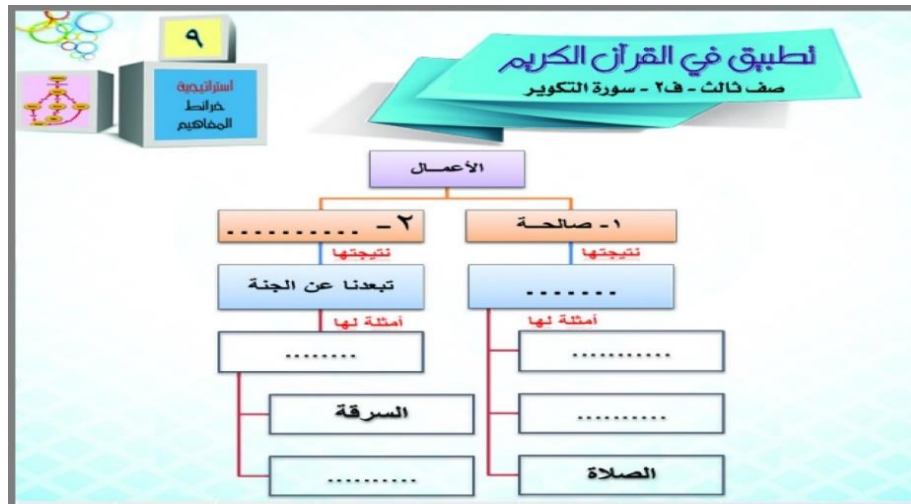
Figure 3.2: Concept Map
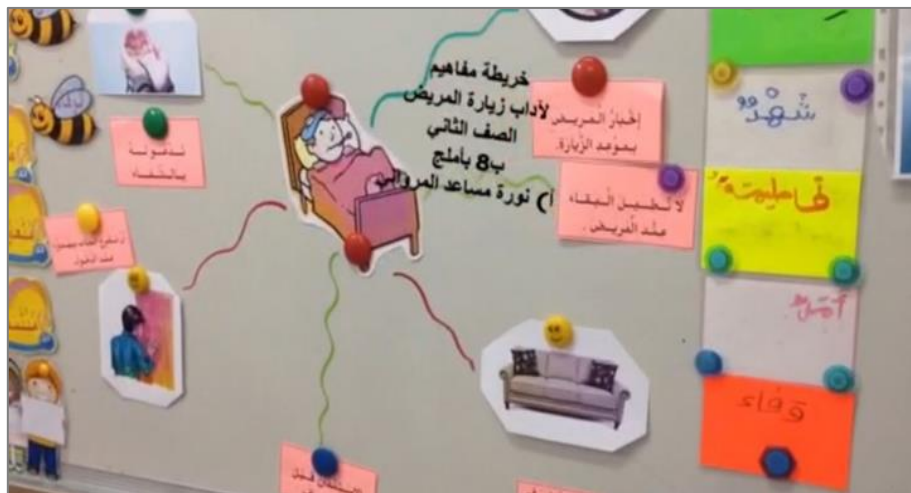
Figure 3.3: Mind Map

Evidence of Effectiveness

The advantages of using mind maps include providing a group learning environment for discussion among the learners and assisting the learner in searching for relationships and similarities and differences between concepts (Farrand et al., 2002; D'Antoni et al., 2010). Also, it helps the learners relating new concepts to previous concepts that students already know and separating important information from marginal information and selecting suitable examples to clarify the concept (Wickramasinghe et al., 2011; Al-Shammari, 2011). Additionally, mind maps help the learners preparing a schematic summary of what they learned (organising what they have learned in the lesson). Finally, mind maps may help the students to achieve a meaningful learning; and increase students' achievement and recall of what they have learned for a longer period. (Farrand et al., 2002; Wickramasinghe et al., 2011). The advantages of using mind map to the teachers include helping teachers planning for teaching whether for a

lesson, unit, term or full academic year and identifying the depth that the lessons should have. Moreover, it facilitates selecting suitable learning activities and teaching aids and discovering students' wrong perceptions and working to correct them as well as improving the spirit of cooperation and mutual respect between the teacher and her students. In other words, a tool for communication between the teacher and learner (Al-Shammari, 2011).

Uses of the Mind Map Strategy by Islamic Studies Teachers

Islamic Studies teachers use this strategy when the topic of the lesson has multiple components, such as the Prayer. So, the teacher writes the main topic (i.e. the Prayer) in the middle of the blackboard, and then the other components (i.e. the Pillars and Obligations of the Prayer) are branched out from the main topic. By the end of the lesson the teacher would have drawn a map for the lesson. Some teachers use the mind maps for revising the previous lesson or relating the lessons to one another as well as summarizing the whole unit in a single mind map. Teachers also use it to simplify the lesson content, and they regard it as the best method for simplifying information.

3.4.4.1.3 Lollipop Sticks

The Steps of the Strategy

    a. The name of each student is written on a lollipop sticks.

    b. The sticks are put in a container at the front of the classroom.

    c. The students are told about the Lollipop Sticks strategy and how it will be done.

    d. When a question is asked during a class discussion, the teacher, while the students are watching, picks one stick randomly and then asks the student whose name is on that stick to answer the question (Wiliam, 2009; Al-Shammari, 2011).

    e. The teacher continues with the lesson after she returns the stick to the container. Returning the stick shows that the same person could be called on again to answer another question (Al-Shammari, 2011).

Evidence of Effectiveness

This strategy encourages all the students to listen and participate effectively in class discussions. Moreover, it helps the students to focus their attention on sharing ideas with other students about the lesson (Al-Shammari, 2011). The Lollipop Sticks method is particularly suitable when used with open-ended questions for the primary level (Wiliam, 2009).

Uses of the Lollipop Sticks Strategy by Islamic Studies Teachers

Islamic studies teachers use this strategy when asking questions during the lesson or during the review of the previous lesson to stimulate the students into focusing on the class since the name of the person who should answer the question will be selected randomly. Many teachers also use it for class control and management (Al-Shammari, 2011).

3.4.4.1.4 Hot Seat

The Steps of the Strategy:

a. Change the positions of the chairs in the classroom to a circular setting and put the hot seat in the centre of the circle.

b. The teacher requests a volunteer student, who has mastered a specific topic or skill, to sit on the hot seat.

c. The students ask questions to the student on the hot seat, and she answers their questions. The questions should be open-ended and not designed for one-word answers.

d. The teacher may sit on the hot seat to encourage the students to form questions, particularly open-ended questions (Bentley et al., 2009; Al-Shammari, 2011).

Using the Hot Seat Strategy in the Groups Form:

a. The teacher divides the students into small groups (five to six per group) after delivering the lesson, or the teacher may divide the lesson into sections so that each student is assigned a specific section.

b. A volunteer student from each group sits on the hot seat in the centre and the rest of the students surround her and ask her open-ended questions either about the lesson or the section that was assigned to her. The students can exchange roles among themselves so that more than one student sits on the hot seat (Al-Shammari, 2011).

To sum up, the Hot Seat Strategy is based on the students asking the student in the hot seat questions about a specific topic. In this strategy, the teacher plays the role of a facilitator by selecting the students to make the discussion easy and successful. She divides them into groups and asks questions to promote thinking among the students and directing them to the answer (Al-Shammari, 2011).

Evidence of Effectiveness

Applying the Hot Seat strategy may develop skills such as reading, constructing questions, exchanging ideas and decision-making (O'Dell et al, 2009; Al-Shammari, 2011). Bentley et al., (2009) concluded that implementing the hot seat increased the students' engagement and motivation and helped them to learn more than traditional classroom. They also found that such methods helped to create more engaging dialogue between student-student and student-teacher. On the other hand, applying the hot seat strategy may prevent the teachers from sufficiently explaining the lesson's content.

Uses of the Hot Seat Strategy by Islamic Studies Teachers

This strategy is effective when Islamic studies teachers want to implant specific values and beliefs in the students' minds. Usually, this strategy is used to discuss a general or complicated issue to promote thinking among the students, and to help them think about the issue from various aspects and listen to different opinions. Moreover, some Islamic studies teachers use this strategy to assess the students after completing the lesson so they can find out to the extent of students' understanding of a lesson. Some Islamic studies teachers believe that this strategy can be used at any stage of the lesson since it requires asking many questions that vary in difficulty and, in turn, require thinking from the student. For instance, during the introduction, the Hot Seat leads to the topic of the new lesson; during the main body of the lesson, it is used to achieve specific objectives in the lesson; and at the end of the lesson, it is used to evaluate the extent of understanding and comprehension by the students. It is also preferred when the teacher wants to detail specific topics or concepts.

3.4.4.2 The Benefits and Drawbacks of Using Active Learning

From the Islamic studies teacher's point of view, active learning helps the students to understand the lesson and ease the delivery of information by identifying various simple methods for explaining the lessons. Moreover, active learning helps both the teacher and her students to gain new experiences such as constructing questions and developing new skills such as research skill because some strategies require the student to search for information in a book from school library or from the web. The student becomes an independent learner because she must read, define and interpret the information. Also, applying active learning helps the learner memorise information quickly and improve higher-order and critical thinking skills. Regarding its usefulness for teachers, sometimes active learning helps in managing the classroom and maintaining the attention of the students. It also helps the teacher to detail specific topics or

concepts and determine to what extent the students have understood the lesson, particularly when it is being used as a summative evaluation method.

Prince (2004) stated active learning promotes interpersonal relationships, improves social skills, fosters self-esteem and can help develop critical thinking and problem-solving skills. It also increases the students' achievement (Staley, 2003). Another study compared traditional lecture-based classes with those taught using active learning. The study revealed that student in active learning learned two to three times more than students taught through traditional lecture methods. Also, active learning helps address and change students' misconceptions (Hake, 2002). Bonwell and Eison (1991) concluded that applying active learning resulted in improvement in the students' thinking as well as writing. Moreover, it contributes to better the students' attitudes, and it significantly improves the recall of information and promotes student engagement as well as motivating learners to further study (Prince, 2004). These findings are supported by a meta-analysis of Science, Mathematics, Engineering and Technology (SMET) small group learning by Springer et al., (1999): "The meta-analysis demonstrates that various forms of small-group learning are effective in promoting greater academic achievement, more favourable attitudes toward learning, and increased persistence through SMET courses and programs" (p.1).

On the other hand, Islamic studies teachers believe that applying active learning strategies require more time when preparing and delivering the lessons. Also, using some of the active learning strategies might lower the value of the lesson's content and teachers may experience difficulty in re-controlling the class after applying some of the active learning strategies such as, the Hot Seat strategy. Finally, the more than hundred active learning strategies which the teachers are required to choose from makes it difficult for the Islamic studies teachers to choose which one would suit the lesson content the most, and which strategy would help teacher to achieve the specific curriculum objectives. According to Sun and Chiang (2015), changing from traditional learning to active learning classroom has some limitations. For instance, due to the physical layout of the classroom both teachers and learners may face many challenges such as, no single focal point. Consequently, the students must turn to view that the board or screen and they may not be able to take notes using a desktop surface. Some students may find it difficult to see the teachers at all times. Moreover, some students comment that the active learning classroom environment is distracting. These distractions range from noisy small group conversations to easily being able to view the video screens of other students' laptops and

electronic devices. Instructors also comment on the distraction of having to constantly keep moving to be able to see and make eye contact with all the students (Baepler et al., 2014 p.65).

The next section explains the definition of multimedia learning and the effectiveness of applying multimedia learning in the teaching and learning process.

3.5   Multimedia Learning

Individuals are believed to acquire and absorb more information when words are delivered along with Images, instead of presented on their own, as in a lecture. This concept is known as the "multimedia principle" (Mayer, 2005 p.36). By definition, multimedia presentations are a mixture of teaching modes managed by one program which normally relies on a computer (Schnotz and Bannert, 2003). Similarly, Harris (1993) stated that multimedia is the mixture of numerous modes of media like film, images, cartoon, sound, and written text, which can be retrieved by using a computer and particular programs. According to Mayer (2005), the term multimedia presentations mean presenting words (voiced or printed text) along with images (drawings, photographers, cartoons or film) being communicated to them. Here, words signify that the matter is expressed in verbal form, such as using printed text or orally delivered words. Photos indicate that the material is presented in pictorial form such as using either static graphics like maps, charts, figures, or by using dynamic visuals including cartoon or video (Mayer, 2005; Mayer, 2001). "In this definition, multimedia refers to the presentation of words and pictures, whereas learning refers to the learner's construction of knowledge" (Mayer, 2005 p.2). Thus, multimedia learning occurs when individuals produce mental representations from the words (voiced or printed text) and images (drawings, photographers, cartoons or film) (Mayer, 2005).

Mayer (1997) claims that if multimedia involves presenting material in two or more forms, then it must be explored through delivery media, presentation modes, and sensory modalities. All of these three elements must be present and must work together to make multimedia learning in the classroom more functional and effective. According to the *delivery media* view multimedia requires two or more delivery devices, such as a computer screen and amplified speakers or a projector and a lecturer's voice (Mayer, 2005). On the other hand, the *presentation modes* require verbal and pictorial representations, such as on-screen text and animation or printed text and illustrations. Finally, according to the *sensory modalities* view, multimedia requires auditory and visual senses, such as narration and animation or a lecture and slides (Mayer, 2005).

Based on Mayer's notion above, teaching students how to perform prayer correctly can be delivered: by using a projector to display a text from the student book as well as using a lecture method to verbally explain the correct performance of prayer (*delivery media*); through illustrations along with printed text on the side (*presentation mode*); and through using PowerPoint slides (visual) and lecture methods (auditory) (*sensory modality*).

The two goals of multimedia learning are remembering and understanding. Remembering refers to the ability to reproduce or recognize the presented material assessed by retention tests. Understanding means the ability for learners to construct a coherent mental representation from the presented material and is assessed by transfer tests (Mayer 2005; Mayer, 2001). Moreover, the three kinds of multimedia learning outcomes are: (1) no learning, which is indicated by poor retention and poor transfer performance, (2) rote learning, indicated by good retention and poor transfer performance, (3) meaningful learning, as indicated by good retention and good transfer performance. Moreover, the meaningful learning outcome depends on the learner's cognitive activity during learning rather than on the learner's behavioral activity during learning such as, engaging in hands-on activities (Mayer, 2001).

The next section explains the cognitive theory of multimedia learning (the process by which people build mental representations from words and pictures) and the three memory stores (sensory memory, working memory and long-term memory). Moreover, it briefly explains two techniques "Repetition" and "Retrieval Practice" which may help Islamic studies teachers achieve the curriculum objective, particularly memorizing the required verses of the Qur'an.

Cognitive Theory of Multimedia Learning

Mayer's cognitive theory of multimedia learning is based on the following three assumptions: 1) the information processing system includes two separate channels, one channel processes the visually represented material and the other channel processes the auditory represented material (dual-channels assumption); 2) each channel has limited processing capacity, in other words, humans are limited in the amount of information that can be processed in each channel at one time. (limited-capacity assumption) and; 3) active learning involves a coordinated set of cognitive processes during learning which include paying attention, organizing incoming information, and integrating incoming information with other knowledge (active-processing assumption) (Mayer, 1997; Mayer, 2002; Mayer and Moreno, 2003).

The basis for Mayer's cognitive theory of multimedia learning is that the multimedia instructional messages which are designed in accordance with how the human mind works (how people process information), are more likely to lead to meaningful learning than those that are not (Mayer, 2001). Mayer and Moreno (2003), define meaningful learning

> "as deep understanding of the material, which includes attending to important aspects of the presented material, mentally organizing it into a coherent cognitive structure, and integrating it with relevant existing knowledge. Meaningful learning is reflected in the ability to apply what was taught to a new situation" (p.1).

In addition, the cognitive theory of multimedia learning emphasises that meaningful learning occurs when learners:

1. Select relevant words from the presented text or narration,
2. Select relevant images from the presented illustrations,
3. Organize the selected words into a coherent verbal representation,
4. Organize selected images into a coherent visual representation,
5. Integrate the visual and verbal representations and prior knowledge (Mayer, 2001; Mayer, 1997).

3.5.1   Working Memory and Retention of Information

The three memory stores in multimedia learning are: sensory memory which allows visual and auditory information to be stored for a very short time, working memory is used when humans actively process and manipulate information to create mental constructs. Moreover, working memory has a limited-capacity memory store which is used for temporarily holding knowledge in active consciousness. On the other hand, long-term memory is like a repository of all things learned and can hold large amounts of information over long periods of time (Mayer, 2001; Mayer and Moreno, 2003).

According to Mayer (2005), in the process of multimedia learning, material is represented in five forms: 1) presented words and pictures; 2) presented sounds and images in sensory memory; 3) presented sounds and images in working memory; 4) construction of verbal and pictorial models in working memory; and 5) construction of new knowledge in long-term memory.

Spiro et al. (1991) stated that: "Revisiting the same material, at different times, in rearranged contexts, for different purposes, and from different conceptual perspectives is essential for attaining the goals for advanced knowledge acquisition" (p.28). Moreover, Driscoll (1994) asserts that putting instructional content side-by-side and including access to multiple modes of representation could be another condition of presenting information that will help learners gain knowledge effectively. According to DeWinstanley and Bjork (2002) "teachers can promote long-term retention of information presented in lectures by using strategies that require a high level of student engagement" (p.23).

In the context of this study, Islamic studies teachers strive to ensure that their students really learn from and understand the lessons, when teaching aspects of the Islamic education curriculum. Moreover, the primary aim for teaching Islamic education in Saudi Arabia is not to increase students' knowledge of different religions, but to teach them about the Islamic religion, in hopes of helping them to become better followers of Islam – people whose words and actions are influenced by Islamic principles and values. What is more, Islamic studies teachers have a duty to inspire students to practise what they have learned (Kurdi, 2007). Thus, Islamic studies teachers may need to apply some techniques which may help learners to retain information longer and help teachers to achieve specific curriculum objectives, particularly memorizing the required verses of the Qur'an.

The next section explains two techniques (Repetition and Retrieval Practice) which may help teachers foster long-term retention of information.

3.5.1.1   Repetition

Repetition can be used by teachers in making the students remember a particular piece of information; hence, there is use of the technique of memorization (Thornbury, 2006). DeWinstanley and Bjork (2002) recommend the spaced repetition of information with and across lectures. Here, the repetition of information, words, and terms would be evenly distributed rather than amassing them all in one instance. In the context of this study, repetition is used by Islamic studies teachers to help students memorize a piece of information, particularly in memorizing the required verses of the Qur'an.

3.5.1.2   Retrieval Practice

The other strategy presented by DeWinstanley and Bjork (2002) is the technique called the "Retrieval Practice". The learning is not merely concentrated on the generation of ideas, the production of memory and the associations and interconnections of ideas. More than ever, the ability of the students to retrieve the information that they have learned would be much more important since this would provide evidence regarding whether they had really learned something or not (DeWinstanley and Bjork, 2002). Retrieval practice is a powerful leaning tool that enabled the students to become more, "explicitly aware of when they do not know the answers to questions and thereby may spend more time studying the information outside a lecture" (DeWinstanley and Bjork, 2002.p 23). Instructors also may allocate more time to that information in future lessons. According to Thornbury (2006), the retrieval practice is another type of repetition and it means that "the act of retrieving a word from memory makes it more likely that the learner will be able to recall it again later.

Islamic studies teachers usually encourage learners to recite the verses that they have learned in class in prayer, so as not to forget the verses. This may also help students in converting the verses from the short- to the long-term memory.

The next section will explain different approaches which can be used by teachers when delivering the lessons. It also discusses the use of multimedia approaches for teaching Islamic education modules and the evidence of the effectiveness of using multiple representations.

3.5.2   Modalities of Teaching and Learning

There are various ways in which the same information can be presented differently. Information that is the same can be presented using graphs, verbal descriptions, mathematical illustrations, diagrams, bar charts and pictures. Moreover, other form of an alternative presentation of information is the digital storytelling. This is defined as the idea of merging the art of telling stories with a variety of digital multimedia, such as images, audio, and video (Robin, 2008). In other words, it is a classroom presentation method, wherein the instruments of technological media are used to narrate a story. DeNatale (2008) stated that storytelling is not only the integration and narration of events; it is also a way for the students to reflect and assess their thoughts and views regarding the world they live in. Hence, storytelling involves cognition as students understand complex and cyclical processes of telling and re-telling a story.

Some examples of multimedia learning are comprised of watching a video on a display screen while listening to the phrases being delivered, music and sounds being played or simply watching a PowerPoint display whilst paying attention to the explanation of the narrator. Low-tech samples of multimedia comprise of 'chalk-and-talk' exhibitions, which involve a narrator writing or sketching on a blackboard (or perhaps an overhead projector) while delivering a lecture or a textbook lesson that is accompanied by writing and photographs (Mayer, 2005).

In a study conducted by Ramadan (2011) to explore the preferences of Arabic typeface, the style, font size, page layout and four foreground/background colour combinations were evaluated in written materials. The participants were divided into three experimental groups. The first experimental group evaluated the preferred font styles by exploring the effects of four selected Arabic fonts (Simplified, Kofi, Traditional and Nassekh) that were available in Microsoft Word in order to determine which one of the four fonts the participants preferred the most. The second experimental group explored which of the three font sizes (10, 12 and 14 point) and typeface styles the learners preferred most when reading e-passages. The third experimental group examined the preferred layout and foreground/background colour combinations of online Arabic materials that had been written using a simplified font style and 14-point font size.

The results of this study showed that the 14-point font size enabled the participants to read significantly faster, with a better grasp of their reading of e-passages, which had been written using the "Simplified" font style, when compared to the participants who read using the other three styles (Kofi, Traditional and Nassekh). Additionally, it was determined that the one-column, black and white background was the best combination. Thus, the font style, font size, page layout and foreground/background colour combinations are essential factors for a designer to consider when presenting the text, even for low vision learners, to help in achieving the aims of any reading (Ramadan, 2011). Finally, teachers are advised to be aware of the visual style guide associated with the major details of colour, typeface and other aspects of design, and white space as these are beneficial, since they provide confidence to the persons involved. Similarly, Mayer (2005) found that when students are able to interact with the forms of learning presented to them, their performance in the classroom is likely to be enhanced more.

3.5.3   A Multimedia Approaches for Teaching Islamic Education Modules

In terms of the delivery of Islamic education lesson, the teacher could tell a story or give an example from everyday life that links to the verses or to the topic taught in the lesson. However, when it comes to the way of presenting Qur'an verses and the page layout, still or vivid images cannot be used to clarify the meaning of whole verses or a single word or even to provide interactivity to the page. That is because the Qur'an is the holy book for the Muslim nation and if images are used to clarify purpose it would be disrespectful to God's word. On the other hand, there are some ways to clarify the meaning of the verses or draw students' attention to specific words without the fear of disrespect to the holy Qur'an. First, one can divide the page into two parts where the first section is on the left side of the page, providing the meaning of the entire verses and all verses on the right side of the page include further footnotes for some verses (see Figure 3.4). Second, one can provide the meaning of some words on the right side of the page and write these words in a different colour in the verse. Another method could be to use different colour-coded intonation rules to provide explanation as a key at the end of the page, to which each colour refers (see Figure 3.5).

Figure 3.4: Qur'an verses with Interpretation of the Meaning

Figure 3.5: Qur'an Verses with Colour-Coded Intonation Rules.

From the foregoing discussion, it can be concluded that the way in which information is presented may help students to not only read fluently but also to apply intonation rules correctly (such as the clear pronunciation of each letter and producing it in its correct place vocally). Moreover, using different colour versions of the Qur'an that are already in print may increase student interest and help to improve their reading speed while applying intonation rules.

3.5.4   The Effectiveness of Applying Multimedia Learning

Supporters of digital storytelling believe that it can facilitate and improve classroom schematics, especially towards the cognition and motivation of students (Robin, 2008). According to Crosby and Stelovsky (1995), multimedia enables the instructors to combine writing, images, cartoons and other similar media into one bundle to exhibit comprehensive information for the learners to gain the desired results (specific curriculum objectives). Additionally, it allows the exhibition of complex procedures in a very interactive manner. Also, using digital media, may enable educators to harness the potential of the technology and use multiple modes of presentation which may increase students' engagement with the lesson and make the learning environment itself more enjoyable and interactive (Mayer, 2009). Moreover, using various and alternative forms of media may enable students to fully digest the information load and greatly helps in the ability of the students to easily comprehend the lessons they have (Mayer, 2009). In addition, the combination of words and pictures attract the attention of the students and help them increase their attention span because the students can integrate

faster the words with the pictures if there are various media of presenting information (Mayer, 2001).

Yeh and Wang's found that the combination of different forms of multimedia such as annotated words with pictures and text will help second-language learners to learn and remember English vocabulary better than if the word is presented alone or if the words are annotated with text, picture, and sound. Moreover, annotated words with text and images have been found to be the most effective way not only to learn the meaning of the word, but also to remember it in the long-term memory. In other words, it helps with the recognition of target words in both long and short–term memory and retention (Yeh and Wang, 2003). Other studies conducted by Chun and Plass (1996) examined the effectiveness of different types of annotations for vocabulary acquisition. To achieve the research aim, they examined three different ways of presenting the meaning of the word. First, it was by using text with picture. Second was by using video plus text. Finally, in the last group, the words were glossed with text only. The result of their studies show that a significantly high result was garnered from learners when words were interpreted with text and pictures compared with the video plus text and the only text groups. Similar studies conducted by Hulstijn (1993) and Knight (1994) supported Yeh and Wang and Chun and Plass, finding a higher level of accuracy than expected among foreign learners where the vocabulary had been annotated by text and picture.

However, because there are tools that enable the advanced visualization, this does not mean that teachers are guided on how to employ them (Mayer, 2005). For example, not all images are evenly efficient. It is essential that teachers realise what image best suits the words. In addition, as much as the use of various and alternative forms of media can help the students be more engaged in their lesson, there is also the possibility that too much information may harm them. Schnotz and Bannert (2003) conducted an experiment with sixty university students with the aim of exploring the effectiveness of integrated verbal and pictorial learning. They found that the construction of the graphics influenced the structure of the mental model. These students were grouped into two, in which one group learned only with the hypertext while the other learned with hypertext and different kinds of graphics. The second group performed poorly suggesting that graphics that are not task appropriate can hinder the mental model of the students. Hence, there is the term of information overload. When students are overly stimulated by the existence of too many visuals, texts and sounds, it would be difficult for them to properly process the information (Mayer, 2005; Mayer et al., 2005).

The last section illustrates the advantages and possible drawbacks of multiple representations. The following section will discuss the advantages of considering learners preferences along with its criticisms.

3.6   Learner Preferences

The three commonly accepted learning approaches are visual, auditory and kinaesthetic (Felder and Soloman, 2009). Murano and Knight (1999), emphasise that if students fit comfortably in one of these styles, it would be best for the educator to find the most basic adaptive teaching method which could benefit all types of students. However, it should be noted that the differences between students' learning approaches are more complex than this, it would become very challenging to put all these learners in one class that must accommodate all of their individual differences. Therefore, these learners could be divided into groups and placed in classes that can nurture their abilities based on their learning preferences and current capabilities. Pritchard (2009) claims that with the identification of these learning approaches, teachers can adapt appropriately and promote practical and analytical learning while providing a more dynamic approach to knowledge acquisition. Moreover, considering learning preferences enables the students to take greater responsibility adjust to the learning atmosphere since they now understand that there are methods in place that adapt to their current learning style (Pritchard, 2009).

On the other hand, learning styles are subject to various criticisms. For instance, Higgins (2013) claims that when developing student understanding it is helpful to present the lesson using multiple modes of representation, instead of grouping students according to their learning styles. This is because in most studies of learning styles, the tests and assessment were not reliable and learners' reported preferences do not necessarily relate to their actual choices. Acharya (2002) also indicated that the ability to adapt teaching methods to different learning styles can influence a learner's information processing as well as evaluate the learner's personality regarding their ability and desire to learn. Kirschner and van Merriënboer (2013) concluded that

> "When designing instruction that takes differences between learners into account, one should assess cognitive abilities rather than preferred learning styles because abilities are better predictors of how people learn most effectively. Moreover, these cognitive abilities should be objectively measured on an ordinal scale and in an objective way, rather than by subjective self-reports that are used to assign people to types on the basis of one or more arbitrary criteria". (p.6)

Furthermore, students may become successful learners, not because of adopting an appropriate style, but rather, because of how much they found the learning engaging and how much responsibility they are prepared to accept. In addition, linking students to a particular style will likely damage their motivation at school, as they need to believe that they can succeed through effort (Higgins, 2013). Furthermore, when introducing the idea of learning styles to students it is helpful to stress the importance of being able to work and learn in different ways, at different times and for different purposes (Miller, 2002; Merrill, 2000). Moreover, Riener and Willingham (2010), assert that although interests, backgrounds, and abilities differ from one student to another, they do not differ in their learning styles. Additionally, each student may have preferences about how to learn; however, the educator cannot guarantee that considering these preferences will lead to better learning outcomes (Riener and Willingham, 2010). Dembo and Howard (2007) emphasise that

> "…learning style instruments have not been shown to be valid and reliable, there is no benefit to matching instruction to preferred learning style, and there is no evidence that understanding one's learning style improves learning and its related outcomes…We urge instructors to reconsider their instructional practices, especially the advice they give students about learning styles, and base their practices on sound research" (p.107).

3.7   Conclusion

E-learning is a method of gaining new knowledge using technology. Technology has affected and influenced various groups, institutions, organizations and cultural processes. In particular, technology has changed the way education can be provided to students. The Internet has transformed the world so greatly that even the education sector has adopted new digital technologies for the delivery and development of education. Currently, technologies such as radio, television, computers, laptops, tablets and interactive whiteboards and even mobile phones are used by teachers in teaching students. The capabilities of these technologies can be used for the benefit of educational systems; however, their introduction needs to be fully planned and regulatory systems established first to ensure the effectiveness of their integration. Moreover, the successful implementation of blended learning depends on the overall teaching environment, including curriculum design and accessibility issues in the campus or distance learning environment. Furthermore, teachers need to carefully understand what online tools do well and under what conditions they perform best. Moreover, the ongoing development of the

teaching process and the teachers themselves is vital, as innovations are continuously changing the nature of work and the lives of every individual. Teachers should respond to these changes and learn to develop their teaching methods to better deliver lessons to their students. Also, careful selection of the methods and media and consideration of possible course designs are key to a successful blended learning environment.

Utilising blended learning can have many advantages for both instructors and students. Studying in such an environment gives teachers more flexibility. It also provides teachers with diverse methods with which to enhance learning materials and the learning environment. Blended learning can also increase student interaction within the lesson and with learning activities; with their engagement and motivation to learn increasing accordingly in and beyond the classroom. In addition, the use of various forms of media in presenting the lesson can help students to easily comprehend the lessons they have. The combination of words and pictures attract the attention of the students and gives them a longer attention span. Using multiple forms of presentation also enables the students to engage more with the lessons and may help in particular with the retention of information.

3.8   Chapter Summary

This chapter has discussed the relevant literature in the current research including e-learning, blended learning and multimedia learning. The next chapter will turn to the evidence from recent studies into the teaching of the Islamic education curriculum and the use of blended learning, innovative teaching methods and ICT.

Chapter Four: Review of Previous Research

4.1   Introduction

This chapter summarises some of the previous studies that have examined the use of blended learning and innovative teaching methods with a focus on teaching Islamic education curriculum in the Kingdom of Saudi Arabia. The chapter is divided into two sections:

Section One: This section systematically reviews some of the previous studies that have been conducted to examine the use of blended learning and innovative teaching methods, such as brainstorming, cooperative learning and higher order thinking skills, in Saudi Arabia.

Section Two: This section reviews a number of studies that have examined the use of blended learning in countries other than Saudi Arabia, and it compares the similarities and differences between the previous studies and the current study.

4.2   Section One: Systematic Review

The review was limited to studies that examine the use of blended learning and innovative teaching methods in Saudi education that were conducted by Saudi students in UK universities from 2004 to 2014.

4.2.1   Review Aims

The aim of the systematic review is to bring together the findings and recommendations from reviewing a significant part of existing doctoral and master's theses associated with using blended learning and innovative teaching methods in teaching aspects of Islamic education curriculum in Saudi Arabia. Thus, to shed light on the advantages and disadvantages of using blended learning and new teaching strategies and the obstacle to the successful implementation of these new methods, as making teacher aware of the obstacle and the steps to the successful implementation of ICT tools, may increase teacher confidence and motivation to integrate more technology when teaching Islamic education modules. Additionally, for this systematic review I have taken a more focused approach and have included studies that examine the use of blended learning and innovative teaching approach in Saudi schools and universities with more focus in teaching Islamic education curriculum.

4.2.2   Review Objectives

This review sought to address the following:

1. Incorporating master and doctoral theses that aim at examining the effectiveness of using blended learning and different teaching methods in teaching student aspects of the Islamic Education in Saudi Arabia.

2. Identifying the impact of using blended learning and innovative teaching methods in teaching aspects of the Islamic Education in Saudi classroom

3. Shed light on the positive and negative impact of using blended learning and innovative teaching methods in teaching aspects of the Islamic Education in Saudi classroom

4.2.3   Review Strategies

The studies included in this review were collected from E-theses Repositories (ProQuest, ethos, Durham, Exeter, and Lancaster), computerised databases, and Google Scholar and tracking reference from other papers. In addition, basic search and advanced search were used with the following search terms:

- Using ICT in Saudi Arabia.
- Blended learning.
- Education in Saudi Arabia.
- Using technology in Saudi Schools.
- Teaching Strategies in Saudi classroom

"Saudi" OR "Saudi Arabia"

AND

"Teaching methods" OR "Teaching Strategies"

Using the above search terms, a total of 855 articles were identified by search results in databases and scanning reference lists of relevant articles based on the search criteria. However, 265 articles (see Appendix C for some examples) had to be excluded due to the following reasons:

1. The use of ICT was not in Islamic Education.
2. The article was not in English language
3. Data was published multiple times
4. The full text was not available.

The set of potentially relevant articles (N = 590) was then scanned based on the following inclusion and exclusion criteria.

4.2.4   Inclusion and Exclusion Criteria

Language of report: Included studies were written in English.

Year of publication: Only Master and doctoral theses published from 2004-2014 were full text was available were included.

Type of the study: Study was included only if it is a doctoral or master thesis

Study design: Studies were included if they evaluated the use of blended learning or different teaching methods or the obstacle to the use of either of these (See Figure 4.1 below for more details in representing review stages).

4.2.5   PRISMA Flow Diagram
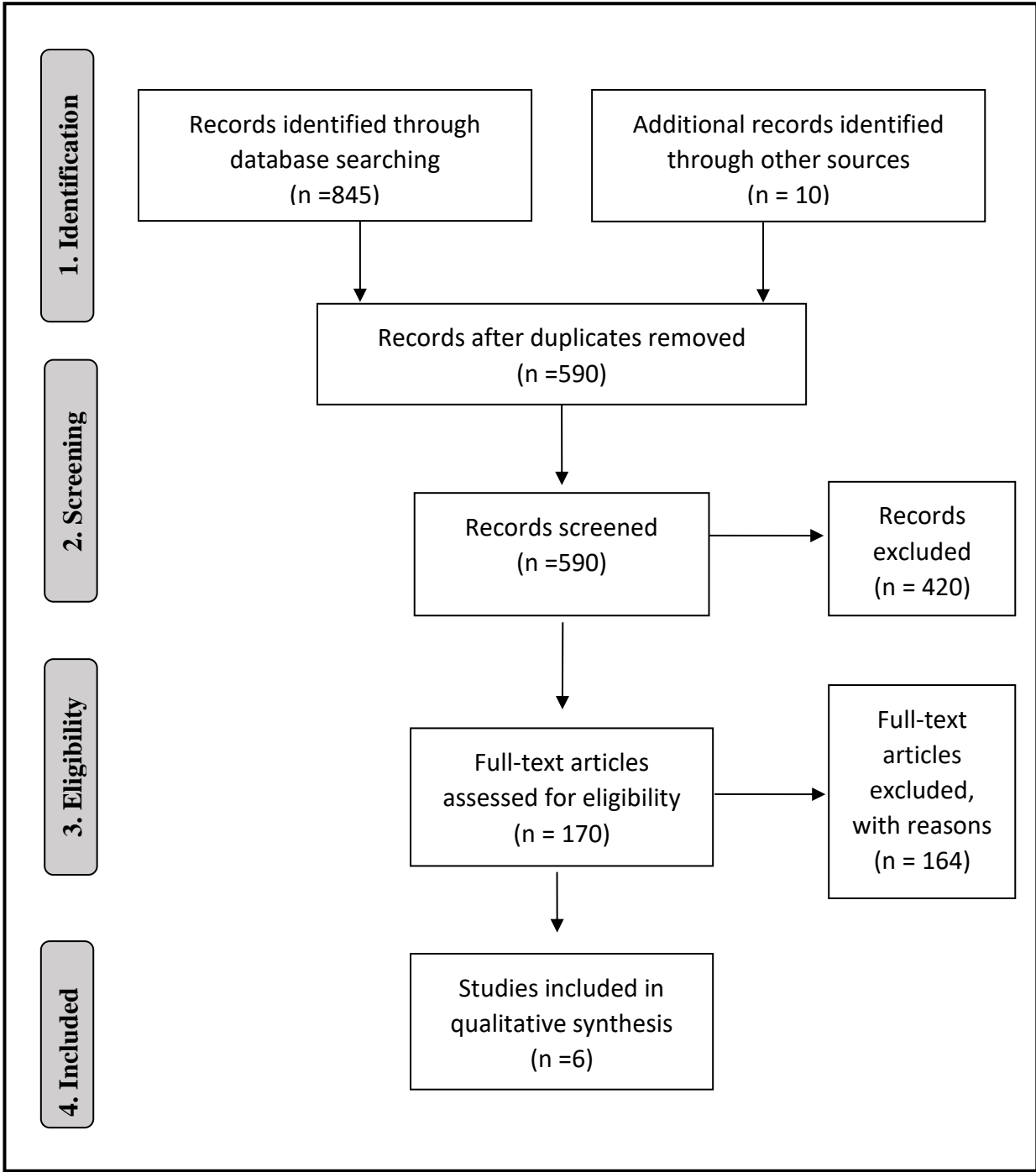
Figure 4.1: Flow Diagram of Studies Selected for Qualitative Analysis

4.2.6   Summary of the Selected Studies

The six selected studies are divided into two categories:

1.   Studies that examined the use of innovative teaching methods.

2.   Studies that examined the effectiveness of using blended learning.

4.2.6.1   First: Studies Examined the Use of Innovative Teaching Methods

Level	Author/Year	Title	Place
Primary	Alsenaidi (2012)	Electronic **brainstorming** in Saudi **Primary** education	University of Exeter
Secondary	Al-Matari (2008)	To what extent do high school Islamic education teachers in Saudi Arabia implement **innovative approaches** in their teaching? Do teacher gender, academic qualifications, and teaching experiences matter?	University of Kansas
	Algarfi (2010)	Teachers' and pupils' perceptions of, and responses to, **cooperative learning** methods within the Islamic culture courses in one **secondary school** in Saudi Arabia	University of Southampton
	Alanazi (2004)	The use of **higher order thinking skills** in Islamic education : a case study of **secondary education** in Saudi Arabia	Birmingham

Table 4.1: Summary of the Selected Studies Related to Using Innovative Teaching Methods

4.2.6.2   Second: Studies Examined the Effectiveness of Using Blended Learning

Level	Author/Year	Title	Place
University	Alebaikan (2010)	Perceptions of **Blended Learning** in Saudi Universities	University of Exeter
	Alqahtani (2010)	The effectiveness of using **e-learning blended learning and traditional learning** on students' achievement and attitudes in a course on Islamic culture: an experimental study.	Durham University

Table 4.2: Summary of the Selected Studies Related to Using Blended Learning

The above tables (4.1 and 4.2) summarise the studies which met the inclusion and exclusion criteria. This summary includes the education level of the target sample (primary, secondary and university), author name and date, study title, institution name and place. As can be seen, only a few studies have been conducted to examine the impact of using blended learning and innovative teaching methods, such as brainstorming and higher order thinking skills, specifically in relation to the teaching of Islamic education curriculum in Saudi Arabia.

The following section offers a summary of these studies, including the research title, research aims, sample and instrument used for data collection, data analysis techniques, main findings, and recommendations each researcher made for policymakers.

4.2.7   Detailed Analysis of the Selected Studies

The previous section provides a summary of the selected studies, including author name, date, title and place. Further analysis of the selected studies including title, research aims, sample, methods used for data collection and analysis procedures, the main findings, and researchers' recommendations; are summarised below.

4.2.7.1   First: Studies Related to Using Innovative Teaching Methods

Study Title: Electronic Brainstorming in Saudi Primary Education (Alsenaidi, 2012).
Study Aims
The study aims to investigate the use of electronic brainstorming in classrooms in primary schools in Saudi Arabia. To explore the students' interest in Islamic Education in primary schools in Saudi Arabia, to improve their creativity skills through electronic brainstorming and to investigate the influence of the pedagogical affordances of the electronic brainstorming method on classroom activity.
Sample
61 primary school students and 3 Islamic education teachers.
Research Instrument
The data were collected through classroom and online forum observations, teacher and student interviews, texts from the electronic brainstorming forum and pre- and post-tests.
Analysis Techniques
The qualitative data were analysed using some principles of grounded theory (the constant comparative method). While the quantitative data were analysed using the normality test to check for the distributions of the pre- and post-tests. Moreover, An ANOVA test was used for the normal distribution, while the Kruskal-Wallis test for three independent samples was used for the non-normal distribution. In addition, The Wilcoxon Signed-Rank test was used to test whether the post-test scores were significantly different from the pre-test score. Finally, the quantitative data were analysed using the Statistical Package for the Social Sciences (SPSS).
Main Findings
The observation and interview findings revealed positive differences between electronic brainstorming and verbal brainstorming and traditional methods. The use of electronic brainstorming increased student participation, motivation and creativity in the Islamic education lessons. Moreover, employing electronic brainstorming had contributed to a significant improvement of creativity skills, dialogue, research and thinking skills and engagement in learning environment where electronic brainstorming had been used. Teachers believed that the electronic brainstorming method lead to improvements in learners understanding and enabled them to construct knowledge. In addition, the use of the forum gave students freedom to generate ideas and a wide space to participate. The findings also indicated that the obstacles which may hinder Islamic education teachers from using Electronic Brainstorming include technical problems, lack of hardware and differing levels of IT skills among students, internet access, time constraints and large amount of information

in the curriculum. Finally, this study concluded that electronic brainstorming method has considerable potential to improve the Islamic Education curricula in primary schools in Saudi Arabia compared to verbal brainstorming and traditional teaching methods.

Recommendations
The research suggested that the Saudi ministry of education should: • Reduce the number of lessons per week, as it may help teachers to implement new teaching methods and to use new technologies when teaching Islamic lessons. • Encourage Islamic education teachers to practise the electronic brainstorming in their teaching. • Increase teachers' awareness of the use of digital technologies in their teaching. • Provide teacher with resources and software, which is relevant to the school curriculum. • Establish training courses for both teachers and students on how to use technology for education purpose as well as some training programs in new teaching methods such as brainstorming. • Gather data using a questionnaire from in-service teachers about their opinion on the curriculum, pedagogy and obstacles they have faced during their teaching.

Table 4.3: Study Which Examined the Use of Electronic Brainstorming

Study Title: Teachers' and pupils' perceptions of, and responses to, cooperative learning methods within the Islamic culture courses in one secondary school in Saudi Arabia (Algarfi, 2010).
Study Aims
The study aimed to examine male Islamic education teachers' and learners' perceptions of using cooperative learning in two Islamic culture classes in one secondary school in Saudi Arabia.
Sample
-Two Islamic education teachers. Two classrooms with 93 students in male secondary school.
Research Instrument
- Individual interviews with teachers before and after the training program, in the middle of the implementation stage and at the end of the project. - Focus group interviews with students before, in the middle and after the implementation. - Classroom observations.
Analysis Techniques
Constant comparison • Comparison with in a single interview. • Comparison between interviews within the same group. • Comparing interviews within the same group over time.
Main Finding
The training course delivered by the researcher on cooperative learning methods, increased teachers' knowledge and developed their understanding of the cooperative learning approach. The findings also indicated that both teachers and students benefited from using cooperative learning. For example, cooperative learning contributed to the learner-centre approach of learning and students feel it gave them much freedom to learn and to express their opinion and to develop their knowledge and understanding in the Islamic culture lessons. Participants' perceptions of cooperative learning were largely positive.
Recommendations
The researcher suggested that: • Future researcher may conduct similar studies in different school levels • Developing training programmes such as, cooperative learning, e-learning and the use of digital technologies.

Table 4.4: Study Which Examined the Use of Cooperative Learning

Study Title: To what extent do high school Islamic education teachers in Saudi Arabia implement innovative approaches in their teaching? Do teacher gender, academic qualifications, and teaching experiences matter?   (Al-Matari, 2008)

Study Aims

The study aimed to examine to what extent high school Islamic education teachers in Saudi Arabia implement innovative approaches in their teaching. The study also paid little attention to teachers" beliefs about innovation and creativity and how those beliefs may influence teachers" perceptions as well as their choice of instructional methods and tasks.

Sample

Participants were randomly selected.
107 male Islamic education teachers and 67 Female Islamic education teachers from seven high schools in Saudi Arabia formed the sample of the study.

Research Instrument

The data were collected through two questionnaires:

The first questionnaire consisted of five subscales; (1) Static –Dynamic; (2) Easy–Hard;   (3) Sanctity of the Discipline; (4) Student Learning and Achievement; and (5) Teacher Role as Mentor. Moreover, this questionnaire aimed to gather data about the Pedagogical Beliefs of Islamic education Teachers.

The second questionnaire also consisted of five subscales: (1) Freedom of Opinion; (2) Acceptance of Innovation; (3) Innovation in the Content of Islamic Curricula Discipline; (4) Innovation in the Methods of Teaching; and (5) Innovation in the Method of Assessment. Moreover, this questionnaire aimed to gather data about the innovative approaches in teaching Islamic Curricula.

A Likert type five points scale (1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree and 5= Strongly Agree) were used for collecting responses.

Analysis Techniques

Statistical analysis includes standard deviations, One-way analysis of variance (ANOVA), and correlation coefficients were employed.

Main Findings

The finding of the study showed that there was a strong relation between teachers' beliefs and using of innovative teaching methods. Moreover, Sanctity of the Discipline plays a huge role in determining acceptable innovation from unacceptable innovation. Furthermore, no statistically significant differences were found among Islamic education teachers who used innovative approaches with regard to a number of years teaching experience, academic qualifications, and teacher gender.

Recommendations
The researcher suggested that: • Teachers need to have a clear vision, awareness and understanding of what innovation and creativity is and entails in order for teachers to fully comprehend how creativity and innovation can be enhanced in the classroom. • The Educational Supervision Department and the General Curricula Department in the Ministry of Education should develop training courses for teachers on examples of innovative teaching approaches such as, critical thinking. • It is recommended that the current study be applied in other types of high schools, such as school of the Memorization of the Holy Quran, the private schools, and the international schools. • Teacher education institutions should work to uncover many of the teachers' beliefs about the nature of teaching and learning and understanding how these teachers' beliefs interact with the content and pedagogy of the existing teacher education programs.

Table 4.5: Study Which Examined the Extent of Using Innovative Approaches

Study Title: The use of higher order thinking skills in Islamic education: a case study of secondary education in Saudi Arabia (Alanazi, 2004).

Study Aims

The study aimed to introduce Bloom's taxonomy (three higher-order thinking skills: analysis, synthesis and evaluation) in Islamic Education settings in order to make learning and teaching more effective in teaching Islam at year ten.

-To help learners develop a reflective Islamic faith and practice.
-To help students intelligently articulate their understanding of Islam and develop their personal perspective on issues in Islamic Education.

Sample/Research Design

A qualitative case study approach with an element of action research.

Students from a selected **secondary** school in Riyadh.

Research Instrument

The data were collected through recording of the lessons, classroom observations, students' activities and interviews.

Researcher recorded each lesson and used diary in which he recording his own observations about the students' progress and reactions to the teaching styles in the classroom.

Students were interviewed prior and after each lesson in order to understand their overall views on the teaching lessons, and to ascertain the impact of teaching on their personal learning and faith development. In addition, students recorded several activities that are required in the classroom using notebooks, to show their reflections that they put into their learning diary.

Analysis Techniques

Translated data into English.
Coding and labelling collected data.
Generate categories and themes.
Presented data in a narrative form.
Interpreting the findings.

Main Finding

The use of higher order thinking:
- Improved students' achievement compare to that of student who were taught with traditional method.
-Helped student to become active and involve in the lesson by discussing and listening to other student views, and became more self-organized learners (monitoring and critically reflecting upon their own learning processes).
- Improved the learning process and helped students developed a positive attitude towards learning and they developed the skills necessary to be part of collaborative learning process.
-Contributed to the development of a reflective thinking where the students learn to reflect on their own faith and increase their understanding and knowledge of Islam.
- helped students to develop their own perspectives on religious topics and demonstrating a reflective attitude towards faith.
- Increased, students' knowledge and understanding of the studied topics.

Recommendations
The researcher suggested that: • Thinking skills should be an essential part not only of Islamic Education curriculum but also other subject curriculum. Also, higher order thinking skills should be on the syllabus in teacher training program. • The Islamic Education topics should not be introduced only for sake of conveying information, but should facilitate students' engagement and reasoning with studied subjects. Moreover, a thinking component should be added in each of the topics. • Islamic Education text books and the general and specific aims of Islamic Education should be revised in order to reflect a thinking oriented mode of learning and teaching at all levels of compulsory schooling. • The policy makers should make thinking skills a priority, while teachers' lesson plans in each subject should be presented to the students as having a specific connection with particular thinking skills. Teachers must be trained in teaching the basic thinking skills and higher order thinking skills and should be able to make links while constructing their plans. • Teaching Islamic education should become learner-centred by encouraging student to ask question rather than teacher-centred. Thus, to increase learners' knowledge and understanding of Islam and students will begin to think about different aspects of Islam. Consequently, the learning process will accelerate.

Table 4.6: Study Which Examined the Use of Higher Order Thinking Skills

4.2.7.2   Second: Studies Related to Blended Learning

The following tables summarise two studies which conducted to investigate the effectiveness of using blended learning.

Study Title: The effectiveness of using e-learning blended learning and traditional learning on students' achievement and attitudes in a course on Islamic culture: an experimental study (Alqahtani, 2010).
Study Aims
The study aimed to investigate the effectiveness of applying online learning, blended learning and traditional learning on students' achievements in teaching the ethics unit from an Islamic culture course at Umm Al-Qura University in Saudi Arabia.
Sample/ Research Design
A total of 148 students formed the sample of the study, participants were randomly divided into two experimental groups and one control group; e-learning approaches was used with the first experimental group and blended learning was used with the second experimental group and traditional face to face learning was used with the control group. All groups of students were taught the same content. - Researcher Redesigned a chosen unit in a form of asynchronous virtual website using the 'Moodle' program.
Research Instrument
The data were collected using Interview and questionnaire. Moreover, pre- and post- tests were used with all groups to assess the students' prior knowledge and to find out the connection between the ways of the delivery and learning outcomes. Thus, to compare their achievement after they had taken a course with different delivery methods.
Analysis Technique
Using the statistical package for social sciences (SPSS) the following tests were carried out: - Cronbach Alpha Coefficient.   - Chi-Square test.   - One- way ANOVA test.   - Analysis of Covariance (ANCOVA).   - Pearson correlation coefficient.
Main Findings
The result of the study showed that, generally, there was a significant relationship between the mode of delivery and students' achievement. However, when the researcher compared the difference between students' achievement, he found that there were no major differences between students using the e-learning approach (n = 43) and students using the traditional learning approach (n = 50), while there was a significant difference in the blended learning group (n = 55) compared to the achievement of e-learning and traditional learning groups.

