A Mixed-Methods Study of the EFL Professional Knowledge of Pre-service and In-service Saudi Teachers in Saudi Arabia

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Abstract

This study explores Saudi English language teachers' English as a Foreign Language (EFL) professional knowledge in Riyadh, Saudi Arabia. The study's main objective was to investigate and compare the different knowledge domains of pre-service and in-service EFL teachers, while also exploring the relationship between EFL professional knowledge and a number of demographic variables, such as gender, educational training, educational level, academic discipline, school type, school stage, and teaching experience. A mixed-methods explanatory sequential design was adopted using such data collection tools as an online self-assessment questionnaire, semi-structured interviews, and the Teacher Knowledge Test. A total of 556 in-service teachers self-assessed their EFL professional knowledge via online questionnaires; 30 in-service teachers participated in the semi-structured interviews; and 1,916 pre-service teachers completed the Teacher Knowledge Test. The analysis showed that both pre-service and in-service teachers possessed low levels of EFL professional knowledge and were especially limited in their knowledge of language proficiency, pedagogy, students, technology, content, curriculum, and context. The study also identified statistically significant differences in teachers' professional EFL knowledge based on gender, educational training, educational level, school type, and teaching experience. However, no statistically significant differences were found based on academic discipline and school stage. The study's findings will make an important contribution to enhancing the understanding of EFL professional knowledge and will be of great value to language teachers, language teacher educators, and policymakers in supporting EFL teachers, including Saudi EFL teachers, in their pre-service education and professional development.

Contents

List of Appendices

List of Tables

List of Figures

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Declaration

I declare that this thesis is a presentation of original work and I am the sole author.

This work has not previously been presented for an award at this, or any other,

University. All sources are acknowledged as References.

Dedication

This journey would not have been possible without the support of my family. I dedicate this work to my family for their unconditional love, support and encouragement throughout my life and, in particular, during my years of education and the preparation of this thesis.

1 Introduction

1.1 Introduction

This study investigates the professional English as a Foreign Language (EFL) knowledge base of pre-service and in-service teachers in Saudi Arabia and the differences based on demographic variables, such as gender, educational training, educational level, academic discipline, school type, school stage, and teaching experience. Additionally, this study sought to identify the gaps in the EFL professional knowledge of Saudi in-service teachers and their preferred educational methods. This chapter briefly describes the study's background, aims, and the contribution it could make to the current knowledge and practice of EFL professionals in Saudi Arabia. This chapter will also present research questions, research methodology, the significance of the study, and an outline of the overall thesis.

1.2 Background of the Study

English is one of the most widely spoken languages in the world. It is one of the international languages that has spread throughout almost all countries. The English language certainly has a unique status as a global language, as proficiency in English offers individuals many professional and academic opportunities. English is the official language of science, medicine, engineering, economics, business administration, and other fields (Al-Seghayer, 2011). Realising its importance, many countries introduced the English language to their national curricula as a main subject. Moreover, higher education institutions have designed teacher preparation programmes and training courses for EFL teachers.

Despite these efforts and numerous educational reforms to improve the teaching-learning process of English, EFL poses a tremendous challenge to students and teachers in many countries (Fareh, 2010), particularly Saudi Arabia (Picard, 2018). The Kingdom of Saudi Arabia's ranking in the EF English Proficiency Index (EPI) report has been declining since 2017. In the latest report from 2020, the Kingdom of Saudi Arabia ranked 97th out of 100 countries in the world with a score of 399 points (EF English Proficiency Index, 2020).

The possible causes of such decline are rooted in the pre-service teacher preparation programmes and in-service teacher professional development (Al-Hazmi, 2017). Elementary, intermediate, and secondary English teachers in Saudi Arabia are trained through teacher preparation programmes offered by English departments in several Saudi universities (Al-Seghayer, 2017). However, these preparation programmes have different programme designs (e.g., English language translation and English language and literature) and requirements. Such differences can limit the opportunity to have a unified EFL professional knowledge base and establish national standards and frameworks that guide and influence teacher preparation and training (Al-Seghayer, 2014). Academics have urgently called for reforms in Saudi EFL teacher-preparation programmes and in-service training programmes (Freihat & Alshowaier, 2019). For example, Al-Seghayer (2014) stated that "the current programmes are inadequate for the preparation of Saudi EFL teachers, especially with regard to disciplinary knowledge, pedagogical content knowledge, and technological pedagogical knowledge" (p.146).

