

INFORMATION AND COMMUNICATIONS TECHNOLOGY INTEGRATING AT
TATWEER SCHOOLS: UNDERSTANDING EXPERIENCES OF SAUDI FEMALE
ENGLISH AS FOREIGN LANGUAGE TEACHERS

A DISSERTATION

SUBMITTED TO THE GRADUATE SCHOOL

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE

DOCTOR OF PHILOSOPHY

BY

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MUNCIE, INDIANA

JULY 2016

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Abstract

DISSERTATION: Information and Communications Technology Integration at Tatweer Schools: Understanding Experiences of Saudi Female English as Foreign Language Teachers

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DEGREE: Doctor of Philosophy, Educational Studies

COLLEGE: Teachers College

DATE: July 2016

PAGES: 121

This qualitative study explored and described the lived experiences of five Saudi female EFL teachers' Information and Communications Technology (ICT) integration at Tatweer schools. Phenomenological research was utilized as a methodology for this study. Open-ended semi-structured interview questions were used to collect data. Vagle's (2014) phenomenological data analysis approach guided the analysis. Participants were asked to share their lived experiences and the meaning of those experiences; each participant had two face-to-face interviews, which were audio recorded, with the consent of the participants, and then transcribed verbatim. Five findings emerged from the analysis, which answer the questions of the study. Participants felt good about being a woman and believed that gender does not make a difference in their own abilities of integrating ICT, unlike technicians. The majority of the participants described their experience of integrating ICT mostly as a presenting tool to deliver knowledge to students. Participants' reasons to integrate ICT into teaching were to consider professional needs and students' needs. The issues that affect their ICT integration included lack of school support, and lack of time, and lack of training. These findings have implications for Tatweer policy decision makers, and contribute to the literature on gender digital divide and ICT integration issues in developing countries such as Saudi Arabia.

Acknowledgments

My greatest thanks are to Allah Almighty for His infinite blessings, one of which is the achievement of finishing this dissertation. I thank Him for blessing me with a number of important and valued people who directly or indirectly assisted me during my journey to achieve the PhD degree. I thank these people and express my sincere appreciation and gratitude to them.

My appreciation and gratitude are to my dear supervisors and professors. My deepest thanks are to my supervisor Dr. Ayesha Sadaf for her valued guidance, consistent encouragement, and continued support. Also I wish to express my appreciation of Dr. Jon Clausen, Dr. Sheron Fraser-Burgess, and Dr. Linda Taylor, my committee members, for their valuable suggestions, sincere encouragement, positive criticism, and thoughtful comments. As well, I want to thank Dr. Elena Polush, for her valued input on my research methodology. Moreover, I want to give thanks to Dr. Nancy Brooks who was always there for me through the rough times during my doctoral study years.

I also would like to thank my friends Maureen Sanders Brunner and Mr. Mark Bevington for their much-needed comments on the initial drafts of the proposal of this dissertation. My thanks are extended as well to my colleagues Dr. Joshua Miller, Dr. Ben Hotmire and Dr. Aaron Bruewer for sharing their dissertations that utilized a phenomenological approach, which helped me in crafting my own. Indeed, I am indebted to my assistant for her help with the analysis process, and to all of the study's participants for their time and willingness to share their experiences and stories.

Special thanks and appreciation are due to my precious parents Aisha and Mohammed Fallata who have stood beside me since day one in my life and provided endless prayers, positive

encouragement, tremendous support, and unconditional love. My love, gratitude, and respect to them are beyond my ability to describe. Many thanks from the bottom of my heart to my beloved siblings, Dana, Reem, Ghaith, and Shahd for standing by my side all the time. My thanks to my extended family and my friends, back home, who were encouraging me, believing in me, praying for me, and wishing me success.

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Chapter One: Introduction

I have always been interested in topics that talk about marginalization, especially gender issues, and have been fascinated by analyzing females' perspectives. For instance, my masters' thesis research was a critical reading of female characters in a novel that talks about resistance. While I have been studying educational technology courses in my PhD program, topics such as the digital divide caught my attention; but the most interesting ones to me were topics that examined digital divide and gender. Learning that a gender gap exists in which females are behind in digital literacy (Cooper, 2006) has provoked me to think about examining female teachers' experiences with Information and Communications Technology ICT integration, an aspect of educational technology.

I am interested in understanding the phenomenon of integration of ICT of Saudi female English as a Foreign Language (EFL) teacher. What are Saudi female EFL teachers' experiences with ICT integration at Tatweer schools, schools that implement King Abdullah's Public Education Development Project, which is a technology-oriented educational reform? How might their beliefs about gender roles in regards to technology affect their ICT integration experiences? How do they perceive the gender-segregated educational system in Saudi Arabia affect their ICT integration?

Statement of the Problem

Almost all aspects of life in the 21st century are affected significantly by technology. The ability to use ICT has become the new literacy for the 21st century (Levin & Wadmany, 2008). Effectively integrating ICT in teaching has several benefits that research has found, such as increasing the quality of learning, providing easy and quick access to a very high volume of information and knowledge, reducing educational expenses, indirectly creating learning

experiences, increasing interest in learning, and increasing learning opportunities (Ghasemi & Hashemi, 2011). Therefore, many governments are investing in integrating ICT in education (Organization for Economic Cooperation and Development, 2011).

Some countries such as Saudi Arabia have realized the importance of ICT integration, and are trying to provide education that produces digitally literate students who can compete on the global level by establishing technology-oriented programs (Tatweer, 2010). One of biggest educational reform programs that aims to integrate ICT is King Abdullah's Public Education Development Project (Tatweer) which has a 2.4\$ billion budget ("Tatweer Co. for Educational Services," 2013).

With such huge investment in ICT integration, it is valuable to investigate the integration of ICT in Saudi education especially in Tatweer schools because these schools push for technology integration. Moreover, it is essential to focus on teachers' experiences in integration because how teachers utilize technology, not the mere availability of technology makes the difference in education (Roessingh, 2014). The review of research on ICT integration revealed that much has been done on structural factors such as training, time and school support that affect technology integration (Chen, 2008; Haydn and Barton, 2008; Wang, 2014), but not so much has been done on teachers' experiences integrating ICT, which should be investigated (Roessingh, 2014).

Up to date, few studies have examined teachers' ICT integration in Saudi schools- for example Almaghlouth (2008) and Oyaid (2009). Almaghlouth (2008) examined Saudi science teachers' perception of the use of ICT to enhance teaching and learning. He surveyed 131 Saudi teachers using a quantitative questionnaire. To examine the teachers' usage of ICT, he asked his participants to answer multiple-choice questions and provided numerical results describing the

frequency of ICT tool usage. Almaghlouth found that most common tools used among science teachers were the projector (56%), presentation software (53 %), and curriculum specific software (36 %). Only two percent of teachers accessed the Internet during lessons. His findings indicate that teachers and students have limited or no access to highly technical equipment such as digital cameras, laptop computers, and scanners, making integrating ICT in science education difficult.

While Almaghlouth's (2008) study focused on the use of ICT by science teachers and utilized a quantitative research methodology, Oyaid's (2009) study employed a mixed method design. Her results indicated that Saudi teachers' use of computers is still in the early stages of implementation as most of the participants mentioned use of computers for writing documents and designing presentations. Her study recommended that further investigation be conducted to better understand teachers' use of ICT.

Although these few studies have produced useful information about teachers ICT use, they do not provide a deep understanding of teachers' experiences with ICT integration because of the focus on the frequency of use and availability of equipment and tools. Moreover, none of the reviewed research on teachers' ICT integration in Saudi examined gender. Regarding the importance of the gender aspect, Cooper (2006) examined the literature of the last 20 years and concluded that a gender digital divide exists not only in the United States but also internationally. In addition, Ezza (2014) mentions "both ICT discourse and research findings suggested that ICT is a masculine preserve and thus a number of world supporting agencies have been created to empower women in it" (p. 73). Although his recent study conducted in Saudi Arabia finds no significance in gender and age in faculty ICT knowledge and skills, the use of ICT in teaching, and the integration of the students' ICT skills into classroom practice, his participants are not

representatives of the Saudi female teacher because as he noted higher education institutions such as the one selected for his study “hire foreign faculty who in some cases have acute social and cultural differences from [Saudis]” (Ezza, 2014, p. 76). Therefore, this study aims to conduct an in-depth exploration of Saudi female EFL teachers’ lived experiences with ICT integration in teaching within Tatweer Schools to provide a deep understanding of this phenomenon in order to supplement the current research and fill in the gaps.

Purpose of the Study

This study is an attempt to explore Saudi female EFL teachers’ lived experiences with ICT integration in their teaching within Tatweer Schools to better understand how gender specifically being female, shapes participants experiences in integrating ICT: in particular, what decisions Saudi female EFL teachers make to integrate ICT tools, and the reasons behind those decisions will be examined. A phenomenological approach will be used to gather data using the teachers’ voices about their experiences integrating ICT at Tatweer schools. The purpose of this study is to analyze Saudi female EFL teachers’ experiences through sociocultural theory framework to understand the phenomenon of their ICT integration practices and beliefs. The study seeks to give Saudi female EFL teachers an opportunity to share their perspectives about ICT integration within Tatweer Schools in Saudi Arabia.

Significance of the Study

The study has practical significance for improving ICT integration at Tatweer schools. The data gathered from teachers at few Tatweer schools would assist decision makers in understanding Saudi female EFL teachers’ concerns, beliefs, and needs regarding ICT integration. The implications of the study can provide leaders of Tatweer project with information on how to best support Saudi female EFL teachers in integrating ICT at Tatweer

schools, as well as give ideas on how to support Saudi female EFL teachers through professional development and training provided by Tatweer project.

Moreover, the study demonstrated the benefit of using phenomenology as a primary research method for investigating educational technology related topics such as technology integration. A phenomenological study was used to conduct this study drawing upon the work of phenomenologists such as van Manen (2014) and Vagle (2014). This study was grounded on interpretive phenomenology to provide rich description of the lived experiences of Saudi female EFL teachers' at Tatweer schools integrating ICT. This study sought to examine participants' experiences about being a Saudi female EFL teacher integrating ICT at their Tatweer schools. The aim was to explore the ascribed meaning teachers place on the phenomenon under investigation. It added to the existing literature in the field of teachers' technology integration by giving an in-depth understanding of the Saudi female teachers' voices.

Research Questions

The main and sub questions that guided this study were as follows:

- 1) What is it like to be a Saudi female EFL teacher integrating ICT at Tatweer schools?
 - a. How do Saudi female EFL teachers' views about technology in relation to gender affect their ICT integration at Tatweer schools?
- 2) What are Saudi female EFL teachers' experiences with ICT integration at Tatweer schools?
 - a. What influences Saudi female EFL teachers' decisions to integrate ICT into teaching?

- b. What issues did Saudi female EFL teachers perceive hinder their ICT integration at Tatweer schools?

Positionality Statement

I have great interest in the topic of this study for many reasons. First, topics that tackle marginalization, especially gender issues, have always interested me. I have been fascinated by analyzing the female perspective on various issues. For instance, my masters' thesis research was a critical reading of female characters in a novel that talks about resistance. Hence, gender in regards to digital divide is of great interest to me.

Second, my excitement about this study's context that will look at an aspect of a huge national educational reform program emerges from being a Saudi educator who has interest in the educational system of the country. Moreover, my experience in learning and teaching educational technology courses made me more interested in the Tatweer project because it is an educational reform that pushes for technology integration.

Lastly, being an educator and teacher provoked my interest in learning more about teachers' experiences. I earned my B.A. in English language from a Teachers College, and was educated to teach English as a Foreign Language (EFL) at both the intermediate (grades 7-9) and the secondary (grades 10-12) levels, which enabled me to relate to teachers of EFL. Moreover, being a Saudi female speaking the same language that the participants speak, and sharing the same cultural background would help me communicate with them and extract meaning from the data that will be gathered. My role as a researcher was to construct meaning of participants' experiences to illuminate the phenomenon under investigation.

I expected participants to be excited to share their experiences through in-depth interviews in an effort to help provide information that might help improve the Tatweer program.

I expected them to describe the challenges they face integrating ICT at Tatweer schools, which might include the structural factors, and personal beliefs. I assumed that they will be excited to share their views on gender roles from a female perspective of integrating technology. These assumptions were based on previous conversations on Tatweer project, technology integration, and gender with technology supervisors at few Tatweer schools.

Definition of Key Terminology

Effective Integrate of Technology

In this study it is defined as “[Utilizing] technology as a learning device (van Braak, Tondeur, & Valcke, 2004) or [requiring] students to use technology (Center for the Advancement of Research and Development in Educational Technology, 2009)” (Liu, 2010, p. 1012).

English as a Foreign Language

English as a foreign language (EFL) in this study refers to the teaching of English language in a non-English-speaking region.

Information and Communications Technology

Ghasemi and Hashemi (2011) define information and communication technologies (ICTs) as a "diverse set of technological tools and resources used to communicate, and to create, disseminate, store, and manage information" (p. 3098). They include “computers, the Internet, broadcasting technologies (radio and television), and telephony" (p. 3098) in these technologies.

Tatweer Company for Educational Services

Tatweer Company for Educational Services as a subsidiary of Tatweer Education Holding Company is dedicated to K-12 educational development in Saudi Arabia and beyond (“Tatweer Co. for Educational Services”, 2013).

Tatweer Education Holding Company

Tatweer Education Holding is the first Saudi company to develop the education sectors. It was established in accordance with a Royal Decree from the Custodian of the Two Holy Mosques King Abdullah bin Abdulaziz in Nov 2008. Tatweer Holding Company (THC), which is wholly owned by the government, was established to support the development of the public educational system through the provision of all core and supporting educational services, development, establishment, acquisition, operation, and maintenance of educational projects, and the execution of related work and activities. The Company is tasked with the implementation of the King Abdullah bin Abdulaziz Project for Development of Public Education and any additional educational programs (“Tatweer Education Holding Company,” 2012).

Tatweer Project

King Abdullah bin Abdulaziz Project for Development of Public Education is commonly known as Tatweer. Its projected budget was 2.4\$ billion. Unlike the previous reform projects that were supervised by the Ministry of Education, a private company called *Tatweer for Educational Services* established in 2012 started managing the Tatweer project (“Tatweer Co. for Educational Services,” 2013). Tatweer is independent of the Ministry of Education and is directly supervised and reports to the king, which reflects its importance as stated by Al-Hakami (“Chicago forum,” 2010).

Tatweer Schools

Public schools that have implemented either phase one or phase two of the Tatweer project (Alyami, 2014). These schools were selected to be Tatweer schools because of their student high achievement results and availability of resources and facilities to support the educational process. (“Tatweer educational forum,” 2009).

Tatweer Smart Schools (TSSs)

Public schools in Saudi Arabia that got equipped with various ICT resources including interactive whiteboards, LCD projectors, digital cameras, and laptops for every teacher and student (Tatweer, 2010).

Organization of the Study

This qualitative research study was designed to investigate the lived experiences of Saudi female EFL teachers with ICT integration in their teaching within Tatweer Schools in Saudi Arabia. A phenomenological method of qualitative inquiry was used in order to conduct in-depth interviews with the participants in person. Chapter Two covers the relevant literature associated with this study. Literature addressing the need for this study is reviewed. Topics that are covered include educational system in Saudi Arabia, Tatweer Project, ICT integration, EFL teaching, and gender. Chapter Three of this study presents the methodology. It includes the rationale behind choosing a qualitative inquiry and explores interpretive phenomenology as the most appropriate approach for capturing the essence of ICT integration experienced while being Saudi female EFL teachers at Tatweer schools.

Chapter Two: Literature Review

Introduction

This chapter provides a detailed review of the existing related literature and demonstrates the need for the study. It starts with a brief explanation of the educational system of Saudi Arabia, the setting of this study, and a historical overview of ICT integration in education. Then, it gives a detailed explanation of the Tatweer project to provide an understanding of the context of the study in Tatweer schools. Then, it covers research on ICT integration in relation to the factors affecting teachers' integration. Finally, sociocultural theory and feminist perspectives are reviewed to provide an understanding of the framework that was used in the study.

The literature review was conducted through the use of multiple tools beginning with Google Scholar, and Ball State University Library's *One-Search*, searching for Tatweer and ICT integration. The next step was searching *ProQuest Dissertations & Theses* to review relevant phenomenological studies that examined technology integration, and Saudi research on Tatweer Project. Dissertations utilized dated from 2009 to 2015 in order to ensure reviewing recent research. For other peer-reviewed articles specific databases were accessed such as Academic Search Premiere, Educational Resource Information Center (Eric), JSTOR, PsycInfo and EBSCOhost. Search keywords used included "teacher beliefs", "technology integration", "gender", "Tatweer", "Instructional technologies", "English language teaching", "EFL" and "ICT" to identify relevant research.

Educational System in Saudi Arabia

The latest educational reform in Saudi Arabia, the Tatweer Project, was established in 2007 as a response to "the increasing criticism to the Saudi curricula and continues calls from stakeholders to improve the whole educational system in the country" (Kamal, 2012, p. 24). In

order to understand the need for this particular reform it is essential to shed some light on Saudi Arabia and its educational system.

The kingdom of Saudi Arabia is the largest country on the Arabian Peninsula. It is divided into 13 regions, each of which has local administration responsibilities, including education (Central Department of Statistics and Information, 2010). A higher council for education that supervises education affairs oversees the education system in Saudi Arabia. The Ministry of Education (MOE) established in 1952 (Alqahtani, 2012) was responsible for the provision and resourcing of free elementary, intermediate and secondary education. On the other hand, the Ministry of Higher Education (MOHE) administered universities and colleges. On January 2015, a royal decree was issued to merge both under MOE (Ministry of Education, 2015). Basically, the government controls the educational system. MOE has many projects for developing Saudi education (Ministry of Education, 2014) and the King Abdullah bin Abdulaziz Project for Development of Public Education in Saudi Arabia, commonly known as Tatweer, is one of the latest projects. Tatweer is an Arabic word, which roughly translates in English as ‘development.’