Recommendations

The researcher suggested that:
 	
 • The tutors at Saudi university should not limited their teaching method to lecturing when teaching Islamic culture courses, it should involve other methods of teaching such as blended learning and they should encourage students to develop their skills and to be independent learners.
 • The rest of Islamic culture course (101) units should be designed electronically and the developer of the curriculum in Saudi universities should incorporate courses specially designed to enable learners to take advantage of modern technology.
 • In order to insure a successful use of virtual classrooms the policy maker should consider:
      • Providing a reliable infrastructure as a prerequisite for introducing this type of modern educational approach.
      • Both learners and their instructors should be trained to meet the requirements of the new approach.

Table 4.7: Study Which Examined the Use of E-learning, Blended Learning and Traditional Learning

Study Title: Perceptions of Blended Learning in Saudi Universities (Alebaikan, 2010).
Study Aims
The study was conducted in King Saud University in Riyadh to understand how Saudi female undergraduate students and their lecturers experience blended learning and its future in Saudi Arabia. It also aimed to identify critical factors affecting students' and lecturers' views of the blended learning environment by discovering participants' opinions regarding the advantages of blended learning and the challenges associated with it.
Sample
The study consisted of seven lecturers and 68 students.
Research Instrument
Qualitative methods include Focus groups interviews, questionnaires and observations, Diaries and reflective essays, were used to collect data from both lecturers and students.
Analysis Technique
The qualitative data was analysed in the form of explanation and interpretation of the participants" perception of blended learning as well as thematic analysis to identify themes within the data using computer-assisted data analysis software (NVivo).
Main Findings
The blended design was 30% face-to-face (F2F) instruction and 70% online instruction. The major conclusion of the study was that applying blended learning in higher education in Saudi Arabia will greatly contribute to the development of Saudi higher education. In addition, developing training programs for lecturers and students prior to the course was essential to addressing their lack of IT skills. Moreover, it had been found that the blended learning environment offers the flexibility for Saudi female students to continue their higher education while maintaining their own cultural values and traditions.
Recommendations
The researcher suggested that: • Institutions need to endorse different models of blended learning according to the nature of the courses instead of one typical model for all courses. • Prior to enrolment in a blended learning course, students' technical skills should be assessed.

Table 4.8: Study Which Investigated Female Lecturers Perceptions of Blended Learning in Saudi Universities

Summary of the above Tables

The identified studies either examined the effectiveness of blended learning or investigated the effectiveness of using innovative teaching methods, such as cooperative learning, electronic brainstorming and higher order thinking, in Saudi Arabia. In addition, the target participants involved in the reviewed studies varied between students only, students and teachers, and university students and lecturers. The reviewed studies also differed in the mode of learning. Two studies used blended learning (face-to-face learning with online learning), while three other studies have used other teaching methods, such as higher order thinking skills, cooperative learning and electronic brainstorming. However, it should be noted that each study used only one instruction method.

The reviewed studies also differed in the academic levels of the participants. In this regard, one study was contacted in a primary school, three in secondary school and two in university.

With regard to the data collection in the reviewed studies, researchers collected data using a variety of tools, including questionnaires, interviews and classroom observations. Moreover, studies varied between qualitative inquiry and mixed methods study. The Statistical Package for the Social Sciences (SPSS) was used by the majority of researchers to analyse the quantitative data.

Two of the reviewed studies examined the effectiveness of using blended learning and indicated positive results. Alqahtani (2010) found a significant difference in the blended learning group compared to the achievement of e-learning and traditional learning groups. Alebaikan (2010) found that the blended learning environment offers flexibility for Saudi female students to continue their higher education while maintaining their cultural values and traditions. Additionally, the four studies which examined the effectiveness of using innovative teaching methods also revealed positive results. The use of the electronic brainstorming method increased student participation, motivation and creativity in the Islamic education lessons and contributed to a significant improvement in creativity, dialogue, research and thinking skills. Islamic education teachers believed that cooperative learning had contributed to the learner-centre approach to learning. Moreover, students felt that applying cooperative learning gave them much more freedom to learn and to express their opinion and to develop their knowledge and understanding in the Islamic culture lessons. Similarly, the use of higher order thinking skills improved the learning process and helped students developed a positive attitude towards learning; they developed the skills necessary to be part of the collaborative learning process. Only the study by Al-Matari (2008) concluded that there was a strong relation between teachers'

beliefs and using innovative teaching methods. Moreover, the sanctity of the discipline plays a huge role in determining acceptable innovation from unacceptable innovation.

The recommendations that most researchers made include developing training courses for both teachers and learners, reducing teachers' workload, and providing hardware and software in schools. Some researchers have also emphasised the importance of preparing teachers to use technology and teaching methods, such as brainstorming and cooperative learning.

4.2.8   The Similarities and Differences Between the Current study and the Reviewed Studies

The reviewed studies differed from the current study in many aspects, such as the research aims, data collection methods, data analysis methods and main finings. However, most of the recommendations that each research study suggested for policymakers and future research studies appear to be consistent with the recommendations that the current study makes. The following tables summarise these similarities and differences.

Table 4.9: Summary of Previous Studies According to Study Aims

Author / Date	Research Aims	Aims of Current Study
Alsenaidi (2012)	Aimed to investigate the use of electronic brainstorming in classrooms in primary schools in Saudi Arabia	This study examines the perception of effectiveness of using a blended learning approach (different forms of technology, traditional teaching methods and teaching aids, active learning strategies, and collaborative learning) in teaching students Islamic education modules in Saudi Arabia. Furthermore, it investigates participants' perspectives on whether a blended approach is suitable for teaching all Islamic education modules or if only traditional methods are ideal for teaching some of these modules. In addition, it sheds light on the key factors that motivate Islamic studies teachers to use a blended learning approach as well as the obstacles that could stand in the way of implementing a blended learning approach.
Al-Matari (2008)	Aimed to examine to what extent high school Islamic education teachers in Saudi Arabia implement innovative approaches in their teaching	
Algarfi (2010)	Aimed to examine the development and implementation of cooperative learning in two Islamic culture classes in one secondary school in Saudi Arabia	
Alanazi (2004)	Aimed to introduce Bloom's taxonomy (three higher-order thinking skills: analysis, synthesis and evaluation) in Islamic Education settings in order to make learning and teaching more effective in teaching Islam at year ten.	
Alebaikan (2010)	Aimed to identify critical factors affecting students' and lecturers' views of the blended learning environment by discovering participants' opinions regarding the advantages of blended learning and the challenges associated with it.	
Alqahtani (2010)	Aimed to investigate the effectiveness of applying online learning, blended learning and traditional learning on students' achievements in teaching the ethics unit from an Islamic culture course at Umm Al-Qura University in Saudi Arabia.	

Table 4.10: Summary of Previous Studies According to Data Collection Method

Author / Date	Research Instruments	Methods Used In The Current Study
Alsenaidi (2012)	classroom observations teacher and student interviews texts from the Electronic Brainstorming forum Pre- and post-tests (mixed-methods)	A mixed-methods approach was used for data collection including qualitative (lesson observations and interviews) and quantitative (online questionnaires) methods.
Al-Matari (2008)	Questionnaires (mixed-methods)	
Algarfi (2010)	Individual interviews Focus group interviews with students Classroom observations (qualitative)	
Alanazi (2004)	classroom observations Interviews (qualitative)	
Alebaikan (2010)	Focus groups interviews questionnaires and observations Diaries and reflective essays (qualitative)	
Alqahtani (2010)	Interview and questionnaire Pre- and post-tests (mixed-methods)	

Table 4.11: Summary of Previous Studies According to the Data Analysis Method

Author / Date	Analysis Techniques	Data Analysis Method Used In The Current Study
Alsenaidi (2012)	Normality test ANOVA test was Kruskal-Wallis test Wilcoxon Signed-Rank test	
Al-Matari (2008)	standard deviations One-way analysis of variance ANOVA, and correlation coefficients	
Algarfi (2010)	Constant comparison	In the data analysis phase, both a thematic analysis and a descriptive statistics analysis include factor analysis using the Statistical Package for the Social Sciences (SPSS) was employed to facilitate the interpretation of quantitative data.
Alanazi (2004)	Thematic analysis	
Alebaikan (2010)	Thematic analysis using computer-assisted data analysis software (NVivo)	
Alqahtani (2010)	Cronbach Alpha Coefficient Chi-Square test One- way ANOVA test Analysis of Covariance (ANCOVA) Pearson correlation coefficient	

Table 4.12: Summary of Previous Studies According to researchers' Recommendations

Author/ Date	Recommendations				
	Training Courses for Teachers	**Training Courses for Students**	**Increase Teachers' Awareness**	**Provide Resources**	**Using Various Teaching Methods**
Alsenaidi (2012)	✓	✓	✓	✓	✓
Al-Matari (2008)	✓		✓	✓	✓
Algarfi (2010)	✓	✓	✓	✓	✓
Alanazi (2004)	✓			✓	✓
Alebaikan (2010)	✓	✓		✓	✓
Alqahtani (2010)	✓	✓		✓	✓
Current Study	✓		✓	✓	✓

4.2.9   Comparison and Reflection

4.2.9.1 Research Aims

The aims of the current study are broader than all the reviewed studies; the current study examines Islamic studies teachers' perceptions of the effectiveness of blended learning on the delivery of the curriculum and students' achievements. It also examines the factors that may encourage Islamic studies teachers to use a blended approach and what may hinder teachers from using such a method. Thus, the current study has combined what could be examined in two or more research studies.

4.2.9.2   Research Instruments

- With regard to the data collection methods, only one study used questionnaires, interviews and classroom observations; the study was qualitative. In contrast, the current study used a questionnaire, observation and interviews to gather qualitative and quantitative data from participants.

- In most of the reviewed studies, the researchers used SPSS to analyse the quantitative data, but none of them used factor analysis. In the current study, however, factor analysis was used to classify the obstacles which may hinder Islamic studies teachers from using a blended approach and to identify which factors prevent them from using a blended approach.

4.2.9.3   Main Findings and Recommendations

- In the reviewed studies, there was a consensus on the importance of training teachers to use technology and new teaching methods. Some researchers emphasised the importance of increasing teachers' awareness about the benefits of using technology and teaching methods such as electronic brainstorming; this is because it may encourage teachers to integrate technology into their lessons and to use innovative teaching methods when teaching Islamic lessons. Similarly, the current study indicated that the frequent use of technology and active learning strategies (along with receiving training courses that impart basic information on fixing common breakdown problems associated with technology usage) are likely to increase the level of the teachers' confidence, and the level of technology usage when teaching may increase accordingly.

- With regard to the teachers' beliefs, only one researcher emphasised the need to uncover Islamic studies teachers' beliefs toward using innovative teaching methods. Similarly, the current study found that the fear of undermining the respected status of the academic content may hinder Islamic studies teachers from using a blended approach. Yet, concern is still present among Islamic studies teachers.

- The range of the recommended training courses for both per-service and in-service teachers include e-learning, blended learning, the used of ICT and examples of innovative teaching methods such as cooperative learning and critical thinking.

4.2.10 Summary of the Systematic Review Steps

Step One: I started with the searching of online databases and only master and doctoral theses written in English language were full text was available were included in this review.

Step Two: the content of the selected material was scanned to apply the inclusion and exclusion criteria.

Step Three: all the identified studies fall into two main categories: blended learning and innovative teaching methods.

 Step Four: extracted data from each included study.

Step Five: analysed and compared the findings

The next section will summarise some of the studies that have examined the effectiveness of applying blended learning when teaching various subjects in countries other than Saudi Arabia.

4.3   Section Two: Studies Examining the Effectiveness of Using Blended Learning

This section summarises the research that has been conducted to examine the effectiveness of applying the blended learning model in different countries and for teaching different subjects. The summary focuses on the aims of the study, the blended learning model, the methods used for data collection and the data analysis techniques, and provides a summary of the main findings.

4.3.1   Research Examining the Effectiveness of Using Blended Learning

Tosun (2015) investigated the effects of blended learning in teaching vocabulary, as well as students' perceptions towards using a blended learning strategy in learning vocabulary. A total of 40 intermediate level students participated in the study. They were divided into an experimental and a control group. The blended learning model involved face-to-face interaction and the use of Web 2.0 and digital tools (TV series, short video films and newspapers). The data were collected using semi-structured interviews and pre- and post-tests. The data were analysed using an independent t-test to calculate the post-test scores. The study revealed that students were satisfied with the blended learning approach, which they preferred to the traditional face-to-face learning. However, Tosun (2015) found that using blended learning did not increase either students' achievements or motivation to spend more time studying new vocabulary.

Sadeghi et al. (2014) conducted a quasi-experimental study to compare the effect of the traditional lecture method and blended learning method on students' learning and satisfaction. A total of 93 students (four classes) from the Public Heath School at the Tehran University of Medical Sciences, Iran were divided into two groups, 45 students studied according to the traditional lecture method and 48 students (the experimental group) studied through a blended learning form (lectures and e-learning). The experimental group, in addition to receiving educational content through lectures, were sent other materials via email. Furthermore, the educational materials were available on a blog which was designed by the researcher. Pre- and post-tests, which were undertaken through e-questionnaire, were used to compare the learning outcomes before and after the course. In addition, the electronic questionnaire was used to collect data from participants in order to investigate learners' satisfactions and perceptions on both lecture and blended learning methods. The data were analysed using paired t-test, ANOVA and descriptive statistical. The findings revealed that blended learning increased students' knowledge and attention.

Chen and Huang (2009) investigated how blended learning has influenced grade six students of various abilities in an elementary school in Taiwan in terms of their achievements regarding environmental education. The study lasted for four weeks and consisted of 12 classes. Pre- and post-tests were used to examine the effectiveness of blended learning in improving students' achievements, and questionnaires were used to collect the experimental students' opinions on blended learning. Students were divided into experimental and control groups, with a total of 31 students in each group. A t-test was used to compare the results from these two groups. The findings showed that there was no significant difference in students' scores in the control group as compared to those in the experimental group. However, the acceptance of blended learning methods by low-ability students was higher than those of high- and middle-ability students. This could be attributed to the lack of motivation and attention amongst low-ability students. Finally, it was found that applying blended teaching methods for low-ability students not only increases student curiosity and their learning motivation but also supports their comprehension ability.

Korkmaz and Karakus (2009) sought to determine the impact of a blended learning model on student attitudes towards a geography course, as well as on their critical thinking skills. A total of 57 students, who were divided into a control and an experimental group, at Kırşehir High School in Turkey participated in the study. The experimental group were taught the subjects of

Soil and Plant Geography through a website which comprised various visuals and animations and their classes were held in a computer lab with one computer for each student. The learning activities for the experimental group included exercises, individual study, homework and group work. While the traditional learning model (a face-to-face learning environment which included lectures and questions and answers) was used for the control group. The data were collected through a literature review, the Geography Attitude Scale, and the California Critical Thinking Disposition Inventory with Cronbach Alpha values of 0.92 and 0.88, respectively. The data were analysed using a statistical approach that included percentage, arithmetic mean, ANOVA and t-test. The findings highlighted that the blended learning approach was the most effective method in the enhancement of student attitudes towards geography courses. Furthermore, it also contributes to higher critical thinking dispositions and the levels of students when compared to the traditional mode of learning.

Yapici and Akbayin (2012) examined the effect of a blended learning model on high school students' achievements in biology and on their attitudes towards the Internet. The 107 participants were divided into control and experimental groups. In addition, pre- and post-tests were used to determine the effect of the blended learning model. The experimental group was taught the biology course using a website, while the control group was taught using traditional teaching methods. The results indicated that applying a blended learning approach contributed significantly to the students' scores in the experimental group as compared to the scores in the control group. Moreover, students' attitudes in the experimental group towards the Internet improved significantly.

Meejaleurn et al. (2010) attempted to determine the quality of online learning for a Grade 9 group activity by using blended learning with respect to information communication and network systems. It also aimed to evaluate students' achievements and satisfaction after finishing the online lessons. A total of 35 students were involved in the study. The construction of online learning was conducted through a mode of group activity that used blended learning. Its steps included:

A. Categorising the Contents

In this stage, the brainstorming approach was used to create the contents of the lesson. This was followed by categorising the contents to produce the content network chart which indicated the sequence of the contents in logical order.

B. Lesson Design

In this stage, students were divided into groups of three or four. Students were asked to share their opinions and learning resources. Students actively encouraged each other and the high-ability students helped the low-ability ones.

C. Unit Development

The content was written and verified by a specialist in curriculum development. A test comprising 30 questions was conducted for the 30 students who had completed the lesson.

D. Development of Online Learning

The online learning lesson was developed through 'Moodle'.

E. Evaluating Online Learning

The evaluation was conducted to evaluate whether or not the online system could meet the learning objectives. The quality of the online lesson was checked by experts in content and media production before it was initially used with the sample group.

The data were collected using pre- and post-tests. The data were analysed using the dependent t-test to compare the learning achievements. The findings revealed that the online learning material, including the use of the media and the presentation of the information, was of very good quality and students' achievements were higher after using the online learning module. Furthermore, the participants were also satisfied with this type of learning.

Hoic-Bozic et al. (2009) examined the use of a blended e-learning model based on combining collaborative learning, problem-based learning and independent learning. Moreover, the blended e-learning approach consisted of a face-to-face environment and online learning using a learning management system (LMS). Learning activities included a hypermedia web application with multimedia elements. A course entitled '*Teaching Methods in Information Science*' was designed for the undergraduates. The course focused on improving students' skills in ICT by improving teaching methods and mixing collaborative learning and problem-based learning. In addition, after studying this course, students should have been able to recognize various types of ICTs, such as the Internet and hypermedia, and be able to use them in education. Moreover, they should be able to plan, prepare and develop online courses, while taking into account the use of good design techniques. Fifteen to 25 senior students on the undergraduate program in Mathematics and Informatics at the Department of Informatics, University of Rijeka (Croatia) formed the population of the study. The results indicated that the students accepted the new online learning environment and that they were satisfied with the mixture of methods.

Moreover, they achieved more than what was expected of them and they liked the freedom to access the lesson materials and forum at any time and the opportunity to communicate with a teacher. Additionally, they benefited from learning from each other; for example, if a question was answered on the forum, then everyone could read the answer. However, despite all these acknowledged advantages, the participants did not think that they learned as much as they would have in a traditional environment.

Taradi et al. (2005) investigated the effect of blended learning on student learning outcomes (knowledge, skills and attitudes) in acid-base physiology. The blended learning model combined web-based learning, problem-based learning and collaborative learning. To support the problem-based learning a web-environment was designed using Web Course Tools (WebCT) software package. Moreover, the combination of the three methods could support active learning and possibly help learners to achieve meaningful learning outcomes. A total of 121 second year medical students at the University of Zagreb in Croatia formed the population of the study. The participants were divided into two groups, the first group were taught the course using traditional teaching methods (face-to-face and problem-based learning), while the second group were taught through a WebCT software package that combined web-based learning, problem-based learning and collaborative learning. Students were required to work in small groups using problem-solving activities in order to develop their understanding. The lectures were integrated with static images (photographs and pictures) and interactive services (flash interactive animations and calculators) and self-assessment features with immediate feedback. The aim of the course was to help students acquire a deeper understanding of the subject. The effectiveness of blended learning was measured in terms of students' learning outcomes and satisfaction. The data were collected through satisfaction questionnaires, and formative and summative assessments. Moreover, the data were analysed using descriptive statistics and t-tests. The findings indicated that the students showed a positive attitude to the blended learning environment and there was a statistical significance difference in learners' satisfaction between the control and experimental groups. Additionally, the study found blended learning increased students' achievements.

Wang (2009) used quantitative and qualitative methods in order to gain informative data on the students' perspectives regarding the effectiveness of their instructors' strategies in e-learning teaching. The students who participated in the study were volunteers and were from various departments in several colleges. Students were asked to answer open-ended questions regarding

the effectiveness of the e-learning strategies of their teachers. The data obtained were from students' descriptions of the e-learning strategies that their instructors used while administering the blended courses. The researchers highlighted quotes from their questionnaires and sorted them into categories. The categories were then used to code the students' responses, both in terms of the open-ended questions and the eight focus-group interviews involving 33 students. SPSS was employed to analyse the data. The findings indicated that the majority of respondents felt that the course materials provided online were the most useful and the most effective strategy used by their instructors. The main reason the students highlighted was that the materials could be easily viewed and reviewed once they were posted online. Furthermore, 28% of the questionnaire respondents also considered audio and video materials to be an effective blended learning strategy. Five of the eight focus groups indicated that online audio/video presentations of lessons, student reports, commercials, and other products were very helpful in their learning. The repeatability of viewing was the primary reason that students felt this was effective. Twenty-one percent of the questionnaire respondents and three focus groups considered the use of synchronous interactions to be an effective method and strategy in blended learning. Synchronous interactions primarily come in the form of discussion threads or forums in which students can interact with their teachers and classmates more frequently. Also, they can easily refer to previous posts, if necessary. However, the questionnaire respondents differed from the focus group participants regarding asynchronous interactions, which included bulletin boards, emails, questions and answers and collaborative student projects. Only a few of the questionnaire respondents believed that this method was effective, while six out of the eight focus groups believed the method was effective. In addition, the respondents believed that the effective strategies for blended learning included synchronous distance teaching, monitoring computer screens, roll-calls and the demonstration of practical operations.

Al-Ghamdi (2011) assessed the effectiveness of blended learning in teaching PowerPoint to high school students. The study also sought to determine the difficulties that students may face when they are studying such software, as well as suggesting solutions to overcome the problems. A questionnaire was developed to ascertain the difficulties faced by students when they learn to use PowerPoint in a traditional learning environment. Post-test results and observations were used to examine the effectiveness of blended learning. PowerPoint was taught by means of an electronic application that was designed by the researcher in the form of a website. The sample was 394 secondary school students, who were divided into a control and an experiment group, with equal numbers in each group. The results indicated that there was a significant difference

in students' achievements between the control and experiment groups. The students' difficulties in studying PowerPoint in a blended learning environment consisted of the following: first, the information in their books had not been explained in an accessible way. Second, there were difficulties in the time it took to learn the necessary computer skills; and finally, the accessibility of computers and the internet. Al-Ghamdi (2011) proposed that a way to solve these problems is to offer the lesson materials in a more attractive and interactive way. Additionally, the teacher must ensure that students properly apply their learnt skills and that they have mastered each skill before moving to a new one. Finally, the research suggested that it is essential to apply blended learning in a teaching curriculum, and it is essential to train teachers how to use this approach.

Becta (2008) in their study titled "Using Information Communication Technology to Develop Critical Thinking with Secondary RE (Religion Education) Students," the main research Question was: How can the Internet help someone experience aspects of a place of worship? Students in their eighth year of school evaluated two web-based virtual tours of the Hindu temples. An interactive whiteboard was used by the teacher to introduce the two virtual tour websites and show the students where the direct links to these websites were on the school's computer network. Students worked in pairs, and the class then presented their suggestions using an interactive whiteboard. After that, the class chose either word processing or desktop publishing tools in order to produce a draft proposal of some suggestions about the elements that could be used to design good websites intended to show the purpose of a place of worship. The major findings of the experiment were that using interactive whiteboard enables the students to access the required websites easily and quickly, and that it also enables them to effectively discuss and share their ideas with their team. In addition, the students were able to participate in a rewarding form of religious expression. Using technology motivated the students and developed their RE learning skills. Moreover, this project encouraged the students to view the Internet critically.

Kenney and Newcombe (2011) conducted research using a blended learning approach to improve learners' participation, preparation and understanding, as well as to promote active rather than passive learning in large-sized, undergraduate courses. The study also aimed to measure student and teachers' perceptions of the application of a blended learning approach and to provide information to other institutions interested in using blended learning techniques. The blended learning instruction was a combination of face-to-face sessions and online learning

activities. One unit on human development was selected and supplementary learning resources such as PowerPoint presentations, video clips, and websites, were posted on Blackboard (the university's course management system). Students also participated in an online discussion group. The participants were divided into three groups. The first group consisted of 60 students randomly selected as the experimental group, while the second and the third group were control groups with 60 students in one group and 30 students in the other group. This approach was used to ascertain if class size made any difference. The researchers sought to answer the following five questions:

1. Did the blended approach improve student learning?
2. Did the blended approach increase students' active involvement in the course and engagement in the course material?
3. Did the students feel more prepared for in-class activities after learning the content online?
4. Did the blended approach increase student participation during the face-to-face classes?
5. Did the blended approach increase student interest in the material and overall satisfaction with the course?

The data were collected through a unit exam, a survey, observations and tracking statistics of students' viewing of the course materials that were available online. The findings indicated that students in a blended learning environment had a slightly higher score than those using non-blended learning. In other words, students learning outcomes were increased as a result of using blended learning. Moreover, 75% of students who responded to the survey believed that blended learning contributed to their learning and more than 50% felt more engaged in the course material using the blended learning approach. In addition, blended learning increased students' preparation, participation and raised learners' interest in the course material. Fifty-nine percent (59%) of the students believed that the blended learning approach helped to promote interest in the course material, while 75% indicated that the blended approach helped them to go more in-depth into the topic. Furthermore, this method helped students interact more easily with their classmates and to develop new skills, including time management, organisation, self-discipline for learning and increased proficiency in the use of technology for learning purpose.

4.3.2   Summary of the Main Findings

The review of the literature in relation to examining the effectiveness of applying blended learning strategies in teaching different subjects finds that the majority of the studies were not conducted in Arab countries. In addition, the studies varied between qualitative and mixed methods approaches. Moreover, they examined different modes of delivery, such as solely online learning or solely traditional learning, or comparing blended learning where online learning is combined with face-to-face learning or online learning is blended with face-to-face and collaborative learning. In addition, one study examined the use of a blended e-learning model based on combining collaborative learning, problem-based learning and independent learning (Hoic-Bozic, 2009). Furthermore, the literature examines the impact of applying blended learning strategies in teaching different subjects, such as geography, biology, information communication and network systems and ICT. However, only a few studies have been conducted specifically in relation to religious education. For example, Becta (2008) investigated teachers using an interactive whiteboard to introduce two virtual tour websites in order to ascertain how the Internet can help someone experience aspects of a place of worship.

Moreover, the majority of these studies revealed that applying blended learning strategies yielded positive results. The approach can help students build relationships, make decisions and brainstorm, particularly in group work activities (Littlejohn and Pegler, 2007; Macdonald, 2008; Moskal et al., 2012). It also helps to clarify concerns and consolidate learning. More importantly, blended learning provides an opportunity for learners to meet with their peers (Moskal et al., 2012). It gives students a variety of choice and increases students' achievement and their interest and motivation to learn. In terms of teachers, it provides a wide range of teaching methods to enhance learning materials and the learning environment, as well as access to wider up-to-date resources. However, several researchers found that there was no significant difference in teaching in a blended environment as compared to teaching in a traditional learning environment. However, students were generally satisfied with the new teaching and learning approaches (Smyth et al., 2012; Hoic-Bozic et al., 2009). This suggests that the advantages of applying blended learning outweigh its disadvantages.

The next section explains the similarity and differences between previous studies and the current study in order to shed light on the importance of the current research.

4.3.3   The Differences between the Current Study and the Previous Studies

The studies reviewed above differ from the current study in many aspects, particularly:

- the blended learning model used;
- the study aims; and
- the sample and context.

Details about these differences are as follows:

1. The subject of the current study is the Islamic education curriculum in Saudi primary schools, whereas the studies reviewed examined the effectiveness of using a blended approach in teaching other subjects, such as geography, biology and ICT.

2. Most studies reviewed did not provide a sufficient description of the blended learning model; very few studies, such as Hoic-Bozic, (2009), even mentioned the elements of the blended learning model. However, in the current study, I endeavour to clearly explain the four elements of the blended learning model, which may help Islamic studies teachers achieve specific curriculum objectives when teaching aspects of the Islamic education curriculum.

3. Most of the studies reviewed examined the effectiveness of blended learning on students' achievements by comparing the learning outcomes of the experimental with the control group. Only a few studies examined either learners' or teachers' perceptions of using blended learning. In contrast, the current study investigates Islamic studies teachers' perception of the delivery of Islamic education lesson using a blended approach, as well as investigating the benefits accrued from applying such methods to learners and to the delivery of the curriculum. Additionally, the factors which motive Islamic studies teachers to use a blended approach as well as the factors that inhibit them from using such methods are examined in the current study.

4. The data collection methods used in the current study are questionnaires, interviews and classroom observations, whereas, most studies reviewed used either pre-and post-tests or questionnaires.

5. Thematic analysis and descriptive statistical analysis, including factor analysis, are used in the current study when analysing the quantitative data. In contrast, most studies reviewed used t-tests and ANOVAs.

6. The main findings of the majority of the studies reviewed so far emphasised the effectiveness of blended learning on students' achievements, while the current study identified some factors that motivate Islamic studies teachers to use a blended approach

as well as some factors that may hinder Islamic studies teachers from using a blended approach. Also, the current study reveals the effectiveness of blended learning methods on students' knowledge acquisition from their teachers' points of view, and identified some of the advantages and disadvantages that applying such methods may bring to the teachers and the delivery of Islamic education curriculum.

7. The current study differs from the studies reviewed in terms of the blended learning model. The blended approach used in this study consists of four elements: 1) different forms of technology; 2) teaching methods and teaching aids; 3) collaborative learning; and 4) active learning. However, the blended learning format used in most of the studies reviewed combines face-to-face and learning with digital technologies.

8. In relation to the sample size the current study comprises 129 Islamic Studies teachers from three different types of primary schools (state primary schools, private international primary school and a Qur'an memorisation state primary school), appears to be higher than the sample size in most of the studies reviewed above.

4.3.4   The Rationale for the Current Study

I have conducted an in-depth narrative review, consisting of fourteen studies that examine the effectiveness of using the blended learning method in different countries. To inform the research design of my study, I have taken a more focused approach for this review and have included the blended learning model, study aim, methods used for data collection and data analysis techniques and the main findings. In addition to this narrative review I conducted a systematic review which produced six studies, in order to examine the use of the blended learning and other teaching methods in Saudi Arabian schools and universities.

I found that there was a lack of research which examined the use of the blended learning approach within the Islamic education system. Most importantly, I identified that there was a particular lack of studies concerning the blended learning method in girl's primary schools in Saudi Arabia. I believe that this is especially problematic as the years girls spend in primary school and the content they are taught during this time is the foundation upon which all future learning is based. Therefore, it is crucial that we take this into consideration when selecting teaching methods to be used in girls' primary schools.

In addition to this, a systematic review identified gaps that call for further investigation of the effectiveness of using blended learning and the impact that using innovative teaching methods has on students' achievement and teachers' performance in Saudi schools and universities. Also,

other Saudi researchers on this topic suggested that future research could be conducted on the effectiveness of the blended learning method particularly in girls' schools (Alebaikan, 2010; Alqahtani, 2010, Alsharidah, 2012). Others have concluded that there is a need for further research to find out why Islamic studies teachers are continuing to use traditional methods (Al-Buraidi, 2006; Al-Matari, 2008). Further to this, Alebaikan (2010), concluded that future studies will help us to identify the challenges that arise when using different forms of technology in blended learning courses in Saudi Arabia (Algarfi, 2010). Consequently, further studies are needed to examine the feasibility of different teaching methods within Saudi girls' primary schools, with emphasis on a blended learning approach and innovative techniques.

Having illustrated the gaps in current knowledge, this study seeks to answer the following research questions:

1. How effective do Islamic studies teachers in girls' primary schools believe using a blended learning approach is for teaching Islamic education modules (Qur'an and Tajweed, Hadith, Tawhid, and Fiqh)?

2. What are the factors that motivate Islamic studies teachers to use a blended learning approach when teaching Islamic education modules?

- Does using a blended learning approach in teaching aspects of the Islamic education curriculum change teachers' perceptions of their delivery of this curriculum?

- Do Islamic studies teachers believe that using a blended learning approach is suitable for teaching all Islamic education modules, or is it more applicable to one subject than it is to others?

- What are the main disadvantages of using a blended learning approach when teaching Islamic education modules?

- What are the factors that inhibit Islamic studies teachers from implementing a blended learning approach?

4.4   Chapter Summary

This chapter reviewed some of the relevant studies that have been conducted to examine the use of blended learning and innovative teaching methods, with more focus on teaching Islamic education curriculum in Saudi Arabia. The chapter also provide a comparison between the reviewed studies and the current study from multiple angles, these are: the blended learning model used; the study aims; and the sample and context. The next chapter will explain various data collection methods and analysis techniques with the rationale of the chosen methods. In addition, ethical issues, the role of the researcher and issues of validity and reliability will also be presented in the next chapter.

Chapter Five: Methodology

5.1   Introduction

Research methods are defined as "techniques and procedures used in the process of data gathering" (Cohen et al., 2007 p.47). This chapter discusses research aims, research questions and the procedures and methods used to collect data for this study. This chapter also provides a comparative and critical analysis of the data collection methods, including questionnaires, interviews and observations with the rationale of the chosen methods. Finally, the analysis techniques, ethical issues, the role of the researcher and issues of validity and reliability are presented.

5.2   Research Aims

This study seeks to examine Islamic studies teachers' perceptions of the effectiveness of using a blended learning approach (different forms of technology, traditional teaching methods and teaching aids, active learning strategies and collaborative learning) in teaching students Islamic education modules in girls' primary schools in Jeddah. In addition, it aims to identify the key factors which motivate Islamic studies teachers to use a blended learning approach. Furthermore, it investigates participants' perspectives on whether a blended approach is suitable for teaching all Islamic education modules or if only traditional methods are ideal for teaching some of them. Moreover, it examines Islamic studies teachers' perceptions of the obstacles which could stand in the way of implementing a blended learning approach.

5.3   Research Questions

This study is conducted to answer the following research questions:

1. How effective do Islamic studies teachers in girls' primary schools believe using a blended learning approach is for teaching Islamic education modules (Qur'an and Tajweed, Hadith, Tawhid, and Fiqh)?

2. What are the factors that motivate Islamic studies teachers to use a blended learning approach when teaching Islamic education modules?

- Does using a blended learning approach in teaching aspects of the Islamic education curriculum change teachers' perceptions of their delivery of this curriculum?

- Do Islamic studies teachers believe that using a blended learning approach is suitable for teaching all Islamic education modules or is it more applicable to one subject than it is to others?

- What are the main disadvantages of using a blended learning approach when teaching and learning Islamic education modules?

- What are the factors that inhibit Islamic studies teachers from implementing a blended teaching approach?

5.4   Research Design

In social science, the three main approaches to research methods are qualitative, quantitative and mixed-methods (Leech and Onwuegbuzie, 2009). Mixed method research is a methodology in which a combination of both quantitative and qualitative information is collected in a single study (Ostlund et al., 2011). Qualitative research or quantitative research alone may not provide as rich an understanding as mixed method research does (Arthur et al., 2012; Creswell, 2003; Ostlund et al., 2011).

Due to the nature and the complexity of this study, a blended learning approach is a new model. It consists of four elements and there is a need to collect data on many aspects regarding it uses in teaching the Islamic education curriculum. A mixed method approach was used for data collection in this study, including qualitative (lesson observations and interviews) and quantitative (online questionnaires) methods as this reflected the different sources of evidence and maintained the focus on participants' perceptions (Greene et al., 1989; Arthur et al., 2012).

5.5   The Study Sample and Population

Gay et al. (2014) defines sampling as "the process of selecting a number of individuals for a study in such a way that the individuals represent the larger group from which they were selected" (p.66).

I selected three primary state schools, which are classified as modern schools, a Qur'an memorisation primary state school and one primary private school in Jeddah. That is because Islamic studies teachers in state schools are expected to have more experience than those in the private schools. In addition, the teaching aids and the digital technology available for the teacher in school, and in the classroom in particular, differ in state and private schools. Moreover, the number of students in each class is high in state schools compared to that of the private school. In terms of the study population, a total of eleven Islamic studies teachers were interviewed, six were observed when teaching aspects of the Islamic education modules and 129 Islamic studies teachers answered the online survey which was designed using a Google Form and the link was sent to them via the *WhatsApp* and *Telegram* applications (For more details about the participants in this study, see Table 5.1).

Month	Method	Sample/ Population	Selection Criteria
August	Focus group interviews	Two groups of Islamic Studies teachers from state schools: N=13	• Willingness to participate in the study • Awareness of the study aims • Teacher availability
	Semi-structured interviews	3 Islamic Studies teachers: • a Qur'an memorisation school N=1 • a private international primary school N=1 • a state primary school N=1 Total=3	• Willingness to participate in the study • Awareness of the study aims. • Teacher availability • Specialist in Islamic Studies
	Classroom observations	Observed one lesson: a state primary school N=1	• Teacher's consent to observe her while teaching the lesson • The subject and the content of the lesson • Teacher who teaches new content and is not just assessing the students in previously taught content for the entire lesson • The time of the lesson in the schedule (at the beginning, after break or at the end of the day)
September weeks 1 & 2	Focus group interviews	Four groups of Islamic Studies teachers: • a Qur'an memorisation school N=6 • a private international primary school N=5 • a state primary school N=7 Total=18	• Teacher availability • Awareness of the study aims Willingness to participate in the study
	Semi-structured interviews	4 Islamic Studies teachers: • a Qur'an memorisation school N=1 • a private international primary school N=2 • a state primary school N=1 Total=4	• Teacher availability • Awareness of the study aims • Willingness to participate in the study • Specialist in Islamic Studies

Month	Method	Sample/ Population	Selection Criteria
September weeks 3 & 4	Classroom observations	Observed five lessons: • a Qur'an memorisation school N=1 • a private international primary school N=1 • a state primary school N=3 Total=5	• Teacher consented to be observed while teaching the lesson • The subject and the content of the lesson • Teacher who teaches new content and is not just assessing the students in previously taught content for the entire lesson • The time of the lesson in the schedule (at the beginning, after break or at the end of the day)
	Semi-structured interviews	4 Islamic Studies teachers: • a Qur'an memorisation school N=1 • a private international primary school N=1 • a state primary school N=2 Total=4	• Teacher availability • Awareness of the study aims • Willingness to participate in the study • Specialist in Islamic Studies
November & December	Online questionnaire	Sent the link to the Islamic Studies teachers who the researcher met during the fieldwork N=30 Respondents	• Only teachers who signed the consent form
	Online questionnaire	Sent the link via the WhatsApp and Telegram applications to teachers group with the following statement: "Please note that only Islamic Studies teachers are qualified to fill in the survey." N= 84 Respondents	• Islamic Studies teachers • Teachers group in WhatsApp • Teachers channel in Telegram • An educational channel in Telegram
	Online questionnaire	Sent the link to the Islamic Studies teachers who the researcher met during the fieldwork and I asked them to send the link to other Islamic Studies teachers who might be willing to complete the online questionnaire N= 15 Respondents	• Islamic Studies teachers who might be willing to participate in the study

Table 5.1: The Participants in the Study

5.6   The Procedure for Obtaining the Approval to Pilot the Study

This section sets out the steps the researcher took to prepare for the research and the process of gaining approval and consent.

Step One:

I requested a letter from my supervisor at the university explaining the need for a fieldwork for the purpose of gathering the information that will answer the research questions (see Appendix D). I then sent that letter to the Saudi Arabian Cultural Bureau (SACB) in London and requested a letter from them to the Director of the Education Administration in the city of Jeddah. They provided me with a letter confirming my status as a student in the UK and that in order to complete the requirements for obtaining a PhD, I will need to gather data from Islamic studies teachers. This letter plays an important role in obtaining the approval to approach schools and was the first document that I had been asked to present when I went to the Administration of Education in the city of Jeddah, as the first step of the process of gaining the approval is to sign this letter (which the SACB provided to me) from the Director of the Administration of Education. After that I went to the Pedagogical Planning and Development Administration in the city of Jeddah and made an application to pilot the study. In addition to this, I attached the letter which I received from the Saudi Arabian Cultural Bureau, the survey questions and the personal interview questions as they requested with my application. Then, I obtained the approval of the Pedagogical Planning and Development Administration to pilot the study using the research instrument (questionnaire, lessons observations and interviews). Gaining approval to conduct educational research is necessary in Saudi Arabia and no research can be conducted in the education sector without a formal approval from the Saudi Arabian Cultural Bureau, the Ministry of Higher Education and the Pedagogical Planning and Development Administration. Not only that, but there are rules regarding what action the researcher can take as well as the duration for the fieldwork. All these rules and restrictions limited what was possible for me to carry out, and a considerable amount of my time was taken up waiting to hear if my application to conduct the study had been accepted.

Step Two:

After obtaining the approval of the Saudi Arabian Cultural Bureau, the Ministry of Higher Education and the Pedagogical Planning and Development Administration and identifying the schools in the region where the researcher resides – which are classified as modern schools in state buildings and not rented buildings, the Director of the Pedagogical Planning and Development Administration provided me with a permission letter to enter a number of primary

schools in Jeddah (see Appendix E). It should be noted that without this permission letter, it would have been difficult to collect data and I would most likely have been refused entry to schools. Next, I visited every school and met with its head teacher to introduce myself and provided her with information about the research that I was doing and its objectives. Appointments and days were arranged to meet with all the Islamic studies teachers in the school. Then I met with the teachers punctually to respect the teacher's time and so as not to waste the students' time by cutting into class-time.

When meeting with the teachers I started to explain the concept of a blended learning approach and the research aims. I also talked about the importance of their views, as well as their participation in the study. I then requested them to look at the consent form for participating in the study (see Appendix F) which included personal interviews, group interviews and attending some lessons to learn about the teacher's current methods for teaching the Islamic education modules (Qur'an and Tajweed, Tawheed, Hadith and Fiqh) and answering the questions in the online questionnaire whose link would be sent to them via the *WhatsApp* application. According to Patel et al. (2003)

> "When a potential participant is first identified, contact should be established wherever possible. Confirm the contact details at each subsequent contact to avoid early attrition before recruitment is completed. Mobile telephone numbers and e-mail addresses may remain unchanged despite many changes of home address, so always ask for these details where appropriate" (p. 235).

After the teachers looked at the form and agreed to participate, I requested those interested in participating to give their phone numbers for the purposes of communicating with them during the research period. This was particularly important due to the researcher studying outside the Kingdom of Saudi Arabia, and to send them the link to the online questionnaire using the *WhatsApp* application.

Step Three:

I went to each school once a week for a duration of eight weeks. Following my visit, I requested a letter from each school principal confirming that I had visited the school for research purpose. I then handed these letters to the Director of the Pedagogical Planning and Development Administration and requested a letter from him to the SACB in London confirming that I had completed the fieldwork in girls' primary schools.

From the three steps, it is clear that obtaining approval to carry out research in the KSA context is a challenging process, because I had to request a number of letters before obtaining the approval as well as after completing the fieldwork. I also had to wait for the approval from the Pedagogical Planning and Development Administration and I had to negotiate with the schools to ensure that they were willing to take part in this research.

Having explained the process and the procedure of gaining approval to conduct research in classrooms in Saudi Arabia, the next section will discuss the constraints on conducting research in classrooms in the KSA.

5.7 The Constraints of Conducting Research in Classrooms in the KSA

According to Peeke (1984), there are many difficulties faced by teachers involving themselves in research. One type of difficulty is practical difficulties, which include three types of resources – time, money and equipment. It should be noted that these are just examples and that a range of difficulties exist. Consequently, teachers need to be able to combine the task of teacher and researcher successfully.

In the context of the KSA, the constraints which may face a Saudi researcher when conducting research in classrooms are as follows:

5.7.1   Time Constraint

Walia (2015) found that 80% of the participating teachers expressed their powerlessness when taking part in any educational research due to the number of constraints. The time constraint was one of the real issues for the majority of the instructors. They were over-burdened with teaching tasks, such as drawing up plans for each day, preparing lessons and maintaining records of the students' progress. These tasks made it difficult for teachers to get involved in educational research, as there was no extent of directing any such research. Similarly, time constraints were problematic for many of the Islamic studies teachers who participated in this study as they were overloaded with teaching tasks, which included preparing lessons, assessment activities, marking students' homework and exams, as well as providing parents with a regular record of their children's progress, all of which prevented many Islamic studies teachers from taking part in the semi-structured interviews and classroom observations. Furthermore, in the KSA context the lesson duration is 45 minutes and there is a lot to teach during the lesson (Al-Mulhim, 2014). Consequently, there is no scope for any experiments to be conducted in that timeframe. However, I tried to make the interviews as short as possible and not exceeding the duration of one lesson so that the teachers could prepare for the next class

that they were going to teach. Also, sometimes I divided the interview with the same teacher into two parts, one straight after observing her teaching the Islamic lesson and a second in my next visit as the duration of the fieldwork was eight weeks. In addition, I gave the participants a chance to talk about their workload, which included teaching, preparing learning materials and assessing student learning. These discussions were very beneficial because the present study seeks to investigate the factors which may inhibit Islamic studies teachers from applying a blended learning approach.

5.7.2   Lack of Sources of Knowledge

The lack of references and sources of knowledge required for conducting educational research is another difficulty which the Saudi researcher may face (Al-Dossry, 2011). For example, the distribution of technology and ICT resources in primary schools is decided by the Ministry of Education and I found that the current distribution of technology and ICT resources was insufficient. However, unfortunately there was a lack of information regarding why the government were not supplying more technology to schools, so I was unable to come to a conclusion here. Furthermore, due to either the complexity or the novelty of the current study, I found little information in journals and books concerning the blended learning in Saudi schools. Thus, reviewing the relevant literature was challenging and I decided to conduct two types of literature review: 1) an in-depth narrative review; and 2) a qualitative systematic review. A narrative literature review was conducted to offer a comprehensive background in order to understand the notions of the current research, including the blended learning approach, and to highlight the importance of the current study, which is teachers' perceptions of the effectiveness of using a blended learning approach. The systematic review aimed to bring together the findings and recommendations of existing doctoral and master's theses associated with using blended learning and innovative teaching methods in the teaching aspects of the Islamic education curriculum in Saudi Arabia. Such an approach helped me identify the gaps in the current knowledge and determine the research questions that might help bridge the identified gaps.

5.7.3   Obtaining Approval and Participants' Consent

In the context of the KSA, gaining approval to conduct educational research is a challenging process. This is due to the routine and formal procedures for obtaining approval from the responsible authorities (Al-Nemary, 2011). For example, sponsored researchers like me should

obtain letters from different sources in order to be able to make an application to conduct a study in the classroom. These letters are as follows:

1. Letter from the academic supervisor at the university to SACB in London.

2. Letter from SACB to the Education Administration in the city of Jeddah.

3. Letter from the Education Administration in the city of Jeddah to the Pedagogical Planning and Development Administration.

4. Letter from the Pedagogical Planning and Development Administration to the principals of the selected schools.

5. Letter from the school principals to the Pedagogical Planning and Development Administration confirming researcher's visits with date and week.

6. Letter from the Pedagogical Planning and Development Administration to the SACB confirming the completion of the fieldwork.

Prior to piloting this study, I chose the period for the fieldwork, developed a plan for the data collection phases, prepared all the documents and made an application to pilot the study six month in advance. Then, I gained approval from the researcher's sponsor (Ministry of Higher Education, Saudi Arabia), the SACB and the Pedagogical Planning and Development Administration. However, it should be noted that obtaining approval, which took a few months, only allowed me to access a certain number of primary schools. In other words, the approval of the Pedagogical Planning and Development Administration did not guarantee the consent of the teachers in the selected schools to participating in this study.

According to Patel et al. (2003), the discussion between the researcher and the potential participants should include the nature of the procedure and the relevant risk. Also, the language used in the process of obtaining informed consent should be pitched at a level that can be understood by the potential participants. Additionally, the individual concerned must be competent to make a decision and the consent must be voluntary. Similarly, Amerson and Strang (2015) state that "the standard protocol for informed consent requires an explanation of the study, benefits, risks, incentives, privacy, confidentiality, and contact information for the researchers as well as the sponsoring university" (p. 586).

In order to gain the participants' consent to taking part in this study, I first told them that I had taught the Islamic education curriculum for five years, and in order to complete the requirements for obtaining a PhD I needed to collect data from Islamic studies teachers. Then,

I adequately explained the aim, the nature of the study (exploratory study), and reassured the teachers that their names and personal information would not be included in the questionnaires or in the transcripts of the interviews. In addition, all the information would remain confidential and would only be used for the purposes of the study. I stated that their participation was totally voluntary and they had the right to withdraw from the study at any time. I also told them about the possibility of sharing the study's findings with the participating schools if they were interested in knowing that. It should be noted that the schools which I went to during the fieldwork did not include the school I worked in. Therefore, nothing would have influenced the teachers' responses to the interview questions.

5.7.4   Administrative Constraints

According to Al-Dawood (2005), the administrative constraints include the high number of students in some classrooms, the lack of equipment and inadequate availability, the lack of numbers of research assistants or the lack of technical assistants in schools. Also, the lack of books and journals necessary for educational research, lack of funding for research and the limited time allocated for conducting educational research. Furthermore, Al-Buraidi (2006) adds that the procedures, routines and regulations of the institutions are some of the other hindering factors when conducting educational research. Due to the lack of technology found in schools in Saudi Arabia, I was not able to conduct an experimental study and therefore I amended the research proposal and I decided to conduct an exploratory study instead of an experimental study.

The next section will highlight the data collection methods used in this study and demonstrate the rationale of the chosen methods.

5.8   Data Collection Methods

5.8.1 Questionnaire

The questionnaire serves as the primary data collection tool for obtaining the insights of the respondents towards a study in a structured and comparable way (Walliman, 2011). Moreover, the questionnaire was used to gain information about the current situation and practices and to discover people's attitudes and their opinions (Ary et al., 2009). Regarding the type of questionnaire, they can comprise closed or open-ended questions or a combination of the two (Kumar, 2005; Walliman, 2011). In the closed-ended questions respondents are required to answer either "yes" or "no" or they must select an answer from those that are provided (Kumar, 2005; Bell, 2005). While, the open-ended questions do not require the selection of an answer

from the choices provided, but require the respondent to share their opinions and explain them in the pest possible way, and take longer for respondents to complete (Bell, 2005).

McNabb (2010) states that the advantage of using questionnaires is the considerable flexibility, as they can be custom designed to meet the objectives of almost any type of research and researchers can create their own questionnaire depending on the topic and the level of understanding of the respondents. Walliman (2011) emphasise that the use of surveys can be effective in the social sciences, where a researcher often needs to gather information about the feelings, opinions and reactions of a large number respondents in a key user group. In general, questionnaires are easy and convenient to use with a large number of respondents in different geographical areas. On the other hand, sometimes the respondents do not provide the answers that are needed by the researchers. They can often respond hastily, thereby providing incorrect and unhelpful information (McNabb, 2010; Arthur et al., 2012). Moreover, the information gathered is very difficult to analyse, just as in the case of informal interviews, due to the wide range of information presented (Kumar, 2005; Bell, 2005). In the closed-ended questions respondents are limited and they also limiting in nature because one may not express all her views on the topic in a question, especially if none of the choices capture it. The other disadvantage of questionnaires is that they require a lot of time and skill to design and develop.

Some of these disadvantages are critical for the process of this research. For example, I communicated with Islamic studies teachers and if they faced any difficulty or needed further clarification they sent me a text message using *WhatsApp* application and I replied as soon as I could. Moreover, the respondents were only Islamic studies teachers who know and understood varies approaches to teaching Islamic education and they had sufficient information about the four dimensions of the blended learning model. In addition, in each multiple-choice question I included others to allow participants to express their opinions if none of the given choices captured their views. Finally, at the end of the questionnaire I asked participants to add any comment they may have regarding the use of a blended learning approach.

In terms of the delivery, a questionnaire can be delivered in three different ways, personally, by post and via the Internet. Using personal delivery enables the researcher to clarify any questions and can ensure a higher response rate. With a large number of respondents in different locations, a postal questionnaire is very helpful (Arthur et al., 2012). However, while the response rates are high for personal delivery, postal questionnaires often receive very low response rates

(Moore, 2006). When a researcher has only a limited amount of time, Internet questionnaires are very useful (Walliman, 2011).