As a lecturer in a teacher preparation programme in a university in Saudi Arabia, I was frequently confronted by pre-service teachers' misconceptions of what EFL teachers need to know to teach the English language effectively. When the students were placed in a real classroom, they usually expressed shock and

17

disappointment to me, regarding their EFL professional knowledge. They highlighted the fact that the situation in the classroom was totally different from the content of their preparation program. As part of my job as a lecturer in the teacher preparation program, I used to visit schools and talk to in-service teachers. Sadly, they had the same problems. Criticising their previous education, many in-service teachers pointed out their lack of professional EFL knowledge. I was rather intrigued by these comments, which led me to further research the topic of teacher professional knowledge in the EFL context. As noted by Borg (2019), teacher cognition remains under-researched and needs to be explored further.

Despite the increasing research interest in subject-specific teacher knowledge, the scientific understanding of teachers' professional knowledge of EFL is very limited and has rarely been studied in Saudi Arabia (Munifatullah et al., 2016). Clearly, defining a professional EFL knowledge base could be the first step in research to improve the quality of EFL teacher preparation programmes and training courses (Carlson et al., 2015). To be effective in their classrooms, Khan (2012) argued that EFL teachers should be familiar with the core knowledge domains needed for their profession. These preparation programmes and training courses should truly reflect the EFL teachers' learning and teaching needs and put enough emphasis on filling any existing knowledge gaps, in order to help teachers to excel in their job responsibilities.

Thus, any knowledge gap in the teachers' EFL professional knowledge can lead to a myriad of problems in real-life classrooms (Sahragard & Saberi, 2018b). For example, a lack of knowledge of technology was identified by teachers as one of the most important barriers to technology integration in the classroom (Mercader & Gairín, 2020). Another example was reported by Xu (2015), who found that a lack

of sufficient pedagogical and content knowledge can cause difficulties for EFL teachers in planning, monitoring, and evaluating their teaching.

1.3   Study Rationale

Many studies emphasised the positive impact of highly effective teachers on their students' personal lives and educational outcomes. A strong relationship between teacher effectiveness and student achievement has been reported in the literature (Burroughs et al., 2019; Hatisaru & Erbas, 2017; Hill & Chin, 2018; Tucker & Stronge, 2005). Effective teachers use their professional knowledge to facilitate a successful learning process. It is thus imperative for teachers to develop high levels of expertise to help the learning process. The first step for such development, as Al-Hazmi (2009) maintained, would be to clearly define the specific types of professional knowledge that teachers need to develop (Al-Hazmi, 2009). However, a comprehensive literature review of language teaching, teacher education, and teacher cognition has made it clear that the EFL field lacks a well-defined base of professional knowledge (Al-Seghayer, 2017). As Fischer et al. (2012), Munifatullah et al. (2016) and many others have observed, EFL professional knowledge is an understudied topic. The vast majority of the studies testing teacher knowledge have focused on teachers' knowledge of mathematics and science (Hestness et al., 2018; Sorge et al., 2019).

Furthermore, in recent years, concerns have been raised about EFL education in Saudi Arabia and that poorly designed pre-service programmes and the lack of in-service training have led to professionally and linguistically incompetent Saudi EFL teachers (Javid et al., 2012). In light of these issues, one of the prominent researchers in the field of EFL in Saudi Arabia, Al-Seghayer (2017), urgently called for educational reform regarding pre-service and in-service training models in Saudi

Arabia. Therefore, this study investigated the different domains of EFL professional knowledge and the differences in teachers' knowledge based on their gender, educational level, academic discipline, school stage, school type, and teaching experience. Including such demographic variables in the investigation has a significant advantage, as it provides a deep, well-rounded analysis of EFL education in Saudi Arabia.