Technology in Saudi Educational System

ICT uses and applications have increased rapidly in the last ten years in Saudi Arabia. For example, the total number of mobile subscriptions grew to around 56.1 million by the end of 2011 third quarter, with 198% growth, compared to 12 % in 2001 (Ministry of Communication and Information Technology, 2011). In addition, the number of Internet users increased from around one million in 2001 to approximately 13 million at the end 2011 reaching to about 46% of the population compared to only 5% of the population at the end of 2001 (Ministry of

Communication and Information Technology, 2011). Technology uses in education needed to catch up with this rapid growth.

Before the Tatweer Project, which is technology-oriented, there were several reform policies that aimed to integrate technology in education. Wiseman, Astiz, & Baker (2013) provided a brief historical overview of technology-based education policy reform established in Saudi Arabia in order to investigate the reason for the unsuccessful application of these policies. The first national educational development plan in Saudi Arabia that specifically addressed the role of technology in education took place from 1985-1990 and was named the Fourth Plan for Educational Development (Ministry of Education, 2014). Schools that adopted this reform were labeled Developed High Schools (Wiseman et al., 2013). This reform was abandoned due to a lack of available technology resources as stated by Wiseman et al. The following plans, The Fifth Plan for Educational Development (1990 – 1994), and the Sixth Plan for Educational Development (1995 – 2000) had similar rationale; to “increase the use of technology to modernize curricula and teaching methods as part of the country’s commitment to developing human capital nationwide” (Wiseman et al., 2013, p. 40). Wiseman et al. argue that the traditional culture could be a reason for limiting the implementation of technology-based education, specifically ICT-based instruction. Moreover, they claim that not utilizing data in planning for such policies either because data is incomplete or because of a lack of the capacity to analyze the available data, is one of the main reasons that hinder the successful implementation of these reform policies.

Technology-based education has been of interest to Saudi Education since the 1980s, but there has been a noticeable increase in importance that is being given to ICT in education according to Oyaid (2009). She believes that:

Introducing ICT into education is now a governmental tropism towards improving and developing the current educational system so that Saudi Arabia will be able to compete with other developed nations. Notably, since half of its population [is] of school age, educational issues are of particular importance for this young nation. (p. 27)

This increasing importance given to ICT-based learning motivated Oyaid (2009) to investigate teachers' ICT usage in ten secondary schools in Riyadh. She interviewed 14 teachers, ICT coordinators, and head teachers. In addition, she collected data from 266 teachers who completed a questionnaire on their ICT usage. She found that teachers have positive attitudes towards ICT, but there are three main factors that hinder their ICT usage. These factors are time constraints, lack of training, and financial issues. Moreover, she found that teachers' ICT use was influenced by the school's policy more than MOE policy. Oyaid's study is relevant because it focuses on teachers' perceptions and views regarding ICT use in Saudi education. It was interesting to see how her results relate to this study's findings. Knowing that the Tatweer project provides training for teachers and equips schools with resources it was helpful to understand how the experiences of Saudi female teachers' integrating ICT in this study were different or similar to Oyaid's study.

The Tatweer Project

The Tatweer project is a huge project including several subprojects that interact with each other to achieve the governments' main goal of moving Saudi Arabia's education to the next level, as Dr. Ali Al-Hakami, General Manager of Tatweer, declared ("Chicago forum," 2010). The aim of the Tatweer Project is to improve the general education by accomplishing four main goals: improving the quality of school curricula on the basis of the nature of the learner, social conditions and ideals, and the selection and organization of subject matter; enhancing classrooms

by forefronting technology resources; qualifying teachers to use technology and integrate it into their curricula; and focusing on extra- and co-curricular activities to enhance practical experience, extreme creativity, higher-order cognitive skills, inquiry skills, and self-confidence of students, as well as to boost their educational, social, and attitudinal development (Tatweer, 2010). The government's ambition is to transform the educational system in order to "provide all students with the knowledge and skills that they need to succeed in an increasingly networked global knowledge economy" (Tatweer, 2010, para. 1).

The Tatweer Project, which originated in 2007, is the latest curriculum reform program in Saudi Arabia. The Tatweer reform program is of concern not only to educators, but also to all citizens who care about the educational system outcomes in Saudi Arabia. As mentioned earlier, this reform has four main goals but the focus in this study was on the goal directly related to the purpose of the study. This goal aims to improve the public educational system's quality through the integration of Information and Communication Technologies (ICT). This particular goal was given a specific timeframe. In 2007, MOE started to transform all public schools into Tatweer Smart Schools (TSSs) and was supposed to achieve this by 2012. This project was intended to "institutionalize information and communication technology (ICT) resources at the classroom and school building-levels to create a new paradigm for teaching and learning in Saudi Arabia" (Wiseman, Astiz, & Baker, 2013, p. 41).

Initially, the Saudi Tatweer policy makers chose 50 schools to be transformed into TSSs. These transformations involved the purchasing and implementation of various ICT resources for classroom use, including interactive whiteboards, LCD projectors, digital cameras, and laptops for every teacher and student (Tatweer, 2010). The number of TSSs was supposed to increase, but Alyami (2014) reported that Tatweer policymakers decided that it was too costly to transform

all public schools in the country into TSSs. In response to policy makers' concerns, a new phase was implemented in 2011. Phase two did not include as many technological resources, but, according to Alyami, "the schools were given more autonomy in their decision-making and more freedom in the way they manage and teach" (p. 1429) than traditional public schools.

Although not all Tatweer schools are equipped with various ICT resources, the goal of the project has not changed in the second phase because there is an understanding of how important this goal is to Saudi Arabia's education, especially considering the fact that almost half the Saudi population is under the age of 20 (Central Department of Statistics and Information 2010). This makes that Saudi's population digital natives (Prensky, 2001). According to Prensky (2001), digital natives were not just born into a digital and information age, they speak the digital language fluently, and their whole lives revolve around technology. Prensky believes that in order to connect the school to the world outside that revolves around technology, educators should integrate technology so those digital natives can get a meaningful education. Technology should be integrated with the goal of preparing students who are equipped with 21st century skills, to compete on a global level and successfully work in the 21st century (Partnership for 21st Century Skills, 2009).

According to Tatweer Co. for Educational Services (2013) there are several aspects to Tatweer Project; these aspects include curriculum development, improving educational standards and assessment to fit 21st century needs, improving professional development, and enhancing schools' environments to promote meaningful learning. Meaningful integration of ICT that will help meet 21st century students' learning needs is still one of the main goals because it is one of the ways to improve educational outcomes. Warschauer and Mathuchniak (2010) noted that the diffusion of the Internet and computers occurred along with the transition from an industrial to

an informational economy. Therefore, it is the educators' duty to utilize the technology because "the ability to use it and adapt it, is the critical factor in generating and accessing wealth, power, and knowledge in our time" as they cite Castells (1998) (p. 180). These are all things that developing countries could use more of in order to improve, and Saudi Arabia is not an exception. Therefore, educators should focus on educating students to use technology effectively and improve the necessary skills for using technology.

According to Partnership for 21st Century Skills (2009), learning and innovation skills are what separate students who are prepared for increasingly complex life and work environments in today's world and those who are not. Students need to be creative and able to think critically to solve problems. Moreover, we live in a technology and media-driven environment, which is marked by access to a huge amount of information. Students need to be able to collaborate and contribute to be successful globally as stated by the Partnership for 21st Century Skills. Improving 21st century skills is a major goal of education for many educational institutions and programs nowadays and Tatweer is one of them (Tatweer, 2010). However, technology integration in the Tatweer project does not appear to be done effectively, based on the little research done on the topic. For instance, Wiseman et al. (2013) believe that successful technology integration at Tatweer schools is hindered because of teacher, societal, and institutional related factors.

The Tatweer project is an example of education reform that is focused on technology-based education in Saudi Arabia. As explained earlier through the brief historical overview provided by Wiseman et al. (2013), it is the latest of several technology-oriented educational reforms that have been established in the country since the 1980s. The Tatweer project adopts more active learning strategies such as inquiry-based, problem-based, project-based, and

collaborative learning, as the learning norm (Tatweer, 2010). It pushes for a student-centered approach to learning. Tatweer schools' curriculum emphasizes using technology in education to support student collaboration and help them gain 21st century skills (Tatweer, 2010).

In order to achieve this goal, Kamal (2012) pointed out that in 2010 MOE and Tatweer policy makers signed a contract with Microsoft worldwide program "Partner in Learning" to train teachers in integrating technology in Project Based Learning (PBL) environment. These are steps to achieve incremental change and address one of the issues with successful implementation of the project, which is the lack of professional development and training for teachers (Sywelem & Witte, 2013).

The Tatweer project aims to "prepare schools to be appropriate place to educate and support students and help them to reach high achievement levels in a healthy, safe, and supportive environment that prepare students to be active and responsible citizens" (Tatweer, 2010). Alyami (2014) explains that when comparing traditional public schools in Saudi Arabia to Tatweer schools, the latter have more autonomy to plan, execute, and evaluate the learning process. In such a learning environment, teachers have more freedom to design learning activities that are more student-centered using technology that will help students use high-ordered thinking skills.

This is the context of Tatweer project and schools that are labeled as Tatweer schools. It looks promising, but it has not been fully evaluated and there is a need to investigate technology integration because it is one of the main factors that differentiates this education policy reform from previous reforms. Knowing how technology is integrated based on teachers' views would provide a better understanding of this huge project since it is not the availability of technology

that will make the difference in education, but how the technology is utilized by teachers (Roessingh, 2014), and how their attitudes affect their technology use decisions (Rogers, 1995).

It is important to indicate that the phenomenon that was investigated in this study, experiences of Saudi female EFL teachers' integrating ICT at Tatweer schools, to the best of my knowledge, has not been researched before. There is little research done about the Tatweer project in general which is increasing gradually. I assume that the scarcity of research on the Tatweer project exists probably because it is a relatively recent project.

Examples of the limited research that exist are Alenezi's (2015) study, which examined the factors of ICT implementation through technical, political, and cultural perspectives. Another example is Al-Madani and Allaafijiy (2014), and Sywelem and Witte (2013), which looked at the professional development of teachers. Also there is Alnahdi's (2014) research, which studied educational change. A few dissertations that tackle the Tatweer Project in some way are Barri (2013) and Kamal (2012). Barri looked at the following variables: teachers' concerns, motivation, and barriers but his focus was not Tatweer schools only, but included different types of schools in Saudi Arabia. On the other hand, Kamal focused on the implementation of technology-assisted PBL at Tatweer schools. It is important to note that Kamal's study was limited to Tatweer schools in only one educational district of the 13 districts in Saudi Arabia. Up to the time of conducting this study, no research focusing on teachers' experiences in integrating technology in teaching at Tatweer schools existed.

This study was set in a unique cultural context, Tatweer schools in Saudi Arabia, for several reasons. First, it is because Tatweer schools are an important aspect of a technology-oriented educational reform project in Saudi Arabia (Tatweer, 2010). Typically, as Ghasemi and Hashemi (2011) noted, developing countries do not have a long history of using computers and

the Internet in education because of limited infrastructure and the high cost of access. Setting the study within the Tatweer project decreased the second limitation, high cost of access, because Tatweer schools are supposed to be technology-oriented schools where resources are provided. Second, because it was essential to examine the cultural aspects from teachers' perspective in regards to ICT integration for a meaningful ICT integration. Although Syrian teachers in Albirini's (2006) study believed that ICT is culturally appropriate for their schools and society, they thought that some issues need to be solved, such as providing alternative computers that are more appropriate to the Arabic culture and identity. Drawing on this finding an interest in understanding Saudi teachers' perspectives about the cultural aspect of ICT integration experiences among other aspects was thought to be meaningful for better ICT integration.

21st Century Skills and ICT Integration in Teaching and Learning

One main role of education is to prepare learners for the future, so educators need to focus on improving 21st century skills that would prepare today's students for their future (Jacobs, 2010). The partnership for 21st century skills (P21), an American organization advocating 21st century readiness for every student has identified those skills by creating a framework for the 21st century education that has been adopted by 16 states (Partnership for 21st century skills, 2011). The framework is created to help teachers integrate skills into core academic subjects. The framework includes content knowledge, skills, experiences and literacies to prepare students for their future careers. Successful adaptation of this framework requires system support, including standards and assessment, curriculum and instruction, professional development, and learning environments (Partnership for 21st century skills, 2011).

The P21 framework divides the 21st century skills into three major categories. First category is learning and innovation skills, which includes critical thinking and problem solving,

communication and collaboration, and creativity and innovation. The second category is information, media, and technology skills, which includes information literacy, media literacy, and ICT literacy. The third category is career and life skills, which includes flexibility and adaptability, initiative and self-direction, social and cross-cultural interaction, productivity and accountability, and leadership and responsibility (Partnership for 21st century skills, 2011).

As mentioned earlier, ICT literacy is a subcategory of 21st century skills; integrating ICT in teaching effectively has several benefits that research has found, such as increasing the quality of learning, providing easy and quick access to a very high volume of information and knowledge, reducing educational expenses, indirectly creating learning experiences, increasing interest in learning, and increasing learning opportunities (Ghasemi & Hashemi, 2011). With all these benefits to offer, the use of computers and the Internet is unfortunately not where it should be in developing countries due to several reasons such as limited infrastructure (Ghasemi & Hashemi, 2011). In countries where English is taught as a foreign or a second language, teachers of EFL are the ones who utilize ICT in their teaching the most (Albirini, 2006). According to Oyaid (2009), who interviewed 14 teachers about their usage of ICT and their perceptions towards this usage, eight of those teachers commented that there is a need for professionally developed resources that teachers can access because most professionally developed ICT resources are in English which is why many of teachers are not able to utilize them due to the language barrier. Teachers of EFL might not face this particular barrier because they know the language.

The integration of ICT in language teaching has started more than three decades ago, since the 1960s (Li & Walsh, 2011). The development of technology has affected the practices of teaching language in several ways (Dudeney & Hockly, 2012). According to Warschauer and

Healey (1998), when ICT is integrated effectively, it yields many benefits such as creating an interactive classroom, motivating learners, and providing learners with authentic language input (Li & Walsh, 2011), because teachers can use technology tools such as the Internet and Web 2.0 tools to help students take part in online communities (Dudeny & Hockly, 2012) where the native language is used.

Factors Affecting ICT Integration

Training

Technology training is one of the most effective factors in ICT integration. There is a need for focused training in content and tools because it is more effective for teachers as Haydn and Barton (2008) and Chen (2008) have found out. Chen found that EFL teachers who use the Internet actively are the ones who had technology training, which indicates the importance of technology training for effective technology integration in teaching. He concludes that there is a need for training focused on integrating technology in teaching language, "continuous professional programs should be unique to language instruction and meet the needs of language teachers" (Chen, 2008, p. 1023). In addition to training designed for integrating technology in language teaching, Haydn and Barton (2008) suggest "allowing teachers to pursue particular facets of ICT in some depth may be more productive than putting them through 'general' training courses" (p. 446). The information available about training for Tatweer teachers does not explain whether or not it specialized technology training for different subjects. Following is what Al-Madani and Allaafiajiy (2014) provide about training provided by the Tatweer Project:

[The] Tatweer project has collaborated with Centre for British Teachers "CFBT" to devise and continuously implement a teacher training programme in Saudi Arabia (www.cfbt.com). Professional development programs initiated in Saudi Arabia (Ministry

of Education, 2007) are to specifically train teachers in troop (Ministry of Education, 2003) as a fact that teacher-related development and training is the most significant predictor for success technology adoption (Almalki & Williams, 2012) and a critical factor in the successful integration of ICT in Saudi Arabia. (p. 103)

Time

Time is another important factor that affects teachers' ICT integration. Teachers believe that it is time consuming to find appropriate resources, create appropriate material, and develop the skills needed for advanced technology (Chen, 2008). Some consider it to be an individual level factor (Wang, 2014), but others think of it as an institutional level factor since the school can provide it to the teachers; for instance, by minimizing teachers' managerial responsibilities so they have more time to invest in ICT (Oyaid, 2009). When viewed as an institutional level factor, it is essential for schools to give the teachers enough time to explore the potential of ICT (Haydn & Barton 2008). This would help them improve their use of ICT in teaching, especially if they had a chance to cooperate with other teachers teaching the same subject (Haydn & Barton, 2008). All of these studies that examined teachers' views about time or the lack of time do not examine the Saudi context. Few studies in the Saudi context talked about teachers' views about time and successful ICT integration. For instance, Oyaid's (2009) study investigated Saudi secondary school teachers' ICT usage and its relation with ICT educational policy, teachers' perceptions and attitudes towards the use of ICT in the teaching and learning process, and their envisions of possible and preferable usage of ICT in future education. She collected data from 14 teachers that she interviewed, and from 266 teachers drawn from ten secondary schools who answered a questionnaire. Unfortunately her study is a bit outdated, more than 6 years ago, focused on Riyadh region only, and did not investigate Tatweer schools.

School Support

This is a major factor that constitutes of many sub-factors such as providing equipment, funding, maintenance of infrastructure, and access (Chen, 2008; Wang, 2014). Inadequate institutional support hinders teachers and creates a barrier to effective ICT integration in teaching (Chen, 2008). Ensuring teachers that their schools have long-term plans for technology integration that will support them in their technology integration would eliminate one of the integration barriers (Chen, 2008). Unlike the previous factor, there is a recent local study (Alyami, 2014) that indirectly touches upon school support at Tatweer schools. The majority of Alyami's participants have a positive attitude about the Tatweer Program. They are given "a broad area of autonomy" and believe that "the work ethos within these schools became established and professional" (Alyami, 2014, p. 1428). The issue with Alyami's study which "investigate the impact of educational policy development on practice within Tatweer Schools in [Saudi Arabia], to seek in which aspects they are innovative and to examine the level of autonomy" (p.1424) is that her participants are all head teachers or educational experts, not classroom teachers at Tatweer schools. She interviewed eight participants: five head teachers, one deputy (ex-head teacher), one educational expert and one Tatweer Unit's member. None of the interviewed participants are a typical classroom teacher; therefore, their views might be different based on the difference of their work nature. Typical classroom teachers might not have the same opportunities and support given to head teachers.