In this study, the online questionnaire which combines both close and open-ended questions was used to support and enrich the information that gathered through interviews. In addition, the link to the online questionnaire was sent via the *WhatsApp* application to over 45 Islamic studies teachers and via the *Telegram* application to a channel called "Primary Level Teachers". As I hope to benefit from some features in these applications such as recordings (either audio or video) and the ability to answer any questions teachers may have regarding the online survey.

5.8.1.1 Developing the Questionnaire

The questions in a well-written questionnaire should demonstrate these key characteristics: they are easy to understand, short and specific to the study. Two other requirements that are sometimes overlooked are that all possible answers should be mentioned as options in multiple-choice questions (Gay and Airasian, 2003). Finally, as should be done with any quality online questionnaire, the data collected must be checked for completeness and validated (Moore, 2006).

At the beginning of my online questionnaire, I included a statement that only Islamic studies teachers were qualified to fill in the survey. I provided the respondents with the research title, research aims and instructions for filling in the form; for example, "if a mobile phone is used to answer the questionnaire, it is preferable to place the mobile in a horizontal direction in order to see all the choices for the multiple-choice questions." In addition, I marked all questions as "required". Thus, a respondent could not submit her answers unless she had answered all the questions; if a respondent tried to submit an incomplete form, a message appeared explaining that there was a question or more left without an answer. To ensure that participants had a chance to express their opinions and to collect rich data, I always included "other" as an option in multiple-choice questions. Also, I asked participants to list any other obstacles which may prevent them from applying a blended approach when teaching the Islamic education curriculum. Finally, to give participants the opportunity to freely express their views and benefit from other teachers' experiences in teaching an Islamic education curriculum, and to gather more information, I placed the following as the final question in the online questionnaire: "Would you like to add any comments or ideas?"

The questionnaire was divided into four dimensions: 1) demographic information; 2) teaching methods (traditional and modern methods, teaching aids and active learning strategies); 3) teacher perception about using a blended learning approach when teaching Islamic education

modules; 4) the factors that prevent Islamic studies teachers from implementing a blended learning approach when teaching Islamic Education lessons (see a copy of the questionnaire in Appendix G).

The first section aims to collate demographic information about the participants. It consisted of ten questions that gather information about Islamic studies teachers with regard to their qualifications, experience, training courses they had undergone during work experience and computer and Internet usage.

The second section aims to elicit information about the frequency of using six traditional teaching methods and six modern teaching methods, the availability and the frequency of using twelve examples of teaching aids and the frequency of using eight examples of active learning strategies. Using a Likert type frequency scale, 'always', 'often', 'occasionally', 'seldom' and 'never' (McLeod, 2008). Thus, to collect information about the most widely used methods and the least used and the extent of using these methods. Moreover, to identify which of these teaching aids are available in schools.

The third section consisted of eleven statements about Islamic studies teachers' perceptions of using a blended learning approach when teaching the Islamic education curriculum. The teachers must choose which subject would benefit the most from each statement. It also consisted of nine statements where participants asked to indicate to what extend do they agree with each statement, using a Likert type agreement scale 'strongly disagree', 'disagree', 'agree' and 'strongly agree' (McLeod, 2008).

The fourth section consisted of nine statements focused on the factors that inhibit Islamic studies teachers from implementing a blended teaching approach. Using a Likert type agreement scale 'strongly disagree', 'disagree', 'agree' and 'strongly agree' (McLeod, 2008).

It is extremely important for the participants to understand the study's aims and the research terms before answering the questionnaires, so as to provide valid answers. Therefore, the participants were asked about teaching methods, teaching aids and active learning strategies first, followed by specific questions about the effectiveness of using a blended learning approach. This made it possible to further clarify the dimensions of the blended learning model used in this study as well as enhance the teachers' understanding of what is a blended learning approach. In addition, the main source of the questions was from past studies and literature in the field of Islamic education and other studies to some extent linked to the current study (see

table 5.2 for references to the original survey). However, due to the context of this study I made changes to some items in existing themes, such as teaching methods and teaching aids to only include those that female Islamic studies teachers used and I added a new sub-theme (Active Learning Strategies). In addition, to make the questionnaire specific to this study I made changes to some questionnaire statements that were in past research.

Themes	Sub-Themes	References
Demographic Information	Qualification	(Alsharidah, 2012; Al-Malki, 2011; Al-Matari, 2008)
	Work Experience and Training Courses	(Aldossari, 2013; Al-Buraidi, 2006)
	Computer and Internet Usage	(Alsharidah, 2012; Almaghlouth, 2008)
Teaching Methods	Traditional Teaching Methods	(Alsharidah, 2012; Al-Buraidi,2006)
	Modern Teaching Methods	(Alsharidah, 2012; Al-Buraidi,2006)
	Teaching Aids	(Alsharidah, 2012; Almaghlouth, 2008; Al-Buraidi, 2006)
	Active Learning Strategies	(Al-Shammari, 2011)
Teachers Perceptions of the Delivery of Islamic Education Lessons Using a Blended Approach	Delivery of Information Students Achievement Motivation Engagement	(Al-Malki, 2011; Al-Matari, 2008; Algahtani,2011)
The Factors Inhibit Islamic Studies Teachers from Implementing a Blended Teaching Approach	- Teacher workload - High Number of Students - Slow or Inadequate network access - Lack of IT skills - A lack of training - A lack of resources	(Alsharidah, 2012; Al-Mulhim,2014)

Table 5.2: References to the Original Survey

The Summary of the Process of Developing the Questionnaire
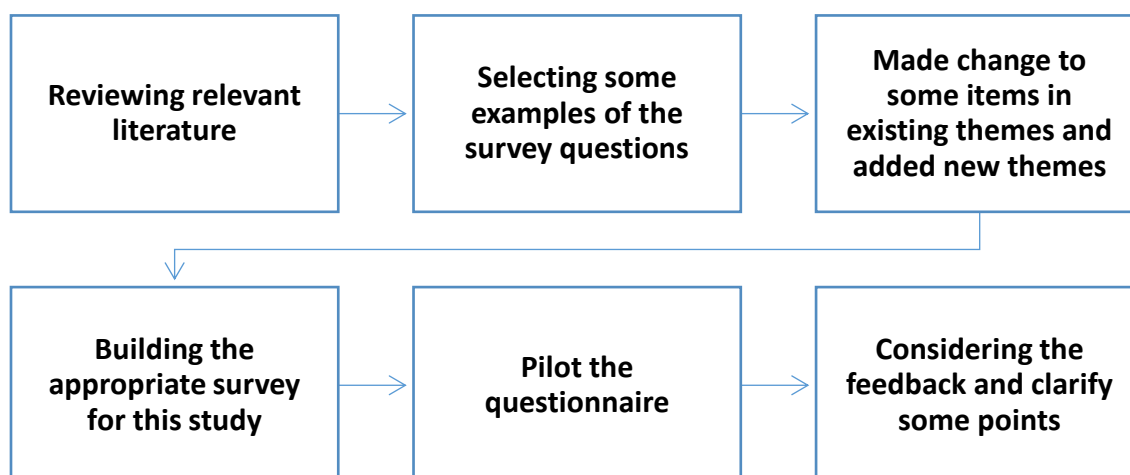
Figure 5.1: The Process of Developing the Questionnaire

5.8.2   Interviews

Cannell and Kahn (1986) defines research interviews as "a two-person conversation initiated by the interviewer for the specific purpose of obtaining research-relevant information, and focused on content specified by research objectives of systematic description, prediction, or explanation" (p. 530). According to Merriam (1998), there are three types of interviews: structured, unstructured and semi-structured. Cohen et al., (2007) adds another type of interview, which is the focus group interview.

A structured interview comprises essentially a verbally administered questionnaire. It includes a list of questions which are pre-determined and asked with little or no changes at all. It does not have any scope for follow-up questions to responses that need justification or further explanation. As a result of this, they are relatively rapid and easy to understand with clarification of some questions such as numeracy problems with the respondents. Due to their nature, structured interviews are limited in terms of participant answers and are, therefore, of little importance if 'depth' is required (Gill et al., 2008).

Compared to structured interviews, unstructured interviews do not provide any evidence or truth on theories or ideas and are conducted with little or no organisation. These kinds of interviews always focus upon the initial response of respondents and may start with an opening question such as 'Can you tell me about your experience of visiting the dentist?'.The main disadvantages of unstructured interviews are that they are usually very time-consuming and can be difficult to organise. Due to the lack of pre-determined interview questions, participation is

difficult as it provides little help on what to talk about (which several participants may find confusing and unhelpful). Their use is acknowledged and considered important where 'depth' is required, or when a particular area of the subject is not known or a different perspective of a known subject area is required (Gill et al., 2008; Rowley, 2012).

Semi-structured interviews provide key questions to help gain knowledge about the areas to be investigated. They also allow the interviewer and the individual being interviewed to pursue responses and ideas in an elaborated form (Esterberg, 2002). Compared to structured and unstructured interviews, the flexibility of the semi-structured interview allows for the detail and discovery of information that is significant to participants, providing them with effective guidance on what to talk about (Gill et al., 2008).

A focus group is one in which a particular topic is organised and arranged for research purposes on which group discussions take place. A researcher helps, observes and records the discussion (sometimes called a moderator or facilitator). Focus groups not only gather similar information from several participants all at once but they share many common features with less structured interviews (Bloor et al., 2001; Krueger and Casey, 2002). The main purpose of using focus groups is the generation of information on collective views, and the interpretation of those views. They also prove to be valuable in producing a broad understanding of participants' experiences and beliefs (Morgan & Scannell, 1998; Rowley, 2012). Bloor et al. (2001) adds that focus groups can be used for the exploration of a topic or the collection of group language or narratives. Along with this, they can also be used to clarify, extend, qualify or challenge data collected through other methods and to feed back results to research participants (Parker & Tritter, 2006; Bloor et al., 2001; Gill et al., 2008).

5.8.2.1   The Purposes of Conducting Interviews with Islamic Studies Teachers

In this study, semi-structured interviews were conducted with Islamic studies teachers to give the teachers the opportunity to express their opinions about using a blended learning approach and to respond to any query they may have regarding any dimensions of a blended approach. While the focus group aimed to obtain information from the Islamic studies teachers regarding their opinions about the current methods of teaching Islamic education modules and the assessment criteria. This was to explore how they assessed students' learning outcomes and to elicit their opinions about using a blended teaching approach. Interview questions were mainly open-ended and some were the same as those in the questionnaire. For example, the teachers were asked about the factors that hinder them from using a blended approach and this was to

gather further data from teachers. The other questions focused on teachers' opinions and their attitudes towards using digital technology such as computers and projectors in teaching the Holy Qur'an in particular. That is because a large number of school students experience difficulty in reciting and memorising the Qur'an. Moreover, students have a desire for the Qur'an lesson to be more enjoyable. Finally, there is some routine and monotony associated with Qur'an lessons.

5.8.2.2   The Advantages and Disadvantages of Interviews

The advantages of interviews include the fact that they provide first-hand data and are suitable to be used for both general and specific topics (Walliman, 2011). Unstructured interviews encourage the expression of opinions. Questions are structured to suit a particular time, and even though the interviewer may have an outline of the questions to be asked, there is room for additional questions, depending on what comes up in the course of the interview. It helps the researcher to gather information that has not been planned for and to gather more information on areas that need further explanation (Opdenakker, 2006; Rowley, 2012). A semi-structured interview allows the participants to express their views and attitudes in their own words and it enables them to explore their experience more openly than in the questionnaire (Esterberg, 2002). In addition, the semi-structured interviews give the researcher an opportunity to ask subsidiary questions to ensure that they have the necessary answers to cover the research questions and to understand the details of the points that they feel are important (Radnor, 2002). On the other hand, despite the benefits of interviewing respondents, interviews can take a lot of time, which could affect the quality and range of the research results. There is also a threat of becoming biased as interviewing can be a subjective technique (Check, 2012).

The semi-structured interview helped in clarifying unclear statements and collecting further data from Islamic studies teachers regarding the use of different forms of technology in teaching the Holy Qur'an. Moreover, the semi-structured interview offered me an opportunity to ask supplementary questions to ensure that I had the answers to cover the research questions and to give the Islamic studies teachers a chance to elaborate on the points that they feel are important. For example, when I discussed the use of active learning strategies in teaching all subjects I asked about the suitability of using these strategies in teaching the Holy Qur'an in particular and what was the most suitable strategy to use. That is due to the state of the Holy Qur'an as explained earlier. One teacher responded to my question by stating that we need to be careful about what teaching methods and what active learning strategies to use in Qur'an lessons and

she suggested the Lollipop Sticks strategy (see Chapter three). The focus group interviews gave the Islamic studies teachers a degree of freedom and flexibility to answer the questions and to show their attitudes toward using a blended learning approach when teaching aspects of the Islamic education curriculum.

5.8.2.3   The Criteria for a Successful Interview

There are many factors that should be considered before conducting an interview. According to Briggs and Coleman (2007), it is important to take the location into account as it may have an impact on the interview. In addition, when validating interview questions, the first step is to determine the precision and feasibility of the questions. They should be clear, precise and brief so that they can be easily understood by the intended respondents (Kajornboon, 2005). The researcher should then revise the questions to ensure that they are in line with the purpose and aims of the study (Walliman, 2011; Kajornboon, 2005). Bell (2005) adds that a skilful interviewer can follow up ideas, probe responses and investigate motives and feelings, which a questionnaire can never do. Moreover, the interviewer needs to ensure that the participants are comfortable and relaxed (Berg, 2008; Ryan et al., 2009). In addition, interaction is a key to a successful interview generally. The interaction between participants themselves allows them to speak without any hesitation or fear of repercussions and challenges from other participants (Moore, 2006). Krueger and Casey (2002) adds that a moderator in a focus group interview must take a part in guiding a discussion rather than joining in with it.

In this study, prior to the interviews the information sheets and consent forms were given to the participants to sign. Moreover, I made a prior arrangement with every teacher to conduct the interview, ensuring that the teacher was completely free so that I could discuss with her any point on which I found myself in need of some details or clarification. Every teacher chose the lesson slot she wanted for the interview to take place. Each lesson slot was 45 minutes. Each interview took between 35 and 40 minutes, giving the teacher the opportunity to prepare for the next lesson. I started by clarifying the purpose of the interview and the significance of the study, highlighting that none of the information would be used for any other purpose apart from this research. Moreover, when it was possible I held interviews with teachers directly after observing her teaching to allow her to be able to give detailed descriptions about the rationale of her teaching approach and to give examples from her experience in teaching the Islamic education curriculum. It also gave me a chance to ask any questions related to that lesson or to ask for further clarification on any point.

The most favoured and ideal size for a focus group is approximately six to eight participants (excluding researchers), but for a focus group to work successfully a minimum of three and a maximum of fourteen participants are required. The problem associated with small groups is that only limited discussion would occur, whereas the large groups may result in a chaotic situation and dealing with it may be difficult for the moderator and irritating for the participants who feel that they have inadequate opportunities to speak (Kitzinger, 1995; Fan et al., 1999).

I conducted eleven semi-structured interviews and six focus groups with five to seven Islamic studies teachers from each school (primary state schools, an international primary private school and a Qur'an memorisation primary state school). The partcipants showed interest in the research topic and they were comfortable with each other so they expressed their feelings and opinions openly. As I taught the Islamic education curriculum for five years, conducting focus group interviews with Islamic studies teachers gave me the opportunity to share my opinions and to give examples, which facilitates and encourages the interaction between myself, as a researcher, and the teachers. Furthermore, I asked additional questions and gathered information regarding the criteria for assessing students. The personal interviews were not recorded and that is because the teachers preferred not to have them recorded. One of the teachers said that if the interview was recorded she would not be comfortable and that might affect her opinions. The researcher, therefore, chose to write down the interviews and with some lengthy questions I sufficed with taking notes only from the interview. However, I noticed that writing them by hand might cause me to miss some information or not recall the exact expression used by the teacher. The interviews were conducted in Arabic and after that the answers were translated into English so as to present them in this thesis.

5.8.3   Observations

Observation includes the use of all of the senses and is a strong data collection method because it is first-hand information obtained by a researcher (Hanna et al., 1997). Moreover, observation can be either structured or unstructured (Sapsford and Jupp, 2006). The use of an observation method allows the researcher to gain an insight into the thoughts and perceptions of the respondents. Hanna et al. (1997) found that observed frowns and yawns were more reliable indicators than children's responses to questions. Walliman (2011) asserted that a good observation design must be established to obtain authenticated and appropriate answers. A major advantage of the observation technique is its directness, as it allows for the recording of behaviour as it occurs (Cargan, 2007). However, it only includes the observation of respondents'

attitudes towards the topic. The other disadvantage of the observation method is that it does not necessarily gather accurate data because an individual's behaviour is the only one usually being observed. Walliman (2011) adds that observation can be very time consuming and that it is important to select an efficient method for recording the gathered information.

The online questionnaire contained a question asking participants about twelve different methods used in teaching Islamic education modules to find out the most and least used ones. In addition to the twelve methods that the teachers were asked about in the online questionnaire. A structured observation was used in this study. To provide further information about the teaching methods and teaching aids currently used by Islamic studies teachers when teaching Islamic education modules. The reason for collecting further information is because the methods of teaching differ from one teacher to another, either because she is more experienced than others are or she loves renewal and innovation in her teaching methodology. Moreover, every teacher is different from others with regard to the tools and facilities available to her in school. The availability of a suitably diversified environment in teaching methods, such as the availability of technologies in the school and lower numbers of students in the class, may encourage the teacher to use modern technology. In contrast, unavailability of the required means may perhaps stand as an obstacle to the teacher in implementing a blended learning approach.

5.8.3.1   The procedures of Conducting Classroom Observations

Prior conducting the classroom observations, I decided that when I will observe the Islamic studies teacher, I will focus on: 1) how did the teacher start the lesson; 2) what teaching methods, digital technology and active learning strategies did the teacher use; 3) how did the teacher end the lesson. I made a prior arrangement with each teacher and she chose which lesson she wanted me to attend. I tried to observed teachers in different subjects (Qur'an and Tajweed, Tawheed, Hadith and Fiqh) and at different times. Therefore, to establish if the time of the lesson (at the beginning, after break or at the end of the day) would affect either the teacher's performance or students' engagement. I observed six Islamic studies teachers when teaching the Islamic education modules. I sat at the end of the class taking notes and wrote down any comments so that I could ask the teacher after the class for further details. I concentrated mainly in the steps teacher followed to deliver the lesson and teaching methods and teaching aids she used to deliver the lesson content to the students. Thus, to be aware of the different teaching methods

used by Islamic studies teacher in primary school and what may influence teachers' performance.

Having conducted interviews with Islamic studies teachers and observing some of them it enhanced my understanding of various teaching methods and teachers' perceptions towards using a blended learning approach when teaching the Islamic education curriculum. Moreover, I identified different ways in which Islamic education modules can be taught, as well as ideas to increase student motivation and to focus their attention, such as in the case of the 'young teacher' in the Qur'an lesson (see Chapter 6 for further explanation).

5.8.4   Summary of the Data Collection Phases:

5.8.4.1   First Data Collection Phase

Focus Group interviews were conducted when collecting data from Islamic studies teachers regarding their opinions about the current methods of teaching Islamic education modules and the way of assessing students' learning outcomes, as well as their opinions about using a blended learning approach. Moreover, semi-structured interviews and classroom observations were used to find out what forms of technology Islamic studies teachers used when teaching Islamic lessons. These interviews aimed to discover their positive and negative perspectives on utilising a blended learning approach when teaching aspects of the Islamic education curriculum.

5.8.4.2   Second Data Collection Phase

A link to the online questionnaire was sent via the *WhatsApp* and *Telegram* applications to the Islamic studies teachers. As I hope to benefit from other features by using selected applications, such as recordings (either audio or video), and fostering the ability to answer any questions teachers may have regarding the online survey. Thus, the data collection phases include interviewed and observed Islamic studies teachers, distribution of the survey, guidance on responding to the questionnaire via the *WhatsApp* application and collection of data.

5.9   Data Analysis Procedures

5.9.1   Qualitative Analysis

There are several ways in which qualitative data can be analysed, including narrative and thematic analysis (Braun and Clarke, 2006). Thematic analysis is a method for identifying, analysing and reporting patterns (themes) within data. It minimally organises and describes your data set in (rich) detail. However, it also often goes further than this, and interprets various aspects of the research topic (Boyatzis, 1998, cited in Braun and Clarke, 2006). Moreover, the

theme may be initially generated inductively from the data or could be generated deductively from theories and previous research (Boyatzis, 1998). Thematic analysis enables researchers to use a wide range of types of information in a systematic way, which could increase their accuracy in understanding and interpreting data gathered about people or a situation. Analysing data under themes offers many advantages in organising, processing and analysing qualitative data (Coffey and Atkinson, 1996). Additionally, a "theme captures something important about the data in relation to the research question" (Braun and Clarke, 2006, p.9). The next section explains the interviews, classroom observations and questionnaire analysis techniques (Boyatzis, 1998).

5.9.1.1   Interviews

 A thematic analysis been used in analysing the data collected through interviews. The semi-structured interview themes emerged from the questionnaire themes and focus group interviews. There were two themes: the first was Islamic studies teachers' perceptions of using IT tools such as interactive whiteboards to display Qur'an verses. The second theme was the factor hindering Islamic studies teachers from implementing a blended learning approach.

5.9.1.2   Classroom Observations

In analysing the data collected through classroom observations, I started by explaining what the teacher did at the beginning of the lesson (how she started the lesson), for example, by revisiting the previous lesson, as it is important for Islamic studies teachers to test students' knowledge and understanding because most of the lessons depend on the previous ones. That was followed by explaining the teaching methods and highlighting any technology or active learning strategies used during the lesson, as these are part of the blended learning model used in this study. In addition, Islamic studies teachers are required by their academic supervisors to implement at least three strategies in each lesson. Next, I explained what the teacher did at the end of the lesson. In summary, I analysed the data according to the steps that Islamic studies teachers took to deliver the lesson. That was followed by a summary of the six lessons and the comments based on my experience of teaching an Islamic education curriculum and considering the curriculum's objectives as well as students' needs (see Chapter six).

5.9.2   Quantitative Analysis

According to Moore (2006), it is essential to check and verify the returns as they come in. Additionally, after receiving the completed questionnaires and completed the interview schedules in the data analysis phase the researcher started converting the data into information.

However, before processing the data the researcher should select the software or packages which are specifically designed to analyse the quantitative data, as this will determine the way in which the data will be entered. Thus, to process the data into usable forms, that will be followed by producing the results to draw the conclusions and make recommendations.

5.9.2.1   Questionnaire Analysis

During the second data collection phase I checked that all surveys were returned completely answered and finished. Moreover, I read the answers to ensure that the participants understood each question (Moore, 2006). I made further clarifications to questions by logging into Google Drive and editing the original form. As the data consisted of responses from different institutions and used Arabic in answering all of the questions. The completed questionnaires were entered in a database (Google Drive), which is feasible for this type of research data.

When I received the complete questionnaires, I used the pre-processing design to handle the data gained. First, I classified and tabulated the data using Microsoft Excel. This was followed by using the find and replace function to replace each phrase with a code, for example, (أوافق بشدة) which means strongly agree = 4 (sample in Appendix H). The tabulated data was then filed and stored in statistical analysis software (SPSS). I then used a descriptive statistics analysis including percentage mean and standard deviation to facilitate the interpretation of quantitative data. Additionally, factor analysis was used to analyse data regarding Islamic studies teachers' perceptions of using a blended learning approach and the factors that hinder Islamic studies teachers from implementing this approach when teaching aspects of the Islamic education curriculum.

According to Williams et al. (2010) factor analysis is a multivariate statistical approach commonly used in psychology and education. Another definition is that factor analysis is a collection of methods used to examine how underlying constructs influence the responses on a number of measured variables (DeCoster, 1998). Manly and Alberto (2016) state that factor analysis can be used for ordinal data such as Likert scales. Moreover, the variables used in factor analysis need to be "linearly related to each other" and "must also be at least moderately correlated to each other" (p.28). Factor analysis establishes underlying dimensions between measured factors, which allows the formation and refinement of theory. Moreover, it provides construct validity evidence of self-reporting scales (Thompson, 2004).

There is a range of types of factor analysis but the two main categories are confirmatory factor analysis (CFA) and exploratory factor analysis (EFA) (DeCoster, 1998; Tabachnick and Fidell, 2013; Williams et al., 2010). Confirmatory factor analysis (CFA) is used when sufficient evidence exists to specify which manifest variables should be loaded onto which common factors or when the aim is to validate previous models, proposed theories or a researcher's hypothesis (Taherdoost et al., 2014; Floyd and Widaman, 1995; Williams et al., 2010). While Exploratory Factor Analysis (EFA) is applied when the researcher has no prior assumption of the number or nature of the factors or when there is little evidence for their structure. In other words, when there is little theoretical basis for specifying a priori the number and patterns of common factors (Taherdoost et al., 2014, p.2).

Some common uses of EFA are:
1. To identify the number of common factors and the pattern of factor loadings (Williams et al., 2010).
2. To assess whether they are principally suitable for scale development (Taherdoost et al., 2014)
3. To determine what features are most important when classifying a group of items (DeCoster, 1998).

According to Taherdoost et al. (2014), despite the fact that sample size is an importance issue in factor analysis there are different ideas about the ideal sample size in the literature. Norris and Lecavalier (2010) also supported that "there is no consensus regarding the ideal sample size or subject-to-variable ratio" (p.3). In addition, there are some suggestions in the literature, for instance by Hair et al. (2013), which suggested that a sample size should be 100 or greater.

Norris and Lecavalier (2010) suggested that researchers first need to decide on the research questions or the aim of the study and on which type of factor analysis is appropriate for the data. For instance, when the researcher's target is to examine underlying constructs, then the exploratory factor analysis (EFA) is appropriate while the principal component analysis (PCA) is applicable for data reduction. Additionally, using factor analysis may be useful in many situations, include organising a set of variables into meaningful subgroups.
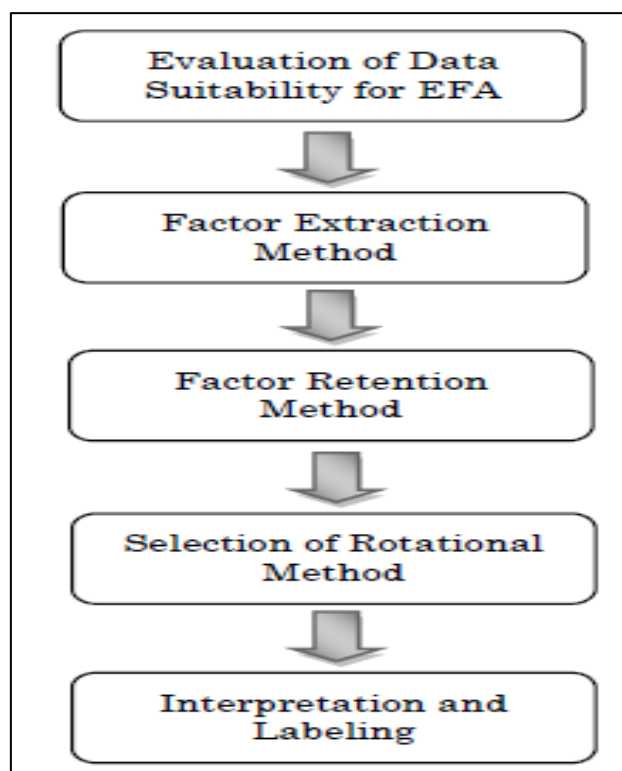
Figure 5.2: The Five-Step Exploratory Factor Analysis Protocol (Williams et al., 2010).

In this study, the researcher has no prior assumption of the effectiveness of using a blended learning approach and what factors may hinder Islamic studies teacher from implementing a blended learning approach when teaching aspects of the Islamic education curriculum. In addition, all variables are important as they help us to find which advantages most teachers agree with and what most affects their implementation of a blended learning approach. Moreover, the selections of the variables passed on reviewing relevant literature and considering Islamic studies teachers' points of view. Therefore, I used exploratory factor analysis.

Unrau et al. (2007) state that simple graphs like bar and pie charts, and illustrations, simplify complex information, emphasise key points and create pictures of data. In addition, it shows proportion, comparison and trends, and can help to clarify evaluations.

After the data was organised, I translated some of the figures into pie chart to present and compare the similarities and differences. The use of graphs may help readers to easily understand the results and perhaps provide an effective evaluation of the data gained. After the presentation and evaluation of the data, I wrote up the overall findings from the data processed in the project.

5.9.3   Summary of Research Questions, Research Instrument and Analysis Technique

Research Questions	Research Instrument	Analysis Technique
How effective do Islamic studies teachers in girls' primary schools believe using a blended learning approach is for teaching Islamic education modules (Qur'an and Tajweed, Hadith, Tawhid, and Fiqh)?	Questionnaires Lesson Observations Interviews	• Descriptive statistics • Thematic analysis • Synthesis from across the analysis and the interpretation of the data
Does using a blended learning approach in teaching aspects of the Islamic education curriculum change teachers' perceptions of their delivery of this curriculum?	Questionnaires Interviews	Descriptive statistics Factor Analysis
Do Islamic studies teachers believe that using a blended learning approach is suitable for teaching all Islamic education modules or is it more applicable to one subject than it is to others?	Questionnaires	Descriptive statistics
What are the main disadvantages of using a blended learning approach when teaching and learning Islamic education modules?	Questionnaires Interviews Lesson Observations	• Descriptive statistics • Thematic analysis • Synthesis from across the analysis and the interpretation of the data
What are the factors that motivate Islamic studies teachers to use a blended learning approach when teaching Islamic education modules?	Questionnaires Interviews	• Narrative analysis • Quote from some responses
What are the factors that inhibit Islamic studies teachers from implementing a blended teaching approach?	Questionnaires Interviews	Factor Analysis

Table 5.3: Research Questions, Research Instruments and Analysis Techniques

5.10 The Role of the Researcher

A researcher must develop the appropriate skill for collecting and interpreting the data prior to conducting a research study (Lincoln and Guba, 1985). Furthermore, a researcher's skill and willingness to conduct a research study could be evaluated by the "theoretical sensitivity" of the researcher. Strauss and Corbin (1990, p.42) state that theoretical sensitivity is a useful concept and it "refers to a personal quality of the researcher. It indicates an awareness of the subtleties of the meaning of data. ... [It] refers to the attribute of having insight, the ability to give meaning to data". Hoepfl (1997) explains that theoretical sensitivity comes from various sources, including personal experiences, professional experiences and professional literature. Similarly, Greenbank (2003) and Denzin and Lincoln (2013) state that the qualitative researcher needs to describe related aspects of self, including assumptions, any anticipations and any experiences, to qualify the researcher's ability to conduct the research. Simon (2011, p.1) adds that a good qualitative researcher seeks to build a picture using ideas and theories from a wide variety of sources.

Having reviewed research methods in education, I was able to select appropriate methods for collecting and analysing the data, as well as justifying the rationale for choosing each method. Following this, the qualitative and quantitative data was collected and analysed. The comments and the interpretation of the findings is based on my specialists in Islamic studies and considering the curriculum objectives and students' needs. All these have helped me to be sensitive to the data and to make appropriate decisions in the field.

Cohen et al. (2007, p.172) suggest that reflexive researchers are "aware of the ways in which their selectivity, perception, background and inductive processes and paradigms shape the research". Moreover, reflexivity requires researchers to examine and evaluate their own assumptions, roles and bias in conducting the research and analysing its findings (Wellington, 2000). Similarly, Creswell and Miller (2000) claim that researcher reflexivity means that the researchers uncover their assumptions, beliefs and biases. This can be achieved by including personal beliefs and values which may shape the research. They emphasise that "it is particularly important for researchers to acknowledge and describe their entering beliefs and biases early in the research process to allow readers to understand their positions, and then … suspend those researcher biases as the study proceeds" (p.127). Additionally, in order to do this, the researcher could integrate this reflexivity into a narrative account by writing a section on

the role of the researcher. Furthermore, researcher reflexivity is a validity procedure that uses the lens of the researcher.

In analysing the results and interpreting the findings of this study, I followed a thematic approach and developed themes both in analysing the data and in discussing the findings to clarify the data for the reader. Furthermore, a narrative literature review approach was adopted to locate a large number of relevant studies and to offer a comprehensive background to understand the notion of the current research. Moreover, I endeavoured to ensure that all sections are clear and divided each chapter into sections and subsections to make it easy for the reader to read the research.

Finally, the role of the researcher also involves justifying the credibility of the research, as checking that the research instruments are valid and reliable makes the research correct and valuable and enables it to become a source for future researchers (Creswell and Miller, 2000; Golafshani, 2003).

The next section discusses the issues of validity and reliability for the selected research instruments.

5.11 Validity, Reliability and Triangulation of Assessing the Research Instruments

According to Lincoln and Guba (1985), there is no validity without reliability in quantitative research and no credibility without dependability in qualitative research. Golafshani (2003), states that reliability and validity are treated separately in quantitative studies, while these terms are not treated separately in qualitative research. Furthermore, terminology that encompasses both, such as credibility, transferability and trustworthiness, is used in qualitative research. Denzin and Lincoln (2003) suggest that neutrality or confirmability, consistency or dependability and applicability or transferability are the essential criteria for assessing the quality of qualitative research. Therefore, in both a quantitative inquiry and a qualitative inquiry, the validity and reliability of the research instruments play crucial roles within the entire research process, as having the research instruments checked as valid and reliable makes the research credible enough to be published (Creswell and Miller, 2000; Golafshani, 2003). Having illustrated the importance of the validity and reliability of research, the following sections will address the validity and reliability issues of this study.

5.11.1 Validity

According to Golafshani (2003):

> "Validity determines whether the research truly measures that which it was intended to measure or how truthful the research results are. In other words, does the research instrument allow you to hit 'the bull's eye' of your research object? Researchers generally determine validity by asking a series of questions, and will often look for the answers in the research of others" (p.5).

Similarly, Gay and Airasian (2003) define validity as the extent to which a measurement measures what it is set out to measure.

McIver and Carmines (1981) state that:

> "The most fundamental problem with single item measures is not merely that they tend to be less valid, less accurate, and less reliable than their multi item equivalents. It is rather, that the social scientist rarely has sufficient information to estimate their measurement properties. Thus, their degree of validity, accuracy, and reliability is often unknowable." (McIver and Carmines, 1981, p.15)

In this study, all of the scales in the questionnaire were multi-item scales. For example, the frequency of using teaching methods included 12 examples of teaching methods. Moreover, the section on the extent of using teaching aids asked about the availability and the frequency of using 12 examples of teaching aids. Furthermore, the active learning strategies section asked about the frequency of using eight examples of active learning approaches. The Islamic studies teachers' perceptions of using a blended learning approach when teaching the Islamic education curriculum and the factors that prevent Islamic studies teachers from implementing a blended learning approach included nine items, with each one examined the extent of the agreement using a four-point Likert-type agreement scale with 'strongly disagree', 'disagree', 'agree' and 'strongly agree'.

5.11.1.1 Types of Validity

There are various types of validity – content validity, face validity, internal validity and external validity – and each type of validity is tested in a different way (Litwin, 1995; Creswell and Miller, 2000; Golafshani, 2003). According to Merriam (1998), to test the internal validity of the research instruments, the researcher may apply several methods, including member checks, long-term observation at the research site, peer examination, and participatory or collaborative modes of research. Moreover, Lincoln and Guba (1985) add that in qualitative research transferability is an alternative to external validity.

Figure 5.2 below provides a summary of the validity procedures in mixed methods research.
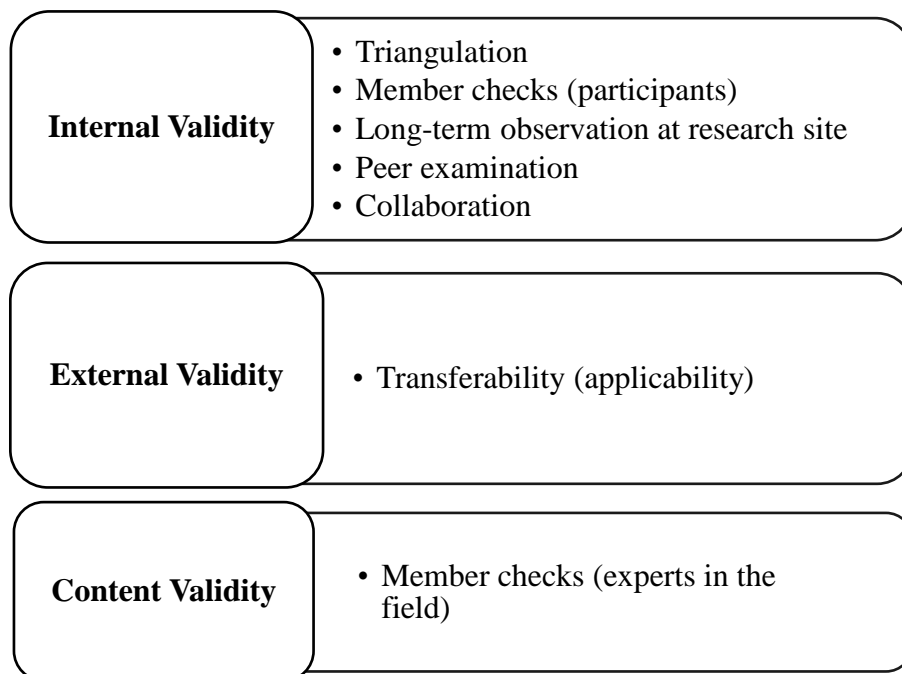
Figure 5.3: Validity procedures in mixed methods research (Zohrabi, 2013)

5.11.1.1.1 Internal Validity

Long-term observation at research site (prolonged engagement in the field)

One technique for assisting the internal validity is for researchers to stay at the research site for a long period of time; however, there is no ideal duration. Ethnographers, for instance, spend between four months and one year at a site. Constructivists emphasise, however, that, "the longer they stay in the field, the more the pluralistic perspectives will be heard from participants and the better the understanding of the context of participant views" (Creswell and Miller, 2000, p.128).

In this study, during the data collection phases I kept in touch with many Islamic studies teachers and other experts in teacher training programmes, such as specialists in training teachers to use active learning strategies. I also joined teaching channels in the *Telegram* and *WhatsApp* applications to be kept informed about the current teaching methods used in teaching the Islamic education curriculum and to see some examples of applying active learning strategies in a classroom. Moreover, I kept in contact with Islamic studies teachers I had met during the fieldwork, and whenever I needed information regarding the teaching methods or needed to find out what their academic supervisor had asked the teachers to do, I either phoned some teachers or sent a message and waited for their reply.

Member Checking

Creswell and Miller (2000, p.127) state that "with member checking, the validity procedure shifts from the researchers to participants in the study". Lincoln and Guba (1985) describe member checks as the most crucial technique for establishing credibility in a study. Member checking involves taking data and interpretations back to the participants in the study so that they can confirm the credibility of the information and narrative accounts (Zohrabi, 2013). It can be conducted in several ways. For instance, the researcher could ask participants to review the findings of the focus group interviews or to review the observation notes and comment on their accuracy (Creswell and Miller, 2000). By doing so, "the results and interpretations of interviews might be handed over to the interviewees in order to confirm the content of what they have stated during the interview encounter. In this way, the plausibility and truthfulness of the information can be recognised and supported" (Zohrabi, 2013, p.258).

Following the classroom observations, I met with the teacher and provided her with a summary of the comments about the lesson, and together, the researcher and the teacher reviewed the steps and methods the teacher used to deliver the lesson. Similarly, immediately after each focus group interview, I asked some teachers (who did not have to teach a lesson after the interview) to review the summary of the interview and add further comments. I also asked for further clarification of some points which I found useful to check the accuracy of the data as well as to enrich the data collected.

5.11.1.1.2 External Validity

Transferability

Denzin and Lincoln (2003) claim that the researcher cannot specify the transferability of findings. The researcher can only provide sufficient information that can then be evaluated by the reader to determine whether the findings are applicable to the new situation. Webster and Mertova (2007) state that providing such richness of detail and accessibility enables the reader to make applications to the same research in another sitting. Moreover, Zohrabi (2013) states that when the researcher provides the reader with sufficient information, he/she achieves the validity requirement.

In this study, I endeavoured to provide readers and stakeholders with sufficient information about the study, including the context of the study, the methods used for data collection, and the data analysis procedures. Furthermore, I clearly explained the four dimensions of the blended learning model and justified the rationale for choosing these dimensions and I included a full copy of the survey questions in the Appendices.

5.11.1.1.3 Content Validity

Content validity shows how accurate an assessment or measurement tool can be with regard to the specific construct in question. This type of validity checks whether a person's answer to a question is being influenced by other factors or not (Gay and Airasian, 2003). Howitt and Cramer (2014) state that good content validity follows from a careful selection of a broad range of items, such as reviewing relevant literature or interviews with people in a similar situation to the target participants. Moreover, seeking items from a wide domain is likely to enhance the content validity. Furthermore, content validity is achieved in several ways. For instance, referring to experts on the topic being measured. The duty of the experts is to conduct an in-depth review and decide whether the types of questions (items) adequately cover the behaviour that the researcher intends to measure (Fitzner, 2007; Howitt and Cramer, 2014). Zohrabi (2013, p.258) states that "based on the reviewers' comments, the unclear and obscure questions can be revised and the complex items reworded. Also, the ineffective and non-functioning questions can be discarded altogether".

Questionnaire

In order to test the content validity, the questionnaire used in this study was discussed initially with the researcher's academic supervisor at Durham University. Next, the Arabic and English versions of the questionnaire were sent to an expert in English-Arabic translation to check that

the Arabic version was clear for the target sample Arabic speakers. Finally, the questionnaire was checked by two academics at the Pedagogical Planning and Development Administration in Jeddah prior to obtaining their approval to pilot this study. All of those people were aware of the study's aims as well as the research questions. More importantly, the questionnaire items were selected from relevant research studies and some statements were amended to make them relevant to this research (Al-Buraidi, 2006; Al-Matari, 2008; Al-Malki, 2011; Alqahtani, 2010; Alsharidah, 2012).

Translating the Questionnaire

1- I designed the questionnaire in English and then discussed it with my academic supervisor at the university.

2- I translated the questionnaire into Arabic and then sent the English and Arabic versions to an expert in English-Arabic translation to ensure that all of the questions were clear and there was no ambiguous wording.

3- The Arabic version was then reviewed by two academics at the Pedagogical Planning and Development Administration in Jeddah prior to obtaining their consent to pilot this study.

Interview

In order to test the content validity of the interview:

1. All the interviews questions were checked initially by the researcher's academic supervisor and two members of the academic staff at the Pedagogical Planning and Development Administration.

2. Obtaining initial approval from Islamic studies teachers, who signed the consent form and agreed to participate in this study.

3. Prior to the interview, I reassured each teacher that their answers will only be used in this research and that their name or any other personal information will not be included in the transcript of the interview.

4. During each interview, I wrote notes about what the teacher said so that I did not forget her answers, and if I missed any part or needed further clarification, I asked the teacher when I met her later.

5. The Arabic and English transcripts were given to an expert in Arabic-English translation to ensure that there was no difference between the two versions.

Having discussed the validity of the questionnaire and the interview, the next section will address the reliability of the scales used in the questionnaire.

5.11.2 Reliability

Reliability is the concept that involves the repeatability of the results of the research. Data should be considered reliable when in the future similar research, the significant results of the first research can still be used to justify the newer research (Sekaran, 2003). For some research, when an experiment replicates the previous research's experiment, it should have the same conditions and will result in the same findings. With this, the data is said to be reliable (Morse et al., 2002).

5.11.2.1 Types of Reliability

Reliability comes in many forms, including test-retest, inter-rater, and internal consistency reliability (Sekaran, 2003). There are also many techniques to assess the internal reliability, including the split half method and Cronbach's alpha (Gliem and Gliem, 2003). In addition to the split half method and Cronbach's alpha, factor analysis also used to test the internal reliability and it gives more confidence regarding the internal reliability of multiple-item scales (Carmines and Zeller, 1979; Thompson, 2004).

The Cronbach's alpha test is a mathematical approach used to test the internal reliability of the research instrument. According to Gliem and Gliem (2003), Cronbach's alpha is a reliability test that requires only a single test administration to provide a unique estimate of the reliability of a given test. The measurement of this reliability test can have a minimum value of 0 and a maximum of 1, and the closer the Cronbach's alpha coefficient is to 1, the greater the internal consistency of the items in the scale (De Vaus, 2002). Moreover, George and Mallery (2003) state that a 0.7 alpha value is acceptable, while Field (2009) argues that an acceptable Cronbach's alpha value should be above 0.7. Although there is no rule of thumb about the acceptable value of Cronbach's alpha, the level of 0.80 is usually acceptable (Gliem and Gliem, 2003). Cohen et al. (2007, p.506) claim that "if the alpha value is greater than 0.90, it is considered a very highly reliable coefficient, 0.80-0.90 is considered highly reliable, 0.70-0.79 reliable, and 0.60-0.69 marginally/minimally reliable".

In this study, both Cronbach's alpha coefficient and factor analysis were used to measure the internal reliability of the all of the scales in the questionnaire.

5.11.2.1.1 Cronbach's Alpha Coefficient

Scales	N of Items	Cronbach's Alpha
Usage of teaching aids	12	0.88
Usage of teaching methods	12	0.86
The effects of using a blended approach in each subject in the Islamic education curriculum	11	0.83
Usage of active learning strategies	8	0.80
Availability of teaching aids	12	0.72

Table 5.4: Internal Reliability 'Cronbach's Alpha' of the Scales in the Questionnaire

The table above shows that the value of the Cronbach's alpha is closer to 1 in most scales and that the reliability coefficients range from a minimum of 0.72 to a maximum of 0.88. Therefore, all of the scales in the questionnaire are reliable. Moreover, if items are deleted, the Cronbach's alpha either does not change or changes slightly.

5.11.2.1.2 Factor Analysis

In analysing the quantitative data, the researcher conducted exploratory factor analysis for two scales: 1) Islamic studies teachers' perceptions of using a blended approach; and 2) the factors preventing Islamic studies teachers from using a blended approach. Each scale had nine items. Participants were asked to indicate to what extent they agree or disagree with each statement, ranging from 1 'strongly disagree' to 4 'strongly agree'.

5.11.2.1.2.1 Islamic Studies teachers' perceptions of using a blended approach

Item	Factor Loading		Cronbach's
	1	**2**	**Alpha**
Increases my productivity when preparing the lesson	0.814		
Eases linking lesson contents to the students' lives	0.807		
Helps achieve curriculum objectives	0.794		0.84
Simplifies the lesson's content in student's textbook	0.741		
Increases the flexibility of my teaching time		0.774	
Suits both high and low ability students		0.763	
Facilitates interaction between students and me		0.670	0.80
Helps students develop new skills		0.655	
Helps students exchange knowledge		0.579	

Table 5.5: Internal Reliability 'Cronbach's Alpha' for Islamic Studies Teachers' Perceptions of Using a Blended Approach

The table above shows that the Cronbach's alpha for the first factor is 0.84 and for the second factor is 0.80. As the alpha values are close to 1 for the two factors, this means that the data is more reliable (De Vaus, 2002). Moreover, deleting any items from the scale does not change the value of the alpha.

5.11.2.1.2.2Factors preventing Islamic Studies teachers from using a blended approach

Items	Factor Loading			Cronbach's Alpha
	1	2	3	
Takes a lot of the lesson time			0.867	0.75
Requires more time and effort in preparing the lesson			0.792	
High number of students in each class	0.805			0.70
Lack of convenient internet access	0.679			
Teachers' workload	0.634			
Fear of undermining the respected status of the academic content		0.761		0.62
Lack of ICT tools		0.693		
Lack of resources in a blended approach		0.603		
Lack of effective training in using a blended approach		0.539		

Table 5.6: Internal Reliability 'Cronbach's Alpha' for Factors Preventing Islamic Studies Teachers from Using a Blended Approach

The table above shows that the Cronbach's alpha value for the first factor is 0.70, for the second factor is 0.62, and for the third factor is 0.75, which means that the data is reliable. Moreover, deleting any items from the scale does not change the value of the alpha.

Having discussed the validity and reliability issues of the current research, the next section will explain the concept of triangulation in mixed methods research, which was used to test both the reliability and the validity of the research.

5.11.3 Triangulation

Triangulation is the type of reliability and validity test that requires the usage of two or more methods in collecting data in relation to the same topic (Golafshani, 2003; Zohrabi, 2013). According to Zohrabi (2013), gaining similar results in quantitative research is relatively straightforward as the data is in a numerical form. On the other hand, in qualitative approaches, achieving identical results is extremely difficult, and this is due to the data being in a narrative form. Denzin and Lincoln (2003) suggest that instead of gaining identical results, the researcher could ensure the dependability and consistency of the findings. This could be achieved by using

many techniques include triangulation. There are four types of triangulation: 1) across data sources such as participants; 2) methods; 3) theories; and 4) among different investigators (Creswell and Miller, 2000). Patton (2002, p.247) advocates the use of triangulation, by stating that "triangulation strengthens a study by combining methods. This can mean using several kinds of methods or data, including using both quantitative and qualitative approaches".

In this study, three groups of Islamic studies teachers in 1) state primary schools; 2) an international private primary school; and 3) a Qur'an memorisation state primary school were involved in a focus group and semi-structured interviews. Moreover, a mixed methods approach (qualitative and quantitative) was used for collecting data. This included a questionnaire, classroom observations, and interviews, which were used to collect data related to the same research question, as "collecting varied types of information through different sources can enhance the reliability of the data and the results. In this way, the replication of the study can be carried out fairly easily" (Zohrabi, 2013, p.259). Furthermore, both a thematic analysis and a descriptive statistics analysis using the Statistical Package for the Social Sciences (SPSS) was employed.

5.12 Ethics

Considering that ethical issues are a significant part of any research, several issues may be faced during a research project (Cohen et al., 2007; Oates, 2006). According to Blumberg et al. (2005), researchers should be aware of the high ethical standards that apply and the need to protect the rights of participants such as interviewees, sponsors and respondents involved in the study. In addition, a researcher should explain clearly how they intend to deal with the information obtained from the research instruments.

Prior to piloting this study ethical approval was obtained from the Ethics Committee of the School of Education at Durham University (see Appendix I). After developing the questionnaire and interview questions, I requested a letter from my supervisor at university which explained the need for fieldwork to collect data over a period of time. This letter was sent to the Saudi Arabian Cultural Bureau (SACB) in London and the Ministry of Higher Education in Riyadh along with a plan for the data collection phases. Next, the SACB provided me with a letter to the Pedagogical Planning and Development Administration in Jeddah, explaining that I am a PhD student and that I need to collect data using the research instruments. A permission letter to enter a number of primary schools in Jeddah was received from the pedagogical planning

and development administration. It would have been difficult to collect data and I may have been refused entry to schools without this permission letter.

That was followed by meetings with the school director to arrange the day and time to meet with the Islamic studies teachers to explain the aim of the study and request their consent to participate after reading the information sheet and signing the consent form. On the information sheet, I stated that the names and personal information of participants were not included in the questionnaires or in the transcripts of the interviews. In addition, all information would be kept confidential and will only be used for the purposes of the study. Finally, there were no direct risks to the Islamic studies teachers who participated in this study, as it was an exploratory study that aimed to contribute to the development of the methods for teaching the Islamic education modules. The participants were aware that their participation was totally voluntary and that they had the right to withdraw from the study at any time.

5.13 Conclusion

Since the teaching methods differs from one teacher to another and from one level to another, taking into account the nature of the subject, the curriculum objectives and student's needs. Consequently, Islamic education teachers from primary state schools, an international private school and a Qur'an memorisation primary state school were involved in this study.