In the EFL field, numerous attempts have been made to identify and classify the different domains of knowledge that constitute the professional knowledge base of English language teachers (Al-Seghayer, 2017; Alharbi, 2020; Burroughs et al., 2019; Guerriero, 2013; König et al., 2016b). A large body of research on the topic of EFL professional knowledge has led to various conceptions of EFL teachers' knowledge base with different definitions and constructs (Andrews, 2001; Elbaz, 1983; Gess-Newsome, 2015; Richards, 1998; Shulman, 1986; Turner-Bisset, 2001). However, despite these attempts, there is still no consensus regarding which domains of EFL knowledge should constitute the professional base, creating confusion in the field (Fernandez, 2014). The need to elucidate the EFL teacher knowledge base is therefore urgent. A clear definition of the EFL professional knowledge base is necessary to create professional standards, evaluate teacher preparation programmes for pre-service EFL teachers, and design training programmes and professional development opportunities for in-service teachers (Alsowat, 2017).

Due to cultural reasons, many studies in Saudi Arabia are limited to one gender of participants. Many researchers in Saudi Arabia rarely investigate their topic with both male and female participants. They prefer to work with the same gender to avoid crossing any cultural or religious boundaries, especially in interviews. However, cross-gender studies can provide valuable insight into any

topic. Balancing gender and culture in research requires cultural knowledge, continuous critical reflection, and researcher flexibility (Redman-MacLaren et al., 2014). For this study, conducting interviews with both male and female EFL teachers allowed me to compare their professional EFL knowledge as well as understand the differences between male and female teachers.

1.4 Objectives of the Study

The main objective of this research is to explore the professional EFL knowledge of English language teachers in Saudi Arabia by particularly focusing on the professional EFL knowledge of pre-service and in-service teachers in Saudi Arabia as well as investigating whether their professional knowledge varies according to demographic variables, such as gender, educational training, educational level, academic discipline, school type, school stage, and teaching experience. Investigating pre-service and in-service teachers' EFL professional knowledge is essential to avoid fragmented language teaching. The comparison between pre-service and in-service teachers' knowledge can strengthen institutional coordination in future planning, in the fields of initial teacher education and professional development. Moreover, examining and comparing the different knowledge domains of both pre-service and in-service teachers can generate useful insights, in order to align and create integral and complementary pre-service and in-service programmes.

1.5   Research Questions

This study aims to contribute to the existing body of literature by addressing five research questions, to investigate the EFL professional knowledge of pre-service and in-service teachers in the Kingdom of Saudi Arabia. The research questions also explore the knowledge gaps and challenges that Saudi EFL teachers might face. The detailed research questions of the present study are as follows:

1. What is the level of EFL professional knowledge of Saudi pre-service EFL teachers?
   1.1. Are there any statistically significant differences in Saudi pre-service teachers' EFL professional knowledge in terms of:
       1.1.1. Gender
       1.1.2. Educational training
2. What is the level of self-evaluated EFL professional knowledge of Saudi EFL in-service teachers?
   2.1. Are there any statistically significant differences in Saudi in-service teachers' EFL professional knowledge in terms of:
       2.2. Gender
       2.3. Educational training
       2.4. Educational level
       2.5. Academic discipline
       2.6. School type
       2.7. School stage
       2.8. Teaching experience
3. How does Saudi pre-service EFL teachers' professional knowledge compare to Saudi in-service EFL teachers' self-evaluated professional knowledge in terms of:
       3.1. Gender
       3.2. Educational training
4. What are the gaps in the EFL professional knowledge of Saudi in-service EFL teachers?
5. What are the preferred educational methods of Saudi in-service EFL teachers?

1.6   Research Methodology

The current study employs an explanatory sequential design mixed-methods approach to answer its research questions. Qualitative and quantitative research are used to inform one another and gain a thorough understanding of the topic. This study uses a self-evaluation online questionnaire, which is a self-assessment tool, to investigate the in-service teachers' level of professional EFL knowledge. Additionally, face-to-face and semi-structured phone interviews are used, to gain a deeper understanding of the EFL professional knowledge of the in-service teachers. In Saudi Arabia, pre-service teachers are required to pass a vocational test which is called the Teacher Knowledge Test (TKT), before applying for teaching positions in public schools. Thus, this study also uses the results of the TKT as secondary data to investigate the pre-service teachers' professional EFL knowledge level.