Teachers' ICT Integration in Teaching

As explained earlier, integrating ICT in language teaching has many benefits (Ghasemi & Hashemi, 2011) but needs to be utilized effectively by teachers in order to achieve these benefits. It is important to emphasize García-Valcarcel's (2010) differentiation between ICT use and ICT

integration. He explains that the use of ICT in the classroom is not an equivalent to ICT integration in teaching; the latter is much more advanced, and requires teachers to use ICT more frequently in a systemic manner. Therefore, as Roessingh (2014) suggests, teachers' integration of ICT is what needs to be examined; this is the aim of this study. Although teachers' experiences of integration of ICT have been studied widely internationally, not much has been done in Saudi Arabia.

It is important to examine teachers' experiences in integrating technology in teaching because such research will shed light on the kind of educational technology practices and uses that teachers implement in their teaching. Not all technology practices are effective. Ertmer (2005) asserts that if technology is not used in ways that support student-centered learning, these uses of technology are not considered to be best educational technology practices. Therefore, in order to integrate technology meaningfully, it is crucial to understand how teachers are implementing it.

This study focused on EFL teachers because as Albirini (2006) cited Lafford and Lafford (1997, p. 215) "the field of foreign language education has always been in the forefront of the use of technology to facilitate the language-acquisition process." Many researchers such as Wang (2014), Chen (2008), and Albirini (2006) also found that most EFL teachers have positive attitudes towards the incorporation of technology in teaching. Although EFL teachers have positive attitudes towards technology integration, they are reluctant to use ICT in their teaching (Wang, 2014). Considering these findings when investigating Saudi female EFL teachers' views on integrating ICT at Tatweer schools helped to understand why teachers might be feeling reluctant to integrate ICT in their teaching.

ICT and Gender

There are many studies that examine gender in relation to technology (Agbatogun, 2013; Cooper, 2006; Teo, 2014). This topic is examined from several angles. For instance, Cooper (2006) analyzed the literature of the last 20 years to conclude that females are at a disadvantage compared to males when learning with computer-assisted software. He believes that a digital divide in regards to gender exists. He found out that this digital divide is basically an issue of computer anxiety, which is rooted in socialization patterns of gender roles and stereotypes that associate computers with boys. Likewise, Huffman, Whetten, and Huffman (2013) assert that gender roles and not the biological sex alone is the source of the difference in technology self-efficacy among university students, which they cited McDonald and Siegall (2001) to define as “the belief that one has the sufficient and correct abilities and skills to be successful when dealing with a technology related task” (p. 1780).

A different angle examined is teachers' views about gender stereotypes in relation to ICT. Although all teachers believed that developing ICT skills is equally important for all students regardless of gender, around half of them thought that boys were more likely to have the interest, aptitude and personality characteristics to pursue studies in computer science or similar fields (Vekiri, 2013). Such views held by teachers might affect their decisions to integrate ICT for female students.

In regards to gender and ICT, although the general literature is inconsistent about ICT integration and gender difference as Rahimi and Yadollahi (2011) indicated, the local literature about Saudi teachers' technology integration indicates that there is a gender difference in regards to technology integration. For instance, Kamal (2012) found that teachers' technology practices are influenced by gender. He believes that the difference between female and male teachers'

technology practices is due to cultural reasons. He infers from open-ended survey answers that he conducted that female teachers get less training than male teachers because most of the professional training workshops are held at centers outside schools. Moreover, he says that female teachers tend to have more workload than male teachers.

There is a need for more in-depth studies to fully understand the reasons that make female teachers fall behind in regards to ICT integration. In addition, in a setting where schools are gender-segregated, there is a need to focus on female teachers' views regarding gender in relation to ICT because the lack of male students in the classroom could discourage a teacher who believes that males are more interested in ICT to integrate ICT in teaching.

Theoretical Perspective

Stemming from Vygotsky's (1978) writings on the individual and social processes in learning and development, sociocultural theory was developed. Wertsch (1991) identified three concepts of sociocultural theory in Vygotsky's work. First, any function of children's cultural development appears first socially then psychologically. When children participate in activities with others they develop new strategies and knowledge of the world around them (Wertsch, 1991). Second, the human mind needs mediating tools in order to communicate with others and express itself (Lantolf, 2000). The focus is on semiotic mediation, emphasizing speech, which provides a useful amount of data for research purposes (Daniels 2004). Third, "the historical study of behavior is not an auxiliary aspect of theoretical study, but rather forms its very base" (Vygotsky, 1978, pp. 64–65).

Within the context of this study sociocultural theory was considered as an approach to understanding humans' behavior by examining the rules of the social groups in which the individual is a member. Elements such as religion, gender, traditions may influence teachers'

decisions in ICT integration. For instance, Alenezi (2015) says that the transition from ICT adoption to ICT implementation can be successful within the framework of Saudi integration pedagogy that is grounded in Islamic values and traditions. Utilizing sociocultural theory allowed for exploring the religious aspect that might influence teachers ICT integration decision.

Moreover, Kamal (2012) thinks that Saudi teachers' technology practices are influenced by gender. He believes that the difference between female and male teachers' technology practices is due to cultural reasons. He infers from open-ended survey answers that female teachers get less training than male teachers because most of the professional training workshops are held at centers outside schools and transportation for females is not as convenient as it is for males in Saudi Arabia. Analyzing the elements that influence teachers' decisions of ICT integration using sociocultural theory provided a deeper understanding of teachers ICT integration experiences.

Sociocultural theory has been utilized in qualitative inquiry studies that examine technology integration. For instance, there are two studies that used sociocultural theory as a framework to examine ICT integration by interviewing teachers: Fisher, Denning, Higgins, and Loveless (2012) and Oyaid (2009). The first study by Fisher et al. (2012) used the theory to develop a framework to improve the use of ICT to support learning. The researchers view technology as a complex set of cultural tools that enables teachers to engage in intentional educational activities. The researchers interviewed 12 teachers and asked them to create mind maps describing their ICT learning activities. Then they were asked to link the activities on their maps to the conceptual framework of learning activities involving ICT tools developed by the researchers. This conceptual framework was based on a sociocultural perspective.

Fisher et al. (2012) find sociocultural theory helpful because it allows researchers to examine ICT tools while considering the context of use. They explain this point here:

The ‘features’ of digital technologies which could make a distinctive contribution to activities have been described as provisionality, interactivity, capacity, range, speed, accuracy, quality, automation, multimodality, neutrality and social credibility (DfEE 1998; Sharp et al. 2002) . . . However, such descriptions locate the identified characteristics in the technologies themselves, and do not open up the understanding of the interaction between digital technologies as tools and the people who use them purposefully. (pp. 311-312)

Using sociocultural theory in this study enabled me to understand the interaction between ICT tools and Saudi female EFL teachers who use them because it focuses on the whole context and the relation between the tools and the users.

The second study (Oyaid, 2009) examined teachers’ ICT usage in ten secondary schools in Riyadh. She interviewed 14 teachers, ICT coordinators, and head teachers. In addition, she collected data from 266 teachers who completed a questionnaire on their ICT usage. She found that teachers have positive attitudes towards ICT, but there are three main factors that hinder their ICT usage. These factors are time constraints, lack of training, and financial issues. In addition, she found that teachers’ ICT use was influenced by the school’s policy more than MOE policy. Oyaid’s study is relevant because it focuses on teachers’ views regarding ICT use in Saudi education. She uses the sociocultural theory because it focuses on tools of communication, which are Arabic language and the ICT tools. She explains that the researcher and the participants come from the same cultural background and speak the same language, which makes constructing meanings from the shared experiences possible. Moreover, similar to the first

study, she considers ICT as tools along with other tools that "vary according to the situation including signs, symbols, numbers, and most importantly language" (Oyaid, 2009, p. 28).

Sociocultural theory was most suitable as a framework for this study because it provided me with an approach to examine elements such as religion, gender, traditions that may influence participants' experiences with ICT integration. Moreover, as in the case of Oyaid (2009) it helped provide insights into Saudi female EFL teachers' views of integrating ICT in teaching since the main communicating tool between the researcher and the participants was language. Sharing the same language with participants enabled me to access the knowledge they expressed about their experiences of ICT integration.

Along with the sociocultural theory perspective, a feminist perspective was used to interpret the experiences of the participants in this study. Feminism as a concept is basically "a set of perspectives that seek to explore the way that gender relations are played out in favor of men rather than women" as Kewer, (2012, p. 27) cited Aitken and Valentine (2006). Feminists are individuals who try to acknowledge inequalities that are based on gender and find ways to reduce or better yet stop it. Historically, feminism is loosely divided into three waves, which represent distinct feminism movements (Tobias, 1997).

The first wave of feminism started in the 19th century and worked to help women be considered as full human and gain full citizenship with full rights such as the right to vote (Tobias, 1997). The second wave took place in the late 1950s and 1960s. Feminists' focus shifted from legal rights to the concept of woman, its definition, and how it can be redefined (Tobias, 1997). As for the third wave, Rebecca Walker started it in 1992 (Snyder, 2008). This wave pushes away from the concept of woman and in response "foregrounds personal narratives

that illustrate an intersectional and multiperspectival version of feminism” (Snyder, 2008, p. 175).

During the second wave, different feminists defined the concept woman differently (Alcoff, 1988). For instance, cultural feminists define women by their activities and attributes in the present culture. While post-structuralist attack the category and concept of woman through problematizing subjectivity. According to Alcoff (1988) both definitions have serious limitations, which led her to develop a different concept of woman. She defines woman as “a position from which a feminist politics can emerge rather than a set of attributes that are ‘objectively identifiable’” (Alcoff, 1988, p. 435).

The emphasis during this second wave was on the difference between the worldviews of women and men (Nicholson, 1997), which assumed that all women share the same experiences because they are women regardless of other factors such as race, class, and ethnicity (Mohanty, 1992). Later on feminists started to realize that the intersections of these factors affect the experiences of women differently, and women may be marginalized in multiple ways that are often hidden (Crenshaw, 1998). Therefore, in the 1990s feminists started to pay much attention to diversity and how women construct their identity and experiences differently (Mohanty, 1992). It became important to analyze the intersections of race, gender, ethnicity, etc. that shape the multiple dimensions of women (Crenshaw, 1989). Therefore Crenshaw (1989) came up with the term intersectionality that she define as a view that women experience oppression in various configurations and in various levels of intensity. She argues that these patterns of oppression are interrelated and are influenced by factors such as race, gender, class, ability, ethnicity, etc.

In this study intersectionality (Crenshaw, 1989) was used as a lens to understand how religion shapes participants’ feminine identity. Although Islam is the religion of most Saudis,

not everyone shares the exact same views about religion. I wanted to understand how does religion influence participants' individual experiences as women, and how does that shape their ICT integration decisions?

Moreover, I utilized Standpoint feminism theory which believe that a woman is influenced by her surrounding experiences and knowledge that are unique to her place in society and differentiate her from 'the other' (Tong, 1998) and recognize that the idea of "universal" woman does not exist. In order to be able to understand a phenomenon experienced by women, whom are marginalized members of the patriarchal society, it is essential to start from the standpoint of those individuals (Smith, 2005). In this study I intended to stand in the position of Saudi female EFL teachers to recognize what they do to integrate ICT in teaching at Tatweer schools.

Although I am a Saudi female who planned to conduct research with other Saudi females, I was aware that my potential participants then, might not consider me an insider. This is due to power issues that might have emerged from being an academic researcher studying abroad. This could be an intimidating aspect that prospective participants then, could have felt. I planned to overcome power issues by representing myself casually, both visually and verbally, in order to establish good rapport with participants.

Summary

The literature review provided a detailed review of the existing literature to demonstrate the need for the study. It started by explaining the context of the study, covering the limited literature conducted on the Tatweer project. The analysis of the relevant literature showed that research on the Tatweer project does not investigate ICT integration and teachers' experiences. In addition, the existing gender digital divide which affects females (Cooper, 2006) is not tackled

in the available literature on ICT integration in Saudi education, especially Tatweer public schools, which makes the problem of how Saudi female EFL teachers integrate ICT in their teaching within Tatweer Schools in Saudi Arabia an original research problem.

The analysis of research on ICT integration revealed that much has been done on structural factors affecting technology integration (Chen, 2008; Haydn & Barton, 2008; Wang, 2014), and much on teachers' experiences integrating ICT (Ertmer, 2005), but not in Saudi Arabia, which should be investigated because teachers are the ones implementing technology (Roessingh, 2014). Therefore, this study aimed to conduct an in-depth exploration of Saudi female EFL teachers' lived experiences with ICT integration within Tatweer Schools to provide a deep understanding of this phenomenon. Finally, sociocultural theory and feminist perspectives were reviewed to provide an understanding of the framework that was used in this study.

Chapter Three: Methodology

Introduction

The purpose of this study is to acquire meaningful information to help understand what Saudi female EFL teachers experience when integrating ICT at Tatweer schools. The goal is to help understand the possible impact of gender on their experiences in integrating ICT. The gained knowledge may better help inform decision makers of the Tatweer project about this population's challenges, and may help enhance Saudi female EFL teachers' experiences in ICT integration. This chapter describes an account of the study's research questions, theoretical perspectives, design, and the rationale for the choice of methods to collect and analyze data. It also provides a description of trustworthiness strategies that were employed to improve the quality of the study.

Research Questions

I am interested in understanding what is it like for Saudi female EFL teachers to integrate ICT at Tatweer schools, and how gender may influence their ICT integration experiences.

The main and sub questions that guided this study were as follows:

- 1) What is it like to be a Saudi female EFL teacher integrating ICT at Tatweer schools?
 - a. How do Saudi female EFL teachers' views about technology in relation to gender affect their ICT integration at Tatweer schools?
- 2) What are Saudi female EFL teachers' experiences with ICT integration at Tatweer schools?
 - a. What influences Saudi female EFL teachers' decisions to integrate ICT into teaching?

- b. What issues did Saudi female EFL teachers perceive hinder their ICT integration at Tatweer schools?

Theoretical Perspective

Phenomenology was the methodology of this study. The first thing that should be known about phenomenology is that it “is not a singular, unified philosophy and methodology” (Vagle, 2014, p. 14). Van Manen (2014) provides a general definition of it:

Phenomenology is primarily a philosophic method for questioning, not a method for answering or discovering or drawing determinate conclusions. But in this questioning there exists the possibilities and potentialities for experiencing openings, understandings, insights - producing cognitive and noncognitive or pathic perception of existentialities, giving us glances of the meaning of phenomena and events in their singularity. (p. 29)

In simpler words, it is a research method that is based on a philosophical background. It is an inquiry method that researchers use not to look for specific answers, but to provide “plausible insights” (Vagle, 2014, p. 14) about a certain phenomena experienced by humans.

This research tried to understand the lived experiences of Saudi female EFL teachers integrating ICT at Tatweer schools by constructing the meaning of the issue being studied. Creswell (2013) notes that according to the literature in the qualitative research field, this type of research utilizes a social constructivism worldview. He explains that such a study tries to understand the subjective meaning of the participants’ experiences without imposing the researcher’s understanding of the phenomenon studied. Since phenomenological research provides a more comprehensive understanding of the nature or meaning of our everyday experiences (van Manen, 2014), my role in this qualitative study as Creswell explains, was not to impose my own understanding, but to help construct that meaning since it is revealed through an

interaction between me and the participants, though it is important to note that the ultimate goal was to construct an understanding of the phenomenon from the individuals' subjective meanings (Vagle, 2014).

Based on the aim of the study, utilizing a phenomenological research as a methodology seemed to be the most suitable because phenomenologists are interested in studying "the world as it is lived, not the world as it is measured, transformed, represented, correlated, categorized, compared, and broken down" (Vagle, 2014, p. 22). My interest as a researcher was focused on understanding participants' understanding of their subjective experiences with integrating ICT at their Tatweer schools. The intent of the study was to deepen the understanding of the experiences of integrating ICT that Saudi female EFL teachers have in this setting.

The use of phenomenology in research that investigates technology integration justifies the use of this research approach for the study. One of the relevant studies that utilized phenomenology to understand teachers' experiences in technology integration is Rizzo's (2013) study. The purpose of her study was to capture the essence of the lived experiences of fifth grade teachers who will be immersed in the phenomenon of teaching in a student-centered, twenty-first century, one-to-one laptop environment. She collected data through multiple, in-depth teacher interviews with nine fifth-grade teachers. She conducted a phenomenological study using a transcendental approach in which data analysis goes through reduction, imaginative variation, and syntheses. The findings revealed themes of difficulties, strategies, and best practices that teachers experience during the implementation of student-centered, 21st century, one-to-one laptop environment.

Another study that used phenomenology to examine technology integration is Boks (2012). This study investigated the process teachers used to change their pedagogy to deliver

effective instruction using Web 2.0 tools. A phenomenological approach was used to understand the lived experiences of seven secondary teachers through in-depth interviews to provide an in-depth qualitative analysis of teachers' views and technology integration. The researcher used the Technological Pedagogical and Content Knowledge (TPACK) framework along with phenomenology. The findings of her study indicated the types of Web 2.0 tools and how they are being used, the reasons why teachers are using the tools for instruction, and the technological factors influencing their use.

Findings from both studies shed light on difficulties and reasons for teachers' technology integration experiences, which is the emphasis of this study. They both use phenomenology to focus on teacher' voices and provide a rich analysis of their views in regards to technology integration. The use of phenomenology in existing research that investigates technology integration indicates its rigorousness as a research approach for such topics.