A mixed-methods approach was used for data collection, including qualitative (lesson observations and interviews) and quantitative (online questionnaires) methods. Additionally, a link to the online questionnaires was send via the *WhatsApp* and *Telegram* applications to an individual Islamic study teacher as well as to existed groups in *WhatsApp* and to a channel called "Primary Level Teachers" in *Telegram*. The Semi-structured interviews used to support the information that gathered through the questionnaire. Moreover, to obtain more information from the teachers specialised in teaching Islamic education curriculum; and to give the teachers the opportunity to express their opinions about using different forms of technology and active learning strategies in teaching Islamic education curriculum. While observation aimed mainly to find out about the current teaching methods, teaching aids and active learning strategies used by Islamic studies teachers when teaching aspects of the Islamic education curriculum.

In the data analysis phase, both a thematic analysis and a descriptive statistics analysis using the Statistical Package for the Social Sciences (SPSS) was employed to facilitate the interpretation of quantitative data, the data collection phases include distribution of the survey,

guidance on responding to the questionnaire via the *WhatsApp* and *Telegram* applications and collecting data.

The research procedures, including developing the questionnaire and collecting data was subjected to validity and reliability testing. To ensure that only credible and right data and information would be included on the research. This is also may help future researches to find data and information that can help back-up the new line of researches being conducted.

5.14 Chapter Summary

Methodology chapter explains research aims, research questions and the steps researcher followed to obtain approval from the pedagogical planning and development administration to pilot this study. This chapter also provides details of the methods used for data collection and analysis techniques with the rationale of the chosen methods. In addition, it explains the procedure of conducting interviews and classroom observations. Finally, ethical issues, the role of the researcher and issues of validity and reliability are presented in this chapter. The next chapter is focused on the analysis and the interpretation of the data gathered using research instruments (online questionnaires, classroom observations and interviews).

Chapter Six: Results

6.1   Introduction

The previous chapter explained the research aims, the research questions, the research design and the approaches adopted in the data collection phases. This chapter describes the analysis of the Islamic studies teachers' responses to the questionnaire and interview questions. The qualitative and quantitative data in this chapter was obtained by means of an online questionnaire, interviews and classroom observations. Thematic analysis, descriptive statistics analysis and the Statistical Package for the Social Sciences (SPSS) were used to facilitate the interpretation of quantitative data. This chapter is divided into three sections: 1) the analysis of the questionnaires, including the participants' demographic characteristics; 2) the analysis of the interviews; and 3) the analysis of the classroom observations and a summary of the findings.

6.2   Questionnaire Results

6.2.1   Demographic Information

The teachers' demographic information includes gender, academic qualifications, specialisations, work-based experiences and training courses and computer and internet usage in preparing and delivering Islamic education lessons. The demographic information also includes the frequency of using examples of teaching methods, teaching aids and active learning strategies when teaching aspects of the Islamic education curriculum. Also, the availability of examples of teaching aids in schools.

6.2.1.1   Gender
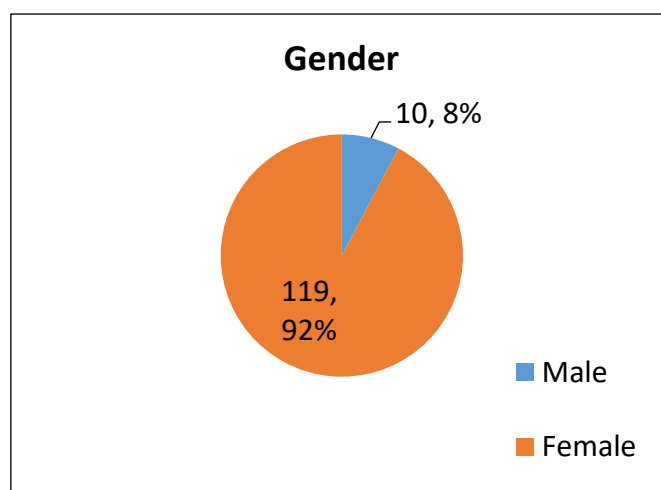
Figure 6.1: Gender of the Participants

The figure shows that 10 male and 119 female Islamic studies teachers responded to the online questionnaire. Thus, a total of 129 teachers form the study's population. In addition, the figure

indicates that the majority of participants were female (92%). Due to the low number of male participants, their responses will be included in the overall analysis but will not be considered for separate analysis.

6.2.1.2   Qualifications

N = 129		
Qualification	**Frequency**	**Percentage**
Diploma	14	10.9
Bachelor's Degree	97	75.2
Master's Degree	18	14.0
Total	129	100.0

Table 6.1: Qualifications of the Participants

Table 6.1 shows that nearly three quarters of the participants (75.2%) had a bachelor's degree, while only 14 teachers (10.9%) had diplomas and 18 (14.0%) had a master's degree.

6.2.1.3   Specializations
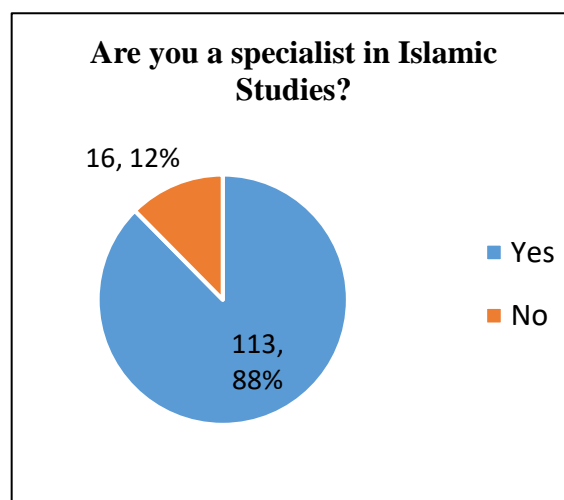
Figure 6.2: Specializations of the Participants

Figure 6.2 shows that of the 129 teachers who participated, 113 (88%) are specialised in Islamic studies, while 16 (12%) are specialists in other disciplines (see Table 6.2 for specifics).

Disciplines	Frequency	Percentage
Art	3	2.3
History	2	1.6
Geography	2	1.6
Science	2	1.6
Arabic	5	3.9
Mathematics	2	1.6
Islamic Studies	113	87.6
Total	129	100.0

Table 6.2: Specializations of the Participants

Of the 129 teachers who responded to the online questionnaire, 16 teachers taught Islamic studies although they were not specialists in the subject. They were instead specialised in various other disciplines: art (2.3%), history (1.6%), geography (1.6%), science (1.6%), Arabic (3.9%) and mathematics (1.6%).

6.2.1.4   Work Experience (N = 129)

Years of Experience in Teaching Islamic Education Curriculum	Frequency	Percentage
1 - 5 years	23	17.8
6 - 10 years	44	34.1
11 - 15 years	19	14.7
Over 15 years	43	33.3
Total	129	100.0

Table 6.3: Participants' Work Experience

About a third of the participants (34.1%) had been teaching Islamic education for 6-10 years, and another third (33.3%) had been teaching the subject for over 15 years. A smaller percentage of the participants (17.8%) had been teaching for only 1-5 years, and the remaining 19 teachers (14.7%) had been teaching for 11-15 years.

6.2.1.5   Training Courses (N = 129)

Training Courses Received During Work Experience	Frequency	Percentage
Yes	107	82.9
No	22	17.1
Total	129	100.0

Table 6.4: Training Courses

Table 6.4 shows that 107 participants (82.9%) attended training courses during their work experience. Only 22 participants (17.1%) did not take any training courses.
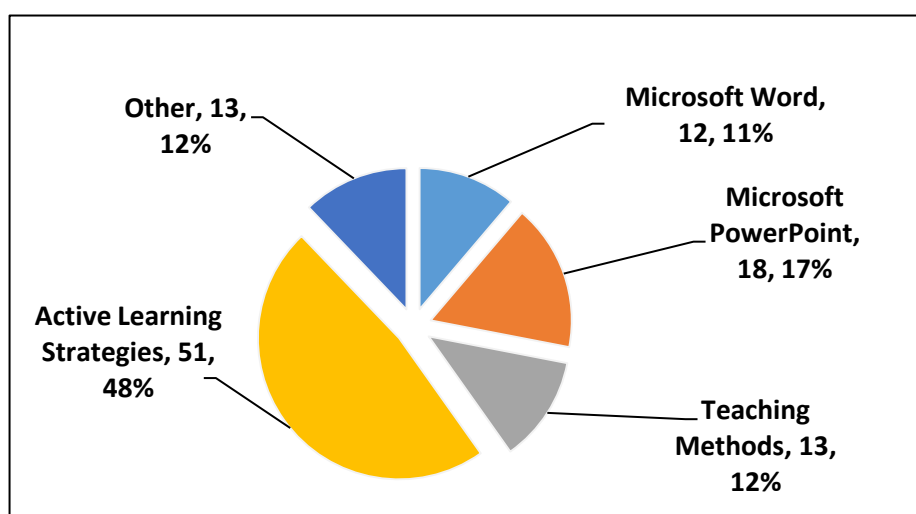
Figure 6.3: Types of Training Courses

Figure 6.3 indicates the types of training courses attended. As can be seen, 51 of the 107 teachers (48%) attended training courses in using active learning strategies, while 12 teachers (11%) attended training courses in using Microsoft Word and 18 (17%) in using Microsoft PowerPoint. Moreover, only 13 teachers (12%) attended training courses in teaching methods. Thirteen teachers (12%) attended other courses for subjects such as thinking skills, classroom management approaches, first aid, self-development skills, instilling values in students, being a role model teacher, educational integration of the iPad and its applications and qualifying teachers to teach the Holy Qur'an.

6.2.1.6   Computer and Internet Usage
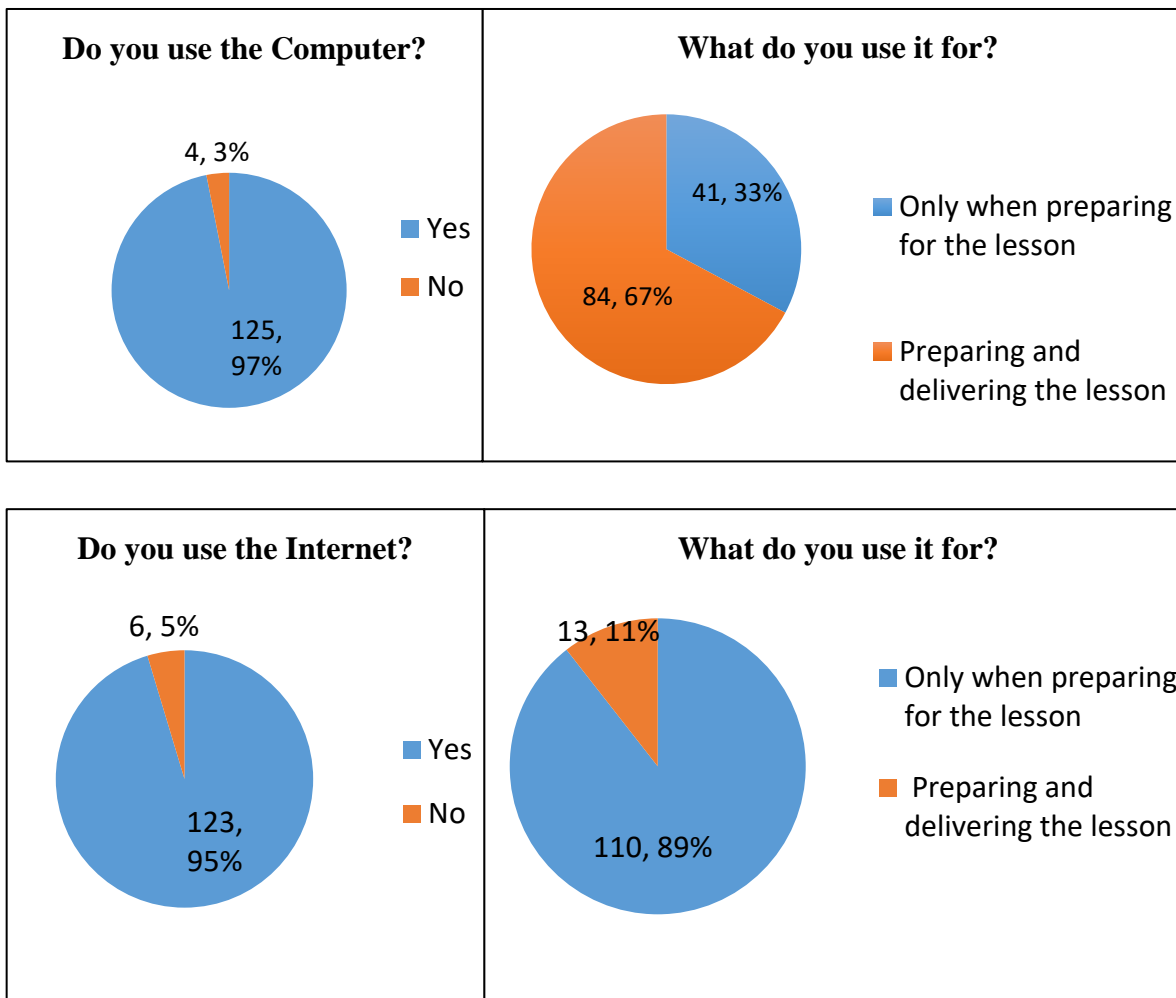
Figure 6.4: Computer and Internet Usage

The majority of participants used the computer (97%) as well as the internet (95%). However, many of the teachers used a computer to prepare and deliver the lesson (67%), while only some participants (11%) used the internet for the same purpose. Of the 129 participants, 110 only used the internet when preparing for lessons.

6.2.1.7   Summary of Participants' Demographic Characteristics

The majority of participants were female Islamic studies teachers. That is due to the gender segregation in the Saudi Arabian education system, which resulted in difficulty for me, as a female researcher, to gain access to male Islamic studies teachers, to observe them and to conduct interviews with them. In addition, I may not have received enough completed questionnaires. Consequently, I may not have obtained the full breadth of responses from my sample.

Many of the participants held a Bachelor Degree in Islamic studies with over 9 years of experience in teaching Islamic education modules. In addition, most participants received various training courses during their work experience, including active learning strategies, Microsoft PowerPoint and Microsoft Word. Moreover, 84 participants used computers to prepare and deliver the lesson, while only 13 used the internet for the same purpose. This suggests a lack of convenient internet access in Saudi Arabian schools.

The next section explains the frequency of using examples of teaching methods, the availability and the frequency of using examples of teaching aids and the frequency of using examples of active learning strategies when teaching aspects of the Islamic education curriculum.

6.2.2   Teaching Methods, Teaching Aids and Active Learning Strategies

6.2.2.1   Teaching Methods

This section discusses the extent to which the Islamic studies teachers participating in the study used examples of teaching methods from two categories (Traditional Methods and Modern Methods discussed in chapter 3). Respondents were asked to indicate how frequently they used each method: Never, Seldom, Occasionally, Often or Always. The means of the responses were computed by assigning a numeric value to each choice: 1 to Never, 2 to Seldom, 3 to Occasionally, 4 to Often and 5 to Always. The results are recorded in the table below.

Table 6.5: Teaching Methods (N = 129)

Teaching Methods	Frequency Of Use					Mean	SD
	Always 5	Often 4	Occasionally 3	Seldom 2	Never 1		
The Discussion Method	**62**	41	21	5	0	4.24	.86
The Dialogue Method	**63**	43	14	8	1	4.23	.93
The Interrogatory Method	50	**54**	21	3	1	4.16	.83
The Deductive Method	**59**	34	33	1	2	4.14	.93
The Collaborative Learning Method	**56**	43	21	7	2	4.12	.97
The Explaining Method	**45**	44	38	2	0	4.02	.84
The use of audio tapes such as recordings of the Qur'an to help students improve their recitation	**48**	45	20	11	5	3.93	1.10
The use of video tapes related to the lesson	**47**	44	24	9	5	3.92	1.08
The use of stories	35	**45**	33	15	1	3.76	1.00
The Problem Solving Method	26	**55**	28	14	6	3.63	1.06
The use of Islamic websites	**37**	30	31	16	15	3.45	1.33
The Demonstration Method	22	32	**52**	16	7	3.36	1.07

Table 6.5 illustrates how frequently Islamic studies teachers used examples of teaching methods. The discussion, dialogue, interrogatory, deductive, collaborative learning and explaining methods had the highest means, ranging from 4.02 to 4.24. Moreover, the use of audio tapes

and video tapes had similar means: 3.93 and 3.92, respectively. The use of stories, the problem solving method, Islamic websites and the demonstration method had the lowest means, ranging from 3.36 to 3.76. Thus, there are three levels of usage for the teaching methods. The high level of usage includes six methods, the moderate level of usage includes two methods and the low level of usage includes four methods.

The dialogue method was 'always' used by 63 teachers (48.8%) and "often" used by 43 teachers (33.3%). The deductive method was "always" used by 59 teachers (45.7%) and "often" used by 34 teachers (26.4%). The interrogatory method was 'always' used by 50 teachers (38.8%) and "often" used by 54 teachers (41.9%). The explaining method was "always" used by 45 teachers (34.9%) and 'occasionally' used by 38 teachers (29.5%). Ninety-five teachers (73.6%) 'Always' used either audio or video tapes, while 10 teachers (7.8%) 'Never' used audio or video tapes. Thirty-seven teachers (28.7%) 'Always' made use of Islamic websites and 30 teachers (23.3%) 'Often' did so. Both Islamic websites and the demonstration method were "seldom" used by sixteen teachers (12.4%).

The results revealed that the nature and objectives of the curriculum play a major role in the choice of teaching methods for Islamic studies teachers. For instance, 52 teachers of the 129 participants 'occasionally' used the demonstration method since it is more applicable if there is a need to demonstrate the correct technique for a specific topic, such as prayer. Therefore, Islamic studies teachers mainly used the demonstration method when teaching lessons of Islamic Jurisprudence. The teachers also indicated a moderate usage of audio and video tapes. This could be because most teachers used audio recorders in Qur'an lessons to help students achieve specific curriculum objectives (proficiency, fluency and lack of hesitancy in memorizing and reciting the required chapters), as the teachers stated in the semi-structured interviews.

6.2.2.2   Teaching Aids

The availability of teaching aids for Islamic studies teachers and the frequency of their use are important as they form part of the blended learning model used in this study. In their interviews, the participating Islamic studies teachers indicated that the lack of technology is a barrier that may obstruct implementation of a blended learning approach in primary schools. The teaching aids considered in this study were selected based on reviewing relevant studies (Al-Buraidi, 2006; Almaghlouth, 2008; Alsharidah, 2012) as well as considering the findings from the interviews and classroom observations.

The next section explains the availability of specific teaching aids and how frequently these examples were used by the participants to teach aspects of the Islamic education curriculum.

Table 6.6: Availability of Teaching Aids in Schools (N = 129)

Teaching Aids	Availability				Mean	SD
	Yes		No			
	F	%	F	%		
school assembly	116	89.9	13	10.1	1.90	0.30
Islamic syllabus	107	82.9	22	17.1	1.83	0.38
School library	102	79.1	27	20.9	1.79	0.41
Pictures	85	65.9	44	34.1	1.66	0.48
Audio recorder	82	63.6	47	36.4	1.64	0.48
Computer	75	58.1	54	41.9	1.58	0.50
Overhead projector	74	57.4	55	42.6	1.57	0.50
Articles taken from newspapers or magazines	50	38.8	79	61.2	1.39	0.49
Tapes/CDs of Islamic lectures	49	38.0	80	62.0	1.38	0.49
Interactive whiteboard	49	38.0	80	62.0	1.38	0.49
Television/video	45	34.9	84	65.1	1.35	0.48
Internet access	35	27.1	94	72.9	1.27	0.45

Table 6.6 shows the level of availability of teaching aids in some primary schools by providing the frequency, percentage, mean score and standard deviation for each example. Accordingly, availability can be divided into three levels: 1) readily available, 2) occasionally available and 3) rarely available.

The 'readily available' level includes school assembly, a school library and an Islamic syllabus; these aids had the highest means, ranging from 1.79 to 1.90. 'Occasionally available' includes pictures, an audio recorder, a computer and an overhead projector; the means for these aids ranged from 1.57 to 1.66. 'Rarely available' includes articles taken from newspapers or

magazines, tapes or CDs of Islamic lectures, an interactive whiteboard, television or video and internet access; the means for these aids were the lowest, ranging from 1.27 to 1.39.

116 (89.9%) of participants indicated that school assembly were held in their school and 107 (82.9%) of teachers indicated that they had an Islamic syllabus, and 102 (79.1%) indicated that there was a school library in their schools. On the other hand, 94 teachers (72.9%) indicated a lack of internet access and 84 teachers (65.1%) indicated a lack of television or video in their schools. Eighty teachers (62.0%) did not have access to interactive whiteboards. These findings revealed that most teachers faced a lack of availability of necessary teaching aids such as interactive whiteboards, computers and internet access. This barrier may obstruct the implementation of a blended learning approach and result in Islamic studies teachers depending on traditional teaching approaches instead.

Table 6.7: The Frequency of Using Examples of Teaching Aids (N = 129)

Teaching Aids	Frequency Of Use					Mean	SD
	Always 5	Often 4	Occasionally 3	Seldom 2	Never 1		
Computer/laptop	**67**	28	26	5	3	4.17	1.03
Overhead projector	**63**	26	33	2	5	4.09	1.08
Islamic syllabus	**66**	19	32	7	5	4.04	1.16
School assembly	**53**	37	29	7	3	4.01	1.04
Pictures	**47**	28	40	8	6	3.79	1.14
Internet access	**46**	30	27	10	16	3.62	1.37
School library	36	25	**42**	12	14	3.44	1.29
Audio recorder	31	32	**33**	16	17	3.34	1.33
Tapes/CDs of Islamic lectures	18	30	**38**	14	29	2.95	1.35
Articles taken from newspapers or magazines	21	18	**43**	25	22	2.93	1.29
Interactive whiteboard	25	17	**39**	18	30	2.91	1.41
Television/video	16	13	**42**	28	30	2.67	1.28

Table 6.7 shows the extent to which Islamic studies teachers used examples of teaching aids. Descriptive statistical analysis was used to analyse the data; the information provided in the table includes the frequency, mean score and standard deviation for each example. As can be seen, the extent of usage ranged from a high mean of 4.17 to a low mean of 2.67 while the standard deviation scores ranged from 1.03 to 1.41.

The results indicate a high level of usage for computers or laptops, overhead projectors, Islamic syllabi and school assembly. A moderate level of usage is seen for pictures, Internet access, school libraries and audio recorders. The lowest level of usage includes tapes or CDs of Islamic lectures, articles taken from newspapers or magazines, interactive whiteboards and television or video.

The findings revealed that the levels of usage for some examples such as internet access, overhead projectors and computers are slightly higher than the level of availability. This is consistent with the results from the classroom observations, as it was noted that some teachers used their own laptops and projectors, which can take a lot of the lesson time to set up. These results may demonstrate teacher interest in using information technology tools.

6.2.2.3 Active Learning Strategies

Active learning strategies form one of the four dimensions in the blended learning model used in this study. In addition, most of the participating Islamic studies teachers stated in their interviews that their academic supervisors have requested that they use at least three examples of active learning approaches in each lesson. To support the interview responses and determine how frequently these strategies are used in teaching aspects of the Islamic education curriculum, the participants were asked the following question:

How often do you use active learning strategies?
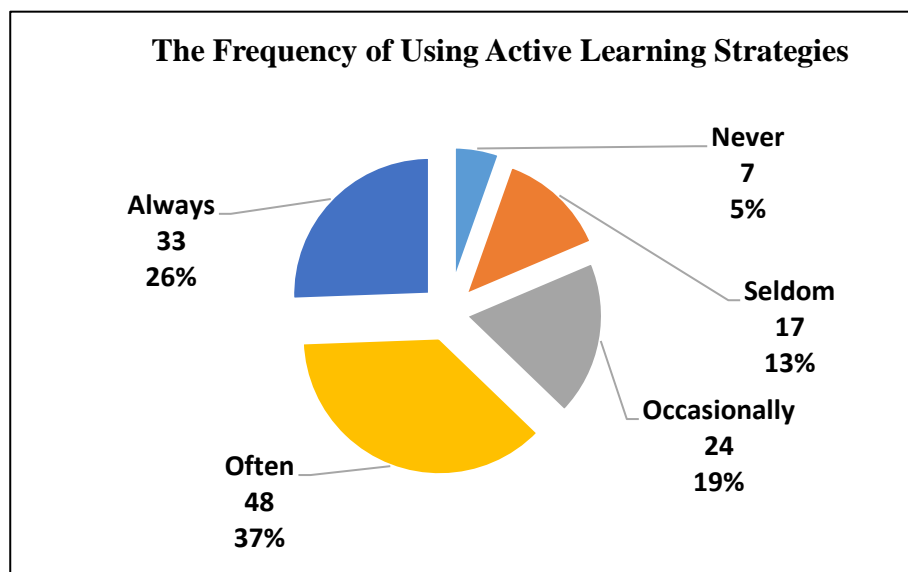
Figure 6.5: The Frequency of Using Active Learning Strategies (N = 129)

Figure 6.5 shows that 33 teachers (26%) 'Always' used active learning strategies, 48 teachers (37%) 'Often' used them and 24 teachers (19%) 'Occasionally' did so. Only 7 participants (5%) 'Never' made use of active learning strategies. These results indicate a high level of use of active learning strategies by Islamic studies teachers. This is consistent with the findings gained from the semi-structured interviews. Moreover, some teachers indicated in their interviews that not all of the strategies are suitable for teaching Islamic education modules due to the nature and objectives of the curriculum. For example, students are required to memorise certain

chapters of the Qur'an and master the recitation of other chapters. In addition, Islamic studies teachers must ensure that their students fully understand the lesson and implement the Islamic manners in their life inside and outside school.

The next section describes how frequently eight examples of active learning strategies were used by the participants. These examples were specifically selected as the teachers indicated during interviews and classroom observations that they used these strategies more often than others because they believed such strategies were most suitable for teaching an Islamic education curriculum.

Table 6.8: The Frequency of Using Examples of Active Learning Strategies (N = 129)

Active Learning Strategies	Frequency Of Use					Mean	SD
	Always 5	Often 4	Occasionally 3	Seldom 2	Never 1		
Brainstorming	**71**	29	14	3	12	4.12	1.26
Mind Mapping	**49**	45	21	3	11	3.91	1.19
Think-Pair-Share	**53**	35	19	10	12	3.83	1.30
Role Playing	30	**41**	27	16	15	3.43	1.29
Lollipop Sticks	**32**	30	29	13	25	3.24	1.44
Concept Cartoons	31	23	**36**	18	21	3.19	1.38
K-W-L	27	**31**	25	21	25	3.11	1.42
Hot Seat	20	25	**39**	15	30	2.92	1.37

Table 6.8 shows how frequently Islamic studies teachers used active learning strategies. Descriptive statistical analysis was used to analyse the data; the information provided in the table includes the frequency, mean score and standard deviation for each strategy. As can be seen, the extent of usage ranged from a high mean of 4.12 to a low mean of 2.92 while the standard deviation scores ranged from 1.19 to 1.44.

The findings revealed that the levels of usage for the active learning strategies varied. The high level of usage includes three strategies (brainstorming, mind mapping and Think-Pair-Share). The moderate level includes three strategies (role playing, lollipop sticks and concept cartoons). The low level includes two strategies (K-W-L and hot seat).

These findings indicate that the nature of the curriculum plays a major role in which strategies Islamic studies teachers choose to deliver information or assess their students' understanding. The least frequently used strategies are those the teachers believe are more suitable for the beginning or end of the lesson, either to assess students' understanding of the previous lesson or in preparation for the new lesson. One teacher mentioned that she often used the K-W-L strategy at the beginning of a lesson to identify how broad or in-depth a lesson should be. According to the teachers, the most frequently used strategies, such as brainstorming and mind mapping, are suitable for assessing understanding as well as teaching new information. In addition, many of the participants indicated that for some lessons they found it difficult to choose which strategy to use, due to the lesson's content or status.

6.2.2.4 Summary of the Current Methods Used in Teaching Islamic Education

The findings revealed that most teachers used a learner-centred approach. The discussion, dialogue, interrogatory, deductive and collaborative learning methods had the highest means. The nature and status of the curriculum played a significant role in which teaching methods and aids Islamic studies teachers chose to deliver information. In conclusion, taking into account the nature and status of the curriculum and adopting a learner-centred approach may help Islamic studies teachers to achieve specific curriculum objectives and foster meaningful learning.

6.2.3 Islamic Studies Teachers' Perceptions of Using a Blended Learning Approach

This section present the analysis of the data gathered from participants regarding their opinions of the effectiveness of using a blended learning approach in teaching Islamic education modules. This section is divided into four subsections:

1. The suitability of using a blended learning approach
2. Factors motivates teachers to use a blended learning approach
3. The advantages and disadvantages of using a blended approach
4. Factors hinder Islamic studies teachers from using a blended approach

6.2.3.1 The Suitability of Using a Blended Learning Approach for Teaching Islamic Education Modules

This section presents the data gathered from participants regarding the suitability of using a blended learning approach in teaching Islamic education modules and the frequency of using such method.
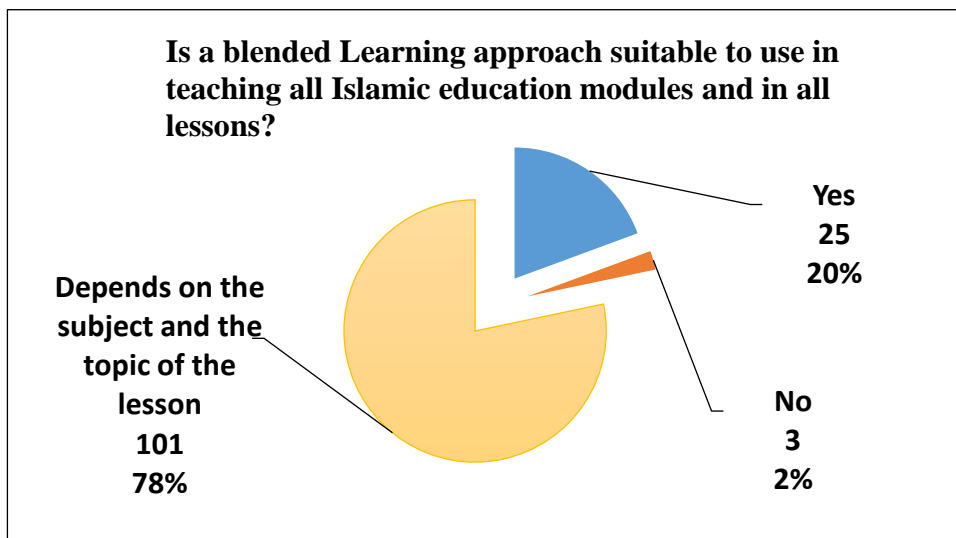
Figure 6.6: The Suitability of Using a Blended Approach for Teaching Islamic Education Modules (N=129)

As can be seen, most Islamic studies teachers believe that the suitability of applying a blended learning approach when teaching Islamic education modules varied according to the subject and topic of the lesson. This result suggests that the nature of the curriculum plays an important role in choosing the appropriate learning approach. Moreover, each subject of the Islamic education curriculum has a specific objective which Islamic studies teachers seek to achieve during lessons.

170

In which subject of the Islamic education curriculum would you use a blended learning approach more than others? Please specify why?
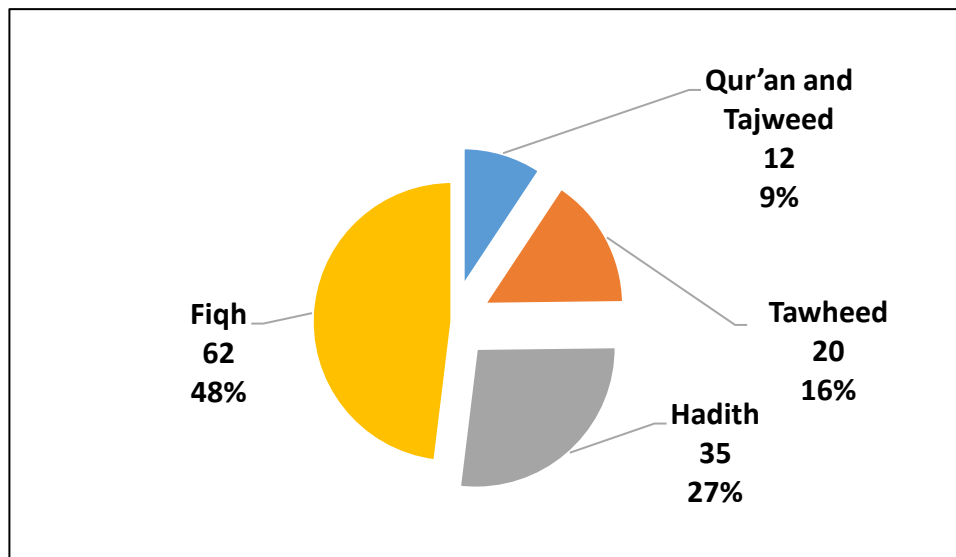
Figure 6.7: The Frequency of Using a Blended Approach (N=129)

Islamic studies teachers believe that Fiqh and Hadith are the subjects in which they used a blended approach the most. This is because Fiqh offers more opportunities for practical activities, unlike other subjects where such thinking is restricted, such as Tawheed, for its topics are theoretical and related to creed matters, and the Qur'an as it is important for the teacher to enable students to sense the greatness of Allah's Book and to help students achieve mastery of recitation. In addition, many teachers indicated that the failure to implement a blended approach in Islamic lessons is due to fear of undermining the respected status of the academic content or showing disrespect for the Holy Qur'an by applying a blended approach. From the foregoing discussion I concluded that, Fiqh and Hadith are the subjects that benefited the most from applying a blended approach in teaching them.

The following is a summary of the reasons for using a blended approach in teaching each module of the Islamic education curriculum from the Islamic studies teachers' point of view.

6.2.3.2   The Reasons for Using a Blended Learning Approach in Teaching Islamic Education Modules

This section presents the analysis of the data gathered from participants regarding the rational for using a blended learning approach in teaching the Islamic education modules (Qur'an and Tajweed. Tawheed, Hadith and Fiqh).

6.2.3.2.1   Qur'an and Tajweed

Subject	Reasons
Qur'an and Tajweed	- The students' weak performance in the recitation of the Qur'an. -**Great variety** "By using the technology I might be able to help the students to listen to the Qur'an by more than one reciter". - To help students to know the miracles of the Qur'an. -**Rich in content** "Because most of the verses contain stories and I need to explain the verses and to clarify the meanings of some words using different teaching methods to enable students to understand the general meaning of the verses." - Students need to understand and ponder the meanings of the verses and memorise some of them. - To take into account the individual differences and learning preferences among the students.

Table 6.9: Reasons for Using a Blended learning Approach in Teaching Qur'an and Tajweed

6.2.3.2.2   Tawheed, Hadith and Fiqh

Subject	Reasons
Tawheed	- Diversity of its topics. - To ease the teaching process. -**Novelty:** "I love innovation and renewal in the method of my teaching" - To deliver the information in a simple way by using visual and audio. - To take into account the individual differences among the students. - To show students some videos and documentaries related to the lesson. - Because modern technology has become a necessity in the teaching environment.

Table 6.10: Reasons for Using a Blended learning Approach in Teaching Tawheed

Subject	Reasons
Hadith	- Diversity of its topics - Each unit in the student's textbook consists of four elements, which are as follow: 1. The wording of the Hadith. 2. The narrator of the Hadith. 3. The meanings of the words. 4. Benefits from the Hadith. Thus, the contents of the lesson in this order have a wide domain for innovation in teaching methods. - Hadith is a subject that needs strategies for simplifying the information for the students. - **Rich in content:** "Each unit contains a lot of wisdom and values which the students should deduce, because I see that the student deducing the information is better and will enable her to remember it for a longer period, unlike if the information was narrated and the student's role was merely to receive". - To ease the teaching process. - To provide interactivity to the lesson. - For the availability of teaching aids that are connected to the etiquette that is taught in the subject of Hadith and the need to support some lessons by showing some videos and documentaries related to the lesson. - To use a mixture of teaching aids such as sound, picture and some modern technology to deliver the information in an easy and simple way and to explain the same pieces of information in different ways.

Table 6.11: Reasons for Using a Blended learning Approach in Teaching Hadith

Subject	Reasons
Fiqh	- Fiqh is considered from the reality that the student lives in, such as learning how to perform ablution; the correct description of the Prophet's prayer; how to perform Tayammum (purification with clean earth) if water is not available; the description of the Rain Seeking, Eclipse and Eid Prayers amongst other interesting topics.

	- For the large number of elements in a single unit such as prayer, which has pillars and obligations, there is a need for using active learning strategies, such as Role Playing, Brainstorming, the Hot Seat and more strategies to clarify and simplify the content of the lesson. - Because the content of the subject includes various activities and most of the topics are about behaviours that the student should possess in her daily life. Therefore, it needs different teaching methods and strategies to simplify the information to the students due to its content. -**Flexibility/Nature of the curriculum:** "In the subject of Fiqh I find a possibility for diversification and renewal without the fear of undermining the respected status of the academic content among the students." - For the diversity of the topics of the units and their tendency towards the practical side more than the theoretical side, such as teaching the description of the Prophet Muhammed's "peace be upon him" prayer. -**Novelty:** "To be an innovative and creative teacher". - To use a variety of teaching methods in explaining Fiqh rulings - **Nature of the curriculum:** "Fiqh is a very enjoyable and more flexible subject than other Islamic education modules and I think a blended approach in its teaching can be applied successfully." - For its closeness to the reality of our life and for the special worships it has in our religion. Also, it has that which represents our manners and the way we deal with people. - Due to the online availability of teaching aids related to the subject, such as, video, audio and pictures. - To enhance the text book content by showing some videos and Images related to the lesson. -To simplify the subject. -The variety of its topics and often it requires administration methods, such as teaching students how to perform 'Ablutions'. -To help students understand the jurisprudential terms. - To use a variety of teaching methods in delivering the information, such as sound, picture and some active learning strategies.

	- To take into account the individual differences among the students. - Simplifying some information by using pictures; for example, distinguishing between the correct and the wrong way of bowing and prostrating in prayer.

Table 6.12: Reasons for Using a Blended learning Approach in Teaching Fiqh

It becomes clear that the motivating reasons for using a blended learning approach are diverse and vary from one teacher to another. In addition, the nature of the curriculum, the availability of the teaching aids related to each unit in a student's textbook, and the availability of IT tools in schools are the key factors which may encourage Islamic education teachers to use a blended approach. This result demonstrates the significance of access to the necessary equipment, such as computers and projectors, and the availability of teaching aids, as these are shown to encourage Islamic education teachers to apply a blended approach when delivering Islamic lessons, and may contribute towards the successful implementation of blended learning in Saudi classrooms.

6.2.3.3   The Advantages for Implementing a Blended Learning Approach to the Learners and Learning Environment

Having used a blended approach, explain the benefits you gain from applying such method.

The benefits that Islamic studies teachers had most consensus on when they used a blended approach in teaching Tawheed, Hadith and Fiqh, was that implementing a blended learning approach eases the delivery of information and contributes to making information seem more pragmatic, and shifts it from the abstract to the tangible. Moreover, it saves teachers' time and effort in writing the correct answers for the assessment questions on the blackboard as she can display the correct answer using IWB or an overhead projector instead. Also, it facilitates the revision of previously used material and the possibility to make require changes. Additionally, it hastens the understanding of information, increases students' achievement and helps students to retain information longer.

With regard to the benefits of using a blended approach in teaching Qur'an lessons, Islamic studies teachers stated that it helps to clarify the meaning of the verses, helps students to know different programmes, which will enable them to practise reciting Qur'an at home with the ability to choose between several reciters' voices. Additionally, it increases the student's desire

to listen to the recitation of the Qur'an and simplifies the meaning of the verses to ease its understanding in a quicker manner.

The next section will explain the advantages that applying a blended learning approach provides to the teachers and the delivery of Islamic education curriculum.

Table 6.13: The Advantages for Implementing a Blended Learning Approach

Statements	N	Islamic Education Modules					
		Qur'an	Tawheed	Hadith	Fiqh	Mean	SD
Makes the subject more enjoyable	129	18	23	41	**47**	2.91	1.04
Helps add interest and enthusiasm to the lessons	129	18	25	38	**48**	2.90	1.06
Helps increase lively engagement among students	129	24	21	35	**49**	2.84	1.12
Relates the contents of the lesson to the student's experience	129	19	22	**49**	39	2.84	1.02
Hastens the understanding of information	129	21	26	37	**54**	2.82	1.08
Enhances the lesson's content in the student's textbook	129	21	25	**43**	40	2.79	1.05
Helps attract the attention of the student	129	20	33	**41**	35	2.71	1.03
Eases the delivery of information	129	22	30	**41**	36	2.71	1.05
Helps clarify information	129	24	31	**37**	**37**	2.67	1.08
Increases a student's motivation to learn	129	29	28	34	**38**	2.63	1.13
Helps students to remember the information for a longer period	129	33	30	**38**	28	2.60	1.12

The table shows a descriptive statistical analysis that includes the frequency, mean and standard deviation for each benefit in each Islamic education module. As can be seen, applying a blended approach in teaching Islamic education modules comes with benefits for both teachers and

students. Statements ranged from a high mean of (2.91) to a low mean of (2.60) and standard deviation scores ranged from 1.02 to 1.13.

Most teachers share an opinion about the benefits for implementing a blended learning approach in teaching Qur'an, Tawheed, Hadith and Fiqh. They believe a blended learning approach makes the subject more enjoyable, increases student's motivation to learn and helps add interest and enthusiasm to the lessons because it is a renewal of and change to the routine of narrating. In addition, applying a blended learning approach hastens understanding of information and helps consolidate it in the student's mind due to the variation in teaching methods, learning activities and teaching aids used for delivering the information, such as video clips, sound, picture and some active learning strategies. Consequently, it may help Islamic studies teachers to achieve specific curriculum objectives.

6.2.3.4 The Advantages Applying a Blended Learning Approach Provides to Delivery of Islamic Education Curriculum

Semi-structured and focus group interviews revealed that Islamic studies teachers and students believed that they need a teaching approach that helps teachers prepare an interactive lesson and help students learn and develop new skills including self-learning. Additionally, as mentioned earlier, the primary objective of teaching Islamic education is not to increase students' knowledge, but to have learners implement what they studied in the lesson. Hence, Islamic studies teachers are looking for an approach that gradually moves from teacher-centred to student-centred. Therefore, a second research question is:

Does using a blended learning approach in teaching aspects of the Islamic education curriculum change teachers' perceptions of their delivery of this curriculum?

A total of nine items in the questionnaire investigated Islamic studies teachers' perceptions of using a blended learning approach in teaching Islamic education modules. The questions used a Likert-type agreement scale of 'strongly disagree', 'disagree', 'agree' and 'strongly agree' were selected for exploratory factor analysis to group items under a theme and identify patterns between variables.

The next section explains the five steps I took to perform the exploratory factor analysis using respondents' data regarding their opinions of a blended learning approach in teaching aspects of Islamic education. The section also provides a descriptive statistical analysis, using frequency, mean and standard deviation to facilitate interpretations of the findings based on research

specialists in Islamic studies, as well as the researcher's experiences in teaching Islamic education curriculum.

6.2.3.4.1 Factor Analysis

The five steps I took to perform the exploratory factor analysis using respondent data are as follows:

Step One: Test the suitability of the data for factor analysis.

Before extraction of a factor, the adequacy of the sample size and the suitability of the data for factor analysis should be assessed. There are several tests to do so, including the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity (Williams et al., 2010; Taherdoost et al., 2014). The KMO test measures sampling adequacy for each variable in the model and for the whole model. KMO values between 0.7 - 0.8 are considered suitable for factor analysis (Cerny and Kaiser, 1977). Netemeyer et al. (2003) stated that a KMO value above 0.6 - 0.7 is considered adequate for EFA analysis.

Bartlett's Test of Sphericity provides a Chi-Square which should be significant ($p<0.05$) for factor analysis to be suitable (Tabachnick and Fidell, 2013; Williams et al., 2010).

As can be seen from the table below, the KMO measure of sampling adequacy is (0.877), and Bartlett's Test of Sphericity is significant at P=0.000 (<0.05). This confirms that the data is suitable for factor analysis.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.877
Bartlett's Test of Sphericity	Approx. Chi-Square	550.319
	df	36
	Sig.	.000

Table 6.14: KMO and Bartlett's Test of Sphericity

Step Two: Determine how the factors are to be extracted.

According to Williams et al. (2010) principal component analysis (PCA) is used most commonly in the published literature and is recommended when no prior theory or model exists. PCA, which reduces a certain number of items to a smaller component, was used in this study as a factor extraction method.

Table 6.15: Communalities.

Communalities	Initial	Extraction
Eases linking lesson contents to students' lives	1.000	0.718
Increases my productivity when preparing the lesson	1.000	0.713
Helps students develop new skills	1.000	0.693
Facilitates interaction between students and me	1.000	0.692
Suits both high and low ability students	1.000	0.663
Helps achieve curriculum objectives	1.000	0.633
Helps students exchange knowledge	1.000	0.631
Increases the flexibility of my teaching time	1.000	0.630
Simplifies the lesson's content in student's textbook	1.000	0.573

Communalities denote the percentage of each variable's variance. Values in the extraction column indicate the percentage of each variable's variance that can be considered for further analysis. In addition, variables with a value (>0.5) will be considered for further analysis. As can be seen from Table 6.13, the nine variables have a value (>0.5). In this case, nine variables will be selected for further analysis.

Table 6.16: Factor Extraction

Communalities	Component	
	1	**2**
1. Helps achieve curriculum objectives	.656	-.450
2. Increases my productivity when preparing the lesson	.783	-.316
3. Increases the flexibility of my teaching time	.332	.721
4. Facilitates interaction between student and me	.799	.232
5. Simplifies the lesson's content in student's textbook	.683	-.327
6. Eases linking the lesson contents to the students' lives	.797	-.286
7. Suits both high and low ability student	.689	.434
8. Helps students exchange knowledge	.783	.130
9. Helps students develop new skills	.806	.209

The factor extraction table shows how each individual variable is related to each component and how strong the relation is between the variable and the component it loads to. All nine variables correlated highly with Component One, with the highest loading for 'Helps students develop new skills' at 0.806. The relationship between variable 3, about flexibility of teaching time, and the components reflects teachers' scepticism about this dimension. The table also shows the nine variables reduced under these two factors.

Table 6.17: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.632	51.463	51.463	4.632	51.463	51.463
2	1.312	14.582	66.045	1.312	14.582	66.045
3	.735	8.162	74.207			
4	.561	6.235	80.441			
5	.507	5.635	86.076			
6	.369	4.095	90.171			
7	.321	3.563	93.734			
8	.300	3.333	97.067			
9	.264	2.933	100.000			

Table (6.17) illustrates factors that were extracted and met the extraction method (PCA), and the eigenvalue is greater than one (>1). The number of questionnaire items put in the analysis equals the number of components in this table. As seen, nine components are shown here. In the first and second rows of the *Initial Eigenvalues* section, the eigenvalues are (>1). Therefore, these two components (factors) will be kept for further analysis. Looking to the *Extraction Sums of Squared Loadings* section, there are only two values; this is how many factors SPSS returned. The eigenvalue of the first factor is 4.63 and explains 51.5% of the variance. In addition, the eigenvalue of the second factor is 1.31 and explains 14.6% of the variance. Consequently, they will be only two factors in the solution. This indicates that the nine variables will be reduced under these two factors.

Step Three: Utilize the factor retention method (scree plot).

A scree plot is a graph of the eigenvalues on the vertical axis and component numbers on the horizontal axis. It is one way to determine how many factors to retain. In general, components that have an eigenvalue greater than 1(>1) will be retained (Williams et al., 2010; Taherdoost et al., 2014).

Figure 6.8: Scree Plot
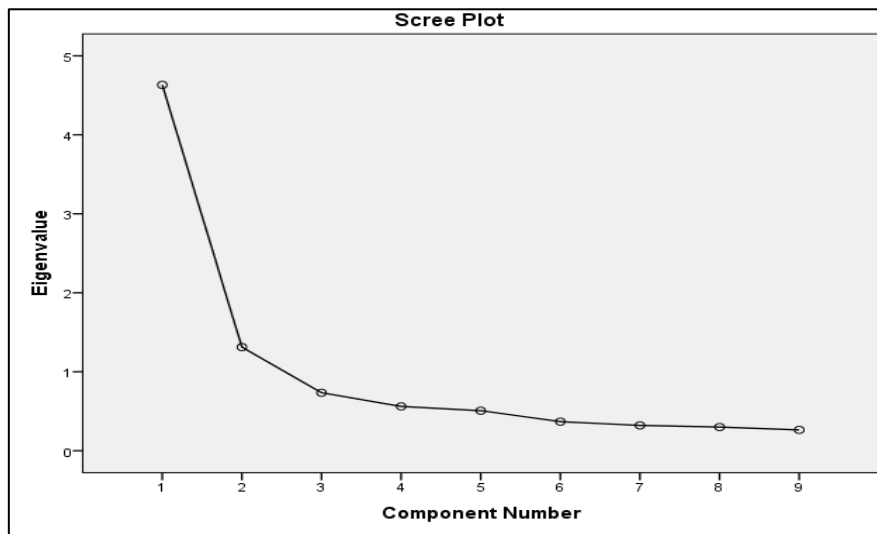
The scree plot above shows the eigenvalues versus the component numbers. As a rule of thumb, the component that has the eigenvalues >1 should be returned. From the third component onward, the line is almost flat. Consequently, the above scree plot agrees with the matrix table; only two components should be extracted. Therefore, the nine variables will load under only two factors after selecting either orthogonal (Varimax) rotation or oblique (Oblimin), which will be explained next.

Step Four: Selecting a rotational method.

According to Taherdoost et al. (2014) rotation helps maximize high item loadings and minimize low item loadings, thus producing a more interpretable and simple solution (Williams et al., 2010; Taherdoost et al., 2014). As such, there are two key types of rotational methods: orthogonal rotation and oblique rotation (Costello and Osborne, 2005; Williams et al., 2010; Taherdoost et al., 2014). Thompson (2004) states that Varimax rotation is the most common rotational method for exploratory factor analysis and often provides a simple structure. In contrast, Fabrigar et al. (1999) indicated that there is no broadly preferred technique of oblique rotation; all techniques tend to produce similar outputs. Williams et al. (2010) emphasise, "Regardless of which rotation method is used, the main objectives are to provide easier interpretation of results" (p.9). The Varimax rotation was used in this study as a rotational method.

Table 6.18: Rotated Component Matrix using (Varimax) Rotation

Statements	Component	
	1	2
1. Helps achieve curriculum objectives	0.794	
2. Increases my productivity when preparing the lesson	0.814	
3. Increases the flexibility of my teaching time		0.774
4. Facilitates interaction between student and me	0.493	0.670
5. Simplifies the lesson's content in student's textbook	0.741	
6. Eases linking the lesson contents to the students' lives	0.807	
7. Suits both high and low ability student		0.763
8. Helps students exchange knowledge	0.543	0.579
9. Helps students develop new skills	0.513	0.655

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

The Rotated Component Matrix table shows, under each component, where each variable should fall. While 'Facilitates interaction between student and me' shows a loading of 0.493 on Component 1, it has the highest loading of 0.670 on Component 2 and therefore, a better fit in Component 2 than Component 1. Similarly, 'Helps students exchange Knowledge' has loading of 0.543 in Component 1 compared to 0.579 in Component 2, so it is a better fit in Component 2 than Component 1. 'Helps students develop new skills' has a loading of 0.513 in Component 1 and 0.655 in Component 2, so it is a better fit in Component 2, due to higher loading than Component 1.