1.7   Significance of the Study

This thesis makes several contributions to the small body of knowledge available on the EFL professional knowledge of teachers, especially Saudi teachers in Saudi Arabia. By introducing an improved framework of the EFL professional knowledge base (and a self-assessment questionnaire based on the proposed framework), this study makes a major contribution to advance the understanding of EFL professional knowledge. First, the findings of the study will help to assess, evaluate, and redesign the existing teacher preparation programmes and professional development opportunities to improve Saudi English language teachers' knowledge. In addition, the study performs an in-depth analysis of the professional EFL knowledge level of pre-service and in-service Saudi teachers in Saudi Arabia and collects data through both qualitative and quantitative approaches.

The new professional EFL knowledge base framework could inspire future research in Saudi Arabia and will hopefully pave the way for comparison studies in other contexts. The findings of this research can be used to offer recommendations of great value to EFL teachers, teacher educators, and policymakers in Saudi Arabia. Fundamental knowledge and continued professional support tailored to meet the needs of Saudi teachers could contribute tremendously to a more successful educational process (Almohideb, 2019).

The current study could be beneficial to pre-service and in-service teachers alike. Through the findings of this study, teachers may discover how a strong EFL professional knowledge base is conducive to teacher and student learning. Raising teacher awareness of the professional EFL framework and how it could be put in practice could improve teachers' performance and metaknowledge. EFL teachers could benefit from knowing the different knowledge domains, methods of acquisition, gaps, sources, and effective applications. Investigations of teacher knowledge could also be beneficial for teacher educators and policymakers in the curriculum development process. As argued by Evens et al. (2018), greater awareness about the nature and structure of the knowledge base of teachers would lead to the design of more effective training programmes.

1.8   Structure of Thesis

This section outlines the thesis and the content of each of the seven chapters.

Chapter 1 presents the introduction of the study. The chapter starts with a brief background of the study, followed by a list of objectives and the research questions that this study intends to answer. The methodology used is then briefly described. The first chapter elucidates the significance of the current study and delineates the different chapters of the thesis.

Chapter 2 offers a detailed description of the Saudi context, providing information regarding the educational system, historical background of Saudi Arabia, and EFL in Saudi Arabia, to fully explain the factors influencing the data in the current study.

Chapter 3 provides a literature review of the theoretical developments of teachers' knowledge, with a special focus on EFL teachers. The chapter also offers definitions of the different types of knowledge that constitute the professional EFL knowledge base.

Chapter 4 explains the research methodology and why the research design is appropriate for the purposes of the current study. This chapter describes the pilot study, data collection instruments, data collection procedures, the settings, the participants, and data analysis.

Chapter 5 presents the results according to the research questions and obtained from the Teacher Knowledge Test, semi-structured interviews, and the online questionnaires.

Chapter 6 offers a discussion of the findings in relation to previous research. It highlights the different knowledge domains of EFL professional knowledge, as well as the pre-service and in-service teachers' level of that knowledge in relation to different demographic variables. It also addresses the knowledge gaps and preferred education methods of EFL teachers in Saudi Arabia.

Chapter 7 presents the summary and conclusions of the current study. This chapter reiterates the background, justification, and approach of the study. It also offers the implications of the study and its contributions to the field. Finally, the study's limitations and suggestions for future research are presented in this chapter.

2   Context of the Study

2.1   Introduction

The purpose of this chapter is to introduce the context of the present study, providing a lens through which the findings can be viewed and situated. Contextualising the study will clarify the reasons behind employing certain techniques, such as the methodological approaches, as well as the arguments, findings, conclusions, and recommendations. This context is also critical to develop a base for comparison with similar previous research.

This chapter starts with an overview of the history of education in Saudi Arabia. Afterwards, it presents different educational reforms and the current educational system, with a focus on English as a foreign language (EFL). The chapter then discusses teacher preparation programmes and professional development opportunities for teachers offered by the Ministry of Education and the Ministry of Higher Education of Saudi Arabia, highlighting the different programmes and their structures, objectives, outcomes, and challenges.