For example, Rizzo (2013) indicated that phenomenology enabled her to provide rich descriptions and accounts about fifth grade teachers' experiences of integrating technology. The direct interaction with the participants that a phenomenological methodology provides, allowed her to ask for clarification and to probe deeper when needed to gain an in-depth understanding of the phenomenon. She acknowledged that the phenomenological methodology enabled her to observe nonverbal responses that added meaning to the findings because she watched the emotion and passion that teachers expressed during the interview about the phenomenon they experienced which added context to the finding. Valuing the use of phenomenology for studying teachers' technology integration she recommend utilizing phenomenological studies in this area because it provides an in-depth understanding of experiences that directly impact teaching and learning (Cilesiz, 2010). This study's goal is to provide a rich description of the investigated

phenomenon, Saudi female EFL teachers' experiences integrating ICT at Tatweer schools; therefore utilizing a phenomenological methodology is significant.

Another reason for using phenomenology is that it gave participants a chance to think and reflect about their experiences, which in the case of teachers, helped them think about their teaching and its impact on students, and encouraged them to begin to make an impact on the education field such as in the case of Bokszy's study (2012). Bokszy's use of phenomenology enabled her to encourage participating teachers to think about their experiences of teaching middle school, what was going on, and figure out what needs to be changed.

Role of the Researcher

As a doctoral student I have successfully completed graduate level courses in qualitative research, research methodology, and statistical methodology. I have a scholarly foundation from which to draw upon to ethically and rigorously conduct this study. I also identify as a Saudi female EFL teacher and believe in the importance of integrating ICT in teaching. These experiences supported the dialogical nature of the research and promoted the necessary rapport with participants.

According to van Manen (2014), interpretive phenomenological inquiry is a pursuit to understand and interpret lived human experience, which relies on an interactive process between the researcher and the participants in the exploration of a phenomenon. My role was to gather data that describes the lived experiences of the participants, and to remain open and sensitive to the phenomenon being studied (Vagle, 2014). I tried to remain sensitive to the study by following van Manen's (2014) philosophical reduction approach. Following his technique I disclosed my assumptions and experiences, as a Saudi female EFL teacher regarding ICT

integration at the beginning of the research in the positionality statement and reflected upon it during the analysis phase (van Manen, 2014).

A Saudi female researcher, Khatma Samar, assisted me in this study. She was involved in the analysis phase of the research. She was asked to follow Vagle's (2014) data analysis steps to create her own "preliminary titles" (p. 99) from some of the transcripts, and then we triangulated our analysis.

Research Design

Participants

Convenience sampling, a strategy of purposeful sampling approach (Patton, 1990) was utilized to recruit participants that fit the criteria for the study. All individuals participating were people who have experienced the phenomenon, which is being a Saudi female EFL teacher integrating ICT at a Tatweer school. The study aims to interpret how the phenomenon had manifested and appeared to the participants (Vagle, 2014). In other words, interpret what it is like being a Saudi female trying to integrate ICT tools in EFL teaching. Therefore, participants of the study were teachers at Tatweer schools without specifying a regional district, grade level, age or race. But they needed to be Saudi, female and an EFL teacher.

In addition, I utilized a purposive and reverse snowballing sampling technique (Bogdan & Biklen, 2007). Snowball sampling entails identifying a few individuals who fit the criteria, and then using those individuals as 'gatekeepers' to other individuals who may meet the criteria (Bogdan & Biklen, 2007). The initial participants recruit additional participants that meet the inclusion/exclusion criteria until an appropriate number of participants have been reached. Instead of receiving suggested contacts of potential participant in order to gain access to the community and sample population, I used a reversed snowballing technique in which through

personal contacts, I provided my contact information to each participant after interviewing her and asked her to share it with prospective participants who fit the inclusion/exclusion criteria; being Saudi, female EFL teacher at a Tatweer school in Saudi Arabia, aged 18 and over. Once I got contacted via email from an individual who wished to participate, then a meeting was arranged to discuss the study in more detail and had the participant sign an informed consent form. The first five people who agreed to participate in the study composed the sample. After getting The Institutional Review Board (IRB) approval I followed those steps to recruit possible participants.

Regarding the number of participants, Vagle (2014) believes that there is not a “magic number” (p.75) for participants in a phenomenological research. He believes that the appropriate number of participants depends on the phenomena and the researcher’s judgment. For this study I decided to interview approximately five to ten teachers to get multiple views on the phenomenon under study. Participants were interviewed face-to-face. I contacted teachers and shared with them information about the study, the IRB approval along with my contact information.

Data Gathering Procedures

For the purpose of this study, interviews were employed as a data collection method for phenomenological research. According to Vagle (2014) “interviews are treated as exciting opportunities to potentially learn something important about the phenomenon” (p. 79). Although unstructured interviews are the most popular technique used in phenomenological research (Vagle, 2014), open-ended semi-structured interview questions (Savin-Baden & Major, 2013) were used to gain an in-depth understanding of the participants’ experiences of integrating technology at Tatweer schools. Using this type of interview allowed “interviewees to respond to

express their perspectives” specific material (Savin-Baden & Major, 2013, p. 359) and to elaborate on any part of the experience they saw as especially important and not constrain their responses. Moreover, Esterberg (2002) cites DeVault (1999) who believe that semi-structured interviews are suitable to study women and other marginalized groups because it gives their silenced voices a chance to be heard, and since the participants in this study are females this type of interview was selected.

I began the interview process after developing a clear understanding of the phenomenon under investigation (Vagle, 2014). The focus of the interview was to move the exchange into a “phenomenological attitude – to look at what we usually look through” (Vagle, 2014, p. 80). Participants were encouraged to share their “experience[s] of the phenomenon as lived, in the natural attitude” (p. 80). This approach allowed me to learn something significant about Saudi female EFL teachers’ experiences with ICT integration at Tatweer schools.

When conducting interviews, I developed enough rapport with each participant to ensure that participants felt comfortable sharing their experiences (Esterberg, 2002). I established rapport by being willing to reciprocate as necessary (Esterberg, 2002) to “develop a relationship of personal sharing” (van Manen, 2014, p. 315). An interview question guide was developed for referral during the interviews, which were planned to be conducted in Arabic, because although participants were EFL teachers it was not guaranteed that all participants would be comfortable expressing their perspectives in a non-native language.

The interview guide (see Appendix B) consisted of nine open-ended questions, with potential follow up questions that were developed when preparing for the follow up interview, allowed for rich descriptions of participants’ experiences with the phenomenon (Creswell, 2014; van Manen, 2014). To gather rich descriptions of participants’ experiences of the phenomenon I

followed Vagel's (2014) interview advices which included getting oriented to the phenomenon before planning the interviews and then reorienting my self to the phenomenon by "spending time thinking, writing, discussing ... about it" (p. 80). I was re-orienting myself to the phenomenon until the time that I was done interviewing all my participants.

The face-to-face interviews with participants were conducted twice for about one hour each time at a public agreed upon place. I took field notes which Bogdan, & Biklen (2007) define as "the written account of what the researcher hears, sees, experiences, and thinks in the course of collecting and reflecting on the data in a qualitative study" (p. 118-119). In those notes I wrote about the small details that I noticed about the interview, such as the setting, the appearance of the interviewee, and any detail that stood out or struck me (Esterberg, 2002). A digital recording device was used to audio record the interviews. The first and second interviews were scheduled approximately four weeks apart to allow time for the researcher to transcribe, read the entirety of the collected data, and craft follow up questions. Moreover, I believe this is an ideal period of time between the two interviews because it allowed participants to have enough time to reflect upon their experiences and answers during the first interview without much time passing that they may forget about it.

The consent form was used to explain the procedure of the interviews to participants. They were asked for permission to conduct two interviews, the second being a follow-up interview. The reason for conducting the second follow-up interviews was to allow participants enough time to think about their ICT integration experiences as Saudi female EFL teachers at Tatweer schools, and give them another chance to talk about the constructed meanings of these experiences during the second interviews. Moreover, participants were notified about recording and confidentiality matters before the interviews took place. All precautions were taken to

maintain confidentiality. For example, any names used on the audio-recording were changed to pseudonyms when the recordings were transcribed. The recordings were stored on my password-protected computer and will be kept for five years and then will be deleted along with all collected, transcribed, and generated materials, whether digital or hardcopy. The reason for the time frame is for the possibility of future publications or presentations based upon the research findings of the dissertation. I provided an Arabic version of the consent forms along with the English version to ensure that participants fully comprehend the study's information.

Data Analysis Procedures

Audio files of the interviews were transcribed verbatim. I transcribed all interviews by listening to the audio files multiple times, and typing the spoken words using F5, a program for scientific transcription. I used bold to indicate stressed words, (...) symbol to indicate pauses, and filler words as used by the participants. This approach of transcription allowed me to locate words that were stressed by the participants in order to gain a better understanding of the meanings each of them may add through their expressions. Vagle's (2014) guide for phenomenological research data analysis was used to analyze the data from the interviews. He explains six steps for the analysis procedure which include (1) holistic reading of the entire text, (2) first line-by-line reading, (3) follow up questions, (4) second line-by-line reading, (5) third line-by-line reading, and (6) subsequent readings.

Following Vagle's (2014) guide I first read the entire data sets, which included the interview transcriptions and the field notes without taking notes. Reading the whole data reacquaints the researcher with the data (Vagle, 2014). Then in the second step, I read the data line by line while taking notes to start identifying "chunks of text" (Vagle, 2014, p. 98).

Afterwards, I reviewed the initial notes for possible follow up questions to be asked during the second interview.

Then, I read the entire collected data, which included transcriptions of the second interviews. During this step, I copied and pasted “identified experts or parts of [participants] transcription” (Vagle, 2014, p. 99) that I believed significant in a separate document. During the fifth step, I repeated what I did in the previous step, identifying significant sections of the participants’ transcribed interviews. Then, I examined those identified sections as a whole and gave them “preliminary titles” (Vagle, 2014, p. 99). Afterwards, I provided a description of the lived experience of the phenomenon based on these titles. Finally, I translated the findings from Arabic to English. This is the approach to data analysis that I used in this study.

Quality Criteria

The term trustworthiness, which is concerned with research quality, is used often in qualitative research studies when describing the validity of the research (Vagle, 2014). Creswell (2013) mentions that validation in qualitative research is an “attempt to assess the ‘accuracy’ of the findings, as best described by the researcher and the participants” (p. 249). Several validation strategies were utilized to enhance the accuracy of the findings and the quality of the research.

One of the validation strategies that were used in this study is triangulation. According to Bodgan & Biklen (2007):

The term originally comes from the application of trigonometry to navigation and surveying . . . [later on] it came to mean that many sources of data were better in study than a single source because multiple sources lead to a fuller understanding of the phenomena. (pp. 115-116)

Triangulation in this study was achieved by using two different sets of data, the interviews and the field notes as well by using two researchers, a Saudi female researcher named Khatma Samar and myself, to analyze the data to establish reliability and validity. The other strategy for improving the research's quality that was used is writing rich, thick descriptions of participants' lived experiences by asking questions about the nature of phenomenon (van Manen, 2014). Providing this type of description helps strengthen the quality of the study by providing a dense description, which involves providing enough "chunks of text" (Vagle, 2014, p. 98) from data that carry meaning. The reader's task in evaluating the study and making decisions on its quality and validity gets easier because the reader becomes well informed (Merriam, 2002).

Finally, member checks were used to improve the accuracy and credibility of the interview process (Lincoln & Guba, 1985). I summarized the collected information, during the interview, and provided a summary of the transcribed data and findings to the participants near the end of the study to ensure authenticity and correct interpretation.

Limitations

Study limitations are anticipated weaknesses associated with the research (Creswell, 2012). In most qualitative research studies, generalizability of findings is not possible because of the purposeful selection of participants; instead transferability, credibility, and dependability achieved by trustworthiness strategies are focused on (Creswell, 2013). In this study five participants who teach at schools of a certain program were interviewed, which limited generalizing the findings because of the small number of participants. Although the number of participants is small, the study focused on the depth of data gathered from each participant.

Ethical Considerations

The study's scope in terms of its context and setting yields issues that need to be considered carefully. In Saudi Arabia, the context of the study, people are not used to social research as much as people in other countries such as the United States. This claim is based on a personal observation. Being Saudi and living in Saudi Arabia for a long time then coming to the United States, I noticed the difference. Personally, I have been asked to participate in a social research only twice when in Saudi Arabia. On the other hand, in the United States I get approached to participate in a social research at least once a month. Therefore, being the researcher, I needed to make sure that my participants understood the study, its nature, the procedures that were to be used, and their rights to confidentiality and withdrawal at any time. I ensured all of that by explaining the information verbally and generally over the phone, then again verbally and by providing the consent form during the meetings for the interview.

Moreover, I considered the following ethical issues: informed and voluntary consent, respect for rights of confidentiality, and minimization of risk. For the first matter, I made sure that participants were provided with an information consent form (Appendix A.) that was presented in clear and simple language. Participants were informed about the following:

- The names of the researcher and supervisor
- The procedures to be used
- The aim of this research and how the information would be used
- The participant's right to withdraw from the process without penalty
- The fact that the data would be returned to them to provide feedback

As for the second issue, respect for rights confidentiality, I protected the identity of participants and their schools at all stages of the research. For instance, I was also responsible

for keeping information (including the identity of participants) confidential and secure from interception or appropriation by unauthorized persons, or for any purposes other than the approved research. Moreover, I used pseudonyms instead of real names to protect their identity.

Finally, for minimization of risk, I did not expose participants to any levels of risk or harm. All participants seemed to be happy to be involved in this study and I did not notice any discomfort amongst them.

Summary

This chapter explained in details how this study was conducted. In order to better understand the Saudi female EFL teachers' ICT integration experiences at Tatweer schools, I used phenomenology as a methodology. Five participants were interviewed. Semi-structured interviews were conducted with each participant. After collecting data, within the analysis phase of this study, I used a sociocultural theory to understand participant's experiences by considering social elements that might affect teachers' decisions in ICT integration such as religion, gender and tradition. In addition, feminist perspectives were contemplated to understand female teachers' experiences. Moreover, I utilized interpretive phenomenological approach to analyze the data and generate meaning of participants' experiences.

Chapter Four: Findings

Introduction

Although many research studies have been done with regards to teachers' experiences with ICT integration, not many have examined teachers' experiences with ICT integration in developing countries such as Saudi Arabia, and even fewer has been done to explore teachers' experiences with ICT integration within Tatweer schools. Therefore, this study would be significant as it attempted to contribute to the knowledge and fill this gap in the research.

The purpose of this study is to understand the experiences of Saudi female EFL teachers as they integrate ICT at Tatweer schools. This chapter presents the findings derived from the interviews gathered from participants, and field notes that I wrote during the process of data collection. A number of findings were generated that answer the main research questions along with the sub research questions:

- 1) What is it like to be a Saudi female EFL teacher integrating ICT at Tatweer schools?
 - a. How do Saudi female EFL teachers' views about technology in relation to gender affect their ICT integration at Tatweer schools?
- 2) What are Saudi female EFL teachers' experiences with ICT integration at Tatweer schools?
 - a. What influences Saudi female EFL teachers' decisions to integrate ICT into teaching?
 - b. What issues did Saudi female EFL teachers perceive hinder their ICT integration at Tatweer schools?

In this chapter I will briefly describe the participants in the study, pseudonyms used, then I will provide my analysis of the data and discuss the findings that emerged from applying Vagle's (2014) phenomenological research data analysis approach which consists of (1) holistic reading of the entire text, (2) first line-by-line reading, (3) follow up questions, (4) second line-by-line reading, (5) third line-by-line reading, and (6) subsequent readings.

The first five participants who agreed to participate in the study, and met the selection criteria: to be Saudi female EFL teachers with teaching experience at a Tatweer school in Saudi Arabia, and 18 years of age or older, were selected to participate in the study. All of the participants had computers and access to the Internet at home.

All five participants taught EFL in a Tatweer school in Saudi Arabia. Those schools that are under the Tatweer project were of two types. Either they were of phase one which were 50 schools initially chosen by Tatweer policy makers because of their students high achievement to be transformed into TSSs, or later phase two. These transformations of schools in phase one involved the purchasing and implementation of various ICT resources for classroom use, including interactive whiteboards, LCD projectors, digital cameras, and laptops for every teacher and student (Tatweer, 2010). The number of TSSs was supposed to increase, but Alyami (2014) reported that Tatweer policymakers decided that it was too costly to transform all public schools in the country into TSSs. In response to policy makers' concerns, a new phase was implemented in 2011. Phase two did not include as many technological resources, but "the schools were given more autonomy in their decision-making and more freedom in the way they manage and teach" than traditional public schools (Alyamin, 2014, p. 1429). All five participants worked in schools that were of phase two. This means that their schools were used to be typical public schools, and

when then they were labeled as Tatweer schools, they were not equipped with additional technology resources.

A brief description of each participant is as follows:

Haifa

The first participant, Haifa, has been teaching English as a foreign language for more than 20 years, in which the last four were in a Tatweer secondary school in Makkah, in the western region of Saudi Arabia. It was her dream since she was a child to be an English teacher as her two elder sisters. Her bachelor degree is in English literature from a university in Jeddah in the western region of Saudi Arabia. She explains that her degree “doesn’t have to do anything with [her] teaching.” Yet, for her teaching is a mission. The issue of learning English for Saudi students occupies the center of her concerns and drives her to teach EFL. She mentioned that the Saudi student learn English for more than six years and still graduate from secondary school unable to speak English well which is a problem. Her goal as a teacher is to ensure that at least some of her students graduate mastering English language: “if at least ten of my students graduated speaking English perfectly, this would be victory for me”. She is in her early 50s, a divorced single mother of six children. Her eldest is 22 years old boy, and her youngest is a 12 years old girl. She is the main provider to her large family.