Table 6.19: Rotated Component Matrix

Statements	Item Loadings	
	Factor 1	**Factor 2**
Increases my productivity when preparing the lesson	0.814	
Eases linking the lesson contents to the students' lives	0.807	
Helps achieve curriculum objectives	0.794	
Simplifies the lesson's content in student's textbook	0.741	
Increases the flexibility of my teaching time		0.774
Suits both high and low ability student		0.763
Facilitates interaction between student and me		0.670
Helps students develop new skills		0.655
Helps students exchange knowledge		0.579

As seen in table 6.19, the result of the factor analysis suggests that nine variables can be loaded under two factors. The first factor includes four items, and the second factor includes five items. The next section provides further analysis and interpretation of the EFA results using frequency, mean and standard deviation.

Step Five: Interpretation and Labelling

According to Taherdoost et al. (2014), *interpretation* is the process of examining the selected variables, which are attributable to a factor and giving a name to that factor (Taherdoost et al., 2014; Williams et al., 2010). Moreover, two or three variables must be loaded on a factor to provide a meaningful interpretation. In addition, it is important that the *label* of a factor reflect the theoretical and conceptual intent (Williams et al., 2010).

As mentioned earlier, the selection of the four dimensions of the blended learning approach is grounded on curriculum objectives, focus group interviews with Islamic studies teachers, classroom observations and students' needs. Additionally, from the foregoing analysis, two factors were extracted that meet the extraction criteria. Therefore, the first factor includes four items labelled as *Teachers' Needs*. The eigenvalue of this factor is 4.63 and explains 51.5% of the variance. The second factor includes five items labelled as *Students' Needs*. The eigenvalue of this factor is 1.31, which 14.6% of the variance. It should be noted that these benefits accrued to students are generated from the teacher's point of view.

Table 6.20: Factor One: Teachers' Needs.

Statement	Strongly Disagree	Disagree	Agree	Strongly Agree	Mean	Std. Dev
Helps achieve curriculum objectives	0	9	49	71	3.48	.626
Eases linking the lesson contents to the students' lives	0	7	55	67	3.47	.600
Increases my productivity when preparing the lesson	0	5	38	86	3.63	.560
Simplifies the lesson's content in student's textbook	0	3	47	97	3.59	.539

Table shows a descriptive statistical analysis including frequency and mean score in descending order. It is clear that most respondents either 'agree' or 'strongly agree' with the four statements. 'Increases my productivity in delivering the lesson' has the highest mean at 3.63, and 66.7% of participants strongly agree. The mean of 'Helps achieve curriculum objectives' and 'Eases linking the lesson contents to students' experience' are 3.48, 3.47 respectively. Linking the lesson contents to students' experience is important for Islamic studies teachers to consider, as it enables students to more easily understand the concepts in religious studies teaching.
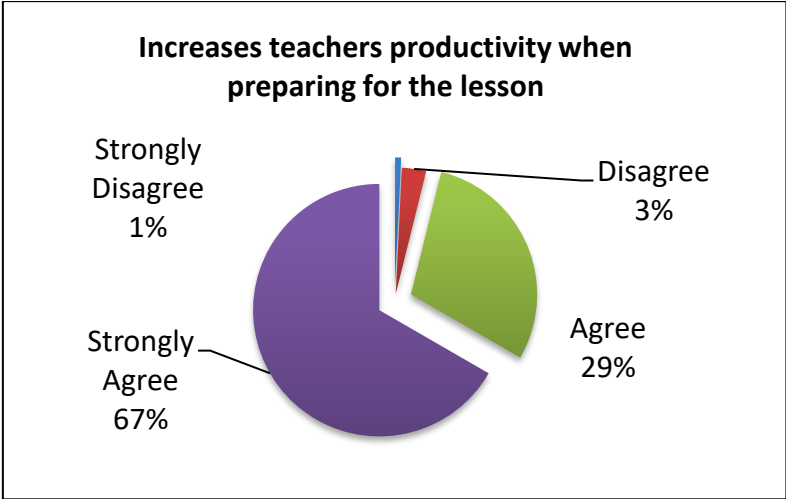
Figure 6.9: Increases teachers' productivity
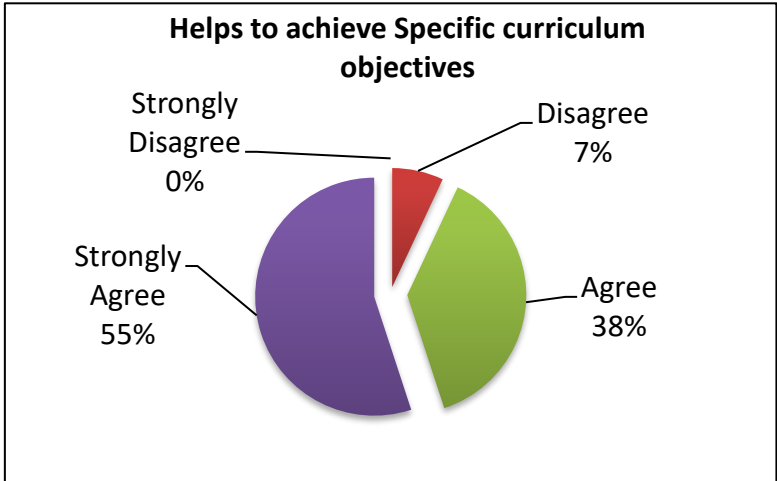
Figure 6.10: Achieve curriculum objectives

Table 6.21: Factor Two: Students' Needs

Statement	Strongly Disagree	Disagree	Agree	Strongly Agree	Mean	Std. Dev
Helps students exchange knowledge	0	6	53	70	3.50	.588
Helps students develop new skills	0	7	59	63	3.43	.597
Facilitates interaction between student and me	0	10	44	64	3.42	.634
Suits both high and low ability student	1	14	53	61	3.35	.703
Increases the flexibility of my teaching time	5	51	42	31	2.77	.862

Table shows a descriptive statistical analysis that includes frequency and mean score in descending order. 'Increases the flexibility of my teaching time' has the lowest mean at 2.77; 51 participants 'disagree' and five 'strongly disagree'. This could indicate that applying a blended learning approach takes more time than using traditional methods. Moreover, many teachers may not finish the unit in one lesson as a result of implementing a blended learning approach. As teachers stated in their interviews, dividing students into groups and explaining active learning strategies such as 'think-pair-share' requires a lot of the lesson time.
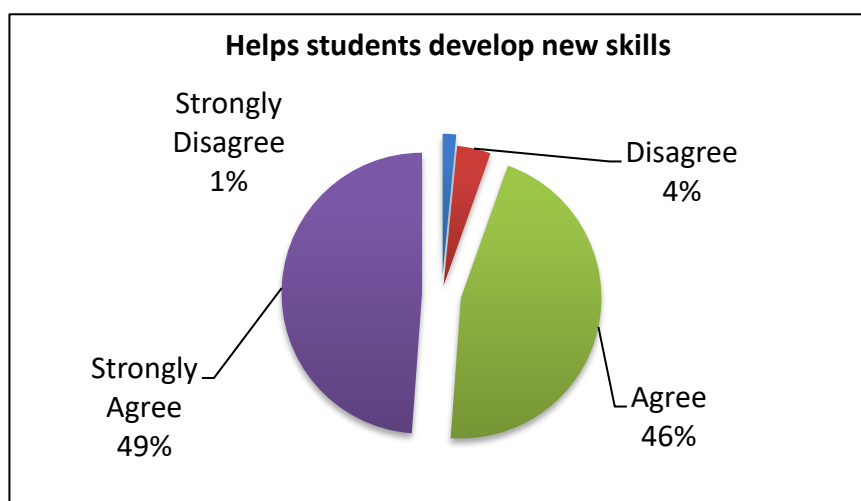
Figure 6.11: Helps students develop new skills
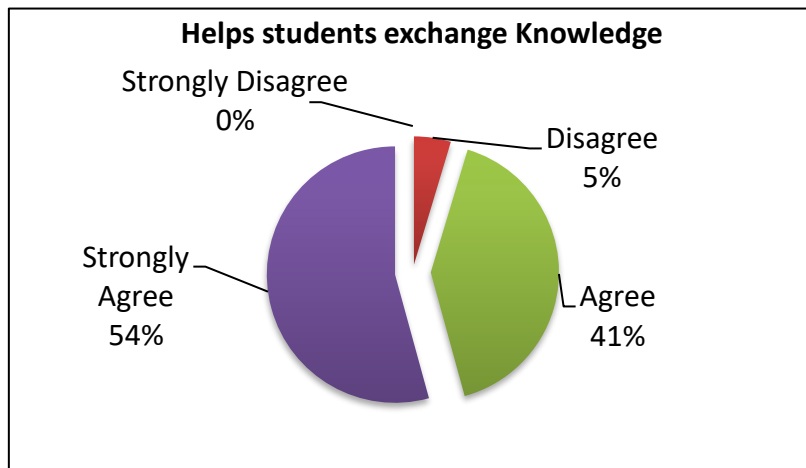
Figure 6.12: Helps students exchange Knowledge

The factor analysis results indicate that the majority of Islamic studies teachers believe that using a blended learning approach increases their productivity when preparing for the lesson and facilitates the process of delivering information to students. This could be due to the diversity of diminution in a blended learning model, as it combines the use of different forms of technology, teaching methods, teaching aids, collaborative learning and active learning. Thus, the blended learning model used in this study is not a choice between digital technology or traditional methods, but rather a mixture of four elements to improve the method of teaching Islamic education curriculum and to help teacher achieve specific curriculum objectives. Moreover, as a result of increasing teachers' productivity when preparing for a lesson, their productivity when delivering the lesson could increase accordingly. Consequently, the teacher provides a lesson using various teaching methods and learning activities. Perhaps, this may help in delivering a lesson that suits learner preferences among students. Moreover, facilitating interaction among students and linking the lesson content to the students' experience possibly helps students exchange knowledge and develop new skills.

The next section analysis participants' responses to the question about the possible disadvantages of applying a blended approach when teaching aspects of the Islamic education curriculum.

6.2.3.5   The Disadvantages of Using a Blended Approach for Teaching Islamic
            Education Modules

As a result of using a blended learning approach, what are the
disadvantages that you or the students faced?

The majority of participants stated that utilising a blended approach has no major disadvantages to either teachers or students. Other participants gave examples of negative aspects which may affect teachers or the teaching process.

The disadvantages that Islamic studies teachers most agreed on was that applying a blended learning approach consumes a lot time and effort. The following is a summary of the participants' views.

6.2.3.5.1   Time

One instructor said that the application of a blended approach consumes too much lesson time, especially due to student training needs, such as searching for information and working with a group.   Other teachers stated that "applying blended learning consumes a lot of the teacher's time and effort because teacher must choose the appropriate teaching methods, leaning activities, and tests for measuring the students' performance". Another participant agreed with this view by saying, "lesson preparation requires more time, effort and thinking from teacher".

While, few participants sheared an opinion that sometimes it requires more time in delivering and preparing the lesson. In addition, some participants indicated that if technological equipment is not available, there will be a financial burden on the teacher. Similarly, one teacher stated "completing the given syllabus on time comes with difficulty and sometimes I try to request extra lesson." Other instructors specify that the length of the curriculum forces them to request extra lessons, because the duration of the lesson is insufficient to teach students the entire unit.

6.2.3.5.2   Distraction and Teacher Control

In regards to blended learning's disadvantages to students, two responders believe that using a multitude of strategies might distract the students or reduce their concentration. One participant found that after applying one of the active learning strategies (such as the Hot Seat), she faced difficulty in retaking control of the class because the students enjoyed it and wanted to continue. Additionally, other teachers mentioned that due to time constraints (the lessons last 45 minutes),

they cannot elaborate on certain information and it becomes superficial, therefore she focuses more on simplifying the unit's content.

6.2.3.5.3 Respect and Value

Some participants' belief that applying a blended learning approach may lower the value of the subject, in particular the Qur'an and Tawheed (Doctrine of Oneness).

6.2.3.6 Summary of Islamic Studies Teachers' Perceptions of Using a Blended Learning Approach

A blended learning approach was found to be suitable for use in teaching all the subjects of the Islamic education curriculum. Additionally, Islamic studies teachers indicated that the suitability of using such method depends on the subject and topic of the lesson that the teacher wants to teach. In addition, they used a blended approach when teaching the Fiqh "Islamic Jurisprudence" and Hadith "Sayings of the Prophet" modules, more so than when teaching other subjects. The nature of the curriculum, as well as the availability of the teaching aids related to each unit in a student's textbook, and the availability of digital technologies in schools are some of the key factors which encourage Islamic education teachers to use a blended approach. Moreover, participants believed using a blended learning approach increased teachers' productivity when preparing for the lesson and helped students to develop new skills. They also thought that a blended approach helped in clarifying and enhancing the lesson content in student's textbook. On the other hand, using many strategies may distract students and possibly resulted in not finishing the given syllabus. Moreover, teachers believed applying a blended approach requires more time in delivering the lesson and more effort in preparing for the lesson.

The previous section explained Islamic studies teachers' perceptions of using a blended approach and the possible disadvantages that applying such method can bring to either learners or instructors. The next section will explain the factors that may inhibit Islamic studies teachers from implementing a blended approach in primary schools.

6.2.4 The Factors that Inhibit Islamic Studies Teachers from Implementing a Blended Learning Approach

A total of nine items in the online questionnaire, using a Likert type agreement scale of 'strongly disagree', 'disagree', 'agree' and 'strongly agree' were selected for exploratory factor analysis to group the obstacles which may inhibit Islamic studies teachers from implementing a blended learning approach under a theme and identify patterns between these obstacles. Also, this study

hopes to identify which are the most factors that inhibit Islamic studies teachers from implementing a blended learning approach, and suggest possible solutions and recommendations to the policy makers, particularly in Saudi Arabia. The criteria and the five steps I took to conduct the exploratory factor analysis were based on (Cerny and Kaiser, 1977; Tabachnick and Fidell, 2013; Costello and Osborne, 2005; Williams et al., 2010; Taherdoost et al., 2014). Moreover, researcher profession in Islamic studies has been considered when interpreting the factor analysis findings. This section also provides a descriptive statistical analysis using frequency, mean and standard deviation to facilitate the interpretation of the data.

6.2.4.1 Factor Analysis

The five steps I took to perform exploratory factor analysis using respondent data are as follows:

6.2.4.1.1 Step One: Test the suitability of the data for factor analysis.

As can be seen from the table below, the KMO score is greater than 0.5 and the Bartlett's Test of Sphericity is significant at P =0.000 (<0.05). The Chi-Square is (303.869). This confirms that the data is suitable for factor analysis.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.749
Bartlett's Test of Sphericity	Approx. Chi-Square	303.869
	df	36
	Sig.	.000

Table 6.22: KMO and Bartlett's Test of Sphericity

6.2.4.1.2 Step Two: Determine how the factors are to be extracted

Communalities	Initial	Extraction
Takes a lot of the lesson time	1.000	0.777
Requires more time and effort in preparing the lesson	1.000	0.774
Fear of undermining the respected status of the academic content	1.000	0.768
High number of students in each class	1.000	0.732
Lack of resources in a blended approach	1.000	0.633
Lack of convenient internet access	1.000	0.574
Teachers' workload	1.000	0.549
Lack of ICT tools	1.000	0.526
Lack of effective training in using a blended approach	1.000	0.507

Table 6.23: Communalities

Communalities denote the percentage of each variable's variance. Values in the extraction column indicate the percentage of each variable's variance that can be considered for further analysis. All variables with a value greater than five (>0.5) will be considered for further analysis. As can be seen from Table 6.23, the nine variables have a value (>0.5). In this case, all nine variables will be selected for further analysis.

Table 6.24: Components Extracted

Items	Component		
	1	2	3
Teachers' workload	.571	-.449	-.145
High number of students in each class	.767	-.135	-.354
Lack of convenient internet access	.713	-.093	-.239
Lack of ICT tools	.533	.490	.042
Lack of effective training in using a blended approach	.451	.396	-.217
Lack of resources in a blended approach	.678	.339	-.241
Fear of undermining the honourable status of the academic content	.302	.636	.522
Requires more time and effort in preparing for the lesson	.715	-.346	.378
Takes a lot of the lesson time	.577	-.326	.581

Having used the Principal Component Analysis as an extraction method, the nine variables load up under three components. In addition, the table shows how strong the relation is between the variable and the component that the variable has loaded in.

Table 6.25: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.306	36.736	36.736	3.306	36.736	36.736
2	1.371	15.232	51.968	1.371	15.232	51.968
3	1.063	11.809	63.777	1.063	11.809	63.777
4	.843	9.363	73.140			
5	.650	7.222	80.362			
6	.609	6.761	87.124			
7	.495	5.504	92.628			
8	.367	4.082	96.709			
9	.296	3.291	100.000			

The table illustrates the actual factors that were extracted and met the extraction method (PCA) and the eigenvalues are greater than one (>0.1). The number of questionnaire items (9) put in the analysis is equal to the number of components in this table. As you can see, a total of nine components are shown here. In addition, in the ***Initial Eigenvalues*** section, the first three components have an eigenvalue greater than one (>0.1). Looking to the ***Extraction Sums of***

Squared Loadings section, there are only three values in each column. The eigenvalue of the first factor is 3.30 and explains 36.73% of the variance. The eigenvalue of the second factor is 1.37 and it explains 15.23% of the variance. The eigenvalue of the third factor is 1.06 and explains 11.80% of the variance. There are only three components with an eigenvalue greater than one. Consequently, they will be only three factors in the solution. The nine variables will be reduced under these three factors.

6.2.4.1.3 Step Three: Utilize the factor retention method (Scree Plot).
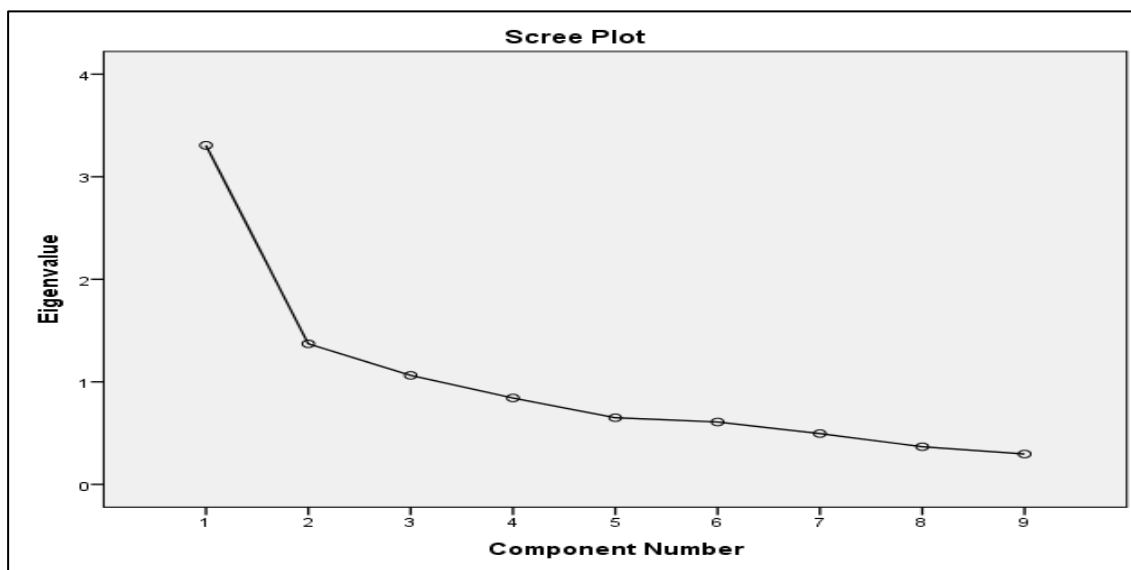
Figure 6.13: Scree Plot

A scree plot above shows the eigenvalues versus the component number. As a rule of thumb, the component that has the eigenvalue greater than one should be returned. It is clear that from the fourth component onward, the line is almost flat. Consequently, the above scree plot agrees with the Components Extracted table, with the curve line only three components extracted. Therefore, the nine variables will load under three factors using Varimax rotation, which will be explained next.

6.2.4.1.4 Step Four: Selecting a rotational method

Items (variables)	Component		
	1	**2**	**3**
Teachers' workload	0.634		
High number of students in each class	0.805		
Lack of convenient internet access	0.679		
Lack of ICT tools		0.693	
Lack of effective training in using a blended approach		0.539	
Lack of resources in a blended approach		0.603	
Fear of undermining the respected status of the academic content		0.761	
Requires more time and effort in preparing for the lesson			0.792
Takes a lot of the lesson time			0.867

 Table 6.26: Rotated Component Matrix
 Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.

The table shows under each new component each variable should fall. In addition, it shows the loadings of the nine items under three components. The first factor includes three items and the second factor include four items. The third factor includes two items.

The next section provides a descriptive statistical analysis using frequency, mean and standard deviation to facilitate the interpretation of the findings.

6.2.4.1.5 Step Five: Interpretation and labelling

The foregoing discussion explains several issues which may stand as barriers to implementing a blended learning approach in teaching the Islamic education curriculum in Saudi schools. Having undertaken EFA helps to categories these barriers under three factors, as follows:

Table 6.27: Factor One: Learning Environment

Obstacles	Strongly Disagree	Disagree	Agree	Strongly Agree	Mean	Std. Dev
Teachers' workload	0	17	39	**73**	3.43	0.716
High number of students in each class	2	22	35	**70**	3.34	0.815
Lack of convenient internet access	8	24	43	**54**	3.11	0.921

The majority of participants either 'strongly agree' or 'agree' with the three potential obstacles. However, teachers' workload and a high number of students seems to affect the implementation of blended learning the most in this category. Having taught Islamic education curriculum in Saudi Arabia, researcher found that Islamic studies teachers are required to design the learning materials, including choosing suitable strategies, selecting appropriate teaching methods and leaning activities, and writing exams to assess student achievement.

Also, table 6.27 shows that 54 (41.9%) responders 'strongly agree' that a lack of convenient internet access is one of the barriers. This supports the results from the "availability of teaching aids" section. As it was noted that, Internet access in school was among one of the "rarely available" teaching aids.

Table 6.28: Factor Two: Challenges to Adoption and Use

Obstacles	Strongly Disagree	Disagree	Agree	Strongly Agree	Mean	Std. Dev
Lack of ICT tools (projector, computers)	1	9	37	**82**	3.55	0.661
Lack of resources in a blended approach	0	13	**76**	40	3.21	0.608
Lack of effective training in using a blended approach	3	17	**64**	45	3.17	0.741
Fear of undermining the respected status of the academic content	11	36	**54**	28	2.77	0.888

The above table summarises the extent of teachers' agreement in the four potential obstacles. More than (50%) of the Islamic studies teachers strongly believe that the lack of ICT tools, such as a projector and computers, may stand in the way of applying a blended learning approach. This is followed by a lack of resources in a blended approach, with (58.9%) of teachers agreeing and (31.0%) strongly agreeing. The two other obstacles were a lack of effective training and a fear of undermining the respected status of the academic content. (49.6%) of teachers 'agree' that a lack of effective training impedes them from successfully implementing a blended approach, and (41.9 %) of teachers 'agree' that a fear of undermining the respected status of the academic content is one of the reasons that prevents them from using a blended approach. Thus, participants highly agreed with the four obstacles. However, based on their level of agreement, a lack of ICT tools seems to affect implementation the most.

Table 6.29: Factor Three: Time

Obstacles	Strongly Disagree	Disagree	Agree	Strongly Agree	Mean	Std. Deviation
Requires more time and effort in preparing for the lesson	4	32	**53**	40	3.00	0.829
Takes a lot of the lesson time	4	32	**55**	38	2.98	0.820

Table 6.29 shows that time is a matter for teachers, as (31%) of them 'strongly agree' and (41.1%) 'agree' that applying a blended learning approach requires more time and effort in preparing the lessons. Additionally, (29%) of teachers 'strongly agree' and (43%) of teachers 'agree' that applying this approach takes a lot of lesson time. On the other hand, four (3.0%) participants 'strongly disagree' and 32 (25%) of participants 'disagree' with the two obstacles.
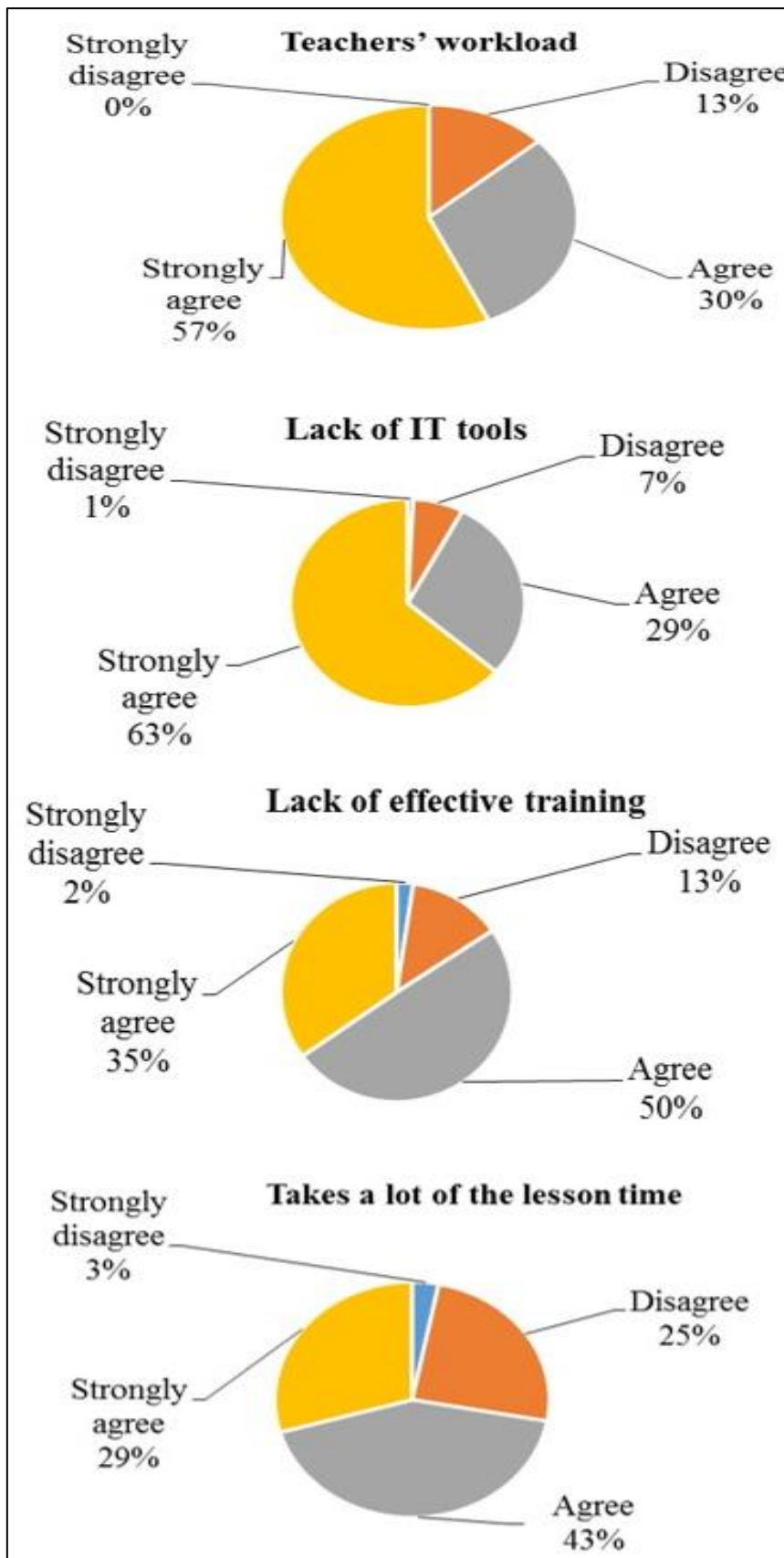
Figure 6.14: Factors that Inhibit Islamic Studies Teachers from Implementing a Blended Learning Approach

This result implies that teacher workload, lack of ICT tools and lack of effective training in using a blended learning approach may result in consuming more time in preparing and delivering the lesson. As one teacher stated in her answer to the interview, after receiving training, her confidence has increased. Other participants stated that with frequent use of active learning strategies and searching for information on how to use them, their performance has improved. Thus, training and frequently using a blended approach could resolve the time issue.

6.2.4.2 Other Obstacles

To ensure that participants had a chance to express their opinions and to collect rich data, researcher asked participants to list any other obstacles which may prevent them from applying a blended approach when teaching the Islamic education curriculum.

Are there any other obstacles besides the nine obstacles which have been mentioned? (If yes please specify).
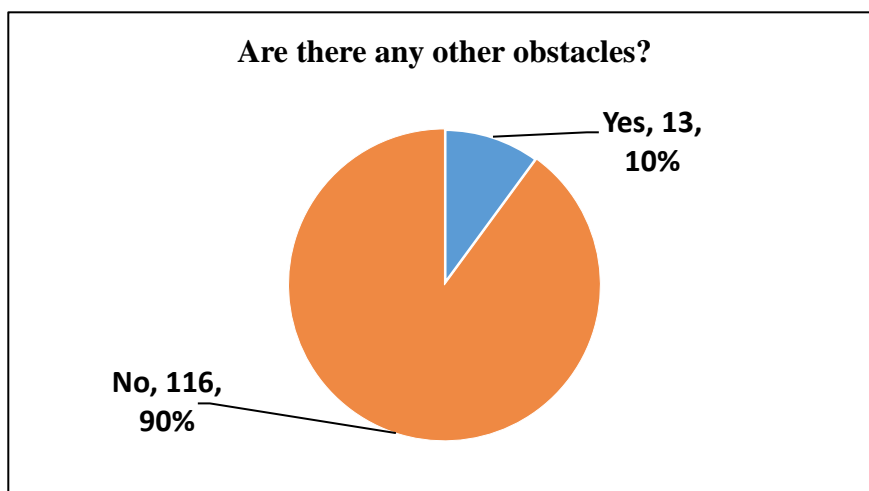
Figure 6.15: Others Obstacles

Most participants, 116, stated that there are not any other obstacles besides what was mentioned in the questionnaire. Only 13 participants out of 129 mentioned other obstacles which may impede Islamic studies teachers from applying a blended approach.
A summary of their answers follows:

- Difficulty re-controlling the class after applying one of the active learning strategies, such as the "hot seat."
- Some teachers believe that the traditional approach requires less effort. Thus, they do not want to develop or to change their teaching style.

- Lack of effective training (teachers believe that many of the trainers were not competent)

- Setting up classrooms (equipped with IT tools such as projectors and computers) needs a budget

- Lack of budget for the maintenance of devices in schools

- Lack of appropriate teaching aids

- The density of students in the classroom, which may reach 39 students in state schools, may hinder a teacher's creativity

- Length of syllabus (the number of units in each module and the amount of information in each unit)

- Total numbers of Islamic education lessons per week are few, compared to the length of the syllabus

Additionally, one responder expressed her opinion and mentioned what discouraged her from using a blended approach, by saying, "the small area of the classroom means I cannot divide the students into groups, especially when the numbers of students might reach 40 students." Another teacher commented that the lesson time is only 45 minutes long. Sometimes this is not enough to apply strategies and explain the whole unit, because applying modern teaching methods such as active learning strategies takes a long time during lesson delivery.

All these obstacles may block the application of a blended learning approach and may hinder the provision of effective and beneficial lessons to learners when teaching the Islamic education curriculum in Saudi schools.

6.2.4.3 Summary of the Factors that Inhibited Islamic Studies Teachers from Implementing a Blended Learning Approach

This section discusses the factors which may inhibit Islamic studies teachers from using a blended learning approach. Most participants indicated that teacher workloads, the lack of ICT tools, a high number of students in the classroom and a lack of effective training are the key factors that may impede them from implementing this approach. Similarly, interviewed teachers explained that multi-tasking (lesson preparation, controlling the class, ensuring student understanding of an Islamic term, motivating students and designing assessment tests) may prevent them from using innovate teaching methods. Some participants showed a strong religious belief against using a blended approach and others expressed reluctance to apply new

teaching methods, as they believe traditional methods require less effort. Also, time is an issue. Teachers believe that using such method requires more time and effort in preparing and delivering the lesson.

6.2.5   Other Comments and Ideas

To give participants the opportunity to freely express their views and to benefit from teachers' experiences in teaching an Islamic education curriculum, and to gather more information, the researcher put the following final question in the online questionnaire:

<p align="center">***Would you like to add any comments or ideas?***</p>

All the views received revolved around 1) suggestions for policymakers and the Ministry of Education in Saudi Arabia to consider as part of their education-development plans; 2) the importance of the role of teachers of Islamic studies; and 3) the desire and need of Islamic studies teachers to know the possible principles that help teachers to implement a blended learning approach effectively and successfully. Here follows a summary of the participant's answers.

One teacher commented that along with developing teaching methods, the development of education involves planning, equipping schools with the necessary hardware and software and following up construction work in all projects, as well as making the necessary checks and tests before builders can submit the work.

Some teachers expressed different views about the importance of a blended approach and the training that Islamic studies teachers need to successfully implement such teaching methods.

One teacher said, "I would like to stress the importance of using a blended approach in delivering Islamic lessons so that the student doesn't get bored and understands the lesson easily." Other participants think that what most teachers need to know is the principles and guidelines for a successful and effective implementation of a blended approach, so that there will not be an adverse effect on the teacher such as more effort and time needed for preparing lessons. Moreover, lack of training and insufficient knowledge might result in time and effort being wasted and using the strategies in the wrong way. In addition, for a successful application of a blended approach, the curriculum should be shortened and the number of lessons should be increased. This may possibly increase the effectiveness and positive impact of a blended approach.

As everyone knows, the teacher is the primary element of the teaching process and without a teacher, the teaching cannot take place. In the context of this study, the researcher believes that the role of Islamic studies teachers, and preparing and qualifying them to teach an Islamic education curriculum, are of great importance. This is because the objective of teaching an Islamic education curriculum in Saudi Arabia is not only to impart knowledge, but also to teach the behaviours and authentic foundations of Islam as they came from the Holy Qur'an and the Sunnah [tradition] of the Prophet Muhammed, to enable students to implement them in their daily life and to use them when dealing with others.

In support of this great role, one of the teachers reported, "The role of Islamic studies teacher has no equivalent if she is competent in her subject and creative in delivering it regardless of the strategies used which at times, but not always, may divert the student away from the theme of the lesson." Similarly, another commented that the beneficial knowledge reaches the heart and an Islamic studies teacher who loves her subject strives hard to raise the academic achievement of her students.

The next section will analysis the data gathered from semi-structured and focus group interviews with Islamic studies teachers.

6.3 Interview Results

Data from semi-structured and focus group interviews was gathered from three groups of Islamic studies teachers (see Table 6.30).

School Type	Number of Teachers	Code
Primary state schools	4	T1, T2, T3, T4
International primary private school	5	T5, T6, T7, T8, T9
Qur'an memorization primary state school	4	T10, T11, T12, T13

Table 6.30: Islamic studies teachers involved in semi-structured interviews.

6.3.1 Criteria and Procedures for Evaluating Student Performance

Objectives and approaches for teaching Islamic education differ significantly from the objectives and approaches for teaching religious education. The Islamic education curriculum in primary level is considered an essential foundation, the aim of which is to enable students to master core competencies and gain sufficient knowledge of the curriculum. Additionally, most Islamic studies teachers interviewed indicated that their workloads, including assessments, prevented them from using innovative teaching methods when teaching the Islamic education curriculum. Therefore, the next section explains assessment approaches and the criteria and procedures for evaluating student performance in each subject of the Islamic education curriculum in girls' primary schools in Saudi Arabia (Qur'an and Tajweed, Tawheed, Hadith and Fiqh).

6.3.1.1 Assessment Approaches

Student assessment is ongoing throughout school and is based on teachers' observations and evaluations of students' achievements. During each lesson, the teacher observes students' answering questions that test their understanding of the previous lesson and during the lesson. Additionally, the teacher considers students' achievements in doing their homework. In addition to teachers' observations during each lesson, there are two formal tests each term; each test consists of an oral examination and a written exam. Students are not able to proceed to the next year unless they master the minimum curriculum skills. Parents receive a copy of the teachers' reports after each test, and they must sign the report and return it to school. As for the student who does not master the minimum required skills, the Committee of Steering and Guidance reviews the student's circumstances and decides whether to move the student forward

or require the student to repeat the academic year. However, this (student fail moving to the next year) is very rare, and Committee's decision is final.

6.3.1.2   The School's Committee of Steering and Guidance

The Committee of Steering and Guidance is formed at the beginning of the academic year, as decided by the head teacher. The committee, which assesses students at all levels, consists of the following:

- The head teacher (Chair of the Committee),
- The deputy (Vice Chair),
- The student guide (Assisting Member), and
- Three Islamic studies teachers who are competent and experienced (Members).

When the Committee is considering a student who did not master the minimum required skills, that student's teacher may attend the meeting (depending on the case and the student's circumstances being discussed by the committee).

6.3.1.3   Criteria and Procedures for Evaluating Student Performance in the Holy Qur'an (by heart and sight) and Tajweed (intonation)

- Competence in memorising required chapters. (mastery of recitation and memorisation)
- Proficiency in reciting the required chapters
- Respect the Holy Qur'an (sit in a respectful place and avoid conversations or other distractions while reciting)
- Know the names of the chapters being recited and their position in the Mushaf "physical pages of the Qur'an"
- Fluency and no hesitancy in reciting and memorising required chapters
- Applying intonation rules
- Prosody when reading the Qur'an (beautifying the voice with the recitation)

6.3.1.4   Criteria and Procedures for Evaluating Student Performance in Tawheed (Doctrine of Oneness), Fiqh (Islamic Jurisprudence) and Hadith (Sayings of the prophet)

At the beginning of every unit, there is a list of skills the student must master upon completing the unit. Most teachers guide students and remind them at the end of the unit of what they should know, understand and memorise from the unit. For example, if there were more than one Hadith "sayings of the prophet" and more than one definition of any Islamic term, the teacher would specify one of each and ask students to memorise it. After each assessment, Islamic studies teachers should fill out a separate form for each student in each subject of the Islamic education curriculum. The form includes the curriculum objectives students should master. The teacher writes the level of students' performance (Distinguished, Advanced, Competent, and Failure) in each skill. The parents then receive a copy of the teacher's report; they sign it and return it to school.

6.3.1.5   Levels of Student Performance in Each Criterion
Student progress is evaluated by levels of performance, which consist of three levels of competence and one level of non-competence. The levels of performance are as follows:

N	Levels of Performance	Clarification
1	Distinguished	Achieved 95% or more of the criteria for the subject including the threshold criteria = a competence of 100% of the criterion
2	Advanced	Achieved 85% to less than 95% of the criteria for the subject including the threshold criteria = a competence from 90% to less than 100% of the criterion
3	Competent	Achieved 75% to less than 85% of the criteria for the subject including the threshold criteria = a competence from 80% to less than 90% of the criterion
4	Failure	Achieved less than 75% of the criteria for the subject or couldn't achieve one or more of the threshold criteria

Table 6.31: Levels of Student Performance.

6.3.2   Theme One: Islamic Studies Teacher Perceptions of Using ICT Tools to Display Qur'an Verses.

Classroom observations in state schools revealed that there is a lack of digital technologies in the classroom. Furthermore, most teachers who answered the questionnaire shared that fear of undermining the respected status of the academic content is a barrier that may obstruct implementation of a blended learning approach. Therefore, to support answers to the online questionnaire and to find out whether the nature of the curriculum or the lack of ICT tools is the most obstructing reason to Islamic studies teachers from applying a blended approach in teaching the Holy Qur'an in particular, that is due to: 1) a large number of students experience difficulty in reciting and memorising the Qur'an; 2) students want their Qur'an lessons to be enjoyable: and 3) there is some routine and monotony associated with Qur'an lessons. Therefore, the participants were asked the following question:

1. To what extent do you agree that the use of the interactive whiteboard or the projector to display Qur'anic verses is better than reading from the printed Qur'an?

Among most teachers in state schools, there was a consensus that the *printed* Qur'an is the best way for students to recite verses and follow the teacher's recitation. When a student can actually turn the pages of the Qur'an and has the Qur'an in her hands during the lesson, it has a significant influence on the student. Further, it develops her sense of the greatness of God and the status of His Book while it is in her hands. On the other hand, one teacher said that the topic of the verses she is going to teach (general meaning and that it contains stories and miracles), determines whether she will show the verses using the projector or a video clip that includes pictures about the topic of the verses.

Conversely, answers from Islamic studies teachers in private schools were contrary to that of state school teachers. A summary of their answers follows:

Teacher 'T5' said she prefers using the IWB, as it helps her students concentrate instead of being occupied with turning the pages of the Qur'an or spending time searching for the required Surah (chapter).

Likewise, 'T8' agreed with 'T5', saying, "I found that use of the IWB to display the verses enables students to easily and quickly follow the teacher". She also thought that it helps students concentrate more, rather than every student becoming occupied with the printed Qur'an.

Moreover, she commented on some features of the IWB, such as the indicator, which helps determine and highlight difficult words and possibly helps increase students' interaction.

'T6' found that when she displays the verses through the smart board, it saves time because it enables her to highlight words she thinks would be difficult as well as words students find difficult to pronounce. Then, she explains their meanings to the students. Also, she found that the use of IWB enables the students to concentrate more on what she says in comparison to when she does not use it.

'T7' stated that her use of the IWB and some programmes, which are designed to teach how to recite the Qur'an, make lessons more enjoyable, and she notices a large number of students have started using such programmes at home to practice reciting the verses. She found that students haven't been limited to using the programme in the class; rather, they have started to search their smartphones and iPads. Also, some students have started to look for features of programmes and their capabilities, such as the beauty of the voice reciting the verses or the possibility of listening to more than one reader, before using them. Some students use the programme to practice and prepare for the next lesson. She finished her answer by saying, "Teaching and training students to use some of the programmes designed to teach them to recite the Qur'an encourages students to use them at home because they aren't difficult anymore. I usually give a simple explanation of how to use the programme first; then I use it in the lesson."

'T9' said, "I didn't use the IWB in the past. I fully depended on the printed Qur'an, but after attending a training course about using the IWB and how to fix some of the problems, my confidence has increased." Also, she found that using IWB for teaching the Qur'an helps her in making the lesson more enjoyable, especially when she selects a different reciter for each lesson, which helps students achieve the master level of the recitation and apply the intonation rules. Every reciter has a different vocal tone, and pronounces each letter clearly and produces it in its correct place vocally.

It became apparent from the teachers' answers that most Islamic studies teachers in state schools prefer to use the printed copy of the Qur'an to allow students to realise the greatness and exaltedness of the Qur'an. Islamic studies teachers in private schools prefer using the IWB to display the verses of the Qur'an, as using it offered out benefits to the students. Furthermore, teacher 'T9's' answer (above) showed the importance of training the teacher and preparing her to use modern technology. This training and preparation may increase the teacher's confidence and motivate her to use some of the available technology in the classroom.

Finally, it should be noted that private school teachers are provided with a computer lab, and each classroom has a computer and a smart board. This confirms that availability of resources is one of the most important motivators that help teachers implement a blended approach when teaching aspects of the Islamic education curriculum. Moreover, the nature of the curriculum and the number of students in the class play a major role on which teaching methods and teaching aids Islamic studies teachers choose to deliver information.

2. To what extent do you agree that reading the verses out loud and using the recording device and the printed Qur'an is better than using the IWB to display verses of the Qur'an, with the use of one of the electronic programmes designed for teaching the recitation of the Qur'an?

The majority of teachers agreed that the best way for students to master recitation is through reading the verses out loud and receiving oral instruction and feedback from the teacher. A programme will not have the same effect, especially in clarifying the pronunciation of words and showing the correct exit of the letters. Also, having each learner follow the teacher when she recites the verses from her own physical copy of the Qur'an is better because she might make some suggestions or highlight difficult words and intonation rules. Thus, when a student practices recitation and memorisation of the verses at home, the classroom lessons may facilitate proficiency in reciting and memorising the required verses.

Teacher 'T3' explained her answer by saying that using the recording device and reading from the physical copy of the Qur'an is better because the student senses the greatness and the importance of the Qur'an when it is in her hands and can look at it with concentration and contemplation. 'T10' found that reciting the verses out loud and each learner following the teacher using her copy of the Qur'an is better because it helps student easily comprehend the verses meanings.

Other teachers favoured reading the verses out loud followed by the recording device and explain their answers by saying:

- Reading the verses out loud comes first, and other methods follow.
- The teacher's oral recitation is of the greatest importance because many students consider her to be their role model. Next is the use of the smart board and a programme which teaches how to recite the Qur'an and consists of the sound and written text of the required verses.
- Students enjoy listening to a reciter with a beautiful voice.

- The beautiful voice of the teacher when reciting the verses out loud attracts the student's attention. Consequenclly, some students may try to imitate the teacher's voice, which indicates how much they enjoy hearing the teacher voice. Additionally, it may increase a student's motivation to improve her recitation until she achieves the masters' level of recitation.

In contrast, 'T7' found that the IWB is better for displaying the verses and listening to them at the same time, as it is possible to observe the correct exists of the letters and the correct pronunciation when using a reciter for the verses (video). In this, there is a shift from what the student is accustomed to, which is her teacher being the only one who recites the verses. The reciter functions in the role of the teacher while she still in the classroom. Moreover, this will benefit some students, such as students attempting to emulate the voice of the reciter, which will help students apply intonation rules. While, 'T2' favoured the recording device as it is easier to carry and necessary due to the lack of a properly equipped lab for teaching the Qur'an. Furthermore, the recording device is known for its quick start, reliability, ease of maintenance, reasonable cost and less effort by the teacher.

Based on the teachers' answers, it is clear that most teachers prefer use of the recording device and the teacher reciting the verses while students follow on the printed Qur'an. This finding implies that face-to-face interaction and reading the verses out loud is better for Qur'an lessons. The programme does not have the same effect, especially in clarifying pronunciation of words and showing the correct exits of letters. However, this does not mean that use of the IWB and some programmes to display the verses is not suitable. Some teachers encouraged their students to use Internet-based programmes to practice the verses when they are at home. These programmes may also help students prepare for the verses that will be explored in the next lesson.

Also, some teachers mentioned that utilising the IWB benefits the students. As such, they prefer the IWB for displaying the verses. Also, introducing online applications could be a way to improve self-learning and increase student enthusiasm about reciting required verses. The availability of ICT tools and training teachers to use them could be a factor in encouraging the teachers to use a blended learning approach and to integrate more technology when teaching aspect of the Islamic education curriculum. Furthermore, teacher interest matters, as passionate teachers teach differently and want to be creative.

6.3.3   Theme Two: Factors that Hinder Islamic Studies Teachers from Implementing a Blended Learning Approach.

Having visited a number of state schools, the researcher found a lack of technology in the classroom. Furthermore, most teachers revealed that a lack of ICT tools, lack of training in using a blended learning approach, and teachers' workloads are barriers that may stand in the way of implementing a blended learning approach in Islamic education. Therefore, to support the answers to the online questionnaire, the researcher asked the following questions:

1. The findings of the questionnaire revealed that lack of technologies, not qualifying the teacher to use a blended learning approach, lack of resources, teachers' workloads, and the number of students in the classroom deter the teacher from using a blended learning approach. What is your comment on this?

Most teachers agreed that the main reasons they do not implement a blended learning approach are teachers' workloads and the lack of core technologies, such as computers and projectors in the school in general, particularly in the classroom.

Teacher 'T1' indicated that technologies in the classroom save her a lot of time and motivate her to use the technology in her Islamic education lessons. However, because she must take her laptop and the projector and connect them and switch them on, which takes a lot of the lesson time, she finds herself dependent on traditional methods instead. So as not to waste any of the lesson time, especially when the content of the lesson is long and the curriculum plan requires teaching it in one lesson forty-five minutes long. On the other hand, she indicated that if the classroom was well equipped, that would make a difference to her. For example, she could present the question and, after discussing it with the students, she can display the answer using either IWB or projector instead of spending time writing it on the blackboard.

Also, some teachers stated that they did not receive sufficient training in the technology, and there were no specialised technicians in schools for maintenance issues.

Meanwhile,'T13', 'T3' and 'T10' found that the number of lessons in a week and the number of students in each class play a primary role in choosing the method of teaching. For them, using modern techniques, such as active learning strategies, wastes time during the lesson, unlike traditional teaching methods, which tend to make the teacher depend on narrating the information and the role of students is to receive.

Based on the teachers' answers, it became apparent that a teacher's workload (being a teacher for two levels, being responsible for prayer hall, qualifying students to participate in a Qur'an competition) is a key factor that stands in the way of Islamic studies teachers implementing a blended approach. Therefore, Islamic studies teachers may prefer to use traditional methods. However, this practice (traditional methods) does not give students an opportunity to participate. Also, they may not gain new skills because the teacher is the centre of the lesson process. On the other hand, technologies such as the computer, projector and smart board are one of the most important aspects for encouraging teachers to implement a blended approach. Moreover, qualifying and training the teacher may give Islamic studies teachers the confidence they need to use modern teaching methods and integrate more technology when teaching aspects of the Islamic education curriculum.

2. Some Islamic studies teacher commented that applying a blended learning approach, especially using active learning strategies, requires more time for preparing and delivering the lessons. What is your comment on this? Do you have any comments related to the use of active learning strategies in teaching Islamic education curriculum?

A group of teachers stated that the number of strategies approved by their academic supervisors and the pedagogical planning and development administration is more than one-hundred. This large number makes it difficult for teachers to identify the proper strategy for each subject and the topics they would like to teach. Teacher 'T1' stated that she thinks most of the strategies are suitable for assessing students' understanding of previous lessons or a new lesson at the end of the lesson. She used an example from when she taught her students the meaning of Eman (Faith). She divided the class into four groups and asked each group to summarise the meaning of Eman in the form of a Mind Map and to give an example for each part of the definition. The teacher drew a Mind Map on the board and recorded the students' answers on the Mind Map. She considered this work to be a summary of the contents of the lesson in the student's textbook, but better presented.

'T13' said, "I did not have sufficient training to use the active learning strategies. Also, sometimes I think the content of the lesson is connected to Aqeedah (Creed). It is not possible to use the strategies, or the content of the unit might be long, and it is not feasible to occupy lesson time with the strategies. This is because every point in the lesson is connected to another, and it is better to explain them to the students in one lesson."

'T6, T2 and T12' stated that their academic supervisor strongly urged them to use at least three strategies in each lesson, but they found that not all the strategies were suitable. For example, a strategy might be appropriate for one subject and not for others and for one topic and not for others in the same subject. They faced difficulty when using them at first, but with frequent use and by searching for information about how to use them, their performance has improved.

'T3' found that many students prefer individual learning instead of working in a group. This applies particularly to a high-performing student; 'T3' expects that in individual learning a high-performance student's will be able to innovate because she is the only one to plan, think and execute and she works hard to show greater progress.While in collabtative learning some students in the group may depend on her and leave her with a big part of work to complete. Also, some students feel that working in a group does not give them an opportunity to express their views freely.

'T1' and 'T2' indicated that the time of the lesson in the schedule plays a large role in determining teaching methods. For example, in the first lesson, they found the students are active and motivated to learn. 'T2' said, "When I use strategies and technologies such as a projector, I feel that I have succeeded in selecting the teaching methods. Sometimes, however, I teach the same lesson to another class on the same day, but since it is the last lesson of the day, the students are less active."

The findings revealed that the blended learning model used in this study is not the primary factor keeping Islamic studies teachers from applying a blended approach. Some of the reasons that keep teachers from implementing a blended approach include:
- Teachers' workload,
- number of students in each class,
- the time of the lesson in the schedule,
- availability of ICT tools, and
- the number of approved active learning strategies.