Samia

The second participant, Samia, in her late 30s, speaks with much enthusiasm about her teaching career that gained her ten years of experience in teaching English as a foreign language in a secondary school for four years and then an elementary Tatweer school in Makkah. English was her favorite subject as a student, and teaching was something she always liked. She graduated from a teachers college from Makkah, with a bachelor degree in English Language.

Typically, Saudi females who are not yet married live with their families: parents' house, or with a brother, or an uncle if the parents are deceased. Samia does not abide by social rules regarding this matter. She lives alone in her apartment, but she has an extended support system that consists of her siblings and their families who live close by. She is single, has no children, but referred to her students as "my daughters" while talking to a fellow teacher on the phone.

Luluwa

The third participant, Lulwa, is a new teacher with one year of experience on her CV. She has a Master's degree in language and literacy from the United States. But she got her bachelor's degree from a teachers college in Riyadh majoring in English Language. She has been teaching English as a foreign language in Aljubail city in the eastern region of Saudi Arabia. According to her, "females are teachers by nature" because of the experience they have with their children. She is in her early 30s and pregnant with her first child.

Alanoud

The fourth participant, Alanoud, describes herself as "a woman, a daughter, a mother, a wife, and a teacher". She has been teaching English as a foreign language at a Tatweer secondary school for almost two years in Riyadh, in the central region of Saudi Arabia. Similar to Luluwa, Alanoud holds a Master's degree in Language and Literacy, and she got her bachelor's degree from a teachers college in Riyadh majoring in English Language. She is in her late 20s and has two boys 3 and 1 years old.

Rana

The fifth participant, Rana, is in her early 30s. She does "not feel as technologically savvy as most of the people of [her] generation. [She] can make a nice PowerPoint, [she] recently found out how to make a Prezi, that's about it!" although she uses an iPhone and owns

an iPad. She holds a bachelor degree in English language from Abha, in the southern region of Saudi Arabia. She has been teaching for six years in an elementary Tatweer school in Riyadh.

Presentation of Findings

The key findings obtained from interviewing the five participants are presented and explained in this section. Findings are as follow:

1. Gender does not make a difference in teachers' abilities of using technology or integrating ICT.
2. Gender of the technicians at the school affects the quality of the service the technicians provide for teachers.
3. The major theme of ICT use was integrating ICT as a presenting tool to deliver knowledge to students.
4. Two themes were reveled regarding teachers' reasons to integrate ICT: considering professional needs, and students' needs.
5. The themes of teachers' ICT integration hindrances included lack of school support, lack of time, and lack of training.

Research Question 1: What is it like to be a Saudi female EFL teacher integrating ICT at Tatweer schools?

The first finding of this study revealed that *being a Saudi Female EFL teacher integrating ICT at a Tatweer school meant for all participants feeling good about being a woman and believing that gender does not make a difference in teachers' own abilities of using technology or integrating ICT.*

This finding explains participants' experiences being Saudi female EFL teachers integrating ICT at Tatweer schools. First, it describes their views about being a woman; second,

it explains their beliefs on gender affecting their own abilities to integrate ICT. All the participants expressed feeling good about being a woman. According to them being a woman is associated with positive feelings like being happy, proud, and lucky. For instance, Samia said, “I am proud to be a female . . . I am happy to be a woman.” Supporting the same point of view Alanoud said she is “proud” to be herself, a woman. In addition, Luluwa responded to the question about her feelings about being a woman saying, “I feel that I'm lucky that I'm a female.” This positive view about being a woman is illustrated by the comment of one participant as follows:

Well, I think that maybe a lot of people, different people, think that being a woman is not something important or something to be proud of. They look down to a woman. So, yeah I don't like this point of view at all. [Being a woman is] about trying to be myself, be proud, do whatever I want. (Alanoud)

One participant explained directly that women's positive feelings about being lucky come from the fact that they can be pregnant and have a close relationship with their children:

When I think about it females, they have the experience of getting pregnant and having this close relationship with their children. I feel that I'm lucky that I'm a female that I can have this experience with my children in the future and have certain feelings like being closer to my children. (Luluwa)

Having the ability to be pregnant and give birth to children were not the only things that were identified to being a woman by participants. The majority (four of five) of participants associated raising and taking care of children with the role of the woman. For example, Luluwa, the pregnant woman, mentioned, “at home, they [women] mostly take care of the children”. Alanoud, the mother of two boys, added, “I think it is more suitable for woman [to raise

children]”. In addition, Haifa, the single mother, explained that being a woman means being responsible, “I have to raise children, care for them, pay for them, and guide them to the right path, to be responsible for everything.” Even the unmarried participant Samia, who lives alone and did not experience raising children, had the same idea about women’s role to raise children. Similarly, she explained the role of the woman saying:

To help her family, protect her family actually, and make sure her children graduate, give them good values to protect them from anything bad outside her house, outside the society. If she prepared them by being their friend more than their mother only, she can make them good people. (Samia)

Participants’ comments illustrated their understanding of the woman’s role to raise children as follows:

I think all females are naturally teachers or teachers by nature because, at home, they mostly take care of the children and they try to teach their children good manners and stuff like that. So, I think that’s basically the role of females. (Luluwa)

As a woman, I think I can work at home and outside of the home. For men, I think they can do both but regarding raising children, at home I think it is more suitable for woman and they're more capable of doing it in the best or the perfect way. This is how, I think, they were created like this. (Alanoud)

As for the second aspect of the first finding that explores participants’ views on gender affecting their abilities to use ICT, all participants expressed that they believed there is no difference in women and men when it comes to using technology and integrating ICT. For example Haifa said, “Women and technology, it’s just like men and technology.” In the same way Luluwa mentioned, “I think [the use of technology] is the same between females and males.

I wouldn't say that it's different." Likewise, Alanoud explained, "[Integrating ICT] wouldn't differ if I was a male teacher or a female teacher."

Yet, more than half (three of five) of the participants mentioned one particular use of ICT, the ability to use a camera to videotape in class, that is affected by gender because of religious and cultural restrictions since as Samia explains "[Muslim] women cannot show themselves to other [non-related] men." Hence, Luluwa rationalized "[female teachers] decide not to videotape, so they won't get in trouble". Additionally, Haifa complained, "if I want to do it [upload my video on YouTube], I can't". This religious and cultural restriction is explained in these participants' comments:

Probably it's religion. I think [of] religion because, in our schools since it's all female, we don't wear the Hijab, the Islamic dress. So, that would be hard and it would be also hard to ask the students to wear the Hijab just to record a video. So, that's why most of the teachers just let it go and decide not to videotape, so they won't get in trouble. (Luluwa)

If I make a [video] record, the students' parents may not trust me. I might show them to other men or I might show it to my brother. That's why everyone tries to protect themselves, and their daughter and their family. So, it's not allowed for a woman to use this technology, recording video in schools. (Samia)

However, they do not think of it as important in their ICT integration experiences. One participant, Haifa the eldest participant, regardless of the religious and cultural restrictions on videotaping females, described her experience where she actually videotaped herself teaching a lesson and avoided revealing any of her students (all females):

You know I tried my best so that the pictures of the students wouldn't appear. Most of the pictures were of me or most of the video, and only the voices of the students because

it's very hard. Maybe the parents wouldn't agree. Still, you know the society didn't come over this problem ... the only difference is that male [teachers], they have the opportunity to videotape without any problem in a class because we've seen on YouTube, many teachers, they videotape their students, male students, without any problem but if I want to do it [upload my video on YouTube], I can't. (Haifa)

She looks very disappointed talking about the opportunity given to male students to get this kind of exposure to the world and be recognized for their excellent work and being viewed as smart, intelligent etc, while female students don't get this chance. Would this be a reason for stereotypes that boys are better in X or Y only because we see images of them doing X or Y but images of girls are not available for us? I do think so because although we still read about their achievements and see their work but not link it to their faces, the effect of the image is probably stronger. (Field notes, October 7, 2015)

Using digital camera is not the only ICT use that is affected by gender because of cultural and religious constrains. *Music could be controversial from an Islamic point of view, would teachers want to avoid it when it interferes with ICT integration? What about other ICT tools that utilize the camera for instance, would teachers avoid using Skype, storytelling tools etc. (Field notes, November 15, 2015).*

When asked about using Skype most participants mentioned they would use it to bring authenticity in teaching EFL, but they specified that they would only use the audio call feature for the same reasons that prevent them from video recording their lessons. For instance, Rana said:

I actually used Skype more than once to have a guest speaker talk to my students about studying abroad. I arranged that it would be an audio call so I protect my students'

privacy and the [female] speaker's privacy as well. I even turned the laptop away from the students just to ensure them that I am not taking anyone's picture! (Rana)

Likewise, another participant explained:

I only have female speakers [audio] call and students may ask her questions. It's never a video call; you know to avoid the trouble. I had a lesson on communication and it was a good tool to utilize, but I need to bring my personal Internet connection otherwise the quality of the call will be poor. (Alanoud)

Other participants who replied that they did not use Skype before discussed other examples on 'controversial' ICT tools. For instance, Samia, the one living alone, shied away from sharing some "effective language learning websites if they have the one-on-one tutoring feature that could easily turn into dating!"

On another note that is not gender related yet controversial, Luluwa mentioned that she advises her students to avoid putting any music in their presentations to respect everyone's beliefs. She said "it does not matter if I listen to music or not, but when I teach, I have to make sure that everyone respects that many Saudis believe music is prohibited". Similarly, Samia does not allow her students to incorporate music into their lesson presentations. She mentioned "listening to music is haram [prohibited] so I don't allow my students to put music in their presentations, but they may put natural sounds if they like".

To sum up, participants felt good about being a female and tried not to let their ICT integration be strongly affected by religious and cultural restrictions.

Research Question 1-a: How do Saudi female EFL teachers' views about technology in relation to gender affect their ICT integration at Tatweer schools?

More than half (three of five) of the participants believed that the gender of the technicians at the school affects the quality of the service the technicians provide them; teachers thought that female technicians provided poorer service compared to male technicians due to inadequate training.

The second finding of the study addresses participants' beliefs about technology in relation to gender. The analysis of the data showed that more than half (three of five) of the participants expressed somewhat negative views on female technicians' abilities to solve complicated problems at their schools. For example Alanoud, the mother of two boys, expressed, "in our school, for the female[s], [IT support system is] rare", while Luluwa, the pregnant one, mentioned, "we only have two [female IT] assistants, and I think they don't have that much of experience". Moreover, they thought that male technicians have better training, which enables them to solve such problems. For instance, Rana mentioned that the assistant at her school is not very knowledgeable about the new smartboards they have, she said, "Unfortunately our technical support lady is not very savvy with them yet either." In detail, Rana and Alanoud stated that although their schools had a *female* technician who they could refer to when they face technical problems, it is not guaranteed that their problems get solved in a timely manner. Those participants believe that the reason for this difference between female and male technicians' abilities is due to the lack of sufficient training for females:

I think for male [teachers], it would be easier for them [to integrate ICT] because they will have more of the IT support system there, because in our school, for the female[s], it's rare. We don't have *trained women* to deal with computer or technology. But for

males, I think they have more access and more knowledge and more staff members to do this job. (Alanoud)

Another participant tackled the same point:

Probably maybe having assistant [IT] would be easier or the support that would help in preparing the class, and that would make it [integrating ICT] easier... We only have two [female IT] assistants, and I think they don't have that much of experience, probably in the future, this will improve or will find a solution to this problem and we have so many classes and it would be hard for them to work with everyone. (Luluwa)

The differences between female and male technicians in regards to services quality in the eyes of the participants could be interpreted as being an element of our Saudi educational system and culture. For example, Saudi female technicians are usually computer science teachers not IT specialist because of the limited majors available for female students to choose from at the university level compared to male students. This gives male technicians an edge over female technicians. Moreover, male technicians could have more opportunities to attend professional development training that are provided outside the school, just as male teachers because of the restrictions on women's mobility since they are not allowed to drive cars yet. (Field notes, November 2, 2015)

It is important to note that although all participants expressed positive views about being a woman and believed that gender does not make a difference in their own abilities of using technology or integrating ICT as explained in the first finding, more than half of them expressed somewhat negative views on female technicians' abilities to solve complicated problems at the school, and thought that male technicians have better training which enables them to solve such problems. Having female technicians who provide poor services to teachers when needed affect

their ICT integration because they don't get the support they need as will be explained in further detail later under issues hindering teachers from ICT integration.

Research Question 2: What are Saudi female EFL teachers' experiences with ICT integration at Tatweer schools?

The data showed that *although some participants (two of five) mentioned using ICT to share content and communicate with students, the majority (four of five) of the participants described their experience of integrating ICT mostly as a presenting tool to deliver knowledge to students.*

This third finding describes the experiences of Saudi female EFL teachers with ICT integrating at Tatweer schools. Analysis of the data revealed that the majority (four of five) of the participants' pattern of ICT is mainly using ICT as a presenting tool to display content to the students. For example Luluwa explained her ICT use, "Usually, I like to show them videos, playing online games, PowerPoints, what else, Prezies." Similarly, Rana expressed that she likes to use presenting tools "I really like PowerPoints". Likewise, Samia, the one living alone, mentioned using several presenting tools "most of it is slide show programs". The following participant expressed their use of presenting programs in detail:

I really like PowerPoints. I don't want to use them like all the time I feel like it can be restrictive. But for visuals I just I know that that's a really nice organized kind of out like to at least get you started, keep you on track, make sure you had all the key points. (Rana)

A lot of programs ... most of it is slide show programs, PowerPoint, sometimes I use Pages, I use Keynote. I connect my iPad. Now, I use the iPad more than the laptop because I use it to connect my iPad to the screen, so I don't have to go back to my laptop and come back. (Samia)

This type of integration does not involve students except when they are the ones conducting and presenting parts of the lesson. For example, Samia indicated that her students also use ICT. She explained some of the activities that she applies in her teaching to ensure students engagement and use of ICT. To clarify, she stated that she makes the following activity compulsory for all her students. She mentioned that she asks each student to select a section of the lesson to explain it using ICT tools. She switches roles with her students so they get the chance to prepare and explain the lesson. It is clear that her students as well used ICT as a presenting tool. This participant explained her students' ICT use:

No, we all use it [ICT]. Sometimes, the students give the lesson by themselves. I just sit like a student. I tell them, "Now, you are the teacher." They use it all of them. They [may use] my laptop and my iPad. Most of them, they depend on iPads. They bring their iPads, they explain, they use the program, any program they want and they explain.

(Samia)

Other than using ICT as a presenting tool to display content, some participants (two of five) talked about using ICT to share content with students, and communicate with them. To point out some examples, Luluwa talked about using Blackboard "to share material with [her] students, announcements for the class and assignments and so on". Similarly, Rana talked about web quests that allow her to direct her students to get the information:

Like quests where you use those authentic websites and you have a goal. So you go to this website and get this information and that leads you somewhere else that leads you somewhere else. I really liked that idea. I am trying to play around with them a little bit.

(Rana)

To summarize the study shows that Saudi female EFL teachers' experiences with ICT integration at Tatweer schools include using ICT mainly as a presenting tool, then as a sharing and communicating tool.

Research Question 2-a: What influences Saudi female EFL teachers' decisions to integrate ICT into teaching?

Participants' reasons to integrate ICT into teaching were to consider professional needs (four of five) and students' needs (three of five).

This finding explains the reasons that influence participants to integrate ICT into teaching. The analysis of the data revealed two reasons: considering professional needs and considering students' needs. Regarding the first one, professional needs, it includes: facilitating classroom operations, and creating customized classroom material. The majority (four of five) of the participants explained that one of their purposes to integrate ICT was to deliver content in a way that saves time and effort which falls under facilitating classroom operations because it increase the efficiency of delivering information. Instead of writing the points on the board in each class, putting in mind that they may teach anywhere from 16 to "24 periods [45 minutes] a week" as Haif, the single mother, mentioned, they use their laptops to show the material they want to deliver to students. Sometimes it is a presentation, other times they show a movie or an audio. Then they ask students to answer questions related to the material they have seen or listened to.

Participants realized that ICT is useful in saving time and effort to facilitate the delivery of knowledge. They explained:

But I have to use the technology because it saves time and it has a lot of new things. For example, it's very easy for me to open a movie for them and after the movie, they answer

the questions. Sometimes, I let them listen to a story and answer the question. So, the technology helps me a lot in saving the time but I don't depend on only technology.

(Alanoud)

I can also repeat the lesson in many classes. Better than writing on the board and then clean it and then go to another class again and clean it. With the technology, I just open the projector, the laptop and then I can repeat the lesson for many times. So, I think it saves the time. When I save my time, I can find another technology. I can do another thing for my students or at least check the students' books ... It saves time for both, keeping files safe, instead of losing them especially nowadays, the students sometimes they forget the flash memory. We use the cloud. I told [the students] don't ever bring your flash to the class. Send it on email or put it on Dropbox. (Samia)

Samia, the one living alone, explains that using ICT not only helps her to save time when delivering the lesson, but also when she receives student's files of assignments and class related work which is another classroom operation that ICT helps teachers facilitate.

An interesting point to consider is that the new curriculum adopted by Tatweer is more student-centered approaches and focuses more on skills (Tatweer 2010). However, few participants explained that the students' evaluation system at their schools still requires teachers to focus on the coverage of the material (textbook), which have placed pressure on them to get through the material and have shifted their focus from ICT integration. For instance, Haifa, the single mother, voiced her frustration with the students' evaluation system "We have a system. It evaluates students on what is in the textbook, their questions are not related at all to ICT or technology skills...So, in this way, sometimes I feel that I'm wasting my time when I use ICT". Luluwa, the pregnant one, suffered from the same problem. She needs to make sure she covers

the whole textbook and that is the priority set by the school for teachers. She explained:

I have to cover the textbook during the assigned weeks of the semester because students will be tested on the material covered in their textbooks. I use ICT as long as it helps me cover the material, and keep my students excited. But I know they won't be tested on ICT at the end of the semester! (Luluwa)

Moreover, under professional needs, teachers integrate ICT because they want to create a customized classroom content that is authentic. Participants think that ICT integration should have a certain objective that serves the lesson to be taught. For example, Rana believes that there should be "a goal for using that technology for whatever it is, if you are using a PowerPoint you know specifically I am using this as a visual tool to try to connect the new vocabulary word to something that the students can recognize."

To explain further, these participants integrated ICT because it was a way that enabled them to bring authentic materials and experiences to their students who typically do not have exposure to the targeted language's culture since they are studying English in Saudi Arabia and not in a country where English is the official and first language. These ideas that express the need to integrate ICT to solve educational problems are well explained by the following participants' comments:

With EFL students finding authentic materials and experiences is obviously a problem because they are not immersed in the culture, so we use the Internet to find those authentic materials to bring in the culture a little bit more than you could otherwise. (Haifa)

You know my goal is to bring in a more authentic activity to challenge my students to see where they are at for anything. For assessment you have a goal for the use of that

technology. Because I've seen it *misused* where they just ... create a PowerPoint just to create a PowerPoint ... We went to website of BBC and we had to listen to news broadcast in English. So the point being those are not made for Language learning, they are made specifically to inform that culture and that people. So it just makes it a little more real than the text book "Hello, how are you? Interviewer: I am well, how are you?" So on and so forth. Besides that I mean anything and everything. We talked about travel websites and pretend booking to travel to another country. (Rana)

As for the second consideration, more than half (three of five) of the teachers believed that addressing students' needs was a reason for them to integrate ICT in teaching. For example Alanound, the mother of two, said "what made me use technology, [is] to make the class more interesting for [students]". In addition, Luluwa explained, "I noticed that the students were more engaged when I use technology". Likewise, Rana's reason for integrating ICT was to enhance her relationship with her students, "you kind of *relate* to your students a little bit more [when integrating ICT]". Participants believed that integrating ICT in teaching makes students more excited and engaged. Also, they noticed that students become more interested in getting the information and getting the knowledge. Teachers were aware of the fact that in the 21st century time that we live in, technology is used in the world outside the school almost everywhere, so the school needs to catch up since the young generation who are "in touch with technology" as Haifa noted is already using it outside the school. As an illustration of this point here are some participants' comment regarding students' needs:

Nowadays, like everybody is using technology especially the young generation, so why not, and they usually enjoy using it like social media and these things, so why not make

the class more interesting for the students. So, that's what made me use technology, to make the class more interesting for them and me as well. (Alanoud)

I think, yeah, using technology is very good. I noticed that the students were more engaged when I use technology when playing the online games they like the classes more and their level of understand increased when using the technology and they're not bored when I don't use the technology. So, I think it's a good thing and I'm going to continue using it. (Luluwa)

I do not feel as technologically savvy as most of the people of my generation (laughing) I can make a nice PowerPoint, I recently found out how to make a Prezi, that's about it ... but I think being able to have that experience [integrating ICT] and you kind of *relate* to your students a little bit more. (Rana, emphasis added)

This third finding explained the reasons that influence participants to integrate ICT into teaching. As has been noted these reasons were to consider professional needs to and students' needs.

Research Question 2-b: What issues did Saudi female EFL teachers perceive hinder their ICT integration at Tatweer schools?

Participants explained the issues that hinder their ICT integration, which included lack of school support (four of five), and lack of time (two of five). Lack of training was mentioned by a few of the participants as a barrier for ICT integration.

The final finding explains the hindrances that affect participants' ICT integration. Most participants (four of five), expressed that the main hindrance they suffer from is the lack of school support. Lack of school support included several points, one of them not having enough well trained technicians to help teachers. For example, Luluwa, the pregnant participant, mentioned that although she found that integrating ICT increased the level of understanding of

her students she hopes to have some “assistant” to help making the integrating of ICT even better and rewarding for her and her students. Moreover, Haifa, the single mother, explained that her school did not have a technical support service, although they have “all the modern technology”. Instead, she says “we have one of the teachers who is a specialist in this, and whenever the teachers want to use the Internet, she helps them.” The specialist that Haifa mentioned is a computer science teacher who teaches computer science but not an official technician offered by the school.

This lack of school support due to not having enough well trained technicians, did not stop some participants from using ICT resources they are familiar with, but definitely discouraged them from experimenting with ICT tools that they are not familiar with such as the new computers in the computer lab in Alanoud’s case. She said, “Actually, we don’t know why we can’t use them. I guess we’re not prepared to use them.” With the lack of technical support, teachers fear to damage the technology as this participant clarified:

There are classrooms [learning resource rooms] in my school that have three screens um, I think they are all the smartboards. So I would love to get to play around with those a little bit. Unfortunately, I am not very savvy with them which makes experimenting with them a little you know, you don’t want to break it. It is a very expensive. (Rana)

Another point under the lack of school support voiced by more than half (three of five) of the participants was not having any ICT equipment in the classrooms. Some participants had to bring their own devices: laptops, iPads, projectors, speakers for listening activities, and portable wireless routers. As an example, Alanoud, the mother of two, explained, “Not all of my classrooms have the needed equipment, so I have to bring my own iPad, speakers, and Internet.” In addition to bringing their own devices, some participants allowed their students to bring and

use their own devices in the classroom during certain activities. For instance, Samia, the one living alone, mentioned, “they [students] bring their iPads, they explain, they use ... any program they want and they explain”.

The following participants’ comments explain clearly the issue of not having school support in regards to not providing ICT equipment:

If it’s only a projector, laptop, it’s very easy for most of the women they buy it – most of my friends, the teachers, they bought these [devices] by themselves and they carry it daily to school. They carry it daily. Maybe other things are very expensive for them. Because they say these [devices] help us in showing the students PowerPoint. (Samia)

Some of the classes don’t have the facilities that I need to play a video or the speakers, the volume of the video would be very low or sometimes the Internet is not working, so that prevents me from showing a video on the Internet or on the Internet or something like that. But lately, the school tried to make all of the classes – [more equipped].

(Lulwa)

The second issue that hinders participants from integrating ICT is the lack of time as expressed by some of them (two of five). These participants explained that time and time management were found to be a barrier to integrate ICT especially in classes with large student numbers. Participants explained that the large number of students in their classrooms made it difficult for them to provide opportunities for all of their students to use ICT during the limited class period (45 minutes). For example, this participant stated:

Of course, if we have 50 students in the class, it’s going to be hard to use technology, a lot of technology. It depends of course on the [type of] technology, but in smaller classes, I think you can use more technology. (Alanoud)

The other participants explained that not having the knowledge to fix technical problems makes them lose time either trying to fix the problem or wait for the technicians' help who are often hard to reach:

We have sometimes problems contacting the IT and we lose our time trying to call them and when they come, it's hard to – it's hard to reach them. So, we waste a lot of time doing that which I think is affecting the learning process in a negative way. (Alanoud)

Instead of waiting for the technicians help this participant prefers to come to class always prepared with a backup plan so she does not waste the time figuring the technical problem out:

“It never seems to work when you want it to! ... There is always glitches and I always ... keep that in the back of my head, even just doing presentations... I try not to be too dependent on it again because I don't really know how to fix it if it goes wrong. I need to have a backup plan and really that's kind of my mindset about it. (Rana)

The third issue that hinders participants from integrating ICT is the lack of training, which was expressed by only a few of them. Although all of the participants expressed having the ability to use ICT, they did not mention having had some kind of ICT training. More than half of them mentioned that they learned about new ICT tools and how to use them from the Internet. For example Samia mentioned, “I can sit on a program for ten days, no problem, working on one program until I become a master of it and then I can change.” Only a few of the participants voiced the need for workshops:

I think it is really important for there to be resources for teachers at whatever stage they are at ... I just think it is so important to have workshops and resources and places for them to go to kind of catch up on all of this and go ok what does this mean for me. What does it mean for my class? How can this help us? Just to get more familiar with it. I feel

like at least for me and for older generations technology is a little intimidating so I think just having a place where you can go and explore with it is so important rather than just having it thrown into your classroom and being expected to use it perfectly. (Rana)

The workshops that the participants believe are needed are the kind that has some kind of hands on activity where teachers can *explore* not only sit and listen to a trainer. She feels the need for this type of training in order to increase her knowledge on ICT and technology in general. Her awareness of the rapid and constant change of technology makes her believe in the importance of continuous workshops for teachers. She explains:

I don't have a Twitter account, I don't have a Tumblr, I do have Facebook, caught that one! I never created a blog or a blogster... I kind of look into the future with even more anxiety a little bit because ... if I don't understand technology now it's only gonna go faster. So you know I hope that we see more of those [workshops] being talked about.
(Rana)

These were the main hindrances that affected participants' ICT integration. They were as explained above: lack of school support, and lack of time. Lack of training was mentioned by a few of the participants as a barrier for ICT integration.

Summary

This chapter presented the five findings revealed by this study. Findings were organized according to the research questions, the two major and the three sub questions. Data which included interview transcripts and filed notes revealed participants' experiences with ICT integration at Tatweer schools. As common to qualitative research, extensive samples of

quotations from participants was included in the presentation of findings. I intended to increase credibility by using participants' own words to accurately represent the phenomena under study.

The major finding of this study was that all five participants felt good about being a woman and they believed that gender does not make a difference in their own abilities of using technology or integrating ICT. Participants expressed positive views on being a woman, and fulfilling the role of raising children as part of them being women and being a female teacher.

The second finding was that more than half of the participants believed that the gender of the technicians at the school affects the quality of the service the technicians provide them; teachers thought that female technicians provided poorer service compared to male technicians due to inadequate training. Interestingly, although all participants expressed feeling good about being a woman and believed that gender does not make a difference in their own abilities of using technology or integrating ICT, more than half of them believed that gender affects female technicians' abilities to solve complicated problems at the school, which affects the quality of support they get from them when needed.

The third finding was that the majority of the participants described their experience of integrating ICT mostly as a teaching tool to present information and to deliver knowledge to students. They talked about the different ways they utilize ICT as a presenting tool to display content to their students. Other participants integrated ICT to share content with their students and communicate with them.

The fourth finding was that participants' reasons to integrate ICT into teaching were to consider professional needs, and students' needs. Regarding professional needs some participants held the same belief about ICT that it helps in saving time and effort. They thought that ICT could help in delivering lessons in a much easier and faster way. Their examples were

the same on the use of ICT such as presentation programs substitutes writing on the board and repeating themselves. Moreover, some teachers believed that ICT integration should be purposeful with a clear objective such as providing EFL students with authentic content. As for meeting students' needs, participants integrated ICT to engage their students and make them more interested in the lesson. Also they understood that their students are of the younger generation who typically is used to using technology outside the school.

The last finding was that the issues that affect their ICT integration included lack of school support which included not having well trained technicians, and not having any ICT equipment in the classroom. Lack of time was also expressed as an issue affecting ICT integration by some participants. As for lack of training, it was mentioned by only a few of the participants as a barrier for ICT integration. In the following chapter I will provide a discussion to examine the findings under the light of the previous research, discussed in chapter two, to interpret the findings of this research.

Chapter Five: Discussion

This chapter begins with a summary of the study. Then, it provides a discussion of the findings that emerged in relation to previous literature and conclusions drawn from the findings. Finally, limitations are considered, recommendations for future research and implications for practice are presented.

Summary of the Study

Reviewing the literature of ICT integration showed that there is an emphasis on studying teachers' ICT integration because they are key factors in the success of ICT integration (Albirini, 2006; Ertmer, 2005; Li, 2007). The studies that have been done generated useful information on this topic (Almaghloogh, 2008; Kamal, 2012; Oyaid, 2009), but there have not been many studies examining ICT integration experiences by teachers in Saudi Tatweer schools. The focus of previous research has been on examining the type of ICT being used or the frequency of its use.

On the contrary, this study utilized sociocultural theory and feminist perspectives as lenses to provide a better understanding of female Saudi EFL teachers' holistic experiences in regards to ICT integration at Tatweer schools. In other words, sociocultural theory and feminist perspectives were used to understand what influenced Saudi teachers' decisions and actions relating to ICT integration in their teaching. Open-ended semi-structured interview questions were used to collect data from five participants. The analysis of the data involved utilizing Vagle's (2014) phenomenological data analysis approach in order to understand participants' experiences of ICT integration. The findings from this qualitative study showed that all participants had positive views about being a woman, but had negative views on female technicians' abilities to provide them good quality services when needed. The study revealed

that gender did not make a difference in their abilities of using technology or integrating ICT except when teachers wished to video record their lessons due to religious and cultural restrictions. Moreover, all participant teachers used ICT mostly as a presentation tool. Teachers' reasons to integrate ICT into teaching were to consider students' needs, teachers' needs, and educational need. Further analysis of the data showed that there were some barriers to ICT integration such as the lack of time, lack of ICT training, and the lack of school technical support. This chapter will present a discussion of the findings.

Discussion of the Findings

Research Question 1: What is it like to be a Saudi female EFL teacher integrating ICT at Tatweer schools?

This study revealed that all teachers' had positive views regarding their gender. They expressed these positive views through a range of adjectives they used to describe their feelings towards being a woman. Some of those words were 'happy', 'proud', and 'lucky'. They associated being a woman with motherhood, having the ability to give birth, although one of them has no children of her own. Moreover, they talked about raising children as one of the most important roles for a woman; "I think [raising children] is more suitable for woman and they're more capable of doing it in the best ... way. This is how, I think, they were created." (Alanoud). In addition, they thought that teaching is nurturing, which suits women since they do it with their children, "all females are naturally teachers" (Luluwa).

Participants defined the concept of being a woman by certain activities and attributes that are present in their culture. According to them, women are the ones who are expected to raise the children. Moreover, they assumed that women do this activity better than men merely because of their gender. Feminist theory explains that women in this study hold a narrow

distinction between what is considered nature and what is considered nurture. According to Fausto-Sterling (2000), the human development, which includes gender roles, is not characterized by that narrow distinction. Instead, the social can influence the biological and the biological can influence the social. Nature and nurture are not necessarily distinct and they do interact continually. What can be inferred from this finding is that teachers' views about gender roles are the product of their patriarchal culture which distinguishes between nature and nurture, and believes that women do a better job in raising children and teaching because of their nature while ignoring social influence.

Moreover, because Saudi women have been engaged in raising children and nurturing them for so long, this shaped their identity and the way they think about their role in society. Reflecting on their experiences and views of what it meant to be a woman, I realize that although they are happy, and proud about being a woman, they need to look at being a woman in a way that is not associated with what a woman does in life. This way they may move forward and seek to improve their conditions, also ask for what they need. For instance, they will no longer think they are good teachers because they are capable of nurturing children, or they are not good at IT because of their gender. On the contrary, they will start to realize that their conditions are due to the circumstances that the patriarchal society imposed on them and not merely because they are women; or as Alcoff (1988) puts it they will stop seeing themselves as a set of attributes that are objectively identifiable.

All participants' did not believe that gender affects the way they integrate ICT. There was only one example that was mentioned by some of them that explains how gender might make a difference in their ICT integration experiences, yet they emphasized that it was not an important difference. When analyzing the data and focusing on the multiple elements that might

affect participants' behavior in regards to ICT integration according to the perspective of the sociocultural theory, this issue seemed to be related to religious and cultural beliefs regarding women in the Saudi society. Sociocultural theory focuses on language, social and cultural influences on the person's behavior. It states that culture along with social interaction and language all directly influenced one another as well as a person's development. Therefore, people's actions are determined by the way they are socialized (Miller, 2006). The idea that everything that enforces behavior is a tool is a central idea of sociocultural theory. In this study, religion and culture are found to be tools that influence teachers' behavior which is integrating ICT. An intersection between gender, religion and culture which are multiple dimensions that shape a woman existed (Crenshaw, 1989).

The use of cameras to video record a lesson or other related activity in the school is one condition that more than half of the teachers mentioned to illustrate the difference between their ICT integration as women and men's ICT integration. As female teachers teaching female students in gender segregated schools, using cameras to video record was not allowed. Some teachers explained that religion is the reason for this restriction on women because women should be covered in front of non-related men and video recording students might risk that and expose them to other men without their 'hijab' Islamic cover:

And say to the believing women that they should lower their gaze and guard their modesty; that they should not display their beauty and ornaments except what must ordinarily appear thereof; that they should draw their veils over their bosoms and not display their beauty except to their husbands, their fathers, their husbands' fathers, their sons, their husbands' sons, their brothers, or their brothers' sons or their sisters' sons, or their women or the servants whom their right hands possess, or male servants have no

desire for women, or small children who have no sense of the shame of sex, and that they should not strike their feet in order to draw attention to their hidden ornaments. And O you Believers, turn you all together towards Allah, that you may attain Bliss. (Quran 24:31)

Other teachers believed that culture was behind it because they were aware of the students' use of social media applications that allow them to take pictures and videos in the school if they wanted to. However, this reveals that society is not yet ready to accept that a teacher took a picture/video of their daughters. For instance Haifa explained "I know now that they are using snapchat and they are sending each other's picture but still still still, it's too early... the society didn't come over this problem." There is still a cultural barrier to use some types of technology.

According to Miller (2011), Vygotsky's sociocultural theory states that our actions and behaviors are determined by our socialization. In this study the elements that influenced teachers' behavior, which is integrating ICT, were religion and culture. This finding confirms what Alenezi (2015) said about the role of religion in ICT implementation. He said that for a successful transition from ICT adoption to ICT implementation, the ICT implementation should be grounded in Islamic values and traditions. Those are considered to be tools that influenced teachers' behavior. In this context, the Islamic value of modesty and wearing hijab influenced teachers' decisions for integrating ICT. Religion and culture were aspect that influenced female teachers' ICT integration decision even though participants did not declare it as an important influence.