Moreover, after reviewing some of the active learning strategies in chapter three, the researcher found that many of them require working in groups. Dividing students into groups and providing them with instructions could occupy a significant part of the lesson time. Also, because teachers indicated that there are more than one-hundred strategies, it is difficult for them to choose which strategy to use, particularly because the strategies not been categorised. For example, strategies could be categorised by subject (e.g. strategies for introducing the

lesson, strategies for assessing student understanding, strategies for teaching new information) and by the time required.

6.4   Classroom Observation Results

This section describes the analysis of the data collected through classroom observations. The analysis of each lesson started by the subject and the level, followed by explaining the steps teacher took to deliver the lesson. First, what the teacher did at the beginning of the lesson (how she started the lesson), for example, by revising the previous lesson. Next, explaining the teaching methods and highlighting any technology or active learning strategies used during the lesson. Then, explaining what teacher did at the end of the lesson. That followed by a summary of the findings based on research specialists in Islamic studies, as well as considering the curriculum objectives and students' needs.

6.4.1.1   (Qur'an: Year 4, State School)

- The teacher started to assess some students on the last verses studied by selecting some students to recite those verses and she put the marks in the follow-up record.

- She introduced the topic of the new verses by mentioning a Hadith of the Prophet Mohammed (Peace be Upon Him) and a story or incident that the students could relate to.

- She gradually got to the main theme of the verses by asking students some questions. This method has been mentioned before in Chapter three (the Deductive Method).

- The teacher recited the verses out loud.

- Then she used a recording device to recite the verses and asked all students to listen to the recitation.

- Next, the teacher recited a verse or part of a verse, depending on the length of the verse, and then the students recited after her. This was a group recitation.

- She selected a number of students to recite the verses and during this stage, the teacher discussed the meaning of the verses with the students and tried to connect them to the students' reality. She reminded students about the importance of applying the commandments and prohibitions contained in the verses to their daily lives.

Researcher's Reflection

This teacher delivered the lessons through well-organised steps as she started with reviewing the previous lesson and followed it with an introduction of the new lesson by linking it to the

other subject of the religion curriculum (Hadith). Finally, she reminded her students about incorporating the meaning of the verses into their daily lives.

6.4.1.2   (Qur'an: Year 5, State School)

- She started by writing the topic of the lesson on the board (chapter name and verses number).

- Then she recited the verses.

- She then used the recording device to recite the verses and asked all students to listen to the recitation.

- She divided the class into three groups with 5 to 7 students in each group

- This was followed by a group recitation (teacher reads the verse and then each group individually read the same verse once after her. For instance, if she heard a mistake in the pronunciation of short vowels, she read that part again and asked the students to repeat it three times).

- The teacher listened to the recitation of some of the students and explained the meaning of the verses and some of the words that she thought were ambiguous for the students. She also asked the students if there were any other words that they wanted her to clarify or explain.

- This was followed by the teacher splitting the class into four groups and identifying, for each group, a student who was called the 'young teacher' (the student who had mastered the recitation of the given verses and the application of the intonation rules). The 'young teacher' had the role of helping the students in her group to master the recitation of the verses and memorise them, if they were required to memorise them by heart.

- The teacher used the Deductive Method; she gave students the meaning of a verse and followed it up by asking them some questions, so that they could deduce the benefits contained in the verses, such as urging reflection on and contemplation of the verses and the creation of Allah.

- She reminded the students about the importance of acting upon the verses that they had read in the Holy Qur'an.

Researcher's Reflection

The group recitation (teacher reads the verse and then each group individually read the same verse once after her) and the way she corrected the students' mistakes in either pronunciation or intonation rules during the recitation observed to be a helpful approach. As many students

mentioned that they had benefited from repeating single words or entire verses thrice and some of them had memorised the required verses following this approach. In addition, she applied the collaborative learning method by selecting a 'young teacher' for each group, which may have helped students to exchange information and to improve their performance in reciting the Holy Qur'an. However, she started by writing the topic of the lesson directly on the board. So, she did not introduce the new lesson or even try to allow the students to find out what the lesson was going to be about by asking them a set of questions. Therefore, by doing so, she did not prepare her students for what she was going to teach them. Finally, the teacher's reminder to the students to apply the teachings of the verses to their daily lives stressed on the practical use of the verses and their incorporation into everyday life.

6.4.1.3   (Qur'an: Year 5, Memorisation State School)

- The teacher wrote the topic of the lesson on the board (chapter name and verses number).
- Then, she recited the verses and the students had to listen carefully to the recitation.
- This was followed by a group recitation (the teacher read the verse and then each group individually read the same verse behind her once).
- She discussed the general meaning of the verses with the students.
- She used the deductive method (She gave students the meaning of a verse and asked them to look for the particular verse that had this meaning).
- She selected a number of students to recite the verses. During this stage, the teacher discussed the meaning of the verses with the students, observed them during the recitation, and corrected their mistakes.
- She used an iPad application called 'Muhaffith Alwahyain' (please refer to Chapter three for more details about this application) to help students with the memorisation of the verses.
- The teacher recorded the recitation of three students using an iPad application called 'Muhaffith Alwahyain' and then presented these recitations to the students to select a winner based on the number of pronunciation mistakes made by the student or intonation rules that they had not applied.
- She reminded the students to practise reciting the verses before the next lessons.

Researcher's Reflection

Based on what the teacher did, her students had a chance to listen to the teacher reciting each verse twice. The first time was when she recited the verse, the students just had to listen to the recitation, and the second time was through the group recitation. This teacher used an iPad application called *Muhaffith Alwahyain* for teaching students to recite and memorise the Qur'an. The students were observed to be active and enthusiastic to find out who the winner was from the teacher. Thus, one can conclude that the teacher's approach helped add interest and enthusiasm to the lessons and helped attract the attention of the students. Moreover, students found the competition useful as some of the students started to evaluate themselves when they practiced reciting and memorising at home. Moreover, this teacher reminded students to practise reciting the required verses so as to achieve the master level of reciting Qur'an verses as it is the primary objective for teaching the Holy Qur'an in school.

6.4.1.4   (Qur'an: Year 4, private School)

- The teacher presented a 'YouTube' clip of the verses that she wanted to teach the students. The clip had to be a 'teaching style' one with a capable student repeating after the recitation (the student had to be able to pronounce every letter properly, giving due consideration to the provisions of intonation; the reciter read the verse and then stayed quiet and a capable student repeated after him). This way the students listened to the verse twice –first, by listening to the reciter and then, by listening to the capable student.

- The teacher reminded the students about the manners of reciting the Qur'an. These include certain rules, such as the one stating that each chapter ('Surah') should be started by saying "In the name of Allah, the Compassionate, the Merciful".

- She asked the students about the meaning of some words that she had explained in the previous lesson.

- She asked the students a question at the beginning of the lesson and told them that the answer to that question would be in the verses.

- She used a laptop, a projector and external speakers to display the verses.

- She showed the verses in a 'Power Point' presentation (a slide appeared with the verses on it and it had sound effects as well. So, the slide and the sound effect appeared at the one click of the mouse).

- Next, she selected some students to recite the verses while the rest of the class listened to each of them and identified their mistakes, whether in pronunciation or in the application of the rules of intonation.

217

- After the recitation of the verses, the teacher highlighted the mistakes on the Power Point slide using the Pointer Options available in Power Point.

- Then, she distributed a form to the students and asked them to write down the difficult-to-pronounce words from the verses in a table and to compare them with the Uthmani style script of the Qur'an and the spelling script of the word. In addition, she reminded them about the importance of repeating these words and practising their correct pronunciation in order to overcome the difficulties in pronouncing these words.

- Before the end of the lesson, she asked every group to write down the benefits that they learned from the verses, and each group raised the board they had written on as soon as they finished.

- This was followed by one student from each group reading what her group had written.

- Finally, the teacher reminded students about the importance of applying the commandments and prohibitions contained in the verses to their daily lives.

Researcher's Reflection

This teacher used different forms of technology (laptop, a projector and external speakers) and a variety of teaching methods (showing YouTube clip, the interrogative approach, the deductive method and the individual and collaborative learning methods). In addition, at the beginning of the lessons, she reminded students about applying the principles of reciting the Holy Qur'an and at the end; she reminded them about the importance of applying what the verses contained to their daily lives. This approach helped students to know the principles of reciting the Holy Qur'an as many teachers did not remind students about it each lesson and they may have only mentioned it at the beginning of each term when they introduced the Qur'an syllabus. Moreover, she encouraged the students to focus better on what she said by asking them a question at the beginning of the lesson and telling them that they would be able to answer that question if they had understood the meaning of the verses well enough.

6.4.1.5   (Qur'an: Year 6, State School)

- The teacher reminded the students about the general meaning of the previous verses, then gradually asked students questions and mentioned some examples in order to introduce the topic of the new lesson.

- She assessed the students on the previous verses.

- She used the recording device to play the verses, followed by a recitation by her, where the role of the students was to listen carefully. Then, there was the recitation by the

teacher where the students had to repeat after her. During this process, she corrected the pronunciation mistakes of the students and explained to them some of the intonation rules that they had missed during the recitation.

- She selected more than one student to recite the verses and during this stage, she discussed the general meaning of the verses with the students.

- The teacher walked among the students to watch them and to ensure that something else did not distract them.

- She then asked some students about intonation rules that are sometimes present in a single word and sometimes in two words, such as Almad (elongation).

- She then explained and clarified some of the intonation rules in more detail.

- She wrote the difficult words on the board and displayed the short vowels (Dhammah, Fathah, and Kasrah).

- She used the 'young teacher' idea.

- She explained the general meaning of the verses and explained some of the values contained in them, such as Tasbeeh (glorifying Allah in remembrance) in order to instil some of these values in the students.

Researcher's Reflection

She used the interrogative method to introduce the topic for the new lesson. She gave special attention to correcting the students' mistakes as well as to the intonation rules (she asked some students about them and then explained and clarified some of the rules in more detail). The classroom management approach she used was very good and it helped her to ensure that all students are following her. She ended the lesson by drawing the students' attention to some of the commandments in the verses.

6.4.1.6 'Doctrine of Oneness' (The Nullifiers of Faith: Year 6, State School)

- The teacher assessed the students on the previous lesson and from the answers of the students; she introduced the topic of the new lesson.

- The teacher started by mentioning the objectives of the lesson.

- This was followed by showing the student an image and asking several questions to simplify how committing one of the nullifiers of faith influenced the person's Faith (she used the brainstorming and interrogative method).

- Then, she used the projector and 'Power Point' programmes to present the lesson.

- The teacher explained the lesson in parts and asked the students some questions after every part as a way of evaluating their understanding of what had been explained.

- There was a poster on the right side of the board with the names of the strategies that the teacher kept using and she asked the students the name of each strategy after she had used it.

- Then, she wrote the name of each strategy after she had used it:
    - Role playing (to introduce the topic of the new lesson).
    - Brainstorming (to teach new information).
    - Think-Pair-Share (to assess students understanding).

- She reminded the students about what needed to be memorised and she reminded them to revise before the next lesson.

Researcher's Reflection

She used the interrogative method, and other strategies such as brainstorming, role-playing, and think-pair-share. She delivered the lesson in a simple style by dividing the content of the lesson into three parts and before moving to the next point, she evaluated the students' understanding of what she had explained. She encouraged students to revise before the next lesson as she was going to do an oral test in order to test the students' understanding of what they have learned, due to the nature of the 'Tawheed' curriculum in which each syllable depends on one another.

6.4.2   Summary of the Results Obtained from Classroom Observations

As it has been mentioned earlier that the objective of teaching Islamic education curriculum in Saudi Arabia is not to increase students' knowledge about different religious, but to teach them only the Islamic religion, in hope of helping students to implement the principles of Islam in their daily life and to make these a way of life. Also, the desire of the students for Islamic education lessons to be more enjoyable. Furthermore, research specialists in Islamic studies, as well as the researcher's experiences in teaching Islamic education curriculum, researcher knowledge and understanding of the possible methods for teaching Islamic education and the criteria of evaluating the Islamic studies teacher's performance and judging her teaching methodology. These are the fundamentals that researcher took into consideration to derive what distinguished the approach of each teacher, and helped it to positively influence the level of the students' achievement, and achieved specific curriculum objectives:

1. The voice of the teacher and the changes in her vocal tones, along with her use of body language, have an influence on students' motivation to learn and stimulate them to participate and answer the teacher's different questions.

2. The students' level of achievement has a strong relation to the teaching approach of the teacher. This is because of the method she uses in teaching and in delivering the information to the student, particularly when a variety of teaching aids and methods are used. These methods include the combination of the lecturing method and the deductive method, and the use of sound, picture or video as well as the use of one of the active learning strategies, such as 'Hot Seat' or 'Mind Maps'. This helps the student to increase her motivation for learning, stimulates her to participate and answer questions during the lesson, and helps her to assimilate information and retrieve it after long periods. The evidence for this is that researcher found students with teachers who used various teaching methods, answering questions correctly when the teacher asked them about the lessons that she had taught them over the previous weeks.

3. Some teachers make links between the subjects. For example, while giving her lesson, a teacher of Tawheed cited some of the verses, which she had taught in a Qur'an lesson. This is beneficial because it reminds students about the verses and gives them the feeling that all Islamic education modules are related to one another.

4. When the researcher asked the teachers about the benefit of the idea of the 'young teacher,' they said that they had found that using this method caused enthusiasm among the students and increased their motivation to practise and prepare the verses at home because they wanted to play the role of the teacher. The teacher who used this idea said that she had benefited from the idea of the 'young teacher' by encouraging and supporting the underperforming students. She requested the students who had mastered the recitation to volunteer to help their classmates to practise reciting the verses during break time. She promised to honour them on the school assembly. This had a noticeably positive effect for the low-ability students and helped them to improve in reciting and memorising the Qur'an.

5. Mind mapping was the most used active learning strategy by Islamic education teachers. Regarding the time of their use, researcher noticed during the observations of the teachers' lessons that most teachers used them when teaching new information or when assessing the students at the end of the lesson to measure their level of understanding of the lesson.

6. Most Islamic studies teachers mainly used the active learning strategies at the end of the lesson as a method of measuring to what extent the students understand the lesson.

7. On the other hand, researcher saw two teachers using one of the Active Learning Strategies when introducing their lesson. One of them used the Role Playing strategy when introducing her lesson and requested the students who had been trained before to act out the scene in front of the students so as to get to the topic of the lesson. Researcher noticed that this approach (using one of the Active Learning strategies when introducing the new lesson) increased the motivation of the students. In addition, I realised that the students were enthusiastic as they watched their classmates. Everyone was participating enthusiastically and answering the questions asked by the teacher.

8. Listening carefully to the teacher when she recites the verses is a fundamental step in helping students to achieve the master level of recitation of the Holy Qur'an.

9. The application of 'Muhaffith Alwahyain' may benefit the students. As it appeared easy-to-use, particularly when it comes to verses that they have to memorise, because the student can use the recording function and record her voice, listen to it, evaluate herself and identify her mistakes.

6.5 Conclusion

This study was conducted to examine the effectiveness of using a blended learning approach in teaching students' aspects of the Islamic education curriculum in Jeddah, Saudi Arabia. A mixed method approach including questionnaires, classroom observations and interviews were used to collect data from the Islamic studies teachers involved in this study. In the data analysis, both a thematic analysis and a descriptive statistics analysis using the Statistical Package for the Social Sciences (SPSS) was employed. Furthermore, to enhance the interpretation of the quantitative data I used factor analysis in analysing the data gathered from participants' regarding their opinions of using a blended learning approach and the factors which may prevent them from using such method. In addition, researcher profession in Islamic studies has been considered when interpreting the factor analysis findings.

The findings of the study revealed that both teachers and students benefited from applying a blended learning approach. Also, teachers believe that using a blended approach increases their productivity when preparing for the lesson and helping students to develop new skills. In addition, it helps clarify and enhance the lesson content in student textbooks. Moreover, a blended approach was found to be suitable for use in teaching all subjects of the Islamic

education curriculum. Fiqh and Hadith are the subjects that benefited most from applying a blended learning approach. On the other hand, using many strategies may distract students and possibly resulted in not finishing the given syllabus. Moreover, teachers believe applying a blended approach requires more time in delivering the lesson and more effort in preparing for the lesson.

Also, the findings of the study revealed that the nature of the curriculum, as well as the availability of the teaching aids related to each unit in a student's textbook, and the availability of ICT tools in schools are the key factors which encourage Islamic studies teachers to use a blended approach. While Teachers' workload, lack of training and difficulty regaining control over the classroom are some of the factors that may impede Islamic studies teachers from using a blended learning approach. Consequently, these teachers may fall back on traditional methods which lack the advantages of the blended learning approach. Thus, these issues need to be resolved to encourage teachers to integrate technology and effectively and successfully apply a blended approach.

6.6   Chapter Summary

This chapter presented the data gathered though an online questionnaire, interviews and classroom observations, using a thematic analysis, a descriptive statistics analysis, factor analysis and the Statistical Package for Social Sciences (SPSS), to facilitate the interpretations of the findings. The chapter also discussed some of the findings based on researcher's profession in Islamic studies and the researcher's experiences in teaching Islamic education curriculum. The next chapter will further discuss and interpret these results to explain the implications of the findings and how these findings fit in with existing studies.

Chapter Seven: Discussion

7.1 Introduction

This study examines the perceptions of Islamic studies teachers on the effectiveness of applying a blended learning approach (the combination of different forms of technology, traditional teaching methods and teaching aids, collaborative learning, and active learning strategies) in teaching the Islamic education modules to the students of primary schools for girls in Jeddah. Furthermore, it investigates participants' perspectives on whether a blended approach is suitable for teaching all Islamic education modules or if only traditional methods are ideal for teaching some of these modules. In addition, it elucidates the key factors that motivate Islamic studies teachers to employ a blended approach in teaching as well as the obstacles that could hinder the implementation of a blended learning approach.

This chapter focuses on a discussion of the research findings from this study to relate them to the literature review and compare and reflect on any differences between these new findings and other similar studies. These findings are the outcome of the answers and observations from questionnaires, interviews, and classroom activities. The discussion based on these findings has been categorised into seven sections:

1. Teaching methods, teaching aids, and active learning strategies
2. The blended learning model
3. Islam and innovation
4. The advantages of implementing a blended approach in teaching Islamic education
5. The disadvantages of implementing a blended approach
6. Factors motivating Islamic studies teachers to apply a blended approach
7. Factors inhibiting Islamic studies teachers from applying a blended approach

7.2   Teaching Methods, Teaching Aids and Active Learning Strategies

The findings derived from the interview data revealed that some Islamic studies teachers already prefer utilising different forms of technology such as a variety of computer programs and interactive whiteboard features while teaching students the Holy Qur'an. The benefits they obtained from such multimedia application included helping students master the recitation of the concerned verses. This finding is consistent with that of Al-Caderi (2008), who discovered that the additional aid of some computer programs in teaching results in a significant increase in student skills while reciting the Qur'an by offering useful models of recitation.

Findings derived from the classroom observations have unveiled that there is a relationship between the teaching methods that teacher employed in delivering the lesson, the level of the students' knowledge, and the ability to recall what they have learned. For instance, some Islamic studies teachers assessed the students' understanding after completing each part of the lesson, and at times, more than one students repeated the same answer. Those students were observed to give better answers than others when teachers asked them the things that they had learnt in the previous week. This finding is in accordance with some of the vocabulary learning approaches particularly a method called "distributed practice". According to Thornbury (2006),

> "It is better to distribute memory work across a period of time than to mass it together in a single block. For example, when teaching students a new set of words, it is best to present the first two or three items, then go back and test these, then present some more, then backtrack again, and so on. As each word becomes better learned. Similarly, over a sequence of lessons, newly presented vocabulary should be reviewed in the next lesson, but the interval between successive tests should gradually be increased" (p.9).

Islamic studies is the most important subject in the curriculum that a student learns due to its strong relevance to her monotheistic religion and personal beliefs; the more she comprehends and implements it in her activities, the closer she gets to pleasing the Lord. Therefore, teaching Islamic education requires the active involvement of the student in every lesson by ensuring that each student draws a relation between Islamic principles and values and her real life through participation in the topic of the lesson, providing specific examples of incidents that have occurred with her and how she managed to deal with them. That is based on the principle that relating what students have learned to their everyday life make them more passionate towards the academic subject and more develop interest in learning it (DeWinstanley and Bjork, 2002; Karpicke and Blunt, 2011).

7.3   The Blended Learning Model

Based on the result derived in Chapter 6, the blended learning approach could be regarded as a solution to enhance the methods of teaching Islamic education and provide interactivity in Islamic lessons. Additionally, such an approach may help overcome the problems of being routine and inert that is associated with Islamic education lessons when mere traditional teaching methods were employed.

A crucial finding of the current study is that a blended learning approach is suitable for teaching all the subjects of the Islamic education curriculum, as 12 teachers (9%) have indicated that they employ a blended approach in teaching the Qur'an and 20 teachers (16%) have indicated that they employ such an approach more in teaching Tawheed than other subjects. Moreover, 35 teachers (27%) have applied it in teaching Hadith and 62 (48%) in teaching Fiqh more than other subjects. This trend could be attributed to the combination of the four dimensions of the blended learning model, considering issues related to institutional, pedagogical, technological, organisational, and administrative matters.

Considering the usefulness of utilising the blended learning approach while teaching Islamic education modules, Fiqh and Hadith are the subjects that optimally benefit from applying a blended approach in teaching them, as teachers have indicated that they employ a blended approach more in teaching these subjects. The other important finding is that a majority (78%) of the participants believe that the suitability of applying a blended approach in teaching an Islamic education curriculum depends on the particular subject and the topic of the lesson. These can be ascribed to the nature of the curriculum and the specific objectives that Islamic studies teachers seek to achieve through delivering these Islamic education lessons, as well as the availability of teaching aids and online resources related to the unit that the teacher wishes to teach.

Another important finding is that a majority of the Islamic studies teachers have displayed a positive attitude towards applying a blended approach. Similarly, some Islamic education teachers have also displayed a positive attitude towards employing technology in conducting the lessons (Alsharidah, 2012; Al-Shehri, 2009). Similarly, researchers who examined the effectiveness of utilising ICT in teaching different subjects such as Science and Social Science (Korkmaz and Karakus, 2009; Yapici and Akbayin, 2012) have discovered positive attitudes, among both teachers and learners, towards the integration of technology. In accordance, Taradi et al. (2005) indicated that the students demonstrated a positive attitude towards the blended learning environment, and there was a statistically significant difference in the learners' satisfaction between the control and experimental groups.

Conversely, a few Islamic studies teachers only adopted traditional methods, particularly in teaching the Holy Qur'an, and they attributed that to the fear of undermining the respected status of the academic content among the students. This finding is consistent with the conclusion of many studies – there are religious and cultural concerns pertaining to the utilisation of ICT

among Islamic studies teachers – and they classify these as the main factors that may inhibit Islamic studies teachers from employing ICT tools in delivering the lectures (Sajjadi, 2008; Anzar, 2003; Lubis, 2009). Alsharidah (2012) adds that, although it is not easy discovering the percentage of Islamic studies teachers who agree with this finding, it is important to admit that these concerns are prevalent among Islamic teachers currently. These concerns could be a result of the misunderstanding of Islam, or teachers may have a strong religious belief that has effectuated the consideration of the utilisation of ICT as a potentially dangerous approach (Al-Sulaimani, 2010). Moreover, Al-Matari (2008), revealed that there is a strong relation between Islamic education teachers' beliefs and the employment of innovative teaching methods. Moreover, the holiness of the subject plays a major role in distinguishing acceptable innovation from unacceptable innovation. Thus, it is crucial to reveal Islamic studies teachers' beliefs towards adopting innovative teaching methods.

7.4   Islam and Innovation

Lubis et al. (2011) emphasise that in Islam, the adoption of an innovative approach and modern technology is encouraged, as it contributes towards the development of positive thinking, the ability to innovate, and the drive for self-improvement. The Qur'an states that "Those people who race to search for a good deed, those are the people who will be more advanced" (Qur'an 18:61). "Are those who know equal to those who know not? But only men of understanding will pay heed" (Qur'an 39:9). "My Lord! Increase me in knowledge" (Qur'an 20:114). Alanazi (2004) adds that the Qur'an explicitly encourages Muslims to follow a thinking-centred orientation towards faith. "Do they not look at the camels, how they are created?" (Qur'an 88:114). Similarly, Najati (1989) noticed that in the Qur'an, there is an interesting conception pertaining to the mind that implies that it is cultivated by education and training.

From the foregoing discussion, it is evident that Islam encourages people to think and be creative and it also emphasises the need to continue learning and the importance of spreading knowledge. Additionally, the essential use of the Internet did not figure as a part of the blended learning model utilised in the current study, as its usage presents ethical and social challenges (Al-Sulaimani, 2010). Hence, nothing in this blended approach is harmful or disrespectful for students or instructors. Furthermore, 66.7% of participants strongly agree that adopting a blended learning approach increased their productivity while preparing for their lessons. Additionally, a blended approach was found to be appropriate for implementation in teaching all Islamic education modules. This discussion implies that the blended learning model is

aligned with Islamic principles, and it is important to increase Islamic studies teachers' awareness about what a blended learning approach means and the advantages that are associated with adopting such an approach in order to provide them with a clear vision of the prospects of enhancing the method of instruction in Islamic lessons, without fear of undermining the respected status of the academic content.

7.5   The Advantages of Implementing a Blended Approach in Teaching Islamic Education Curriculum

A blended learning approach was observed to be quite effective in implementation in teaching an Islamic education curriculum. This claim can be justified by the advantages that Islamic studies teachers mentioned in the open-ended question and the factor analysis findings, which are based on the questionnaire responses and the descriptive analysis of specific benefits in each section of the Islamic education modules. All identified the benefits that can be obtained from adopting such methods.

For instance, Islamic studies teachers believe that the blended learning approach facilitates interaction between students and teachers. This seem to be in accordance with the findings by Alebaikan (2010), who discovered that applying blended learning in higher education in Saudi Arabia greatly contributes to the development of Saudi higher education. Moreover, she found that the blended learning environment offers the flexibility for Saudi female students to continue their higher education, while maintaining their own cultural values and traditions.

Also, respondents of the online questionnaire have indicated that using a blended learning approach accelerates the process of comprehending information and helps students remember the information for a longer duration. This could occur due to two reasons: 1) the mixture of the four elements in the blended learning model used in this study; 2) the nature and the objectives of the Islamic education curriculum. For example, Islamic studies teachers have a duty to motivate students to practise what they have learnt and must strive to ensure that each student learns from and understand the lessons pertaining to Islamic religion. Moreover, students are required to apply their religious learning in the activities of their daily life. In other words, students must implement what they have learned in their daily lives. This is supported by Thornbury (2006), who states that one of the vocabulary learning principle in remembering and adding the word to the long-term memory is to use that word "Use it or lose it" (p.9). Furthermore, the benefit of the blended learning approach in helping students to retain information for a longer period is consistent with the research undertaken previously by Yeh

and Wang (2003) and Chun and Plass (1996). Both studies examined the effectiveness of combining various forms of multimedia, such as annotated words with pictures and text, words annotated with text only, and pictures and sound, rather than presenting only words when teaching English vocabulary to second-language learners.

The quantitative and qualitative results demonstrated that adopting a blended approach enhances students' desire to study an Islamic education curriculum. This result is in accordance with the research undertaken previously by Korkmaz and Karakus (2009), as they found that blended learning presents one of the most effective methods in the enhancement of student attitudes towards geography courses, when compared to more traditional modes of learning. This finding also concurs with Yapici and Akbayin (2012) who concluded that employing blended learning significantly improved students' attitudes towards the Internet. Moreover, Kenney and Newcombe (2011) revealed that 59% of students believed that the blended learning approach helped promote an interest in the course material, while 75% indicated that the blended approach helped them delve more in-depth into the topic.

Conversely, increasing students' desire to study is inconsistent with Tosun (2015), who discovered that applying blended learning did not increase either students' achievements or motivation to spend more time studying new vocabulary. The inconsistency could be justified by 1) the differences between the lesson content and subject; 2) the differences between the teaching methods and teaching aids utilised by teachers; and 3) the method employed in assessing student understanding during the lecture. As this study revealed, the nature of the curriculum plays a major role in selecting appropriate teaching methods and the techniques employed to assess student understanding, such as Repetition and Distributed Practice, which were found to be beneficial for fostering long-term retention of information.

Additionally, Islamic studies teachers opine that adopting a blended approach increases students' achievement. Similarly, a study conducted by López-Pérez et al. (2011) revealed that the adoption of blended learning has a positive effect in reducing dropout rates and improving exam marks. Moreover, the increases in students' achievement is in agreement with the findings of Yapici and Akbayin (2012), who concluded that applying blended learning approaches contributed significantly more to students' biology scores in their experimental group as compared to those of the control group. Additionally, it appears that this result is in agreement with the results of research undertaken by Meejaleurn et al. (2010), who concluded that including media in the presentation of learning material increases students' achievements.

Similarly, Alqahtani (2010) discovered that there was a significant correlation between the mode of delivery and students' achievement. However, when the researcher compared the difference between students' achievement, he found that there were no major differences between students following the e-learning approach (n = 43) and students following the traditional learning approach (n = 50); whereas, there was significant difference in the blended learning group (n = 55) as compared to the achievement of e-learning and traditional learning groups. This was also the case presented in the study conducted by Al-Ghamdi (2011), which sought to determine the effectiveness of employing blended learning in teaching PowerPoint to high school students in Saudi Arabia. The results of the study indicate that there was a significant difference in students' achievement between those in the control and experimental groups. However, increases in students' achievement may present inconsistency with some previous studies. For instance, a study undertaken by Kennedy and McCallister (2000) concluded that there is no statistically significant difference in students' achievement between traditional and blended learning groups. Moreover, the findings of studies conducted by Lim and Yoon (2008), Hameed et al. (2008), and Lim et al. (2007) also differed from the findings of the current study. All three previous studies indicated no significant difference in students' achievement between blended learning and e-learning. This inconsistency between the findings of the current study and past studies could be attributed to the different dimensions involved in the blended learning model applied in the current study, which combines different teaching approaches, such as teacher-centred and student-centred, and different teaching methods, such as collaborative learning and active learning, as well as the application of different forms of technology. In addition, we must regard the fact that the blended approach considered in most previous studies was based on integrated online learning with face-to-face learning such as that involved in an asynchronous virtual classroom. Moreover, the nature of the Islamic education curriculum, as well as the specific curriculum objectives that the teacher seeks to achieve, could all contribute towards this inconsistency. Whilst this study cannot prove that the application of blended learning strategies in Islamic education modules in girls' primary schools are beneficial for the outcomes, the findings indicate that such an approach is feasible and worth further rigorous exploration.

Islamic studies teachers also believe that a blended approach suits both high- and low-ability students. Chen and Huang (2009) investigated further and affirmed that the acceptance of blended learning methods by low-achieving students is greater than that of high- and middle-range students. This may be owing to the lower motivation and engagement of low-achieving

students or their perception that a blended environment furnishes them with new opportunities to succeed (Higgins et al., 2012). Moreover, for the low-achieving students, applying blended learning methods may not only increase their curiosity and their learning motivation but also facilitate their comprehension ability. Conversely, Owston et al. (2013) conclude that

> "Compared with low achieving students, high achievers were the most satisfied with their blended course… High achievers also found blended courses more convenient, more engaging, and they felt that they learn key course concepts better than in other traditional face-to-face courses they have taken. An implication of the study is that low achievers may not be able to cope with the blended environment as well as their high achieving peers" (p.22).

This is an implication that considering the different levels of learning ability among students and their requirements while developing a blended learning model or selecting learning activities is a crucial aspect, which teachers need to consider during preparation of the learning material. That is because doing so may help the teacher to achieve a meaningful learning. This may also help teacher in delivering a lesson that suits learners' ability, meet their needs, and achieve specific curriculum objectives (Ainsworth & VanLabeke, 2004).

Regarding the benefit that applying a blended learning approach brings to the delivery of the Islamic education curriculum, 124 participants agreed that a blended approach increases their productivity while preparing Islamic lessons. One could argue that this is due to the uniqueness of the blended learning model that comprises four dimensions. Furthermore, because of increasing teachers' productivity in preparing for a lesson, their productivity while delivering it may increase accordingly. Subsequently, the teacher provides a lesson utilising various teaching methods and learning activities (Mayer, 2003; Mayer, 2009).

Having discussed the advantages of applying a blended learning approach, the next section will turn to the discussion pertaining to the disadvantages of using such an approach.

7.6   The Disadvantages of Implementing a Blended Approach

It is evident from the teachers' answers that they believe applying a blended approach causes no major disadvantages to either teachers or students. Most of the teachers mentioned that, at times, employing this approach may affect the completion of a given unit. Others reported that there is extra work required on the part of the teacher, because lesson preparation takes a lot of the teacher's time, which includes searching for appropriate teaching methods and strategies that suit the objectives and contents of the lesson. Alternatively, some teachers reported that the lack of the availability of basic technological equipment in the classroom may result in a financial burden on the teacher. Moreover, the length of the curriculum and the duration of the lesson may prevent the teacher from elaborating upon the information. Finally, having a high number of students, as well as using a multitude of active learning strategies, may possibly result in the teacher facing difficulty in controlling the class. Thus, a blended approach is not the direct cause of lack of lesson completion or failed elaboration on the content, as teachers mentioned other issues in their answers, such as the length of the curriculum, the duration of the lesson (45 minutes), the high number of students (39), and teacher's multi-tasking. Additionally, one could state that having 39 students in the class may prevent the teacher from dividing students into small groups, and this may restrict them from applying certain teaching methods and active learning strategies. These views were further supported by Al-Dossry (2011), who concluded that the three time-related factors that affected 35 female Saudi teachers from using ICT are 1) the 45-minute duration of the lesson; 2) teachers' belief that technology wastes class time; 3) the high number of students compared to the lesson duration, resulting in the teacher losing control of the class under such conditions. Similarly, Alfifi (2012) discovered that the high number of students is the key obstacle mentioned by teachers, which impedes Islamic studies teachers in secondary schools in Saudi Arabia from utilising technology, particularly when teaching the Holy Qur'an. Likewise, Al-Mulhim (2014) concluded that in Saudi Arabia, the lesson lasts 45 minutes and there is a lot to teach in that duration. Consequently, the teacher will be less likely to utilise technology, especially where they believe that it wastes time. He suggested some solutions that may increase the implementation of innovative teaching methods and ICT in Saudi primary schools, including a decrease in the curricula and an increase in the class duration, to provide teachers with ample time to complete the requirements for the curriculum by adopting a variety of teaching methods (Al-Mulhim, 2014).

7.7   Factors Motivating Islamic Studies Teachers to Apply a Blended Approach

The current study has identified various reasons that encourage Islamic studies teachers to adopt a blended approach; these include the nature of the curriculum, the availability of teaching aids related to the subject, such as video, audio, and pictures, as well as the desire of Islamic teachers to integrate innovative approaches to clarify and simplify the contents of the unit in the student's text book. Similarly, Al-Mulhim (2014) and Al-Alwani (2005) highlighted that the availability of ICT tools such as a computer motivates Saudi teachers to integrate technology in their teaching. Afshari et al. (2009) also discovered that the well-equipped classroom encourages teachers to apply a blended approach. Likewise, Alev (2003) states that providing ample resources can attract and persuade teachers to utilise them while delivering the lesson. Therefore, the pedagogical planning and development administration needs to consider providing appropriate hardware, software, and teaching aids as part of the education system's development plan.

Some Islamic studies teachers indicated that their level of confidence has increased through the frequent utilisation of active learning strategies, different forms of technology, and receiving some training through courses that may impart some basic information on fixing common breakdown problems associated with technological usage. Similarly, Garrison and Vaughan (2008) concluded that providing technical support via a blended community may help teachers to sustain their innovations.

From the foregoing discussion, I concluded that it is important for teachers to be fairly confident that a full command on the available resources is achieved and they are adequately equipped to operate ICT tools and use innovative teaching in an effective manner.

Having discussed the factors that motivate Islamic studies teacher to apply a blended learning approach, the next section discusses the findings that inhibit Islamic studies teachers from implementing a blended learning approach while teaching aspects of the Islamic education curriculum and suggests some solutions to resolve this issue and possibly contribute to increasing the extent of the usage of the blended learning approach in Saudi schools.

7.8 Factors Inhibiting Islamic Studies Teachers from Applying a Blended Approach

Using the exploratory factor analysis, nine items in the online questionnaire investigated the factors that may prevent Islamic studies teachers from adopting a blended approach. Teachers were asked to indicate the extent of their agreement using a four-point Likert-type agreement

scale with 'strongly disagree', 'disagree', 'agree', and 'strongly agree'. In addition, the obstacles that were identified as hindrances to Islamic studies teachers from adopting a blended approach are separated into three factors:

1. Learning environment
2. Challenges to adoption and use
3. Time

7.8.1   Learning Environment

A majority of the respondents to the questionnaire strongly agreed that the teachers' workload hinders them from applying a blended learning approach. This finding is consistent with that of Algarfi (2010), whose study revealed that 76% of teachers did not use cooperative learning due to their workload. Likewise, Almalki and Williams (2012) emphasise that if schools do not consider reducing teachers' workload, such as the number of lessons each week, it is difficult to expect teachers in Saudi schools to integrate ICT in teaching. Al-Alwani (2005) conducted a study to determine the current level of ICT integration in science education in Saudi Arabia. He discovered that science teachers of primary, intermediate, and secondary schools in the Yanbu school district in Saudi Arabia were unable to integrate technology in their teaching due to their workload. Alebaikan (2010) concluded that the reasons behind two Saudi female lecturers resisting to follow blended learning model include avoiding the extra workload of transferring to blended courses. Similarly, I found from the responses of the interviews that multi-tasking (lesson preparation, controlling the class, ensuring student understanding of an Islamic term, motivating students, and designing assessment tests) prevent some Islamic studies teachers from exploring innovate teaching methods. In accordance, teachers' requirement to multi-task in functions such as administrative and teaching tasks prevent some teachers in Bangladesh from using technology in teaching and learning environments. Moreover, such circumstances leave teacher with insufficient time to design, develop, and integrate technology into the teaching–learning environment (Afshari et al., 2009; Khan et al., 2012). Similarly, Alhawiti (2013) recommended that the teachers should be provided enough free time by reducing their workload, so that they go for the training without having to do the work piled-up due to their absence.

The high level of agreement on teachers' workload as a major hindrance to the implementation of a blended learning approach could be attributed to the consensus on the principle that heavy teaching loads may hinder a teacher's creativity and lead her to rely on applying traditional

teaching methods such as the lecture method, which lack the advantages of the blended learning approach (Al-Matari, 2008; Algarfi, 2010).

7.8.2 Challenges to Adoption and Use

In the current study, the 'lack of effective training' and the 'lack of resources in employing a blended approach' received high mean scores of 3.17 and 3.21 respectively. Whereas, the 'lack of ICT tools' such as projector, computers, and interactive whiteboards received a slightly higher mean score of 3.55.

The data pertaining to 'lack of effective training' and 'the lack of ICT tools' are consistent with Almalki and Williams (2012) who concluded that unlike many developed countries, the Kingdom of Saudi Arabia is still in the developing phase and lacks a proper technological infrastructure. An in-situ training must be made available by the Saudi ministry, making it accessible for primary teachers. The teachers would then be able to manage the rapid and continuous evolution of technology.

While 'the lack of effective training' and 'the lack of resources in using a blended approach' are consistent with Alebaikan (2010), whose study revealed that there is a lack of resources in using blended learning in the Arabic framework. Moreover, the reasons behind the resistance of Saudi female lecturers to adopt a blended learning include inadequate skills. Similarly, Algarfi (2010) concluded that the lack of training prevented many teachers not only from implementing cooperative learning, but also from adopting other teaching approaches.

Alqahtani (2010) also emphasises that

> "To be more precise the well-equipped classroom is only a partial solution to the problem as both students and staff need to be provided with the appropriate training to gain the required skills to deal with modern technology. This is where educational institutions such as e-learning centres and university research centres become important as to provide training in this area" (p.212).

Similarly, McDonald and Kolderie (2009) state that implementing the integration of computers in education is not simple, as teachers need to be trained in utilising them in their lectures. Al-Ghamdi (2011) also suggests that it is essential to apply blended learning in the teaching curriculum in Saudi Arabia, and it is essential to train teachers to apply this approach. Consequently, developing training programs in applying a blended learning is crucial for teachers in order to provide them with the knowledge required to successfully implement such

a method in a learning environment. Moreover, in order to achieve the best from the training, Al-Mulhim (2014) recommended that the technical and the pedagogical skills required to use technology should be included in these training modules, with regular revision and improvement of the standard of the ICT curriculum adopted in the institutions for teachers' preparation. Alhawiti (2013) adds that

> "These training sessions should include not only workshops and tutorials but also collaboration between experienced and non-experienced teachers. Thus, schools should encourage experienced teachers to demonstrate to their peers how they are effectively integrating ICTs in instruction based on their philosophy and pedagogy. This can be done through face-to-face showcases or conferences in which teachers are given the opportunity to demonstrate innovative learning-centred pedagogies that they had successfully implemented" (p.183).

Additionally, in the current study, participants agreed that the lack of ICT tools and the convenient Internet access are the key obstacles that prevent them from applying a blended approach. This can be attributed to the fact that unavailability of resources requires teachers to put in more effort and time (Khan et al., 2012). Second, it takes away a lot of the lesson time if the teacher decides to use her own devices. Finally, the insufficient facilities in the classroom limits teachers' exploration of teaching methods as well as teaching aids. Similarly, Alsenaidi (2012) concluded that the obstacles that may hinder Islamic studies teachers in Saudi Arabia from utilising Electronic Brainstorming include technical problems, lack of hardware, differing levels of IT skills among students, internet access, time constraints, and the extensive information to be covered in the curriculum. Additionally, more than 50% of the participants reported that the insufficient number of computers seriously impede the integration of ICT in education (Pelgrum, 2001).

7.8.3   Time

Time is one of the factors identified to be hindering Islamic studies teachers from adopting a blended approach, as most respondents indicated that applying a blended learning approach requires more time and effort in preparing for the lessons and it requires a lot of the time for delivering the lesson. This could be justified by the fact that the role played by Islamic studies teacher is significantly different from that of other teachers as her role entails leading by example. The lack of effective training in applying blended learning could lead teachers to spending more time seeking and selecting the appropriate method. Moreover, the lack of

appropriate resources consumes a lot of the teachers' time and effort searching for appropriate teaching aids such as videos and photos. This is supported by Almalki and Williams (2012), who emphasise that for multimedia presentations, teachers need many hours to search suitable resources, including photos and videos. Other studies have also revealed similar results. For example, Hew and Brush (2007), in their literature review found that teachers require a considerable duration to search the Internet in order to find appropriate resources. As far as the Kingdom of Saudi Arabia is concerned, Al-Mulhim (2014) emphasises that the barriers that discourage teachers to adopt ICT such as shortage of time and inaccessibility to technology, which associate directly with the educational policy, should be notified by the Saudi Ministry of Education, and a substantive solution should be formulated for encouraging and motivating teachers to utilise ICT for continuing their pedagogical responsibilities. Moreover, Alebaikan (2010) states that the resistance towards the adoption of blended learning could be diminished by introducing the advantages of blended learning environment and identifying the factors that may lead the teacher resisting it to alter her teaching style. Therefore, in order to be in a position to consider solving some of these difficulties (the Factors Inhibiting Islamic Studies Teachers from Using a Blended Approach), it is important for the Ministry of Education to be aware of the factors inhibiting Islamic studies teachers from adopting a blended approach, as these are similar to the factors preventing some Saudi teachers from integrating ICT in teaching different subjects.

The next section discusses the limitations of the current study.

7.9 Limitations of the Study

- The participants were primarily female Islamic studies teachers, due to the segregation between girls and boys in the education system in Saudi Arabia. This resulted in difficulty for me, as a female researcher, to gain access to male Islamic studies teachers, to observe them and to conduct interviews with them. Additionally, I may not receive enough completed questionnaires and as such, I may not obtain enough responses to provide a representative sample. Nonetheless, examining both male and female Islamic studies teachers' perceptions may provide rich data and enable me to compare and contrast male and female Islamic studies teachers' perspectives of using a blended approach.

- The sample size was relatively small (129 Islamic studies teachers). Future researchers may wish to consider having a larger sample of Islamic studies teachers or one which is stratified or randomised to increase the likelihood of generalisability.

- The study did not examine either the effectiveness of a blended approach on students' learning outcomes or students' perceptions of using a blended approach; this was due to the short duration of fieldwork permitted by the sponsor (eight weeks), and because the study was exploratory in nature.

- I was not able to examine either academic supervisors in the Pedagogical Planning and Development Administration or school principals' perceptions of the effectiveness of a blended learning model, due to the short period of time provided by my sponsor for conducting fieldwork; additionally, I experienced difficulty in gaining approval for gathering data from educational supervisors and school principals.

- This study was conducted only in Jeddah city, due to the limited duration for conducting the research, and because it is not permissible for a woman to travel alone, according to Islamic law.

7.10 Chapter Summary

This chapter discussed the findings of the current study in order to answer the research questions and to highlight the important findings. The discussion took place over several sections on the themes utilised to analyse the data gathered through questionnaire, interviews, and classroom observations. Evidence was provided to justify and underpin these new findings and to provide a solution to the factors inhibiting Islamic studies teachers from employing a blended learning approach in order to develop the implementation of blended learning in Saudi primary schools.

Chapter Eight: Conclusions and Recommendations

8.1   Introduction

The previous chapter discussed the research findings, which were gathered using a questionnaire, interviews and classroom observations. Also, the chapter explained the implications of the findings and discussed how they fit with existing studies.

This chapter presents a summary of the findings and sets out the strengths and weaknesses of the study. The chapter also explains the contribution of the study and offers some recommendations for stakeholders and future researchers.

The following section summarises the primary findings of the current study in relation to each research question.

8.2   Summary of the Primary Findings

1. *How effective do Islamic studies teachers in girls' primary schools believe using a blended learning approach is for teaching Islamic education modules (Qur'an and Tajweed, Hadith, Tawhid, and Fiqh)?*

Teachers and students both believed that they benefited from using a blended approach. Islamic studies teachers thought such a method to be suitable for use in teaching all subjects of the Islamic education curriculum, for both high- and low ability students. Additionally, they indicated that applying such method had helped them when preparing and delivering Islamic lessons. They thought that the use of different forms of technology, such as interactive whiteboards and computers, saves teachers time and effort when writing the correct answers for the assessment questions on the blackboard, as she can display the correct answer using the IWB or an overhead projector as feedback to the class. Using IWB for a programme that teaches students to master recitation of Qur'an verses increased students' desire to listen and practice the recitation of the required verses at home. Furthermore, they thought using ICT tools facilitated the revision of previously used material and the possibility for making required changes. Additionally, they believed that all subjects of the Islamic education curriculum benefited from the application of a blended approach. The benefits they identified include:

- making the subject more enjoyable
- helping to add interest and enthusiasm to lessons
- helping to increase lively engagement among students

- relating the content of the lesson to the student's experience

- hastening an understanding of information

- enhancing the lesson's content as it is presented in the students' textbook

- helps to attract the attention of the student

- easing the delivery of information

- helping to clarify information

- increasing a student's motivation to learn

- helping students to remember the information for a longer period of time.

2. *What are the factors that motivate Islamic studies teachers to use a blended learning approach when teaching Islamic education modules?*

The key factors which may encourage Islamic studies teachers to use a blended approach include the nature of the curriculum and teachers' desire and hope of achieving curriculum objectives. Additionally, the availability of the teaching aids related to each unit in a student's textbook, as well as the availability of ICT tools in schools. Furthermore, teachers' interest and passion for using new teaching methods were also noted as the key factors which may encourage Islamic studies teachers to use a blended approach.

- *Does using a blended learning approach when teaching aspects of the Islamic education curriculum change teachers' perceptions of their delivery of this curriculum?*

The analysis of the findings indicated that majority of participants believed that using a blended learning approach increased their productivity when preparing the lesson, and simplified the lesson's content as it is presented in the students' textbook. Moreover, they indicated that such methods helped to achieve curriculum objectives, and eased linking the lesson content to the students' everyday lives. Additionally, Islamic studies teachers believed that applying such a method facilitated interaction between the students and their teacher, and helped students exchange knowledge and developed new skills.

- *Do Islamic studies teachers believe using a blended learning approach to be suitable for teaching all Islamic education modules, or is it more applicable to one subject than to others?*

The blended approach was thought to be suitable for use in teaching all Islamic education modules. Moreover, the frequency of using such method appears to depend on the subject

and the topic of the lesson that the teacher wishes to teach. The analysis of the findings revealed that Islamic studies teachers used a blended approach when teaching the Fiqh 'Islamic Jurisprudence' and Hadith 'Sayings of the Prophet' modules, more so than when teaching other subjects. The main reasons for the high level of usage were the nature of the curriculum and the availability of teaching aids related to the students' textbook content. Consequently, one could argue that these particular subjects benefited the most from using a blended approach.

- *What are the main disadvantages of using a blended learning approach when teaching and learning Islamic education modules?*

The disadvantages of implementing a blended approach include difficulty in completing the given unit in one lesson (45 minutes) and the likelihood of preventing teachers from elaborating on particular information. Additionally, teachers may experience difficulty in retaking control of the class, particularly after applying one of the active learning strategies, such as 'hot seat' for example which tended to get the students excited. Furthermore, using too many or too frequent examples of active learning strategies may distract students. Finally, teachers believed applying a blended approach consumed too much of time, as it requires more time to deliver the lesson and more effort in preparing for the lesson.

- *What are the factors that inhibit Islamic studies teachers from implementing a blended learning approach?*

The study revealed that teacher workload, a lack of effective training and a lack of ICT tools, time constraints and Islamic studies teachers' fear of undermining the respected status of the academic content as key obstacles that they thought would prohibit them from applying a blended learning approach in Saudi schools, and in teaching Islamic education curriculum in particular.

The next section demonstrates the strength of this thesis.

8.3   Strengths of the Study

- Despite the fact that several studies have been conducted to examine the impact of applying a blended learning approach (Littlejohn and Pegler, 2007; Korkmaz and Karakus, 2009; Hoic-Bozic, 2009), it appears that that no study to date has focused on the teaching of Islamic education modules with blended learning.

- This study combined both qualitative (lesson observations and interviews) and quantitative (online questionnaires) methods. Furthermore, the current study is among one of the few blended learning studies in which the researcher employed factor analysis for analysing quantitative data, so as to understand the patterns in teachers' thinking.

- With regard to the study sample, Islamic studies teachers involved in this study had not previously been involved in any research with a focus on the effectiveness of using a blended approach for teaching Islamic education. Moreover, the study sample includes Islamic studies teachers from primary state schools, international primary private school and a Qur'an memorisation primary state school, as teachers may differ in terms of their teaching styles from one school to another, depending on the ICT tools available, as well as teachers' experiences and their level of training.

- This study provides Islamic studies teachers with ideas for enhancing textbook content and to improve methods of teaching Islamic education lessons, without fear of undermining the respected status of subjects. Furthermore, this study provides the Ministry of Education, school principals, as well as academic supervisors in the Pedagogical Planning and Development Administration with some of the factors that motivate teachers to use a blended approach, as well as the factors that hinder teachers from using a blended approach.

The next section explains the thesis' contributions in more detail.

8.4   Thesis Contributions

A blended learning model may be considered a contribution to research in pedagogy, and future researchers may additionally develop or evaluate the effectiveness of the blended learning model for use in teaching other subjects, or in other types of schools, such as boys' primary schools (Chapter 1).

This study provides teachers with knowledge about the blended approach, as well as the advantages and disadvantages that are associated with implementing such a method when teaching aspects of the Islamic education curriculum (Chapters 1, 3 and 6).

The study provides Islamic studies teachers with a clear vision of the potential for enhancing Islamic lessons, without fear of effrontery or undermining the respected status of the academic content (Chapters 1 and 3).