Within this religious and cultural context, I assume that teachers did not want to be attacked or judged morally by traditionalist fellow teachers, students, or students' parents. Using some ICT tools could encourage others to stand against teachers. Teachers are constantly

conscious of the need to filter the ICT tools that they may integrate realizing what is culturally and or religiously acceptable and what is not. The Religious, would be any ICT tool or use that does not confirm with Islamic teachings, while the cultural would be any violation of moral 'Saudi' standards. Teachers consider this when deciding what and how ICT tools should be integrated. For instance Skype is used cautiously, ensuring that it is voice only call, where students listen to and interact with a mostly female guest speaker. Language tutoring websites that offer tutoring services between members are avoided and not recommended to students because there is a possibility for female students to interact with a person from the opposite gender and that is not acceptable culturally especially when it is one-on-one interaction. Students are advised not to incorporate music in their work because the majority believes it is prohibited in Islam.

Personally, I remember during my study in the U.S.A. the several times I was asked to create a portfolio, a tutorial, or an introductory digital story about myself and was asked to include a picture of myself. These times were hard for me because I did not feel comfortable to share my picture with others on the Internet for cultural reasons. But I understood the logic behind it, and did it anyway for the educational purposes. Thus, I understand what these teachers are going through and what they have to think about when it comes to making these decisions regarding ICT integration. So if I were in my participants' place I would most probably do the same and avoid integrating ICT that is not grounded in Islamic values and Saudi traditions, however, I would look for a substitute instead and would not let go integrating ICT completely.

Research Question 1-a: How do Saudi female EFL teachers' views about technology in relation to gender affect their ICT integration at Tatweer schools?

The second finding indicates that participants think there is a gender digital gap that exists between female and male technicians, but there is not a gender digital gap between teachers as Cooper (2006) believed. According to them, male technicians have much better abilities in solving technical problems that face teachers when trying to integrate ICT. They believe that male technicians have better training which makes them better in what they do, hence the services they get from their female technicians are not of high quality which affects their ICT integration.

Unlike Kamal's (2012) finding, which indicated that Saudi teachers' technology practices are influenced by gender, this study's findings reveal that technicians' technology practices are influenced by gender more than teachers' technology practices. According to Kamal's study female teachers get less training than male teachers because most of the professional training workshops are held at centers outside schools and transportation for females in Saudi Arabia is not as convenient as it is for males. Although this was not proven in the current study, receiving less training for female technicians who provide technical support for teachers integrating ICT was mentioned by participants. Moreover, it was found as one of the issues that affected teachers' ICT integration experiences.

It does not seem that they believe females do not have enough interest or aptitude to learn about technology. However, when they talked about female technicians, what they needed according to them was more experience and training. For example Luluwa said, "I think they [female technicians] don't have that much of experience, probably in the future, this will improve". It could be inferred that they did not believe those female technicians have less

interest, aptitude and personality characteristics, compared to men, to pursue studies in computer science or similar fields. This is contrary to Vekiri's (2013) study that found that although all teachers believed that developing ICT skills is equally important for all students regardless of gender, around half of them thought that boys were more likely to have the interest, aptitude and personality characteristics to pursue studies in computer science or similar fields. Saudi Female EFL teachers at Tatweer did not believe in the gender stereotypes in relation to ICT.

Research Question 2: What are Saudi female EFL teachers' experiences with ICT integration at Tatweer schools?

Based on the third finding, participants in this study mentioned using ICT regularly in teaching, yet was most of the time their integration of ICT was to improve their teaching activities, though some of them did consider students' productivity and engagement in ICT use. Saudi female EFL teachers at Tatweer schools use ICT in a way that is not critical for students' active learning, hence it might be inferred that participants did not integrate ICT effectively in their teaching as they did not utilize the possibilities that ICT could offer to support students' active learning.

This finding is consistent with previous studies conducted in Saudi Arabia schools that are not Tatweer schools, (Almaghlouth, 2008; Oyaid, 2009) where it was shown that Saudi teachers appeared to be limited users of ICT. For example, Oyaid's (2009) study that examined the perceptions of Saudi secondary school teachers' ICT use and its relation with broader educational goals concluded that Saudi teachers' use of computers is still in the early stages of implementation because they tend to use ICT in a way that resembles their traditional approach of teaching (Oyaid, 2009).

To further explain, the findings of this study show that the way of ICT integration has not changed much. For instance, previous studies revealed that most Saudi teachers used ICT mainly to deliver their lessons using traditional methods but with new ways of information presentation, such as showing videos, pictures, and sound (Oyaid, 2009). Moreover, the digital projector was the most frequently used for most participants who stated that they used ICT in their classrooms (Almaghlouth, 2008). The current study indicates that participants used ICT mostly as a presenting tool to display content to the students via slide show programs such as PowerPoint, Keynote, Prezi, etc., using the projector, which confirms the findings from previous literature studies.

The analysis of the data revealed that the majority of the participants focused on mainly using ICT as a presenting tool to display content to the students. They depended heavily on the projector to do so. Even in the cases where a smartboard was available, none of the participants mentioned using smartboards in their classrooms instead of the projector. Some participants talked about using ICT such as Blackboard and web quests to share content with students but that is mostly takes place outside of the class time. This result, along with the findings from the previous studies in the Saudi context, implies that the Saudi teachers' use of ICT mostly was still not effective. According to Leach and Moon (2000), using computers only for word processing or presentations does not indicate "effective" implementation of ICT.

Moreover, using ICT to deliver knowledge is not very different than teachers delivering knowledge themselves because students passively obtain the knowledge either from the teacher or from ICT. This means in this case they learn from ICT instead of learning with it. Learning with ICT means students actively use it to construct their own knowledge (Partnership for 21st Century Skills, 2009).

Nonetheless, more than half of the participants integrated ICT in a way that considered individual students learning and not only used ICT to present information to the whole class where the teacher transmits knowledge while students listen passively. This type of ICT integration was evident in the case of Samia, Lulwa and Rana. When these participants utilized ICT in a way that is more focused on the student they demonstrated a student-centered approach of teaching. This pattern of ICT integration, although occurred less regularly than participants' main ICT use as a presenting tool, is more effective because it gives students the opportunity to engage actively in learning (Brown, 2004). As found in the literature, effective ICT integration involves using ICT as a knowledge construction tool rather than an instructional tool (Jonassen, Carr, & Yueh 1998). Hence, effective ICT integration encourages constructivist-learning environments that are student-centered, where students learn through purposeful activities in which they are active participants rather than mere passive receivers of information.

Research Question 2-a: What influences Saudi female EFL teachers' decisions to integrate ICT into teaching?

In this study, findings show that the majority of female Saudi EFL teachers at Tatweer schools seemed to consider professional and students' needs. To clarify, the majority of the participants used ICT as a presentation tool, as revealed by the third finding, which meets their professional needs because it helps to facilitate classroom operations by saving time and effort, also it helps to facilitate the delivery of information.

Although teachers used ICT to save their time and facilitate delivering information, sometimes ICT integration is pushed aside to make time for covering the textbook. Tatweer school leaders and policy makers might need to reconsider the students' evaluation system that focuses only on the material in the textbook. Taking some action towards this problem will help

teachers feel less pressured to cover the material in the textbook and brings ICT integration more to the center of their teaching.

According to the fourth finding, some of the participants considered creating customized classroom material to provide authentic experiences for students when making decisions about integrating ICT in their teaching. It was important for participants to consider providing authentic material and creating authentic experiences for students to help them learn the English language better. Integrating ICT effectively yields many benefits (Warschauer & Healey, 1998) and providing learners with authentic language input is one of them (Li & Walsh, 2011). Participants in this study such as Haifa and Rana used the Internet to provide some authentic material. They went to the “website of BBC and had [students] listen to news broadcast in English” which indicates that students’ roles were passive ones. Teachers in this study did not integrate ICT effectively in a way that help students take part in online communities (Dudeney & Hockly, 2012) where the native language is used.

Although some of the participants considered students’ needs, this consideration did not often lead to having students use ICT effectively. Those teachers rationale for integrating ICT was to get students excited and engaged, more than to improve students’ thinking and learning by developing their own knowledge. These participants realized the importance of integrating ICT in education to be comparable to the young generation who uses it outside school, but not all participants used it in a way that helps students to be able to collaborate and contribute to be successful globally (Partnership for 21st Century Skills, 2009). Oyaid’s (2009) study as well found that teachers use ICT in their teaching because it has advantages for the students and attracts their attention in the class. Teachers feel motivated to educate students so they are able to participate in the economic and social environment of the country in the future.

The findings of the current study indicate that ICT integration was mostly limited to the delivery of lessons to students, even when some teachers discussed some use of ICT by their students. They merely used ICT to reproduce the information they found about the lesson. Teachers considered engaging their students, but the engagement did not lead to meaningful learning in which students learn through the use of ICT to construct, design, and communicate with each other (Howland, Jonassen & Marra, 2012). In order for ICT integration to be effective, teachers must use ICT as “mindtools” to assist students in organizing and interpreting what they learn, allowing students to “function as designers,” and use ICT as cognitive amplification tools “for interpreting and organizing their personal knowledge” (Jonassen, et al., 1998, p. 24). As revealed in this study the majority of teachers’ ICT integration did not allow students to engage in critical, higher order thinking about content (Jonassen, 2000).

Research Question 2-b: What issues did Saudi female EFL teachers perceive hinder their ICT integration at Tatweer schools?

Three barriers were found in this study that affected teachers’ ICT integration. The majority of the participants mentioned the lack of school support as a barrier. School support included not having enough and well trained technical technicians and not having any ICT equipment in the classrooms. Most of the participants explained that their schools lacked adequate technical support. For example, one of the teachers mentioned that her school did not have a trained technician but had a computer science teacher who played the role of the specialist to provide technical support.

This finding is consistent with previous research studies. For example, Almaghlouth’s (2008) study found that the lack of technical support was one of the most identified barriers in ICT use. In addition, Oyaid’s (2009) study found that the lack of maintenance and technical

support was an important factor that affected teachers' use of ICT. Moreover, lack of adequate technical support services in schools severely limits teachers' technology use (Hew & Brush, 2007).

The unavailability of adequate technical support services seemed to affect many teachers' ICT integration experiences. Even when schools were equipped with some ICT resources such as in the case of Rana with the smartboards, and Alanoud with the computer lab, the lack of experienced technicians made teachers in those schools avoid using the available devices. This was because of the teachers' fear of technical breakdowns or failures.

This result is comparable to the finding of previous studies. For example, Oyaid (2009) reported that the lack of maintenance and technical support was considered by many teachers as a hindrance which has a direct effect on teachers' confidence as a result of their constant fear of technical breakdowns or failures. She concluded that teachers' lack of confidence can be resolved by the availability of reliable in-school based technical support. It seems that teachers need adequate technical support services to help them utilize ICT resources better.

The other aspect of the lack of school support was not having any ICT equipment in the classrooms provided by the school. The results revealed that not having ICT equipment in the classroom provided by the school did not discourage teachers from bringing their own devices to utilize. Teachers stated that they brought their own laptops, projectors, iPads, and portable wireless routers for Internet access to their classrooms. Moreover, some of them allowed their students to bring and use their own devices. Teachers had to carry their devices daily to the school which was expressed as a bit of a burden for some as “[teachers] bought these [devices] by themselves and they carry it daily to school. They carry it daily!” (Samia) yet, it did not lead them to discontinue using ICT.

According to the literature in the Saudi context, the availability of resources in classrooms is found to be one of the most common barriers to ICT use in Saudi Arabian schools (Al-Alwani, 2005; Almaghlouth, 2008). For example, Almaghlouth (2008) found that teachers and students have limited or no access to computer labs and to highly technical equipment such as digital microscopes, digital cameras, laptop computers, and scanners, which makes it difficult for ICT use. Inadequate school support in any of its aspects hinders teachers, and creates a barrier to effective ICT integration in teaching (Chen, 2008). Surprisingly, this study revealed that lack of equipment was not a barrier for teachers and they overcame that by bringing their own devices. Probably, being able to afford buying their own devices allowed them to overcome this hindrance.

The second barrier that the current study revealed affecting teachers' ICT integration was the lack of time mentioned by some of the participants. Teachers talked about not having enough time during the 45 minutes of the class period to integrate ICT, especially with the large number of students that reaches 50 in a classroom. Moreover, the lack of inadequate technical support has an effect on teachers' time utilization. Participants mentioned that they lose a lot of time waiting for a technician to come to their classroom to solve a problem. For instance, Alanoud clarified, "We have sometimes problems contacting the IT and we lose our time trying to call them ... it's hard to reach them."

This finding confirms with previous studies that found that teachers identify time as a hindrance to ICT integration (Oyaid, 2009) although they did not find it time consuming to find appropriate resources, create appropriate material, and develop the skills needed for advanced technology as found by Chen (2008). Teachers mentioned that they use the Internet to search for new technology that they can use in the classroom and learn about it. For example Haifa

explained, “I taught myself one of the [tools], I used the Internet...I opened the Internet and I found many, examples and I used it in my class and it was perfect.” So, the problem of lacking enough time occurs during the class not outside of it regardless of their heavy loads of teaching (24 hours per week).

As for the third barrier, few participants mentioned lack of training as an issue affecting their ICT integration. Only few of the participants indicated the importance of and the need for training in the form of hands-on workshops in order to increase their knowledge on integrating ICT. Furthermore, none of the participant indicated getting training by the school on integrating ICT although some of them have six years of experience or more. Probably, as a result of the lack of training participants educated themselves on ICT uses by exploring the Internet.

Previous studies (Haydn & Barton, 2008; Chen, 2008) found that training is one of the most effective factors in ICT integration, and expressed the existing need for focused training in content and tools because it is more effective for teachers. But only a few of the teachers in this study believed they needed ICT training. Although Chen found that EFL teachers who use the Internet actively are the ones who had technology training, this study proved the contrary. Participants who did not have ICT training experiences still used the Internet actively inside and outside the classroom.

Conclusions from the Findings

The first major finding of this current study is that all teachers felt good regarding their gender, and believed that being a woman does not make a difference in their own abilities of integrating ICT. An intersection between gender, religion and culture existed when teachers talked about using certain ICT tools such as cameras. A conclusion to be drawn from this

finding is that, for a successful ICT integration in Tatweer schools in Saudi Arabia ICT use should be grounded in Islamic values and traditions.

The study's second major finding was that more than half of the participants believed that the gender of the technicians at the school affects the quality of the service the technicians provide them. Two main conclusions can be drawn from this finding. First, poor performance of female technicians at Tatweer schools affects teachers' ICT integration. Second, female technicians lack of adequate training or experience could be the reason for their failure to help teachers facing technical issues when integrating ICT effectively.

The Tatweer project adopts more active learning strategies such as inquiry-based, problem-based, project-based, and collaborative learning, as the learning norm (Tatweer, 2010). It pushes for a student-centered approach to learning. Tatweer schools' curriculum emphasizes using technology in education to support student collaboration and help them gain 21st century skills (Tatweer, 2010). But this was not the case with the participants in this study.

The third major finding of this study is that the majority of teachers tended to use ICT as a presenting tool to display information for the students. A main conclusion from this finding is that using ICT merely as a presenting tool barely affects students learning outcomes. Teachers who aim to integrate ICT effectively should integrate ICT in a way that enables students to learn with it to construct their own knowledge instead of learning from ICT where students passively receive information.

The fourth major finding was that teachers considered two needs when they thought of ICT integration, first professional needs, then students' needs. A main conclusion can be inferred from this finding. Teachers mainly considered students' needs for motivation. They

used ICT to get students excited and engaged, more than to improve students' thinking and learning by developing their own knowledge.

The fifth major finding, teachers identified barriers that they believed hindered their ICT integration. This study's final finding was that the majority of participants indicated that, not having school support impacted their ICT integration negatively. Some of them said that lacking time during the class limited their ICT integration. Few of the teachers believed that lacking training hindered them from integrating ICT. There are three main conclusions that can be drawn from this finding.

First, for teachers to integrate ICT in their teaching effectively, school support that includes adequate technical support and sufficient ICT equipment must be provided. ICT integration is not the responsibility of the teacher alone. To integrate ICT effectively, the school should play its role as well. Second, when considering integrating ICT in teaching, time of the class period and the number of students must be taken into consideration. Not only are the teachers the ones who are supposed to think of the time that allows for ICT integration, but also the school because the large number of students in a class, which is the school's responsibility not the teacher's, affects this matter. Last, those teachers who did not have the chance to attend training workshops provided by the School, had to try to educate themselves on using ICT to seek knowledge on the Internet. This does not ensure they learn how to integrate ICT effectively depending on what they find on the Internet. For the Tatweer School, there is a great emphasis on the instruction because it is one of the aspects that the project invests on through professional development for teachers (Tatweer Co. for educational services 2013). Kamal (2012) mentioned some of the aspects of professional training at Tatweer schools "training a huge number of teachers annually ... Arabization ... of relevant material and content, and providing teachers and

school leaders with the tools and resources for the usage of ICT within education” (p. 14-15).

Participants in this study did not get the chance to participate in any of these workshops that are developed to help teachers improve their instructional strategies.

Limitations

Study limitations are anticipated weaknesses associated with the research (Creswell, 2012). In most qualitative research studies, generalizability of findings is not possible because of the purposeful selection of participants; instead transferability, credibility, and dependability achieved by trustworthiness strategies are focused on (Creswell, 2013). In this study five participants who teach at schools of a certain program were interviewed, which limited generalizing the findings because of the small number of participants who taught at a Tatweer school. Although the number of participants is small, the study focused on the depth of data gathered from each participant.