This study provides the Ministry of Higher Education with the identification of factors that appear to motivate Islamic studies teachers to use a blended approach, as well as the factors that may hinder them from applying such a method (Chapter 6).

This study fills the gap in the literature about the nature of the Islamic education curriculum in Saudi Arabia (Chapters 2).

A narrative review of relevant literature has contributed to the overall analysis of the current research on blended learning, e-learning and multimedia learning (Chapter 3).

A systematic review identified gaps that call for further investigation of the effectiveness of using blended learning and the impact of using innovative teaching methods on students' achievement and teachers' performance in Saudi schools and universities (Chapter 4).

Having reviewed some of the relevant literature, this thesis provides the Pedagogical Planning and Development Administration with suggestions regarding strategies that may lead to the successful implementation of the blended approach, and suggests strategies that may improve the integration of ICT in Saudi schools (Chapters 3 and 7).

Many previous researchers have called for further studies on the effectiveness of applying a blended learning method in teaching Islamic education modules in Saudi Arabia, and others have concluded that there is a need for further research about why Islamic teachers continue to use traditional methods. Moreover, some researchers (Alqahtani, 2010; Alebaikan, 2010) concluded that there is a need for similar studies at the primary and intermediate levels within girls' schools to identify the challenges that occur when using different technologies and teaching strategies in Saudi Arabia (Algarfi, 2010); this study answers those calls (Chapters 6).

Having undertaken this research and analysed the findings, the next section offers recommendations aimed at future researchers and the Pedagogical Planning and Development Administration in Jeddah, Saudi Arabia.

8.5   Recommendations

- The data gathered in this study using questionnaires, interviews and classroom observations relate mainly to Islamic studies teachers' opinions. Further research can be conducted to include academic supervisors and school principals' perspectives of using a blended learning approach.

- Further research may add students to the study sample to examine learners' perceptions of the effectiveness of using a blended approach, as student's perceptions may provide useful insights about the advantages and disadvantages of applying a blended approach.

- It is recommended that the current study be undertaken in other types of schools such as boys' primary schools and in teaching other subjects, since the findings of the current study indicated that the nature of the curriculum and the availability of information technology (IT) tools play a major role in terms of the teaching methods and teaching aids teachers choose for delivering information.

- This study can be conducted in the form of an experimental study with two groups of students (control group and experimental group) in a bid to identify the impact on student learning outcomes. Furthermore, such an approach can establish the effectiveness of a blended learning approach in terms of student learning outcomes between a control and experimental group.

- Additional research is encouraged to accurately measure the effectiveness of using a blended approach in general, and for teaching Islamic education modules in particular.

- It is recommended that further research consider gathering additional information about the use of active learning strategies, e.g.:
    - Is the strategy implemented in each step of the lesson?
    - How many strategies are used in each lesson?
    - What are the best active learning strategies that can be used in teaching all Islamic education modules and in all three stages of the lesson (introduction, main body of the lesson and evaluation)?

- It is also recommended that the Pedagogical Planning and Development Administration includes in teacher training programmes courses that provide teachers with a solid framework for using a blended approach, as well as information about its advantages and disadvantages. Additionally, the Pedagogical Planning and Development Administration needs to develop training programmes for teachers that include aspects

for the successful implementation of blended learning in Saudi classrooms, the use of ICT for teaching purposes, and good time management.

- Further researcher is needed to investigate the barriers hindering Islamic studies teachers from using a blended approach.

- As part of the education development plan, the Saudi Ministry of Higher Education may wish to take into account solving some of the difficulties that hinder the application of blended learning.

In addition to the recommendations mentioned above, the implications of this study for policy, practice and research are as follows:

For Policymakers

As discussed in the previous chapter, the lack of effective training was one of the main factors which may prevent Islamic studies teachers from using a blended learning approach. Therefore, the recommendations of this study are of central importance that all teachers within the same institution are provided with the opportunity to attend training courses of the same high standard in order to help them make use of different teaching methods in the most effective and correct manner. Additionally, if the quality of the training courses which teachers receive varies, it might result in unreliable teaching standards within the same school. Shared training also offers the opportunities for staff to discuss and try out new ideas and exchange their views. Thus, it is recommended that teacher training courses are held during the student's holidays to allow all staff members to attend without impacting on the students, and reducing class time, though this would have to be voluntary or may need to be incentivized through additional qualifications or remuneration.

For School Directors and Supervisors (Practice)

The findings derived from the interview data revealed that some Islamic studies teachers thought that their level of confidence increased through the frequent utilisation of different forms of technology such as an IWB, and from receiving of some training courses which had imparted some basic information on fixing common breakdown problems associated with technological usage. Moreover, the content of the lesson and the objectives which Islamic studies teachers seek to achieve (the skills that students should master) play a major role in choosing the teaching methods. Furthermore, the narrative literature review in Chapter 3 emphasised that assessing instructors' technical skills is essential prior to the use of a blended learning method, in order to provide instructors with the required training to successfully adopt

such teaching methods. Also, the careful selection of methods and media, and the consideration of potential course designs are paramount for achieving a successful blended learning environment (Alebaikan, 2010; MacDonald, 2008; Mohammad, 2009). More importantly, the aim of teaching an Islamic education curriculum is not only to increase students' knowledge about Islamic rules and regulations, but to teach students in order to see the behavioural adoption of the Islamic principles in their daily live in as well as outside school. Accordingly, this study recommends that the first step to take into account following the provision new technology such as an IWB for Islamic studies teachers, is to check whether the teacher is familiar with how to use it. This could be done simply by asking the teacher how familiar she is with this technology. The answer should indicate what level of skills would be appropriate to provide support. Next, asking the teacher to analyses the lesson content and matching areas of learning to technology would held understand teachers' thinking. Asking the teacher to choose how she is going to assess student understanding and progress and to justify her choice of assessment in order to gauge the student's grasp of the delivered content.

For Future Researchers

As mentioned above in chapter seven, this study has a number of limitations which include a relatively small sample size of Islamic studies teachers (129), the short duration of the fieldwork permitted by the sponsor, the restriction of the study participants to only female Islamic studies teachers as well as the restrictions of location to one city, Jeddah. Furthermore, due to the lack of technology found in selected schools, the study did not examine either the effectiveness of a blended approach on students' learning outcomes or even students' perceptions of using a blended approach. Despite these limitations, the present study nonetheless provides Saudi teachers with a blended learning model consisting of four dimensions (different forms of technology, teaching methods and teaching aids, active learning and collaborative learning). Also, the current study identified some of the factors which may encourage Islamic studies teachers to use a blended learning method as well as some of the obstacles which my prevent teachers from applying such teaching method in the context of Saudi Arabia. Additionally, the current study contributes to an understanding of the role of technology in teaching an Islamic education and the potential benefits of a blended approach. Moreover, this study bridges the gap in the literature about the nature of the Islamic education curriculum in Saudi Arabia and the effectiveness of applying a blended learning method in teaching an Islamic education in Saudi girls' primary schools. These in turn will contribute to the wider field of education and to the existing literature on the blended learning method. Furthermore, in this study's context,

a blended learning was defined as a solution that combines different forms of technology, teaching methods and teaching aids, collaborative learning and active learning. To improve the methods of teaching Islamic education curriculum and to help the teachers of Islamic studies achieve specific curriculum objectives. This new definition for the blended learning method might impact on some of the writers featured in a blended learning literature, because there is currently considerable debate which could be clarified with a clear and specific definition of the blended learning method. More importantly, both a narrative review and a systematic review of the literature regarding the blended learning method identified new gaps which need to be filled by future researchers.

In light of the limitations of this study, findings and other problems arising from the review of relevant literature, some suggestions for further research will be mentioned next. The suggestions will be presented under two categories as follow:

First: Types of Research

Future research may conduct an experimental study to determine the impact of using a blended learning approach on student learning outcomes or an empirical study to explore student's and teacher's perceptions of the effectiveness of using such method or an empirical study to measure teachers' and learners' satisfaction with a blended learning approach.

Other studies may examine the feasibility and/or the effectiveness of different teaching approaches and their application in Saudi Arabian primary schools in relation to Islamic Education and other subjects of the curriculum.

Also, future research may carry out a comparative study to compare the results from the two genders, or to compare the effectiveness of using such method in teaching two different subjects such as, Math and Science or Geography and History. Since the findings of the current study indicated that the nature of the curriculum and the specific skills which students should master play a major role in choosing what teaching methods and teaching aids are appropriate to teach the lesson content.

Furthermore, it appears that due to strong religious beliefs, some Islamic studies teachers may be reluctant to use technology to aid the teaching of the subject due to concerns that it would decrease the quality of teaching provided, or be seen as disrespectful. Therefore, additional research is encouraged to investigate what factors are most likely to prevent teachers from applying a blended learning method. Also, they may conduct a systematic study to investigate

the effectiveness of using a blended learning method in different subjects in the KSA school curriculum, as the evidence about the effectiveness of using a blended learning approach may change teacher's attitude/concerns toward using a blended leaning approach when teaching Islamic education modules.

Second: Data Collection Methods

A paper questionnaire as well as an online questionnaire is advisable because some people may prefer writing using a pen and paper rather than using a computer or phone. Also, they may use other social media platforms such as Twitter, WhatsApp and Snapchat to promote a link to the online questionnaire which may increase the response rate.

To enrich and support the classroom observations and interviews, researcher may use diaries to gather data about teachers' and learners' perceptions, experience and behaviour by either asking participants to record their experience in a written format or the researcher could also write their thoughts/observations about the students' progress and reactions to the teaching approaches and assessment activities used in the classroom.

To measure teachers' and learners' satisfactions with using a blended learning approach, researcher may use a satisfaction questionnaire with a 5-point scale in which 1 indicates 'very dissatisfied' and 5 indicates 'very satisfied' or the smiley-o-meter in which participants tick one face to indicate to what extent they enjoy studying in a blended learning environment or applying such method.

8.6   Personal Reflection on My PhD Journey

My initial research proposal was to conduct an experimental study to examine the effectiveness of blended learning methods on students' achievement and academic performance, and the degree of teacher and student satisfaction gained (or lost) by using these methods. My secondary goal was to compare the effectiveness of blended versus traditional learning. However, when I visited a number of primary schools, I experienced a lack of digital technology and had difficulty in getting permission to teach students and test their understanding. Indeed, realizing that the tests and activities I had planned to do were not possible was an extremely challenging moment for me. Despite these difficulties, I decided to meet some Islamic studies teachers to elicit their opinions about blended learning. When I met with the teachers, I introduced myself and explained the aim of my study, mainly focusing on explaining the notion of blended learning. I found that teachers were interested in and enthusiastic about the topic of

my research. This positive reaction strongly motivated me, so I decided not to change my research topic, and because of the challenges I found and the interest of the teachers I met with, I decided to conduct an exploratory study instead of an experimental study.

Having undertaken this research and written this thesis, my research skills had improved, as well my understanding of the blended learning concept. I now know how to find information in existing theses by anticipating which section or chapter is likely to contain what I am searching for; a skill I had not yet mastered in my first year after starting my PhD. The findings of my study motivated me to read more about innovative teaching methods. Moreover, I am now convinced that the Islamic education curriculum should be shortened. What is more, the findings of this study revealed that the number of active learning strategies approved by the educational supervisors at the Pedagogical Planning and Development Administration in Saudi Arabia is more than 100; therefore, I have begun thinking about categorising active learning strategies to make it easier for Islamic studies teachers to choose which one would best suit the lesson content.

8.7   Conclusions

The aim of teaching Islamic education modules (Qur'an, Hadith, Tawhid and Fiqh) is not to increase students' knowledge of different religions, but to teach them about the Islamic religion as a whole, thereby assisting them to become better followers of Islam. In other words, people whose words and actions are influenced by Islamic principles and values.

In this study, a blended learning was defined as a combination of different types of technology such as computers, laptops, interactive whiteboards and an overhead projector, as well as the use of different teaching methods and teaching aids alongside active and collaborative learning when teaching aspects of the Islamic education curriculum. The four elements of the blended learning model were derived from interviews with Islamic studies teachers and classroom observations, as well as learners' needs. The aim was to improve the method of teaching Islamic education curriculum and to help teacher achieve specific curriculum objectives such as enable students to understand new knowledge as well as reflect on such a learning and apply it correspondingly in their daily life. This was a small-scale exploratory study that investigated the feasibility of teaching Islamic education modules using a blended learning approach. Also, it investigated whether a blended approach is suitable for teaching all Islamic education modules, or if the traditional method is seen as the ideal and only method for teaching some of them. The study also identified the key factors that may motivate Islamic studies teachers to

employ a blended approach in teaching Islamic education modules as well as the obstacles that could hinder the implementation of a blended learning approach.

A mixed-methods approach was used for data collection, including qualitative (lesson observations and interviews) and quantitative (online questionnaires) methods. In the data analysis phase, a thematic analysis and descriptive statistics analysis, as well as exploratory factor analysis using the Statistical Package for the Social Sciences (SPSS) was employed to facilitate the interpretation of quantitative data.

The findings of the study indicated that both teachers and students benefited from using a blended learning approach. Moreover, Islamic studies teachers believed a blended approach to be suitable for use in teaching all Islamic education modules. However, due to the nature of the curriculum, as well as the availability of the teaching aids related to each unit in the student textbook, Islamic studies teachers used a blended approach more in teaching the Fiqh "Islamic Jurisprudence" and Hadith "Sayings of the Prophet" subjects. These are therefore the subjects that were believed to benefit most from applying a blended approach when teaching them. Furthermore, Islamic studies teachers thought that using a blended learning approach increased their productivity when preparing their lessons. Moreover, they believed the blended approach helped them to achieve curriculum objectives and offers interactivity that cannot be gained using traditional learning methods only. The findings of this study also indicated that the availability of teaching aids and ICT tools to be among the key factors for convincing teachers to apply blended learning when teaching Islamic lessons. On the other hand, teachers' workload and a lack of ICT tools were among the key factors that may hinder Islamic studies teachers from implementing a blended approach.

References

Adebayo, R. I. (2010). The challenges and opportunities of Islamic Studies in the world of modern cyber-technologies: The Nigeria example. In Proceedings of Regional Conference on Knowledge Integration in ICT 2010. Putrajaya, Malaysia.

Acharya, C., (2002). Students' Learning Styles and Their Implications for Teachers. *Center for Development of Teaching and Learning,* 5(6), 1-8.

Acat, B. & Dönmez, I. (2009). To compare student centred education and teacher centred education in primary science and technology lesson in terms of learning environments. *Procedia - Social and Behavioural Sciences, 1*(1), 1805-1809.

Afshari, M., Bakar, K. A., Su Luan, W., Samah, B. A., & Fooi, F.S. (2009). Factors affecting teachers' use of information and communication technology. *International Journal of Instruction, 2*(1), 77-104.

Ahuja, J. S. and Webster, J. (2001). Perceived disorientation: an examination of a new measure to assess web design effectiveness. *Interacting with Computers*, *14*(1), 15-29.

Ainsworth, S., & VanLabeke, N. (2004). Multiple forms of dynamic representation. *Learning and Instruction*, *14*(3) 241-255.

Akyol, Z., & Garrison, D. R. (2011). Understanding cognitive presence in an online and blended community of inquiry: Assessing outcomes and processes for deep approaches to learning. *British Journal of Educational Technology*, *42*(2), 233-250.

Alavi, H. R. (2007) Al-Ghazāli on moral education. *Journal of Moral Education*, *36*(3), 309-319.

Alavi, M. (1994). Computer-mediated collaborative learning: An empirical evaluation. *MIS quarterly*, *18*(2), 159-174.

Alanazi, M.G. (2004).*The Use of Higher Order Thinking Skills in Islamic Education a Case Study of Secondary Education in Saudi Arabia.* (Doctoral Dissertation), University of Birmingham, Birmingham, United Kingdom.

Al-Caderi, M. (2008). *The effectiveness of using computer programming in memorising the Holy Qur'an and learning maintainers for pupils in the sixth grade* (in Arabic). (Master Dissertation), King Saud University, Riyadh, KSA.

Aldossari, A. (2013) *Classroom management approaches of primary teachers in the Kingdom of Saudi Arabia: Descriptions and the development of curriculum and instruction with a focus on Islamic education teachers*. (Doctoral Dissertation), Durham University, Durham, United Kingdom.

Al-Dawood, A. (2005). *Administrative Problems Facing Faculty Members at Al-Imam Muhammad Bin Saud Islamic University* (in Arabic). Riyadh, KSA: King Fahad National Library.

Alebaikan, R. (2010). *Perceptions of blended learning in Saudi universities*. (Doctoral Dissertation), University of Exeter. Exeter, United Kingdom.

Al-Ghamdi, K. (2011). The Effectiveness of Using Blended Learning in Acquiring PowerPoint Skills to High School Students in Riyadh (in Arabic). (Master's thesis), King Saud University, Riyadh, KSA.

Al-Hamid, M. D. (2012). *The Islamic Education in the Kingdom of Saudi Arabia* (in Arabic). Riyadh, KSA: Alresallah Press.

Al-Hashmee, A. (1997). *Methods of Teaching the Islamic Education* (in Arabic). Riyadh, KSA: Al-Resalah Press.

Ali, S., Al-Hamed, M., and Mohamed, A. (2004) *Islamic Education: The conceptions and application* (in Arabic). Riyadh, KSA: Al-Roshed Library.

Allan, B. (2007). *Blended Learning: Tools for Teaching and Training*. London: Facet Publishing.

Al-Shathri, S. (2016). The challenges of developing blended learning in the first electronic university in the Arab world (Saudi Electronic University). *E-journal of the British Education Studies Association,* 7(3), 86-98.

Alqahtani, A. A. (2010). *The Effectiveness of Using E-learning, Blended Learning and Traditional Learning on Students' Achievement and Attitudes in a Course on Islamic Culture: an Experimental study,* Durham thesis, Durham University.

Al-Qurashi, M. and Al-Thubaiti, J. (2001). The methods of reconstruction of education in the graduate schools in Saudi Arabia universities. In: King Abdul-Aziz University, Symposium of graduate schools in Saudi Arabia universities: future trends. (17-18 April 2001), Jeddah: Saudi Arabia.

Alsharidah, M. (2012). *The use of information and communications technology by male Islamic studies teachers in Saudi Arabia*. (Doctoral Dissertation), La Trobe University, Australia.

Al-Shehri, A. (2009). *The use of teachers of Islamic education of computers in the teaching of the doctrines of scientific* institutes (in Arabic). (Master Thesis), Umm Alqura University, Makkah.

Alqahtani, A. A., & Higgins, S. E. (2013). Effects of traditional, blended and e-learning on students' achievement in higher education. *Journal of Computer Assisted Learning*, 29(3), 220-234.

Al-Zabalawy, M. (2000). *Methods of Teaching the Holy Qur'an* (in Arabic). Riyadh, KSA: Al-Tawbah Library.

Al-Shafei, I. (2009). *Islamic education and the way of teaching it* (in Arabic). Riyadh, KSA: Alfalah Library.

Algarfi, A. (2010). *Teachers' and pupils' perceptions of and responses to cooperative learning methods within the Islamic culture courses in one secondary school in Saudi Arabia.* (Doctoral Dissertation), University of Southampton. Southampton, United Kingdom.

Al-Khaleefah, H. & Hashem, K. (2010). *Chapters in teaching Islamic subjects: Elementary, intermediate, and secondary* (in Arabic). Riyadh, KSA: Al-Rasheed Library.

Al-Shammari, M. (2011). *101 Strategies for Active Learning* (in Arabic). Saudi Arabia: Ministry of Education.

Al-Malki, G., and Williams, N. (2012). A strategy to improve the usage of ICT in the Kingdom of Saudi Arabia primary school. *International Journal of Advanced Computer Science & Application*, *3*(10), 42-49.

Al-Mulhim, E. (2014). The barriers to the use of ICT in teaching in Saudi Arabia: A review of literature. *Universal Journal of Educational Research*, *2*(6), 487-493.

Al-Nemary, A. M. (2011). *Social and academic difficulties facing female postgraduate students* (in Arabic). (Master Thesis), King Abdul-Aziz University, Jeddah, KSA.

Alsenaidi, S. F. (2012). *Electronic brainstorming in Saudi primary education*. (Doctoral Dissertation), University of Exeter, Exeter, United Kingdom.

Almaghlouth, O. (2008). *Saudi secondary school science teachers' perceptions of the use of ICT tools to support teaching and learning.* (Master Thesis), University of Waikato, Hamilton, New Zealand

Algahtani, A., F. (2011). *Evaluating the Effectiveness of the E-learning Experience in Some Universities in Saudi Arabia from Male Students' Perceptions.* (Doctoral Dissertation), Durham University, Durham, United Kingdom

Al-Matari, B. (2008). *To what extent do high school Islamic education teachers in Saudi Arabia implement innovative approaches in their teaching? Do teacher gender, academic qualifications, and teaching experiences matter.* (Doctoral Dissertation), University of Kansas, Lawrence, KS.

Al-Malki, A. M. (2011). *Blended Learning in Higher Education in Saudi Arabia: A Study of Umm Al-Qura University.* (Doctoral Dissertation), RMIT University. Melbourne, Victoria.

Al-Buraidi, J., A. (2006). *An Empirical Study of the Perceptions of Male Teachers and Students of the Islamic Education Curriculum in Secondary Schools in the Kingdom of Saudi Arabia.* (Doctoral Dissertation), University of Hull, Hull, United Kingdom.

Al-Sulaimani, A. A. (2010). *The importance of teachers in integrating ICT into science teaching in intermediate schools in Saudi Arabia: A mixed-methods study*. (Doctoral Dissertation), RMIT University, Melbourne, Victoria.

Alev, N. (2003) *Integrating Information and Communications Technology (ICT) into Pre-service Science Teacher Education: The Challenges of Change in a Turkish Faculty of Education*. (Doctoral Dissertation). University of Leicester, Leicester, United Kingdom.

Al-Dossry, N. (2011). *Investigation of Saudi Arabia Female Science Teachers' Perceptions of Integration of ICT in the Classroom*. (Master Dissertation), University of Exeter. Exeter, United Kingdom.

Alfifi, A. A. H. (2012). *The Reality and the Barriers of ICT Usage in Teaching Quran in Secondary Schools in Riyadh City* (in Arabic). (Master Dissertation), Al-Imam Muhammad Ibn Saud Islamic University, Riyadh.

Alhawiti, M. M. (2013). Strategies and action plans for integrating ICT into Saudi elementary schools curricula: The case of Tabuk district of education. *International Journal of Information and Education Technology*, *3*(2), 177-184.

Al-Alwani, A. (2005). Barriers to Integrating Information Technology in Saudi Arabia Science Education. Doctoral dissertation, The University of Kansas, Lawrence, KS.

Al-Aqeel, A. (2005). *Education policy in the Kingdom of Saudi Arabia* (in Arabic). Riyadh: Al-Roshd Library.

Amerson, R. M., & Strang, C.W. (2015). Addressing the challenges of conducting research in developing countries. *Journal of Nursing Scholarship, 47*(6), 584–591.

Anzar, U. (2003). *Islamic education: A brief history of madrassas with comments on curricula and current pedagogical practices.* Retrieved 8 October 2015 from http://www1.worldbank.org/education/social_cohesion/papers.asp

Ashraf, S. A., & Hirst, P. H. (1994). *Religion and Education: Islamic and Christian.* Cambridge: Islamic Academy.

Arthur, J., Waring, M., Coe, R. & Hedges, L. V. (Eds.) (2012). *Research methods and methodologies in education*. London: Sage Publications.

Ary, D., Jacobs, L.C., Sorensen, S., & Razavieh, A. (2009). *Introduction to Research in Education* (8th ed.). United Kingdom: Cengage Learning.

Azlina, N. N. (2010). CETLs: supporting collaborative activities among students and teachers through the use of think-pair-share techniques. *International Journal of Computer Science Issues*, *7*(5), 18-29.

Baharith, A. (2003). *Method of teaching Islamic education* (in Arabic). Jeddah, KSA: Almjtama Library.

Baepler, P., Brooks, D. C., & Walker, J. D. (Eds.). (2014). *Active Learning Spaces: New Directions for Teaching and Learning, Number 137*. San Francisco: Jossey-Bass. Retrieved from https://leseprobe.buch.de/images-adb/e4/c7/e4c7084b-5397-4d98-80bf-810274a9726a.pdf

Bandura, A. (1977). *Social Learning Theory*. New York: General Learning Press.

Bandura, A. (1986). *Social Foundations of Thought and Action.* Englewood Cliffs, NJ: Prentice-Hall.

Becta, (2008). Using the internet in secondary religious education. The 21st century teacher: religious education. Retrieved from http://www.mmiweb.org.uk/publications/re/21stcentury_re.pdf

Beatty, K., and Nunan, D. (2004). Computer-mediated collaborative learning. *System*, *32*(2), 165-183.

Bentley, K. A., Brewer, P. C., & Eaton, T. V. (2009). Motivating students to prepare for class and engage in discussion using the hot seat. *Journal of Accounting Education*, *27*(3), 155-167.

Bell, J. (2005). *Doing your research project: a guide for first-time researchers in education, health and social science*. New York, NY: McGraw-Hill International.

Berg, B. L. (2008). Qualitative research methods for the social sciences (7th ed.). Boston: Allyn & Bacon.

Blankenship, S. (1998). *Factors Related to Computer Use by Teachers in Classroom Instruction.* (Doctoral Dissertation), Virginia Polytechnic Institute and State University. Blacksburg, Virginia

Blumberg, B., Cooper, D. R., & Schindler, P. S. (2005). *Business research methods*. London: McGraw-Hill Education.

Bloor, M., Frankland, J., Thomas, M. & Robson, K., (2001). *Focus groups in social Research*. London: Sage Publications.

Boulmetis, J., & Dutwin, P. (2005). *The ABCs of evaluation: Timeless techniques for program and project managers* (2nd ed.). San Francisco: Jossey-Bass.

Bonwell, C.C. & Eison, J.A. (1991). *Active Learning: Creating Excitement in the Classroom*. ASHE-ERIC Higher Education Reports NO. 1. Washington, DC: The George Washington University, School of Education and Human Development.

Boyatzis, R.E. (1998). *Transforming qualitative information: Thematic analysis and code development*. London: Sage Publications.

Brandom, A., Barnes, L. and Wright, A. (Eds.). (2008). *Learning to teach religious education in the secondary school: a companion to school* experience (2nd ed.). London: Routledge.

Brown, S., & Race, P. (2003). *Lecturing: a practical guide*. London: Routledge.

Braham, G., (2006). *How to survive and succeed with an interactive whiteboard*. Cambridge: Abbeygate House.

Brown, S. (2003). *Interactive Whiteboards in Education*. UK: TechLearn Service, JISC-funded Technologies Centre. Retrieved from http://www.virtualclassrooms.info/iwb/articles/briefingmanagersaboutnteractivewhiteboards.pdf

Braun, V. and Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3 (2), 77-101.

Briggs, A. & Coleman, M. (2007). *Research method in educational leadership and management*. London: Paul Chapman Publishing.

Brinkman, W. P., Payne, A., Patel, N., Griffin, D., & Underwood, J. (2007). Design, Use and Experience of E-Learning Systems. *Proceedings of the 21st British Computer Society HCI Group Annual Conference on People and Computers*, 2, (pp.201-202). Lancaster University, UK.

Butterfield, J. (2017). *Problem solving and decision making*. United States: Cengage Learning.

Cannell, C.F., & Kahn, R.L. (Eds.). (1986). Interviewing. In G. Lindzey and E. Aronson. *The handbook of social psychology* (2nd ed. pp.526-595). New York: Addison-Wesley.

Cargan, L. (2007). *Doing Social Research*. New York, NY: Rowman & Littlefield Publishers.

Carmines, E. and Zeller, R. (1979). *Reliability and validity assessment*. London: Sage Publications.

Cerny, C.A., & Kaiser, H.F. (1977). A study of a measure of sampling adequacy for factor-analytic correlation matrices. *Multivariate Behavioural Research, 12*(1), 43-47.

Chen, H and Huang, M. (2009) The Effect of Blended Learning Model for Elementary School Environmental Education. *Education Technology and Computer Science. ETCS '09. First International Workshop* (pp.96-100). Wuhan, Hubei. http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=4959267&isnumber=4959237

Chiang, C. K., Chapman, H., & Elder, R. (2010). Changing to learner-centred education: challenges experienced by nurse educators in Taiwan. *Nurse Education Today, 30*(8), 816-820.

Chun, D. M. & Plass, J. L. (1996). Effects of multimedia annotations on vocabulary acquisition. *The modern language journal, 80*(2), 183-198.

Chapman, N. and Chapman, J. (2006). *Web design: a complete introduction.* USA: Hoboken.

Check, J. W. (2012). *Research methods in education*. London: Sage Publications.

Chen, W., & Looi, C. K. (2007). Incorporating online discussion in face to face classroom learning: A new blended learning approach. *Australasian Journal of Educational Technology, 23*(3), 307-326.

Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education*. London: Routledge.

Coffey, A. & Atkinson, P. (1996). *Making sense of qualitative data: complementary research strategies.* London: Sage Publications.

Costello, A. B. & Osborne, J. W. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research & Evaluation, 10*(7)*, 1-9*

Creswell, J. (2003). *Research Design: Qualitative, Quantitative and Mixed Methods*. London: Sage Publications.

Cronin, P., Ryan, F. and Coughlan, M., (2008). Undertaking a literature review: a step-by-step approach. *British journal of nursing*, *17*(1), p.38.

Crosby, M. E., & Stelovsky, J. (1995). From multimedia instruction to multimedia evaluation. *Journal of Educational Multimedia and Hypermedia*, *4*(2-3), 147-162.

Creswell, J.W. and Miller, D.L., (2000). Determining validity in qualitative inquiry. *Theory into practice, 39*(3), 124-130.

D'Antoni, A. V., Zipp, G. P., Olson, V. G., & Cahill, T. F. (2010). Does the mind map learning strategy facilitate information retrieval and critical thinking in medical students?. *BMC Medical education*, *10*(1), 61-71.

Dembo, M. H., & Howard, K. (2007). Advice about the use of learning styles: A major myth in education. *Journal of College Reading and Learning*, 37(2), 101-109.

DeWinstanley, P. A., and Bjork, R. A. (2002). Successful Lecturing: Presenting Information in Ways that Engage Effective Processing. *New Directions for Teaching and Learning*, (89), 19-29.

DeNatale, M. G. (2008). Digital Storytelling: Tips and Resources. Boston: 101 College Press.

De Vaus, D. (2002). *Surveys in Social Research* (5ᵗʰ ed.). London: Routledge.

Denzin, N.K. & Lincoln, Y. (2003). The Landscape of Qualitative Research: Theories and Issues (2ⁿᵈ ed.). London: Sage Publications.

Denzin, N.K. and Lincoln, Y.S. (2013). *The Landscape of Qualitative Research* (4ᵗʰ ed.). London: Sage publications.

DeCoster, J. (1998). Overview of Factor Analysis. Retrieved March 20, 2017, from http://www.stat-help.com/factor.pdf

Dillenbourg, P. (1999). *What do you mean by collaborative learning*? .Oxford: Elsevier.

Driscoll, M. P. (1994). Psychology of learning for instruction. Boston: Allyn and Bacon.

Driscoll, M. (2002). Blended learning: Let's get beyond the hype. *E-learning*, *1*(4), 1-4.

Duffy, T. M., & Jonassen, D. H. (Eds.). (2013). *Constructivism and the technology of instruction: A conversation*. London: Routledge.

Dunkin, M. J. (1983). A Review of Research on Lecturing, *Higher Education Research & Development*, 2(1), 63-78

Dunmire, R.E. (2010). *The Use of Instructional Technology In The Classroom: Selection and Effectiveness.* United States: Military Academy.

Emad, S. (2002). *The Teacher and the Learner in Islamic education* (in Arabic). *United Arab Emirates*: Dar Al-menshwy.

Esterberg, K. G. (2002). *Qualitative Methods in Social Research*. McGraw Hill: London.

Exley, K., & Dennick, R. (2004). *Giving a lecture: From presenting to teaching*. London: Routledge.

Eyadat, M. and Fisher, D. (2007). Web Accessibility and Information Systems Curriculum. *Paper presented at the Proceedings of the Fourth International Conference on Information Technology (ITNG'07)*, Las Vegas, NV, USA (pp. 341-346).

Farrand, P., Hussain, F., & Hennessy, E. (2002). The efficacy of the 'mind map' study technique. *Medical education*, *36*(5), 426-431.

Fan, X., Thompson, B. and Wang, L. (1999). Effects of sample size, estimation methods, and model specification on structural equation modelling fit indexes. *Structural Equation Modelling: A Multidisciplinary Journal*, 6(1), 56-83.

Fabrigar, L.R., Wegener, D.T., MacCallum, R.C. and Strahan, E.J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological methods*, *4*(3), 272.

Felder, R.M., and Soloman, B.A. (2009). Learning Styles and Strategies. Retrieved from http://www4.ncsu.edu/unity/lockers/users/ff/felder/public// ILSdir/styles.htm

Feinstein, A. H., Raab, C., & Stefanelli, J. M. (2005). Educational technology research in the hospitality industry. *Journal of Hospitality & Tourism Education, 17*(3), 9-18.

Fitzner, K. (2007). Reliability and validity a quick review. *The Diabetes Educator*, *33* (5), 775-780.

Field, A. (2009). *Discovering Statistics Using SPSS* (3rd ed.). London: Sage Publications.

Floyd, F. J., & Widaman, K. F. (1995). Factor analysis in the development and refinement of clinical assessment instruments. *Psychological Assessment, 7*(3), 286–299.

Garrison, R., and Vaughan, H. (2008). *Blended learning in higher education: Framework, principles and guidelines*. San Francisco: Jossey-Bass.

Gay, L. R., & Airasian, P. (2003). *Educational research: Competencies for analysis and application* (7th ed.). Upper Saddle River, NJ: Pearson Education

Gay, L. R. Mills, G. E., and Airasian, P. W. (2014). *Educational Research Competencies for Analysis and Application* (10th Ed.). London: Pearson Education

George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference. 11.0 update* (4th ed.). Boston: Allyn & Bacon.

Gill, P., Stewart, K., Treasure, E. and Chadwick, B. (2008). Methods of data collection in qualitative research: interviews and focus groups. *British dental journal*, *204*(6), 291-295.

Gilley, J. W., Dean, P. J., and Bierema, L. L. (2001). *Philosophy and practice of organizational learning, performance, and change*. Cambridge, MA: Perseus

Gliem, J.A. and Gliem, R.R., (2003). Calculating, interpreting, and reporting Cronbach's alpha reliability coefficient for Likert-type scales. *Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education.* Columbus, OH.

Goodsell, A. S. (1992). *Collaborative Learning: A Sourcebook for Higher Education*. United State: National Center on Postsecondary Teaching, Learning and Assessment.

Gokhale, A. (1995).Collaborative Learning Enhances Critical Thinking. *Journal of Technology Education*, 7(1), 22-30.

Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The qualitative report, 8*(4), 597-606.

Greenbank, P. (2003). The Role of Values in Educational Research: the case for reflexivity. *British Educational Research Journal*, *29*(6), 791-801.

Greene, J.C., Caracelli, V.J., and Graham, W.F. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis, 11*(3), 255-274.

Gulpinar, M.A. and Yegen, D.C. (2005). Interactive lecturing for meaningful learning in large groups. *Medical Teacher, 27*(7), 590-594.

Hatton, N. & Brown, G. (1982). Explanations and explaining: a teaching skills workbook. England: Macmillan Education.

Hake, R. R. (2002). Lessons from the physics education reform effort. *Ecology and Society*, 5(2), Retrieved May 27, 2016, from http://www.ecologyandsociety.org/vol5/iss2/art28/.

Hair, J., Anderson R. E., Tatham R. L., & Black W.C. (2013).*Multivariate data analysis* (7th ed.). United Kingdom: Pearson Education.

Harris, K. J. (1993). Multimedia: fluff, fashion or future? *International Journal of Hospitality Management*, *12*(4), 367-384.

Hanna, L., Risden, K., & Alexander, K., J. (1997). Guidelines for usability testing with children. *Interactions, 4*(5), 9-14.

Hameed, S. h., Badii, A., & Cullen, A.J. (2008). Effective E-Learning Integration with Traditional Learning in a Blended Learning Environment. *European and Mediterranean Conference on Information Systems*. Dubai, UAE.

Hella, E. and Wright, A. (2009) Learning 'about' and 'from' religion: phenomenography, the Variation Theory of Learning and religious education in Finland and the UK. *British Journal of Religious Education, 31*(1), 53-64.

Hew, K. F., & Brush, T. (2007). Integrating technology into K-12 teaching and learning: Current knowledge gaps and recommendations for future research. *Educational technology research and development, 55*(3), 223-252.

Higgins, S., Xiao, Z., & Katsipataki, M. (2012). The impact of digital technology on learning*:* A summary for the Education Endowment Foundation. London: Education Endowment Foundation.

Higgins, S. (2013). Matching Style of Learning. In J. Hattie & E M. Anderman (Eds.), *International Guide to Student Achievement* (pp. 436-438). London: Routledge.

Higgins, S., Beauchamp, G., & Miller, D. (2007). Reviewing the literature on interactive whiteboards. *Learning, Media and technology*, *32*(3), 213-225.

Hishaam, A.M. (1990). *Biography of the Prophet (*in Arabic*).* Beirut: House of Arab Book

Hmelo-Silver, C. (2004). Problem-Based Learning: What and How Do Students Learn? *Educational Psychology Review*, *16*(3), 235-266.

Hoic-Bozic, N. Vornar, V. & Boticki, I. (2009). A Blended Learning Approach to Course Design and Implementation. *IEEE Transactions on Education, 52*(1), 19-30.

Howitt, D., & Cramer, D. (2014). *Introduction to research methods in psychology* (4th Edition). London: Pearson Education.

Hoepfl, M. C. (1997). Choosing Qualitative Research: A Primer for Technology Education Researchers. *Journal of Technology Education*, 9(1), 47-63.

Hsu, C. H. C., & Wolfe, K. (2003). Learning styles of hospitality students and faculty members. *Journal of Hospitality & Tourism Education, 14*(3), 19-27.

Hulstijn, J. H. (1993).When do foreign-language readers look up the meaning of unfamiliar Words? The influence of task and learner variables. *The Modern Language Journal*, 77(2), 139-147.

Ipgrave, J. (2001). Pupil-to-pupil dialogue in the classroom as a tool for religious education. United Kingdom: Institute of Education University of Warwick.

Jackson, R., S. Miedema, W. Weisse, and Willaime, J. P. (eds.) (2007). *Religion and education in Europe: Developments, contexts and debates.* Munster, Germany: Waxmann.

Jackson, P. (2003). Ten challenges for introducing web-supported learning to overseas students in the social sciences. *Active learning in higher education*, *4*(1), 87-106.

Jelev, G. and Minkova, Y. (2008). Comparative analysis of authoring tools for multimedia applications development. *Fourth international Bulgarian-Greek conference, Computer Science* (pp. 978-983).

Johnson, D., Johnson, R. (1984). *Learning together and learning alone: Co-operation, Competition and Individualisation.* Prentice Hall, Englewood Cliffs.

Jokinen, P., & Mikkonen, I. (2013). Teachers' experiences of teaching in a blended learning environment. *Nurse education in practice*, *13*(6), 524-528.

Kathy, L. B. (2003).From teacher-centered to learner-centered curriculum: Improving learning in diverse classrooms. *Education, 124(*1), 49-55

Kajornboon, A. B. (2005). Using interviews as research instruments. *E-journal for Research Teachers, 2*(1), 1-9.

Karpicke, J. D., & Blunt, J. R. (2011). Retrieval practice produces more learning than elaborative studying with concept mapping. *Science*, *331*(6018), 772-775.

Kerry, T. (2004). *Questioning and Explaining in Classrooms*. London: Hodder & Stoughton.

Keengwe, J., Onchwari, G., & Onchwari, J. (2009). Technology and student learning: Towards a learner-centered teaching model. *Association for the Advancement of Computing in Education Journal, 17*(1), 11-22.

Keyser, M. (2001). Active learning and cooperative learning: understanding the difference and using both styles effectively. *Research Strategies*, *17*(1), 35-44.

Kenney, J., & Newcombe, E. (2011). Adopting a blended learning approach: Challenges encountered and lessons learned in an action research study. *Journal of Asynchronous Learning Networks*, *15*(1), 45-57.

Kennedy, R. L., and McCallister, C. J. (2000). Basic statistics via the internet. *Paper presented at the Annual Meeting of the Mid-South Educational Research Association.* Bowling Green, KY.

Khan, B. (2005). *Managing e-learning strategies: design, delivery, implementation and evaluation.* USA: idea group Inc.

Khan, S. H., Hasan, M. & Clement, K. (2012) Clement. Barriers to the introduction of ICT into education in developing countries: The example of Bangladesh'. *International Journal of Instruction, 5*(2), 61-80.

Kirschner, P.A. and van Merriënboer, J.J. (2013). Do learners really know best? Urban legends in education. *Educational psychologist*, *48*(3), 169-183.

Kitzinger, J. (1995). Qualitative research. Introducing focus groups. *BMJ: British medical journal*, *311*(7000), 299-302

Knowles, M. S. (1980). The modern practice of adult education: From pedagogy to andragogy. Cambridge, UK: the Adult Education Company.

Knight, S. (1994). Dictionary: The tool of last resort in foreign language reading? A new perspective. *The Modern Language Journal, 78*(3), 285-299.

Knight, P., Pennant, J. & Piggott, J. (2005). The power of the interactive whiteboard. *Micro Math*, *21*(2), 11-15.

Köse, U. (2010). A blended learning model supported with Web 2.0 technologies. *Procedia - Social and Behavioral Sciences, 2*(2), 2794-2802

Korkmaz, O. and Karakus, U. (2009). The Impact of Blended Learning Model on Student Attitudes towards Geography Course and Their Critical Thinking Dispositions and Levels. *The Turkish Online Journal of Educational Technology, 8*(4), 51-63.

Kurdi, F. (2007). *Method of Teaching Islamic Education in Girls' Schools (*in Arabic*)*. Saudi Arabia: Acadimic Library.

Kumar, R. (2005). *Research methodology: a step-by-step guide for beginners* (2nd ed.). London: Sage publications.

Kramarski, B. (2009). Developing a pedagogical problem solving view for mathematics teachers with two reflection programs. *International Electronic Journal of Elementary Education*, *2*(1), 137-53.

Krueger, R. A., & Casey, M. A. (2002). Designing and conducting focus group interviews. *Social analysis, selected tools and techniques*, *4*(23), 4-24.

Leech, N.L. and Onwuegbuzie, A.J., (2009). A typology of mixed methods research designs. *Quality & quantity*, *43*(2), 265-275.

Littlejohn, A. and Pegler, C. (2007). *Preparing for blended e-learning*. London: Routledge.

Lincoln, Y., & Guba, E. (1985). *Naturalistic Inquiry*. London: Sage Publications.

Litwin, M.S. (1995). *How to Measure Survey Reliability and Validity*. London: Sage Publications.

Lim, D.H., Morris, M.L. and Kupritz, V.W. (2007). Online vs. blended learning: Differences in instructional outcomes and learner satisfaction. *Journal of Asynchronous Learning Networks, 11*(2), 27-42.

Lim, D. H. and Yoon, S. W. (2008) Team learning and collaboration between online and blended learner groups. *Performance Improvement Quarterly*, *21*(3), 59-72.

López-Pérez, M.V., Pérez-López, M.C. and Rodríguez-Ariza, L. (2011). Blended learning in higher education: Students' perceptions and their relation to outcomes. *Computers & Education*, *56*(3), 818-826.

Luca, J. (2006). Using blended learning to enhance teaching and learning. *In Proceedings of the 8th Australasian Conference on Computing Education* (pp. 3-4). Australian Computer Society, Inc.

Lubis, M. (2009). Educational technology as a teaching aid on teaching and learning of integrated Islamic education in Brunei Darussalam. *World Scientific and Engineering Academy and Society: Transactions on Information Science and Applications, 6*(8), 1370–1379.

Lubis, M. A., Lampoh, A. A., Yunus, M. D. M., Shahar, N. S., Ishak, M. N., & Muhamad, A. T. (2011). The use of ICT in teaching Islamic subjects in Brunei Darussalam. *International Journal of Education and Information Technologies, 5*(1), 79-86.

Mayer, R. E. (1997). Multimedia Learning: Are We Asking the Right Questions?. *Educational psychologist, 32*(1), 1-19.

Mayer, R. E. (2003). The promise of multimedia learning: using the same instructional design methods across different media. *Learning and instruction*, *13*(2), 125-139.

Mayer, R. E. (2002). Multimedia learning. *Psychology of learning and motivation*, *41*, 85-139.

Mayer, R. E., Hegarty, M., Mayer, S., & Campbell, J. (2005). When static media promote active learning: Annotated illustrations versus narrated animations in multimedia instruction. *Journal of Experimental Psychology: Applied*, *11*(4), 256-265.

Mayer, R. E. (2009). *Multimedia Learning*. Cambridge, UK: Cambridge University Press.

Mayer, R. E., & Moreno, R. (2003). Nine ways to reduce cognitive load in multimedia learning. *Educational psychologist, 38*(1), 43-52.

Mayer, R. E. (Ed.). (2005). The Cambridge handbook of multimedia learning. Cambridge, UK: Cambridge university press.

Mayer, R. E. (2001). *Multimedia Learning*. Cambridge, UK: Cambridge University Press.

MacDonald, J. (2008). Blended learning and online tutoring planning learner support and activity design (2nd ed.). England: Gower Publishing Limited

Manly, B.F.J. and Alberto, J. A. N. (2016) *Multivariate Statistical Methods: A primer* (4th ed.). London: Chapman and Hall.

McMillan, D. W. & Chavis, D. M. (1986). Sense of Community: A definition and theory. *Journal of Community Psychology*, *14*(1), 6-23.

McDonald, T. & Kolderie, T. (2009). How information technology can enable 21st century schools. *Information Technology and Innovation Foundation*. Retrieved from http://www.itif.org/files/Education_ITIF.pdf

McNabb, D. (2010). *Research Methods for Political Science: Quantitative and Qualitative Approaches*. New York: M.E. Sharpe.

McLeod, S. A. (2008). Likert Scale. Retrieved from www.simplypsychology.org/likert-scale.html

McIver, J. P., & Carmines, E. G. (1981). *Unidimensional Scaling*. Thousand Oaks, CA: Sage Publications.

Merino, D. & Abel, K. (2003). Evaluating the Effectiveness of Computer Tutorials versus Traditional Lecturing in Accounting Topics. *Journal of Engineering Education, 92*(2), 189-194.

Mercier, E.M. & Higgins, S. (2013). Collaborative Learning with Multi-Touch Technology: Developing Adaptive Expertise. *Learning and Instruction, 25*, 13-23

Merrill, M. D. (2000). Instructional strategies and learning styles: which takes precedence. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.22.3996&rep=rep1&type=pdf

Meejaleurn, S., Uratchanoprakorn, A., Boonlue, S. (2010). The Construction of the online-learning in a group activity using blended learning on the information communication and network system at Grade 9. *2nd International Conference on Computer Technology and Development* (pp. 389-392). Cairo.

Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass.

Millis, B.J. (2012). Active learning strategies in face-to-face courses. Retrieved from http://www.dl.ueb.vnu.edu.vn/bitstream/1247/10092/1/Active%20Learning%20Strategies%20in%20Face-to-Face%20Courses.pdf

Miller, J. (2002). Examining the Interplay between Constructivism and Different Learning Styles. *The Sixth International Conference on Teaching Statistics (ICOTS).* Cape Town, South Africa.

Morgan, H. (2010). *Teaching with the Interactive Whiteboard: An Engaging Way to Provide Instruction. Focus on Elementary,* 3-7. Retrieved from https://pdfs.semanticscholar.org/01ed/876c57f0e2e8ef852f636d813bcd5c09a3a6.pdf

Moss, G., Armstrong, V., Jewitt, C., Levacic, R., Cardini, A. & Castle, F. (2007). *The Interactive Whiteboards, Pedagogy and Pupil Performance Evaluation: An Evaluation of the Schools Whiteboard Expansion (SWE) Project: London Challenge.* School of Educational Foundations and Policy Studies, Institute of Education, University of London. Retrieved from http://www.ioe.ac.uk/Full_report.pdf

Moskal, P Dziuban, C. & Hartman, J. (2012). Blended learning: A dangerous idea. *The Internet and Higher Education, 18*, 15-23.

Mohammad, F. (2009). Blended Learning and the Virtual Learning Environment of Nottingham Trent University. The *Second International Conference on Developments in E-Systems Engineering* (pp. 295-299). Abu Dhabi.

Moore, D. L. (2010). Guidelines for Teaching about Religion in K-12 Public Schools in the United States. *The American Academy of Religion.* Retrieved from https://www.aarweb.org/sites/default/files/pdfs/Publications/epublications/AAR K-12CurriculumGuidelines.pdf

Moore, N. (2006). *How to do research: the Practical guide to designing and managing research projects* (3ʳᵈ Ed.). London: Facet Publishing.

Morse, J. M., Barrett, M., Mayan, M., Olson, K., & Spiers, J. (2002). Verification strategies for establishing reliability and validity in qualitative research. *International* Journal *of Qualitative Methods*, *1*(2), 13-22.

Morgan, D. L. and Scannell, A.U. (1998). *Planning Focus Groups.* London: Sage publications.

Mohamed, A. H., Abuzaid, R.A.S., & Benladen, R.M. (2008).Opportunities and Challenges of the Knowledge Management Approach to E-Learning: A Case Study in Al-Bayan Model School for Girls, Kingdom of Saudi Arabia, *The Electronic Journal on Information Systems in Developing Countries, 35*(4), 1-11.

Murano, P.S., and Knight, D.T. (1999). Determination of learning styles in an introductory food science course. *NACTA Journal,* 50-53.

Najati, M.A. (1989). *Psychology and the Qur'an.* Cairo: Dar al-Shurüq.

Naaj, M. A., Nachouki, M and Ankit, A. (2012). Evaluating Student Satisfaction with Blended Learning in a Gender-Segregated Environment. *Journal of Information Technology Education: Research*, *11*(1), 185-200.

Netemeyer, R.G., Bearden, W.O. and Sharma, S., (2003). *Scaling procedures: Issues and applications*. London: Sage Publications.

Norris, M. and Lecavalier, L. (2010). Evaluating the use of exploratory factor analysis in developmental disability psychological research. *Journal of autism and developmental disorders, 40*(1), 8-20.

O'Dell, B., Mai, J., Thiele, A., Priest, A., & Salamon, K. (2009). The hot seat: Challenging critical thinking and problem solving skills in physical therapist students. *Internet Journal of Allied Health Sciences and Practice*, *7*(1), 1-11.

Oates, B. (2006). *Researching information systems and computing*. London: Sage Publications.

Ostlund, U., Kidd, L., Wengström, Y. and Rowa-Dewar, N. (2011). Combining qualitative and quantitative research within mixed method research designs: a methodological review. *International journal of nursing studies, 48(3)*, 369-383.

Oyaid, A. A. (2009). *Education Policy in Saudi Arabia and Its Relation to Secondary School Teachers' ICT Use, Perceptions, and Views of the Future of ICT in Education*. (Doctoral Dissertation), University of Exeter, Exeter, United Kingdom.

Opdenakker, R. (2006). Advantages and disadvantages of four interview techniques in Qualitative Research. *Forum: Qualitative Social Research, 4*(7), 11-15.

Owston, R., York, D. and Murtha, S. (2013). Student perceptions and achievement in a university blended learning strategic initiative. The *Internet and Higher Education*, *18*, 38-46.

Page, T., Thorsteinsson, G., & Niculescu, A. (2008). A blended learning approach to enhancing innovation. *Journal of Studies in Informatics and Control*, *17*(3), 297-304.

Parker, A. and Tritter, J. (2006). Focus group method and methodology: current practice and recent debate. *International Journal of Research & Method in Education, 29*(1), 23-37.

Patel, M., Doku, V., & Tennakoon, L. (2003). Challenges in recruitment of research participants. *Advances in Psychiatric Treatment, 9*(3), 229-238.

Patton, M. Q. (2002). *Qualitative evaluation and research methods* (3rd ed.).Thousand Oaks: Sage Publications.

Pereira, J. A., Pleguezuelos, E., Merí, A., Molina-Ros, A., Molina-Tomás, M. C., & Masdeu, C. (2007). Effectiveness of using blended learning strategies for teaching and learning human anatomy. *Medical education*, *41*(2), 189-195.

Peeke, G., (1984). Teacher as researcher. *Educational Research, 26*(1), 24-26.

Pelgrum, W. J. (2001). Obstacles to the integration of ICT in education: results from a worldwide educational assessment. *Computers & education*, *37*(2), 163-178.

Riener, C. & Willingham, D. (2010). The Myth of Learning Styles. *Change: The magazine of higher learning*, *42*(5), 32-35.

Posamentier, A. S., & Krulik, S. (2015). Problem Solving Strategies in Mathematics. New York: world scientific publishing.

Ponnusamy, V., Subramaniam, R. and Murugiah, T. (2009). Promoting Better Learning Skills through Online Discussion Boards. In: *Proceedings of the 2009 International Conference on Future Computer and Communication,* pp. 695-699.

Pritchard, A. (2009). *Ways of Learning: Learning Theories and Learning Styles in the Classroom*. London: Routledge.

Prince, M. (2004). Does Active Learning Work? A Review of the Research, *Journal of Engineering Education*, *93*(3), 223-231.

Ryan, F. Coughtan, M. & Cronin, P. (2009) Interviewing in qualitative research: the one-to-one interview. *International Journal of Therapy and Rehabilitation 16*, (6), 309-314.

Ramadan, M. Z. (2011). Evaluating college students' performance of Arabic typeface style, font size, page layout and foreground/background colour combinations of e-book materials. *Journal of King Saud University - Engineering Sciences, 23,* 89-100.

Radnor, H. (2002). *Researching Your Professional Practice: Doing Interpretative Research*. Buckingham: Open University Press.

Robin, B. R. (2008). Digital storytelling: A powerful technology tool for the 21st century classroom. *Theory into practice*, *47*(3), 220-228.

Robertson, M., Webb, I. & Fluck, A. (2007) *Seven Steps to ICT Integration*. Victoria: ACER Press

Rowley, J. (2012). Conducting research interviews. *Management Research Review*, *35*(3/4), 260-271.

Russell, M., Bebell, D., & Higgins, J. (2004). Laptop learning: A comparison of teaching and learning in upper elementary classrooms equipped with shared carts of laptops and permanent 1:1 laptops. *Journal of Educational Computing Research, 30*(4), 313-330.

Russell, M. (2006). *Technology and Assessment: The Tale of Two Interpretations*. United States: Information Age Publishing.

Sadeghi, R., Sedaghat, M. M., & Ahmadi, F. S. (2014). Comparison of the effect of lecture and blended teaching methods on students' learning and satisfaction. *Journal of Advances in Medical Education & Professionalism*, *2*(4), 146-150

Sapsford, R. and Jupp, V. (2006). *Data Collection and Analysis*. London: Sage publications.

Sajjadi, S. M. (2008). Religious education and information technology: Challenges and problems. *Teaching Theology & Religion, 11*(4), 185–190.

Salami, S., & Aremu, O. (2006). Relationship between problem-solving ability and study behaviour among school-going adolescents in south western Nigeria. *Electronic Journal of research in Educational Psychology*, *4*(1), 139-154.

Schunk, D. H. (2012). *Learning theories : an educational perspective*. London: Pearson Education.

Schnotz, W., & Bannert, M. (2003). Construction and interference in learning from multiple representation. *Learning and instruction*, *13*(2), 141-156.

Schuh, K. L. (2004). Learner-centered principles in teacher-centered practices? *Teaching and Teacher Education, 20*(8), 833-846.

Schreiner, P. (2013). Religious Education in the European Context. *Hungarian Educational Research Journal, 3*(4), 4 -14.

Sethy, S. S. (2008). Distance Education in the Age of Globalization: An Overwhelming Desire towards Blended Learning. *Turkish Online Journal of Distance Education*, *9*(3), 29-44.

Sekaran, U. (2003). *Research methods for business: A skill building approach* (4th Ed.). New York: John Wiley & Sons.

Shivetts, C. (2011). E-Learning and Blended Learning: The importance of the learner a research literature review. *International Journal on E-learning*, *10*(3), 331-337.

Sharpe, R., Benfield, G., Roberts, G., and Francis, R. (2006). The undergraduate experience of blended e-learning: a review of UK literature and practice. *The Higher Education Academy*, 1-103

Shulman, L. (2005). Signature pedagogies in the professions. *The American Academy of Arts & Sciences, 134*(3), 52-59.

Singh, H. (2003). Building effective blended learning programs. *Educational Technology*, *43*(6), 51-54.

Simon, M. (2011). Role-of-the-researcher. Retrieved March 21, 2017, from http://dissertationrecipes.com/wp-content/uploads/2011/04/Role-of-the-Researcher.pdf

Sime, D., & Priestley, M. (2005). Student teachers' first reflections on information and communications technology and classroom learning: implications for initial teacher education. *Journal of Computer assisted learning, 21*(2), 130-142.

Simons, R.J., Hout-Wolters, B. V., Violet, S. (2000). Active Learning: Self-directed Learning and independent Work. In R. J. Simons & J. Linden & T. Duffy (Eds.), *New Learning* (pp.21-36). London: Kluwer Academic Publishers.

Slavin, R. E. (1987). Developmental and motivational perspectives on cooperative learning: A reconciliation. *Child development, 58*(5), 1161-1167.

Smyth, S., Houghton, C., Cooney, A., & Casey, D. (2012). Students' experiences of blended learning across a range of postgraduate programmes. *Nurse education today*, *32*(4), 464-468.

Smith, D.G. (1977). College Classroom Interactions and Critical Thinking. *Journal of Educational Psychology, 69*(2), 180-190.

Sorden, S. D., & Ramírez-Romero, J. L. (2012). Collaborative learning, social presence and student satisfaction in a blended learning environment. *Proceedings of 2012 IEEE 12th International Conference on Advanced Learning Technologies* (pp.129-133).

So, H. J., & Brush, T. A. (2008). Student perceptions of collaborative learning, social presence and satisfaction in a blended learning environment: Relationships and critical factors. *Computers & Education, 51*(1), 318-336.

Spiro, R. J., Feltovich, P. J., & Jacobson, M. J. (1991). Cognitive flexibility, construtivism, and hypertext: advanced knowledge acquisition in ill-structured domains. *Educational Technology, 31*(5), 24-33

Springer, L., Stanne, M.E. and Donovan, S.S. (1999). Effects of small-group learning on undergraduates in science, mathematics, engineering, and technology: A meta-analysis. *Review of educational research*, *69*(1), 21-51.

Staley, C. (2003). *50 Ways to Leave Your lectern: Active Learning Strategies to Engage First-Year Students*. United States: Wadsworth Publishing.

Stern, J. (2006). *Teaching Religious Education: Researchers in the Classroom*. London: Continuum.

Stacey, E. & Gerbic, P. (2008). Success factors for blended learning. In *Hello! Where are you in the landscape of educational technology? Proceedings ascilite Melbourne*.http://www.ascilite.org.au/conferences/melbourne08/procs/stacey.pdf

Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. London: Sage Publications.

Suppes, P .(2000). *The Uses of Computers in Education. Scientific American*, *215*(3), 206-223.

Sun, M., & Chiang, F. K. (2015). Active Learning Spaces: New Directions for Teaching and Learning. *Educational Technology & Society*, *18*(2), 394-397.

Taweelah, A. (2000). *The Art of Teaching the Islamic Education* (in Arabic)*.* Saudi Arabia: Alfalah Library.

Talay-Ongan, A. (2003). Online teaching as a reflective tool in constructive alignment. In *Proceedings of International Education Research Conference AARE–NZARE,* Auckland, Australian Association for Research in Education.

Tayebinik, M., & Puteh, M. (2012). Blended Learning or E-learning?. *International Magazine on Advances in Computer Science and Telecommunications*, *3*(1), 103-110

Taradi, S. K., Taradi, M., Radic, K., & Pokrajac, N. (2005). Blending problem-based learning with Web technology positively impacts student learning outcomes in acid-base physiology. *Advances in Physiology Education, 29*(1), 35-39.

Tabachnick, B. G. and Fidell, L. S. (2013). *Using Multivariate Statistics* (6th ed.). London: Pearson Education.

Taherdoost, H. Sahibuddin, S. and Jalaliyoon, N. (2014). Exploratory factor analysis; concepts and theory. *Advances in Applied and Pure Mathematics*. http://www.wseas.us/e-library/conferences/2014/Gdansk/MATH/MATH-49.pdf

~~Teece, G., Read, G., Rudge, J. and Howarth, R. (1992). *How do I teach RE* (2nd ed.). Cheltenham: Stanley Thornes.~~

Tosun, S. (2015). The effects of blended learning on EFL students' vocabulary enhancement. *Procedia-Social and Behavioural Sciences*, *199*, 641-647.

Thompson, B. (2004). *Exploratory and confirmatory factor analysis: understanding concepts and applications*. Washington, DC: American Psychological Association.

Thornbury, S. (2006). *How to Teach Vocabulary*. Edinburgh: Pearson Education.

Unrau, Y., Gabor, P. & Grinnell, R. (2007). *Evaluation in Social Work: The art and science of practice.* Oxford: Oxford University Press.

Urdan, T. A. & Weggen, C. C. (2000). *Corporate e-learning: exploring a new frontier*. Retrieved From http://papers.cumincad.org/data/works/att/2c7d.content.pdf.

Vaughan, N. (2007). Perspectives on blended learning in higher education. *International Journal on E-Learning*, 6(1), 81-94.

Vygotsky, L. (1978). *Interaction between learning and development*. Cambridge: Harvard U Press.

Wang, S. (2009). University Student Perceptions of Effective E-learning Strategies Instructor Used in Blended Courses. *Second International Conference on Computer and Electrical Engineering* (pp. 586-590). Dubai, UAE.

Wang, M., Shen, R., Novak, D., & Pan, X. (2009). The impact of mobile learning on students' learning behaviours and performance. Report from a large blended classroom. *British Journal of Educational Technolog*y, 40(4), 673–695.

Watson, B. and Thompson, P. (2007). *The effective teaching of religious education*. England: Pearson Education.

Walia, K. (2015). A Study of Teacher as a Researcher: Constraints and Restraints. *International Journal of Education and Psychological Research, 4* (4), 114-116.

Webster, L. and Mertova, P. (2007). *Using narrative inquiry as a research method: an introduction to using critical event narrative analysis in research on learning and teaching*. New York, NY: Routledge.

Wellington, J. (2000). *Educational Research: Contemporary Issues and Practical Approaches.* London: Continuum.

Wiliam, D. (2009). *Assessment for learning. Why, what and how*. London: Institute of Education, University of London.

Walliman, N. (2011). *Research Methods: The Basics*. London: Routledge.

Williams, B., Onsman, A. and Brown, T., (2010). Exploratory factor analysis: A five-step guide for novices. *Australasian Journal of* Paramedicine, 8(3), 1-13.

Wickramasinghe, A., Widanapathirana, N., Kuruppu, O., Liyanage, I., & Karunathilake, I. M. K. (2011). Effectiveness of mind maps as a learning tool for medical students. *South East Asian Journal of Medical Education*, (1), 30-23

Whitehead, D. (2007). Research based criteria for the design and selection of literacy and thinking tools. *The Middle Years Journal*, 15(2), 280-310

Wood, R. & Ashfield, J. (2008). The use of the interactive whiteboard for creative teaching and learning in literacy and mathematics: a case study. *British Journal of Educational Technology*, 39(1), 84-96.

Wood, C. (2008). 100 *Ideas for Teaching Religious Education*. London: Bloomsbury Publishing PLC.

Wragg, E.C. & Brown, G. (2001). *Explaining in the secondary school*. London: Routledge.

Yamauchi, L. G. (2008). *Effects of multimedia instructional material on students' learning and their perceptions of the instruction.* (Doctoral Dissertations), Iowa State University, United States.

Yapici, I. & Akbayin, D. (2012).The Effect of Blended Learning Model on High School Students' Biology Achievement and on their Attitudes towards the Internet. *The Turkish Online Journal of Educational Technology, 11*(2), 228-237.

Yeh, Y., & Wang, C. W. (2003). Effects of multimedia vocabulary annotations and learning styles on vocabulary learning. *Calico Journal, 21(1)*, 131-144.

Zayno, M.J. (1997). *Get Your Belief from the Qur'an and Authentic Prophet Tradition*. Riyadh: International Islamic Publication House.

Zhu, E., Kaplan, M., Dershimer, C. & Bergom, I. (2011). Use of Laptops in the Classroom: Research and Best Practices, CRLT Occasional Papers, 30. Retrieved from http://www.crlt.umich.edu/sites/default/files/resource_files/ CRLT_no30.pdf

Zohrabi, M. (2013). Mixed method research: Instruments, validity, reliability and reporting findings. *Theory and Practice in Language Studies*, *3*(2), 254-262.

Appendices

Appendix (A) Examples of Websites for Teaching Students to Recite the Qur'an

Websites Examples	Features					
	Online Courses	Free trial	Enable user to create their own account	Different learning groups	Lessons which help in learning Tajweed	Free Islamic books and Islamic articles
https://quran.mara.gov.om/	✓			✓		✓
http://www.schoolquran.com/		✓	✓	✓	✓	✓
http://www.houseofquran.com/arabic.html	✓			✓	✓	
https://www.appannie.com/en/apps/ios/app/thfyz-jz-m-llatfal-mahr-alm/#	✓			✓		✓
http://www.homequran.com/learning-quran-online.htm		✓		✓		✓
http://www.mohfez.com/	✓		✓	✓		✓
https://play.google.com/details?id=com.quranreading.last10surahwbw&hl=ar	✓			✓	✓	
https://www.yu.edu.jo/tajweed/index.php/t-menu-item-5	✓				✓	

Appendix (B) Examples of Active Learning Approaches

Mind Maps
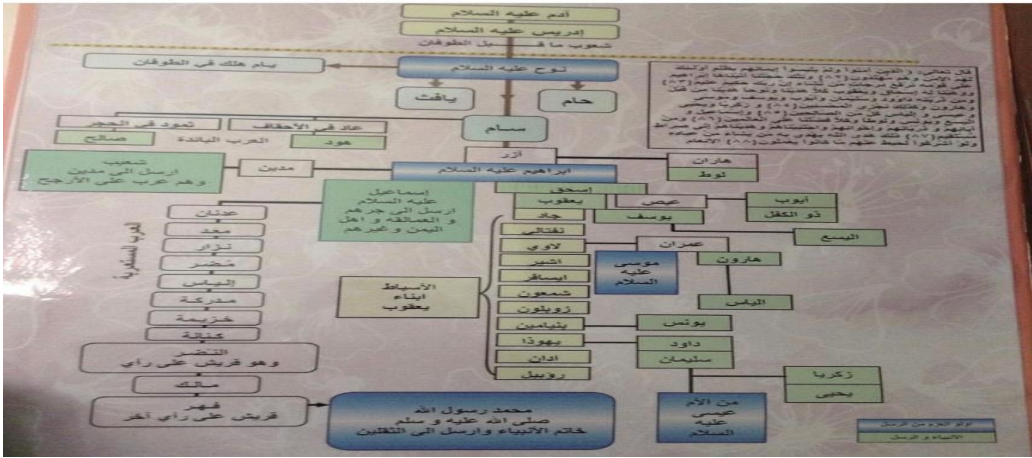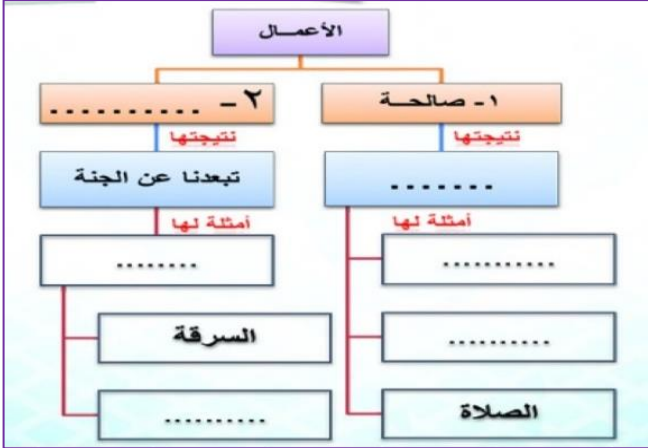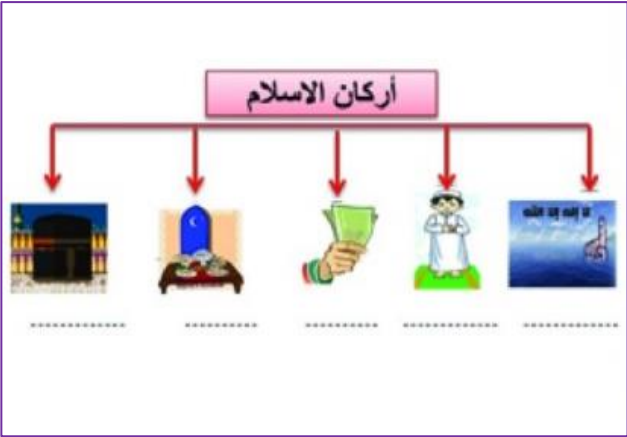
أركان الاسلام

....

الأعمــال

٢ – .... ١- صالحــة

نتيجتها نتيجتها

تبعدنا عن الجنة ....

أمثلة لها أمثلة لها

....

السرقة ....

.... الصلاة

الصلوات المفروضة

٥ ٤ ٣ ٢ ١

صلاة العشاء صلاة المغرب صلاة العصر صلاة الظهر صلاة الفجر

عدد ركعاتها

٤ ٣ ٤ ٤ ٢

الرسوم الكرتونية

استراتيجية جدول المعرفة

K ماذا أعرف

تستخدم هذه المرحلة كتمهيد للدرس . يسأل المعلم الطلاب
ماذا تعرف عن...؟
ويتيح لهم عرض معلوماتهم كأفراد أو مجموعات

مثلا
ماذا تعرف عن.....
- الحج؟
- الاشكال الهندسية؟
- وسائل الاتصال؟
- النبات؟

W ماذا أريد أن أعرف

يقوم الطلاب كأفراد او مجموعات بتسجيل أسئلتهم التي يريدون معرفتها عن الدرس
ثم يناقشوا الى اي مدى اجاب الدرس عن اسئلتهم في النهاية

مثلا
أريد أن أعرف...
- على من يجب الحج؟
- ما خصائص المربع؟
- كيف يعمل الهاتف؟
- كيف يتكاثر النبات؟

L ماذا تعلمت

تستخدم هذه المرحلة كختام الدرس ومناقشة ما تعلمه الطلاب وهل تم الاجابة على اسئلتهم

مثلا
تعلمت أن ....
- الحج يجب على المسلم البالغ المقتدر
- للمربع اربع زوايا واضلاع متساوية
- يعمل الهاتف عبر الموجات الصوتية

أسماء العضوات		اسم المجموعة
1-		
2-		
3-		
4-		
5 -		
6 -		

يستغرق من الوقت دقائق 2

ورقة عمل (١) باستعمال استراتيجية
جدول التعلم K.W.L

ماذا تعلمت	ماذا أريد أن اعرف	ماذا تعرف

Appendix (C) Examples of Excluded Studies

Author/year	Title	University	Full Text
Alasmari, 2014	Improving teaching and learning in Higher Education through the use of e-learning : mixed methods research in one of the southern universities in Saudi Arabia	University of Southampton	✓
Al-Sherhri, 2003	A virtual university model for higher education in Saudi Arabia	Loughborough	✓
Al-Ghadyan, 2004	The attitudes of university academic staff towards e-learning and in-service training in Saudi Arabia : an analytical study	Durham	✓
Algarni, 2014	Video Conferencing Technology for Distance Learning in Saudi Arabia: Current Problems, Feasible Solutions and Developing an Innovative Interactive Communication System based on Internet and Wi-Fi Technology for Communication Enhancement	Durham	✓
Al-Hojailan, 2013	The effectiveness of the social network in higher education in Saudi Arabia: action research to develop an e-learning conceptual model based on blog tools	De Montfort University	✓
Kutubkhanah, 2011	The opportunities and constraints experienced by students and teachers using online systems for learning English at King Abdulaziz University, Saudi Arabia	University of Warwick	✓
Almudibry, 2012	The effectiveness of a CALL multimedia classroom on L2 learners' achievements, attitudes and the word solving strategies' frequencies and the perceptions of helpfulness, when compared with learners in traditional classrooms: A quasi-experimental study	Durham University	✗
Gamlo, 2014	EFL teachers use/non-use of ICT at a university in Saudi Arabia	University of Warwick	✗
Alotaibi, 2014	How and why lecturers of mathematics at universities in the Kingdom of Saudi Arabia use or do not use ICT for teaching : a mixed methods study	University of Warwick	✗
Al-Ghamdi, 2009	Investigating language learning strategy use of EFL Saudi adult learners: a focus on the use of computer and internet tools	Lancaster University	✗

Author/year	Title	University	Full Text
Faqeih, 2012	The effectiveness of error correction during oral interaction : experimental studies with English L2 learners in the United Kingdom and Saudi Arabia	University of York	✓
Alfares, 2014	Using the textbook to promote thinking skills in intermediate school EFL classrooms in Saudi Arabia: an analysis of the tasks and an exploration of teachers' behaviours and perceptions	University of Glasgow	✓
Alnesyan, 2012	Teaching and Learning Thinking Skills in the Kingdom of Saudi Arabia: Case studies from seven primary schools	University of Exeter	✓
Alhatmi, 2012	An investigation into the use of the vocabulary note-taking strategy by university EFL learners in Saudi Arabia	University of Exeter	✓
Al-Shuwairekh, 2001	Vocabulary learning strategies used by AFL (Arabic as a Foreign Language) learners in Saudi Arabia	University of Leeds	✓
Bajunaid, 2008	The effectiveness of co-operative education programmes for developing students awareness of the importance of generic competencies in Saudi Arabia	University of Glasgow	✓
Al-Kuwaiti, 2007	Evaluating the impact of a problem-based learning curriculum on undergraduate medical students in Saudi Arabia	Durham University	✓
Al-Etani, 2010	Investigating students motivation to learn English as a foreign language in a vocational education in Saudi Arabia	University of Birmingham	X
Al-Abbasi,2007	Beliefs and vocabulary learning strategies in Saudi Arabia	University of Nottingham	X

Appendix (D) Fieldwork

Durham University

School of Education

Leazes Road,
Durham,
DH1 1TA
19th February, 2015

Saudi Arabian Cultural Bureau
630 Chiswick High Road
London, W4 5RY

Dear Sir/Madam,

Re: Maram Mohammed Jannah

Department/ University: School of Education, Durham University
Course: PhD Technology Enhanced Learning
Supervisors: Prof Steve Higgins, Dr Vanessa Kind
Title of research project: The Implications of the Implementation of Blended Learning
Strategies for Teaching Students Islamic Education Modules in Primary Schools in Jeddah,
Saudi Arabia

Regarding the above student who is currently studying under my supervision, this letter is to
ask you to support her with the plans for her fieldwork for her thesis.

She intends to travel to Saudi Arabia for a period of about six weeks to undertake her
research, this will be completed as soon as possible. The design of her study will require a
second visit to complete the data collection after a further six months or so.

I would ask you to please give whatever support you can to facilitate her visit.

Yours faithfully,

S. G. Higgins

Professor S. E. Higgins
Supervisor
Email: s.e.higgins@durham.ac.uk
Tel: (+44/0) 191 334 8356
Direct Dial-in (+44/0) 191 334 8401

Appendix (E) Approval of the Pedagogical Planning and Development Administration to Pilot the Study

الرقم : ٦ ٥ ٥ / ١ / ٣ و . د

التاريخ : ٩ / ١١ / ٣٦ ٢ ١ هـ

المرفقات : ١ استبانة

المملكة العربية السعودية

وزارة التربية والتعليم

(٢٨٠)

الإدارة العامة للتربية والتعليم بمحافظة جدة

التخطيط والتطوير التربوي — البحوث والدراسات التربوية

إلـــى :. مديرة مكتب التعليم بشمال محافظة جدة .

مـــن : مدير إدارة التخطيط والتطوير .

بـشـــأن : تسهيل مهمة الباحثة / مرام بـنـت محمد حسن جنة .

السلام عليكم ورحمة الله وبركاته ، وبعد :

بناء على إفادة الملحقية الثقافية بسفارة المملكة العربية السعودية في لندن (المرفق) حول المبتعثة / **مرام بـنـت محمد حسن جنة** ، الطالبة بمرحلة الدكتوراه في تخصص تكنلوجيا التعليم في جامعة (ديرهـام) ، وبناء على رغبة الباحثة في تسهيل مهمتها لتطبيق بحثها الذي بعنوان **"تأثيرات تطبيق استراتيجيات التعليم المدمج في تـدريس الطالبـات مواد التربية الإسلامية في المرحلة الابتدائيـة بجدة ، المملكة العربية السعودية "** وترغب الباحثة تطبيق أداة بحثها (استبانة — مقابلة) .على عينة من المعلمات بالمرحلة الابتدائية بتعليم محافظة جدة

نأمل منكم تسهيل مهمة الباحثة بتمكينها من تطبيق أدوات بحثها على عينة الدراسة ، شاكرين ومقدرين تعاونكم واهتمامكم بالبحث العلمي .

والسلام عليكم ورحمة الله وبركاته

خليل بن فراج الوايلي

إلــى :- مديرات المدارس الابتدائية   المحترمات

(ب/٩٩ – ب/١٢٢ - ب/١٣٩ – ب/٧٨ –ب/١٥٥- ب/٩ - ب /٧٩ – ب تق /٧)

مـــن :- مديرة مكتب التعليم شمال جدة

بشأن :- تسهيل مهمة الباحثة / **مرام بنت محمد حسن جنة**

السلام عليكم ورحمة الله وبركاته :-   وبعد :-

بنـاء على خطـاب مـدير إدارة التخطيط والتطـوير رقم ٣/١/٥٢٦د وتـاريخ

١٤٣٦/١١/٩هـ بشأن تسهيل مهمة الباحثة / **مرام بنت محمد حسن جنـة**

لتطبيق بحثها الذي بعنوان " **تأثيرات تطبيـق اسـتراتيجيات التعلـيم المدمـج في**

تدريس الطالبات مـواد التربيـة الإسلامية في المرحلـة الابتدائيـة بجـدة ، المملكة

العربية السعودية ".

عليه نأمل منكم تسهيل مهمة الباحثة بتمكينها لتطبيق أداة بحثها فـي

المدارس المذكورة .

والسلام عليكم ورحمة الله وبركاته .

سميرة حسين عقاب

م ق

Appendix (F) Consent Form

Participant Information Sheet

I am a PhD student in the School of Education at Durham University. My research topic is **Islamic Studies Teachers' Perceptions of Using a Blended Approach for Teaching Islamic Education Modules in Primary Schools in Saudi Arabia**

I would like to conduct an exploratory study to examine the effectiveness of using a blended approach (different forms of technology, traditional teaching methods and teaching aids, collaborative learning and active learning strategies) in teaching students Islamic education modules. This will be a small-scale exploratory study to investigate the feasibility of teaching Islamic education modules using a blended teaching approach. Furthermore, to investigate whether a blended learning approach is suitable for teaching all Islamic education modules or if only traditional methods is sufficiently effective to be used when teaching students aspects of the Islamic education curriculum.

Your candid and feedback will be very much appreciated by the researcher. All information you provide will be kept confidential and will only be used for the purpose of the study. Your name and identifying information will not be included in the questionnaire, audio recording and interviews transcripts. There are no direct risks to you by participating in this experimental study. Your participation in this study is totally voluntary and you are free to withdraw from the study at any time.

If at any time you have any queries or further concerns, please feel free to contact me via email: maramjannah@hotmail.com

Your contribution and consent is important and I would be grateful, if you could answer all the questions.

Consent Form

The participant should complete the whole of this sheet herself

Have you read the Participant Information Sheet?	Yes ☐	NO ☐
Have you received enough information about the study?	Yes ☐	NO ☐
Have you had an opportunity to ask questions about the study?	Yes ☐	NO ☐
Have you received satisfactory answers to all of your questions?	Yes ☐	NO ☐
Do you understand that you are free to withdraw from the study at any time and without having to give a reason for withdrawing and without penalty?	Yes ☐	NO ☐
Do you understand that the information you provide will be kept confidential and will only be used for the purpose of the study?	Yes ☐	NO ☐
Do you understand that name and identifying information will not be included in the questionnaire, audio recording and interviews transcripts?	Yes ☐	NO ☐
Do you understand that your personal information such as phone number and address will not be revealed to people outside the project?	Yes ☐	NO ☐
Do you understand that the name will be anonymous and you could use pseudonyms if you wish?	Yes ☐	NO ☐
Do you understand that your thought maybe quoted in publications, reports and other research outputs?	Yes ☐	NO ☐
Do you understand that the photographs will not be revealed to people outside the project and it will only be analysis by the researcher?	Yes ☐	NO ☐
Do you understand that the data you provide could be archived and used by other researchers for different purpose such as reports and web pages?	Yes ☐	NO ☐

I have read and understand the data protection statement and I consent to my responses being used as described in the data protection statement.

Signed: …………………….…..…   Date: ………………………………….

Name (IN BLOCK CAPITAL LETTERS): …………………….……………

Appendix (G) Questionnaire

<u>**Cover Letter for the Questionnaire**</u>

Dear Islamic studies teachers,

I am a student in the School of Education at Durham University. My research is titled "**Islamic Studies Teachers' Perceptions of Using a Blended Approach for Teaching Islamic Education Modules in Primary Schools in Saudi Arabia.**"

In order to complete the requirements for obtaining a PhD in Technology Enhanced Learning, I would like to conduct an exploratory study to examine the effectiveness of a blended learning approach (a solution that combines different forms of technology, teaching methods and teaching aids, collaborative learning and active learning) to improve the methods of teaching Islamic education curriculum and to help the teachers of Islamic studies achieve specific curriculum objectives.

The purpose of this study is to investigate whether the method of teaching the Islamic Education Modules (Qur'an, Hadith, Tawhid and Fiqh) could benefit from change or whether the traditional method is sufficiently effective to be used when teaching students aspects of the Islamic education curriculum.

The questionnaire is divided into 4 parts: 1) demographic information; 2) teaching methods, teaching aids and active learning strategies; 3) Islamic studies teachers' perception about using a blended learning approach when teaching Islamic education modules; 4) the factors that prevent Islamic studies teachers from implementing a blended learning approach when teaching Islamic education modules.

Instructions for Filling the Form
- Only Islamic studies teachers are qualified to fill in the survey.
- The questionnaire is expected to take approximately 15-20 minutes to complete.
- There is no right or wrong answer, if you are not sure about which answer to choose, please choose the answer that is closest to your opinion.
- Please first read carefully each question and then choose the option which is compatible with your point of view.

- If a mobile phone is used to answer the questionnaire, it is preferable to place the mobile in a horizontal direction in order to see all the choices for the multiple-choice questions.
- Please do not forget to click 'submit' button to record your participation.

Thank you in advance for your support and your cooperation, and at any time if you have any queries or further concerns about the questionnaire, please feel free to contact me via email: maramjannah@hotmail.com

Your contribution and consent is important and I would be grateful if you could answer all the questions.

<center>**The Questionnaire**</center>

Section One: Baseline Data

What is your gender?
☐ Male
☐ Female

What is your university level?

☐ Master
☐ Bachelor
☐ Diploma
☐ Other (Please specify)

Are you a specialist in Islamic Studies?

☐ Yes
☐ No

If no, what is your specialization?

For how many years have you been teaching Islamic Education Curriculum?

☐ 1-5 years
☐ 5-15 years
☐ 15-20 years
☐ 20-30 years
☐ Other (please specify)

…………………………………………………………………….………

Have you attended any training courses during this work experience?

☐ Yes
☐ No

If you have done, any courses specify the area.

☐ Active learning strategies
☐ Word processing
☐ PowerPoint
☐ Teaching methods
☐ Classroom management
☐ Other (please specify)

Do you use the computer?

☐ Yes
☐ No

If yes, what do you use it for?

☐ In preparing for lesson only

☐ Preparing and delivering lesson

Do you use the internet?

☐ Yes
☐ No

If yes, what do you use it for?

☐ In preparing for lesson only

☐ Preparing and delivering lesson

Section Two: Teaching Methods

This part of the questionnaire is concerned with the teaching methods you use in teaching Islamic education modules and the extent of their use. In addition, I would like you to provide information about the Teaching Aids that are available to you for the teaching of Islamic education and the extent to which you employ them in this section. Also, I would like you to provide information about the frequency of using active learning strategies.

A: Teaching Methods

Please complete the table by ticking (✓) in the appropriate box under the option which most suits your personal opinion regarding the following statements.

	Teaching Methods	Frequency Of Use				
		Never 1	Seldom 2	Occasionally 3	Often 4	Always 5
Traditional Methods	The Discussion Method					
	The Dialogue Method					
	The Interrogatory Method					
	The Deductive Method					
	The Collaborative Learning Method					
	The Explaining Method					
Modern Methods	The use of audio tapes such as recordings of the Qur'an to help students improve their recitation					
	The use of video tapes related to the lesson					
	The use of stories					
	The Problem Solving Method					
	The use of Islamic websites					
	The Demonstration Method					

B: Teaching Aids

By ticking (✓) in the appropriate box, please select which example of teaching aids are available in your school and which one is not available, and how often you use each example when teaching Islamic education curriculum.

N	Teaching Aids	Availability		Frequency Of Use				
		Yes	No	Always	Often	Occasionally	Seldom	Never
1	School assembly							
2	Islamic syllabus							
3	School library							
4	Pictures							
5	Audio recorder							
6	Computer							
7	Overhead projector							
8	Articles taken from newspapers or magazines							
9	Tapes/CDs of Islamic lectures							
10	Interactive whiteboard							
11	Television/video							
12	Internet							

C. Active Learning Strategies

How often do you use active learning strategies when teaching aspects of the Islamic education curriculum?

☐ Always

☐ Often

☐ Occasionally

☐ Seldom

☐ Never

By ticking (✓) in the appropriate box, indicate how often you use each example of the selected active learning strategies when teaching Islamic education curriculum

N	Active learning strategies	Frequency Of Use				
		Always	**Often**	**Occasionally**	**Seldom**	**Never**
1	**Brainstorming**					
2	**Role Playing**					
3	**Mind Mapping**					
4	**Think-Pair-Share**					
5	**K-W-L**					
6	**Concept Cartoons**					
7	**Lollipop Sticks**					
8	**Hot Seat**					

Section Three: Using a Blended Learning Approach

Is it suitable to use the blended approach which consist of four dimensions: 1) different forms of technology; 2) teaching methods and teaching aids; 3) active learning; 4) collaborative learning in teaching all Islamic education modules?

☐ **Yes** (a blended approach is suitable to use in teaching all Islamic education modules and in all lessons).

☐ **No** (a blended approach is not suitable to use at all in teaching Islamic education modules).

☐ **It depends on the subject and the topic of the lesson** (the suitability of using a blended learning approach depends on the subject and the topic of the lesson).

In which of the following subjects would you use the blended learning approach the most? (Please specify why).

☐ Qur'an and Tajweed

☐ Hadith

☐ Tawhid

☐ Fiqh

………………………………………………………………………………………………

Having used a blended approach, explain the benefits that you have gained from applying such methods.

………………………………………………………………………………………………

By ticking (✓) in the appropriate box, please select one subject for each statement

N	Statements: I believe using a Blended Approach	Islamic Education Modules			
		Qur'an	Tawheed	Hadith	Fiqh
1	Eases the delivery of information				
2	Helps add interest and enthusiasm to the lessons				
3	Helps clarify information				
4	Increases a student's motivation to learn				
5	Helps students to remember the information for a longer period				
6	Helps increase lively engagement among students				
7	Enhances the lesson's content in the student's textbook				
8	Relates the contents of the lesson to the student's experience				
9	Makes the subject more enjoyable				
10	Helps attract the attention of the Student				
11	Hastens the understanding of information				

By ticking (✓) in the appropriate box, please indicate to what extent do you agree or disagree with the following statements.

N	Statements: I believe using a blended approach:	Strongly Disagree	Disagree	Agree	Strongly Agree
1	Increases my productivity when preparing the lesson objectives				
2	Helps in achieving curriculum objectives				
3	Increases the flexibility of my teaching time				
4	Helps students to exchange knowledge				
5	Simplifies the lesson's content in student's textbook				
6	Eases linking the lesson contents to the student's lives				
7	Suits both high and low ability student				
8	Facilitates interaction between student and me				
9	Helps students to develop new skills				

As a result of using a blended learning approach, what are the disadvantages that you or the students have faced?

………………………………………………………………………………………….

………………………………………………………………………………………….

Section Four: The Factors that prevent Islamic studies teachers from implementing a blended Learning approach

By placing ticks (✓) in the appropriate box please indicate to what extend do you agree or disagree with the following statements.

N	Statements: I cannot apply a blended approach because of:	Strongly Disagree	Disagree	Agree	Strongly Agree
1	Teachers' workload				
2	High number of students in each class				
3	Lack of ICT tools				
4	Lack of convenient internet access				
5	It takes a lot of the lesson time				
6	Lack of effective training in using a blended approach				
7	It requires more time and effort in preparing for the lesson				
8	Lack of resources in blended approach				
9	Fear of undermining the respected status of the academic content				

Are there any other obstacles besides the nine obstacles which have been mentioned? (If yes please specify).

☐ Yes

☐ No

………………………………………………………………………………..

Would you like to add any comments or ideas?

☐ Yes

☐ No

If yes, what are the ideas?

………………………………………………………………………………..

Appendix (H) Questionnaire Data (Arabic)

ID	1 Teachers' workload	2 High Number of students in each class	3 Lack of convenient internet access	4 Lack of IT tools	5 Lack of effective training in using a blended approach	6 Lack of resources in blended learning approach	7 Fear of undermining the respected status of the academic content	8 Requires more time and effort in preparing the lesson	9 Takes a lot of the lesson time
1	أوافق بشدة	أوافق بشدة	أوافق بشدة	أوافق بشدة	أوافق بشدة	أوافق بشدة	أوافق بشدة	أوافق بشدة	أوافق بشدة
2	أوافق بشدة	أوافق بشدة	أوافق	أوافق بشدة	أوافق بشدة	أوافق بشدة	أوافق بشدة	أوافق	أوافق
3	أوافق	أوافق بشدة	أوافق بشدة	أوافق	أوافق بشدة	أوافق	لا أوافق	لا أوافق	لا أوافق
4	أوافق بشدة	أوافق بشدة	لا أوافق بشدة	أوافق	أوافق	أوافق	لا أوافق	أوافق بشدة	أوافق بشدة
5	أوافق	أوافق بشدة	أوافق	لا أوافق	أوافق	لا أوافق	أوافق	أوافق	لا أوافق
6	أوافق بشدة	أوافق بشدة	أوافق بشدة	أوافق بشدة	أوافق بشدة	أوافق	أوافق	أوافق بشدة	أوافق بشدة
7	أوافق	أوافق	أوافق	أوافق	أوافق	أوافق	أوافق	أوافق	لا أوافق
8	أوافق بشدة	أوافق بشدة	أوافق بشدة	أوافق بشدة	أوافق	أوافق	أوافق	أوافق	أوافق
9	أوافق بشدة	أوافق بشدة	أوافق بشدة	أوافق بشدة	أوافق بشدة	أوافق بشدة	لا أوافق	أوافق بشدة	أوافق بشدة
10	لا أوافق	لا أوافق	لا أوافق	لا أوافق	لا أوافق	لا أوافق	لا أوافق	لا أوافق	لا أوافق
11	لا أوافق	لا أوافق	لا أوافق	لا أوافق	لا أوافق	لا أوافق	لا أوافق	لا أوافق	لا أوافق
12	أوافق بشدة	أوافق بشدة	أوافق بشدة	أوافق بشدة	أوافق	أوافق	لا أوافق	أوافق بشدة	أوافق بشدة
13	أوافق بشدة	أوافق بشدة	أوافق بشدة	أوافق بشدة	أوافق	أوافق بشدة	أوافق بشدة	أوافق بشدة	أوافق بشدة
14	أوافق بشدة	أوافق بشدة	أوافق بشدة	أوافق بشدة	أوافق	أوافق بشدة	أوافق بشدة	أوافق بشدة	أوافق بشدة

Questionnaire Data (English)

ID	1 Teachers' workload	2 High Number of students in each class	3 Lack of convenient internet access	4 Lack of IT tools	5 Lack of effective training in using a blended approach	6 Lack of resources in blended learning approach	7 Fear of undermining the respected status of the academic content	8 Requires more time and effort in preparing the lesson	9 Takes a lot of the lesson time
1.	4	4	4	4	4	4	4	4	4
2.	4	4	3	4	4	4	4	3	3
3.	3	4	4	3	4	3	2	2	2
4.	4	4	1	3	3	3	2	4	4
5.	3	4	3	2	3	2	3	3	2
6.	4	4	4	4	4	3	3	4	4
7.	3	3	3	3	3	3	3	3	2
8.	4	4	4	4	3	3	3	3	3
9.	4	4	4	4	4	4	2	4	4
10.	2	2	2	2	2	2	2	2	2
11.	2	2	2	2	2	2	2	2	2
12.	4	4	4	4	3	3	2	4	4
13.	4	4	4	4	3	4	4	4	4
14.	4	4	4	4	3	4	4	4	4
15.	4	4	3	3	3	4	3	3	3
16.	4	4	4	4	4	4	3	4	4
17.	3	3	2	2	4	4	1	2	1
18.	3	3	3	3	3	3	3	3	3
19.	3	3	4	3	4	3	3	3	3
20.	4	4	4	4	3	3	3	3	3
21.	3	4	4	4	4	4	4	4	4
22.	4	4	4	4	4	4	4	4	4
23.	3	3	3	3	3	3	3	3	3
24.	4	4	2	3	4	4	3	2	2

<u>Appendix (I) Ethics Application Form</u>

**Durham University
School of Education**

Research Ethics and Data Protection Monitoring Form

Research involving humans by all academic and related Staff and Students in the Department is subject to the standards set out in the Department Code of Practice on Research Ethics. The Sub-Committee will assess the research against the British Educational Research Association's *Revised Ethical Guidelines for Educational Research* (2004).

It is a requirement that prior to the commencement of all research that this form be completed and submitted to the Department's Research Ethics and Data Protection Sub-Committee. The Committee will be responsible for issuing certification that the research meets acceptable ethical standards and will, if necessary, require changes to the research methodology or reporting strategy.

A copy of the research proposal which details methods and reporting strategies must be attached and should be no longer than two typed A4 pages. In addition you should also attach any information and consent form (written in layperson's language) you plan to use. An example of a consent form is included at the end of the code of practice.

Please send the signed application form and proposal to the Secretary of the Ethics Advisory Committee (Sheena Smith, School of Education, tel. (0191) 334 8403, e-mail: HYPERLINK "mailto:Sheena.Smith@Durham.ac.uk" Sheena.Smith@Durham.ac.uk). Returned applications must be either typed or word-processed and it would assist members if you could forward your form, once signed, to the Secretary as an e-mail attachment

Name: Maram Mohammed Jannah
Course: PHD Technology Enhanced Learning (Computer Science) XGA001
Contact e-mail address: m.m.h.jannah@durham.ac.uk
Supervisors: Prof Steve Higgins, Dr Vanessa Kind
Title of research project: The Implications of the Implementation of Blended Learning Strategies for Teaching Students Islamic Education Modules in Primary Schools in Jeddah, Saudi Arabia

Questionnaire

		YES	NO	
1.	Does your research involve living human subjects?	√		IF NOT, GO TO DECLARATION AT END
2.	Does your research involve only the analysis of large, secondary and anonymised datasets?		√	IF YES, GO TO DECLARATION AT END
3a	Will you give your informants a written summary of your research and its uses?	√		If NO, please provide further details and go to 3b
3b	Will you give your informants a verbal summary of your research and its uses?	√		If NO, please provide further details
3c	Will you ask your informants to sign a consent form?	√		If NO, please provide further details
4.	Does your research involve covert surveillance (for example, participant observation)?		√	If YES, please provide further details.
5a	Will your information *automatically* be anonymised in your research?		√	If NO, please provide further details and go to 5b
5b	IF NOWill you explicitly give *all* your informants the right to remain anonymous?	√		If NO, why not?
6.	Will monitoring devices be used openly and only with the permission of informants?	√		If NO, why not?
7.	Will your informants be provided with a summary of your research findings?	√		If NO, why not?
8.	Will your research be available to informants and the general public without restrictions placed by sponsoring authorities?	√		If NO, please provide further details
9.	Have you considered the implications of your research intervention on your informants?	√		Please provide full details
10.	Are there any other ethical issues arising from your research?		√	If YES, please provide further details.

Further details
5b) See consent form
9) I have considered the ethical issues and discussed these with my supervisor and with colleagues. The ethical risk of harm is very low, and should the study indicate benefits from, this could be of potential benefit in the longer term.
Continuation sheet YES/NO (delete as applicable)

Declaration

I have read the Department's Code of Practice on Research Ethics and believe that my research complies fully with its precepts. I will not deviate from the methodology or reporting strategy without further permission from the Department's Research Ethics Committee.

Signed: Date: 17/09/2014

Proposal discussed and agreed by supervisor (for students) or colleague (for staff):

Name Professor Steven Higgins on 22nd September, 2014.

SUBMISSIONS WITHOUT A SYNOPSIS OF THE RESEARCH PROPOSAL WILL NOT BE CONSIDERED.
IF YOUR RESEARCH INVOLVES DATA GATHERING PLEASE PROVIDE DETAILS OF HOW THIS WILL BE HANDLED (INCLUDING CONSENT FORM). GENERIC CONSENT FORM AVAILABLE IN CODE OF PRACTICE

Ethical Approval

Durham University
School of Education

Shaped by the past, creating the future

13 October 2014

Maram Mohammed Jannah
Education

m.m.h.jannah@durham.ac.uk

Dear Maram

I am pleased to inform you that your application for ethical approval in respect of 'The implications of the implementation of blended learning strategies for teaching students Islamic education modules in primary schools in Jeddah, Saudi Arabia' has been approved by the School of Education Ethics Committee.

May we take this opportunity to wish you good luck with your research

Islamic Studies Teachers' Perceptions of Using a Blended Teaching Approach for Teaching the Islamic Education Curriculum in Saudi Arabia

Introduction

The world has seen massive changes in many different areas, including education. Due to this rapid change, the education sector has adopted new digital technologies for the delivery and development of education. As a result of the escalating use of technology, some of the methods of teaching have changed from basic to not only sophisticated, but more interactive methods. However, the use of IT tools alone are insufficient. They lack the advantages of traditional face-to-face interaction.

Aims

This PhD project examines the effectiveness of using a blended teaching approach (Figure 1) in teaching Islamic education modules in girls' primary schools. Furthermore, it investigates participants' perspectives on whether a blended approach is suitable for teaching all Islamic education modules or if only traditional methods are ideal for teaching some Islamic education modules.
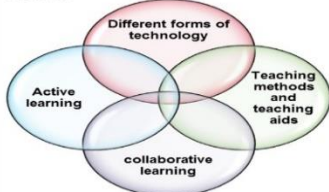
Figure 1: The Blended Teaching Framework

Islamic Education Curriculum

The aim for teaching the Islamic education curriculum is not to increase students' knowledge of different religions, but to teach them about the Islamic religion, in hopes of helping them to become better followers of Islam – people whose words and actions are influenced by Islamic principles and values. Additionally, Islamic education teachers should inspire students to practice what they have learned. These objectives of teaching Islamic education are manifestly displayed through the Islamic education modules (Figure 2).
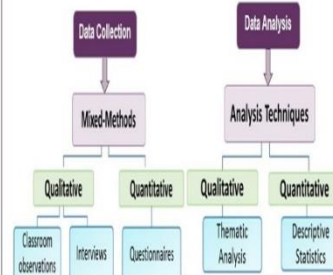
Figure 2: Islamic Education Modules

Methodology

Figure 3: methods used for data collection and analysis

Data Sources

Figure 4: Online questionnaire, WhatsApp and Telegram applications

Results

The result of a factor analysis of the respondent data (Figure 5), using a Likert type agreement scale 'strongly disagree', 'disagree', 'agree' and 'strongly agree', suggested that nine variables can be loaded under two factors (Table 1). The first factor which includes four items labelled as 'Teachers' Needs'. The eigenvalue of this factor is 4.63 and explains 51.5% of the variance. The second factor includes five items labelled as 'Students' Needs'. The eigenvalue of this factor is 1.31 it explains 14.6% of the variance.

Items	Item Loadings		Alpha
	Factor 1	Factor 2	
Increases my productivity when preparing for the lesson	.814		
Eases linking the lesson contents to the student's reality	.807		.840
Helps to achieve the curriculum objectives	.794		
Simplifies the lesson's content in the student's textbook	.741		
Increases the flexibility of my teaching time		.774	
Suits both high and low ability student		.763	
Facilitates interaction between me and student		.670	.804
Helps students to develop new skill		.655	
Helps students to exchange Knowledge		.579	

Table 1: Factor analysis of Teachers' Perceptions of Using a Blended Approach
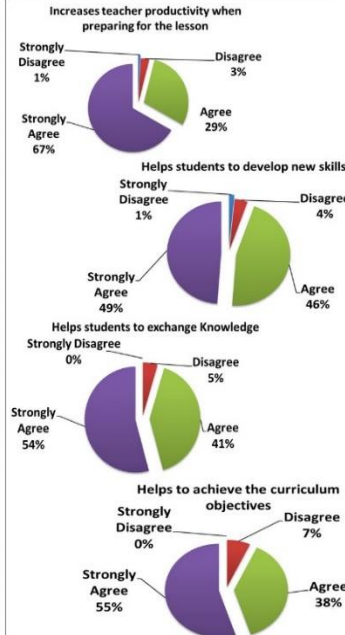
Figure 5: Islamic Studies Teachers' Perceptions of Using a Blended Teaching Approach

This result implies that using different learning activities may help teacher to achieve specific curriculum objectives. Moreover, facilitating interaction among students, linking the lesson content to the student's experience possibly helps students to exchange knowledge and to develop new skills.

Research Contribution

This study fills the gap in the literature about the effectiveness of applying blended learning in teaching Islamic education in Saudi Arabia. Researchers may further develop or evaluate the blended teaching framework for use in teaching other subjects or other types of schools, such as boys' primary schools.

Conclusions and Future Work

Islamic Studies teachers believe that using a blended teaching approach increases their productivity when preparing for their lessons.
This study aims to improve the method of teaching Islamic education and to provide Islamic Studies teachers with knowledge about a blended teaching approach and the advantages and disadvantages which are associated with implementing such an approach; thus, to give teachers a clear vision of the possibility of enhancing the Islamic lessons without fear of undermining the respected status of the academic content.
In future work, this study could be conducted in a form of experimental study with two groups of student (control group and experimental group) to identify the impact on outcomes.

References
Al-Qahtani, A. A., and Higgins, S. E. (2012) Effects of traditional, blended and e-learning on students' achievement in higher education. *Journal of Computer Assisted Learning*, 29 (3): 220-234
Alebaikan, R. (2010) *Perceptions of blended learning in Saudi universities.* Doctor of Philosophy Thesis, University of Exeter

Research: Maram Jannah

Supervisor: Prof Steve Higgins