Another limitation is related to the participants’ recruitment technique. Initially, I wanted to utilize the social network website Twitter, to recruit potential participants. I thought of Twitter as a method to reach potential participants because the Tatweer Project has an official account on this social network, @tatweer_project, with many followers, around 25849 followers, who identify themselves as teachers at Tatweer schools. Therefore, by posting a tweet that includes the account of the Tatweer project, I believed there would be a possibility that the followers of that account read the post and those who were interested would contact me. I intended to post about my interest in studying ICT integration by Saudi female EFL teachers at Tatweer schools in Saudi Arabia. Unfortunately, I was not able to utilize Twitter because I was not able to obtain a permission letter from the Tatweer Project official account to provide to IRB get approval for using social media to recruit participants. Instead, I used a reverse snowballing

technique (Bodgan & Biklen, 2007) in which through personal contacts, I provided my contact information to each participant after interviewing her and asked her to share it with prospective participants who fit the inclusion/exclusion criteria; being Saudi, female EFL teacher at a Tatweer school in Saudi Arabia, aged 18 and over.

Finally, the control for accuracy with the responses from the participants in the study was a limitation. There was a possibility for the participants to answer the interview questions in a way they felt would reflect their effective ICT integration skills or to meet the expectations of the researcher. This possibility of responding to a question to match the perceived expectations of the researcher is present in studies that use interviewing techniques. However, I took measures of trustworthiness, such as member checks and data triangulation to ensure accuracy and to build rapport to gain trust from my participants.

Recommendations for Future Research

This study collected data from interviews with a total of five Saudi female EFL teachers at Tatweer schools. Hence, the findings are not comprehensive enough to generalize on all Saudi female EFL teachers at Tatweer schools across Saudi Arabia. Therefore, further research on teachers' ICT integration in Tatweer context is still needed in order to inform Tatweer decision makers. Future research needs to focus on Saudi male EFL teachers' experiences with ICT in Tatweer schools, in order to conduct an in-depth comparison between Saudi female EFL teachers and Saudi male EFL teachers' experiences with ICT integration in Saudi gender-segregated Tatweer schools. The present study contributes to the discourse of ICT integration by providing an understanding of female experiences only.

Moreover, future research should investigate females' technical supporters at Tatweer schools because they play a role in the ICT integration process. Their experiences should be

carefully examined to understand why their services are not viewed positively, and to come up with solutions to enhance their performance in providing better support to teachers.

In addition, future studies should examine the concept of ICT in the Saudi Arabian research on ICT because now it seems to me that most studies are not actually focusing on ICT tools that promote communication, production of content, publishing etc. The word technology can easily be substituted with ICT in these studies. I want to know what is the understanding of ICT for Saudi researchers, and participants in other words teachers. It seems that there understanding of ICT would not necessarily mean the same thing.

Lastly, I would recommend conducting a similar study to the current one but with a different selection strategy for example, one that looks at EFL Saudi female teachers at Tatweer schools who are recognized for their ICT integration, or teachers approached through Tatweer social media accounts such as Twitter, then compare their experiences with those chosen in the current study.

Implications for Practice

As mentioned in the second chapter of this study, Tatweer's educational reform aims to improve the public educational system's quality through the integration ICT. This project was intended to "institutionalize information and communication technology (ICT) resources at the classroom and school building-levels to create a new paradigm for teaching and learning in Saudi Arabia" (Wiseman, Astiz, & Baker, 2013, p. 41). Although not all Tatweer schools are equipped with various ICT resources-as initially planned- the goal of the project has not changed in the second phase because there is an understanding of how important this goal is to Saudi Arabia's education, especially considering the fact that almost half the Saudi population is under the age of 20 (Central Department of Statistics and Information 2010). This makes that Saudi's

population digital natives (Prensky, 2001). Improving 21st century skills is a major goal of education for Tatweer, however, ICT integration in some Tatweer schools does not appear to be done effectively, based on the current study's findings.

To me it seems that almost every aspect of society in the 21st Century revolves around ICT. Therefore, it is essential for educators to integrate ICT in the education of students of today who are born into a world rich with technology. Digital natives were not just born into a digital and information age, but also they speak the digital language fluently, and their whole lives revolve around technology Prensky (2001). Hence, in order to connect the school to the world outside school that revolves around technology, educators should integrate technology so those digital natives could get a meaningful education. This seemed to be a view the participant of this study shared with me, but found it challenging to apply effectively in their Tatweer schools for several reasons. First, the lack of proper professional developments for teachers whom Prensky (2001) considered them as "digital immigrant." Although not all participants were like Rana a true 'digital immigrant who knows few things about technology, and needs assistance to try new things, yet professional development is needed for all teachers regardless of their familiarity with ICT and technology use in general.

Second challenge is the lack of school support. In order to achieve Tatweer goals of proper ICT integration to prepare students who are equipped with 21st century skills to compete on a global level and be able to successfully work in the 21st century teachers need to overcome these challenges. It is essential for Tatweer schools to put professional development for teachers into consideration, and providing teachers with the needed support in the form of adequate technical support.

Third, in order to achieve the goals that Tatweer schools want to meet, personally, I believe teachers' educational philosophy needs to put the learner in the center. Alyami (2014) explains that when comparing traditional public schools in Saudi Arabia to Tatweer schools, the latter have more autonomy to plan, execute, and evaluate the learning process. In such a learning environment, teachers have more freedom to design learning activities that are more student-centered using ICT that will help students use high-ordered thinking skills. Yet, from the analysis of the data, participants practiced a teacher-centered approach of teaching when they utilized ICT in their teaching. They used it as a tool to present information to their students more than using it to create opportunities for students to learn and build their own knowledge.

I believe that knowledge is gained through experiences because reality for constructivists is contingent on human practices, constructed by interaction and collaboration of humans and the world, developed and transmitted in social context (Crotty 1998). Thus, learning should be student-centered and the learning environments should encourage learners to experiment and find interesting experiences that are relevant to their context because knowledge is grounded in context and ICT consists a part in the lives of students of today; hence it needs to be integrated.

The goal of the teacher should be to create learning opportunities that "challenge learners to construct meaning within a learning community and validate knowledge through discourse and action" (Heinecke, Dawson, & Willis, 2001, p. 308). Teachers at Tatweer schools will not be able to achieve this goal without embracing an educational philosophy that encourages them to plan their lessons in a way that makes learning interactive between the teacher and the students and focuses on instructional needs of both teachers and students.

In conclusion, for Tatweer school policy makers, to achieve the goals set by Tatweer regarding ICT integration, some practical steps need to be taken to improve teachers' experiences in ICT integration:

- Encourage teachers to use ICT tools in a way that is more student-centered by providing ICT training for teachers that educate them on this topic.
- Consider the time of the lesson and the number of students in each class to give the teacher the chance to integrate ICT effectively.
- Improve the quality of the school support provided both in providing equipment and adequate technical support.
- Enhance female technician's experiences by providing more training to help them solve complicated problems in the school to save the time.
- Teachers should have access to training in their schools.
- Training should be in the form of hands on workshops where teachers can experiment with ICT tools.
- The content of training should be tailored to the subject teachers are teaching.
- The content of training should support teachers' reasons for integrating ICT.

Conclusion

The current study has significant outcomes. First, as noted, the findings from this study provide an understanding of ways in which Saudi female EFL teachers at Tatweer schools in Saudi Arabia currently integrate ICT. This was in contrast to the previously existing research that examined the use of ICT in Saudi schools, which has focused on examining the type of ICT being used, or the frequency of its use.

Second, the current study has provided valuable information about teachers' integration of ICT in Tatweer schools and the barriers that might influence their integration at a time when the Saudi government has taken major steps towards ICT implementation seen in the huge investments in the Tatweer Project. The results from this study may benefit the decision makers of the Tatweer project in Saudi Arabia. They will become more knowledgeable of the current state of teachers' use of ICT and the issues that may affect their integration.

Finally, the study demonstrated the benefit of using phenomenology as a primary research method for investigating educational technology related topics such as ICT integration. This study was grounded on interpretive phenomenology to provide rich description of the lived experiences of Saudi female EFL teachers' at Tatweer schools integrating ICT. It added to the existing literature in the field of teachers' technology integration by giving an in-depth understanding of the Saudi female teachers' voices.

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Appendix A. Interview Informed Consent Form

Informed Consent Form

Study Title: Information and Communications Technology Integration at Tatweer Schools: Understanding Experiences of Saudi Female English as Foreign Language Teachers

Study Purpose: The purpose of the proposed study is to explore Saudi female English as Foreign Language (EFL) teachers' lived experiences with Information and Communications Technology (ICT) integration in their teaching within Tatweer Schools.

Inclusion/Exclusion Criteria: Participants must be Saudi female EFL teachers with experience teaching at a Tatweer school in Saudi Arabia. All participants must be 18 years of age or older.

Participation Procedures and Duration: For this study, you will be asked to complete two interviews; each will last for approximately one hour. The first and second interviews will be scheduled approximately four weeks apart at mutually agreed upon time and interviews may take place in any mutually agreed upon location.

Audio Recording: With your permission, the interviews will be audio-recorded for accuracy purposes. Any names mentioned on the audio recording will be changed to pseudonyms when the recordings are transcribed. The recording will be stored on the researcher's password protected computer for five years and then will be deleted.

Data Confidentiality or Anonymity: Data for this study is confidential. Any part of the interview that might be used to identify a participant such as names will be changed to a pseudonym; also any identifying information will not be used in the study to protect the confidentiality of each participant. Only the researcher, Soha Fallata, and the Faculty Advisor, Dr. Ayesha Sadaf, will have access to the interview recordings, and field notes gathered during this study.

Storage of Data: Electronic data files whether interview recordings or filed notes will be stored on the researcher's password-protected computer and/or iPad for five years and then deleted. The reason for the maintained time frame is for the possibility of future publications or presentations based upon the research findings of the dissertation. Upon the completion of the specified time line, all collected, transcribed, and generated materials will be permanently deleted.

Risks or Discomforts: This study does not have any anticipated risk, yet at any stage of the study you are free to withdraw as a participant at any time without bias from the researcher.

Benefits: Participants may feel a sense of satisfaction from conveying their experiences to an interested listener.

Voluntary Participation: Your participation in this study is completely voluntary and you are free to withdraw your permission at anytime for any reason without penalty or prejudice from the investigator. Please know that your participation in this study will not affect your employment at

your school. Please feel free to ask any questions of the investigator before signing this form and at any time during the study.

IRB Contact Information: For one's rights as a research subject, you may contact the following: For questions about your rights as a research subject, please contact the Director, Office of Research Integrity, Ball State University, Muncie, IN 47306, (765) 285-5070 or at irb@bsu.edu.

Consent:

I, _____, agree to participate in this research project entitled, "Information and Communications Technology Integration at Tatweer Schools: Understanding Experiences of Saudi Female English as Foreign Language Teachers". I have had the study explained to me and my questions have been answered to my satisfaction. I have read the description of this project and give my consent to participate, and I give permission for the researcher to use an audio-recording device to record interviews in the manner described above. I understand that I will receive a copy of this informed consent form to keep for future reference.

To the best of my knowledge, I meet the inclusion/exclusion criteria for participation described on the previous page in this study.

Participant's Signature _____
Date _____

Researcher Contact Information:

Principal Investigator: Faculty Supervisor:

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Appendix B. Interview Semi-Structured Open-Ended Interview Protocol

Script: Thank you for willing to volunteer your time to participate in this study. In this first interview, I will ask you some questions related to your experience with integrating technology in teaching at your school. Shall we start the interview?

1. Please tell me a little about your self?
 - a. What is your degree?
 - b. How long have you been teaching in this school etc.?
2. What is it like for you to be a female?
3. What is your gender role?
4. What are your thought about women and technology?
5. What influences your decisions to integrate or not integrate ICT into teaching?
6. How is being a female integrating ICT makes you feel?
7. What do you think hinders you from integrating ICT in teaching?
8. How would you integrate ICT if you were a male EFL teacher?
9. Is there anything else you would like to add about your experience of integrating technology at a Tatweer school?

Script: Thank you again for sharing with me your experience. Understand your experience could help providing a deeper understanding of teachers' experiences integrating technology at Tatweer schools. If you're willing, let us schedule the second interview within four weeks from now. The second interview will be a follow up interview in which I'll be asking you to clarify and expand on some questions that I might have after going through this interview. Please let me know if you have any questions or concerns.

Second Interview

Script: Thanks again for meeting me with for the second interview. This interview will be a follow up for the first one to expand on and clarify some questions.

1. Is there anything else you would like to add about your experience of integrating technology at a Tatweer school?

Script: I want to thank you again for your time and willingness to share your experience with me. It was an honor for me to be able to learn more about your experience with integrating technology at a Tatweer school. I will send you the transcription of the interview so you can check for the accuracy. Please let me know if you have any questions in the future or would like to see the result of my research. Best regards to you.

Appendix C. Initial E-mail Sent to Potential Participants

Subject: Invitation to participate in Technology & Education study

Hello [name of potential participant],

My name is Soha Fallata. I am a graduate student at Ball State University, Department of Educational Studies. Your name has been given to me by [contact name]. I am conducting a study about “Information and Communications Technology Integration at Tatweer Schools: Understanding Experiences of Saudi Female English as Foreign Language Teachers”. I would be interested in learning about your experience as a Saudi female teacher of English as a Foreign Language with integration of information and communication technology at Tatweer schools.

Would you be interested in this opportunity to share your thoughts? I would be more than glad to meet and explain the study in more details.

Regards,

Miss. Soha Fallata, Graduate Student
Dept. of Educational Studies
Ball State University
Muncie, IN 47306
Email: sfallata@bsu.edu
Mobile: +1-916-595-1065

If I get a positive reply and the person agrees to participate, I will schedule a time, date and location to meet.

If the person declines, then I will thank her for her time.

Appendix D. Interview Consent Form Arabic Version

بسم الله الرحمن الرحيم
عزيرتي معلمة اللغة الانجليزية بمدرسة تطوير،
السلام عليكم ورحمة الله وبركاته،
سلمها الله،
وبعد،

أنا سها محمد أحمد فلاته طالبة مبتعثة بالولايات المتحدة الأمريكية لنيل درجة الدكتوراه بإذن الله قسم دراسات تربوية تخصص مناهج وتكنولوجيا التعليم بجامعة بولستيت. أرجو مساعدتك في التفضل بالمشاركة في هذا البحث الخاص برسالة الدكتوراه بعنوان (استخدام تكنولوجيا المعلومات والاتصالات في مدارس تطوير: فهم تجارب معلمات اللغة الانجليزية السعوديات).

يهدف هذا البحث إلى مقابلة بعض معلمات اللغة الانجليزية السعوديات لفهم تجاربهن في استخدام تكنولوجيا المعلومات والاتصالات في التعليم في مدارس تطوير في المملكة العربية السعودية.

مشاركتك في هذا البحث مشكورة سلفا لا تشكل أي خطورة عليك، علما بأنها تطوعية ويمكنك التوقف عن المشاركة في أي وقت بدون أي قيد أو شرط. علما بأنه يجب أن تكون المشاركة سعودية، معلمة لغة انجليزية ولديها خبرة تدريس في أحد مدارس تطوير بالمملكة العربية السعودية، ولا يقل عمرها عن ١٨ سنة.

سيطلب منك المشاركة في مقابلتين ستأخذ كل واحدة حوالي ساعة من الوقت، وسيتم تسجيلها صوتيا على جهاز تسجيل الكتروني. ستكون المقابلة الثانية بعد شهر تقريبا من الأولى. والمقابلتين ستتم في مكان يتفق عليه الطرفان: المشاركة والباحثة.

إن التوقيع على هذا النموذج يعني الموافقة على المشاركة في البحث والسماح للباحثة بتسجيل المقابلة صوتيا والاحتفاظ بالبيانات في ملفات الكترونية محمية بكلمة سر لاستخدامها لاجراض علمية فقط مثل هذا البحث وما يترتب عليه من مشاركة الباحثة في مؤتمرات او مجلات علمية.

مع العلم بأن البيانات والمعلومات الشخصية مثل التصريح باسم المشاركة أو مدرستها لن تطلب منك، وسوف تظل سرية في حال ذكرت معلومة شخصية اثناء المقابلة، كما وستستخدم أسماء وهمية عند تفريغ المحادثات. وللعلم الباحثة ومشرفتها د. عائشة صدف فقط من سيملك الحق للاطلاع على تسجيلات المقابلة والملاحظات الخاصة بها.

كما أن توقيعك على هذا النموذج إقرار منك بأنك تستوفين شروط المشاركة في هذا البحث على حد علمك. وكما أنه إقرار منك بأنك قرأتني وصف البحث وتمت الاجابة على جميع أسئلتك بشكل وافي.

إذا كان لديك أي استفسار أو تساؤل حول هذا البحث الرجاء الاتصال بالباحثة من خلال بيانات التواصل الموضحة بأسفل النموذج. ولك خالص التحية والتقدير. كذلك في حال أردتي الاستفسار عن حقوقك كمشاركة في بحث علمي يمكنك التواصل مع لجنة أخلاقيات البحث في الجامعة من خلال بيانات التواصل الموضحة بأسفل النموذج.

أوافق أنا _____ على المشاركة في هذا البحث الخاص برسالة الدكتوراه بعنوان (استخدام تكنولوجيا المعلومات والاتصالات في مدارس تطوير: فهم تجارب معلمات اللغة الانجليزية السعويديات). وقد قرأت وصفه وشرح لي بشكل واضح وقد تمت الإجابة على جميع أسئلتني بشكل وافي. كما أعلم بأنني سأستلم نسخة من هذا النموذج للاحتفاظ بها والرجوع لها عند الحاجة.

توقيع المشاركة _____ التاريخ _____

المشرفة د. عائشة صدف قسم الدراسات التربوية- كلية المعلمين- جامعة بولستيت الولايات المتحدة الأمريكية البريد الالكتروني: sadaf@bsu.edu الهاتف: 0017652852720	الباحثة سها محمد أحمد فلاته قسم الدراسات التربوية- كلية المعلمين- جامعة بولستيت الولايات المتحدة الأمريكية البريد الالكتروني: sfallata@bsu.edu الهاتف: 0019165951065
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