2.2   History of Education in Saudi Arabia

The roots of modern Saudi Arabia extend back to the ancient civilisation that lived in the Arabian Peninsula. For centuries, the peninsula played an important role as a trading centre and the birthplace of Islam. The Kingdom of Saudi Arabia is located in southwest Asia; its capital is Riyadh. It is the largest country in the Arabian Peninsula, with a population of 33.7 million people. It is bordered by the Red Sea and the Gulf of Aqaba on the west and the Arabian Gulf on the east. Its neighbouring countries include Jordan, Iraq, Kuwait, Qatar, the United Arab Emirates, the Sultanate of Oman, Yemen, and Bahrain (Figure 2.1).

Figure 2.1

Map of Saudi Arabia
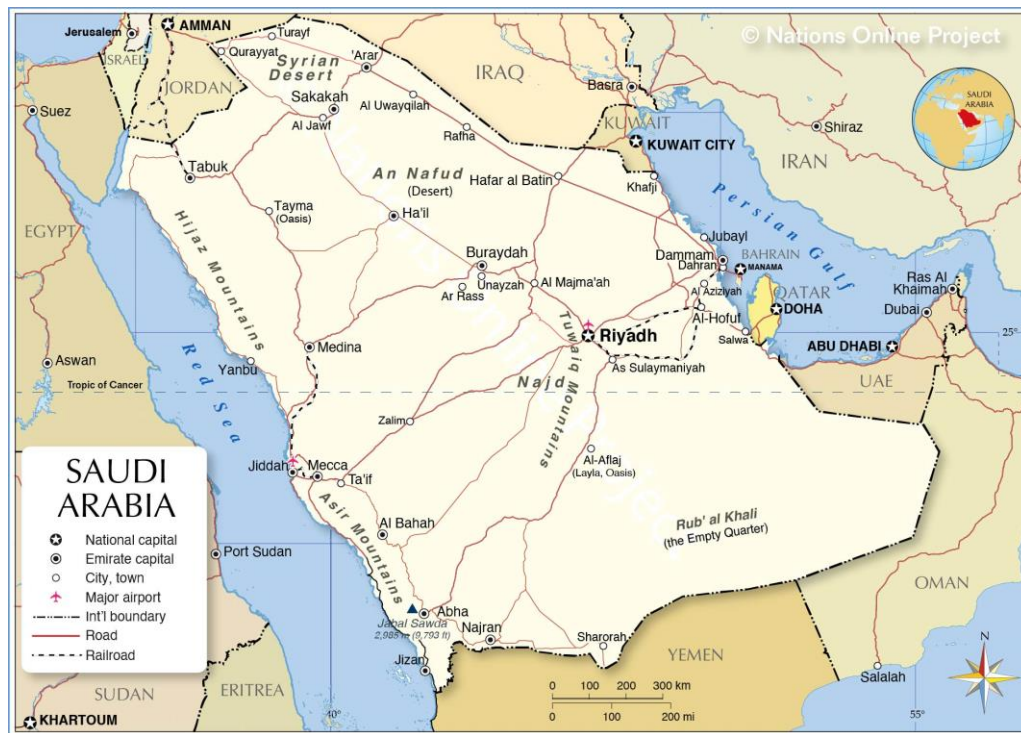
In 1943, King Abdelaziz Al Saud issued a royal decree unifying the country under the name of Kingdom of Saudi Arabia (KSA). A new era began, with enormous efforts undertaken to develop the new country. The discovery of oil resources in KSA revived its economy and education system, which rapidly transformed it into a well-established and stable country (Abir, 2020). The economic revolution that Saudi Arabia witnessed improved all aspects of human development, including the standard of living, health, and education services.

2.3   Education System in Saudi Arabia

The education system in Saudi Arabia has witnessed many changes over the years. Before the start of a formal system, education went through three stages. The first stage was the traditional stage, with religious scholars in mosques teaching students about the Quran and reading and writing in Arabic. This type of education was the norm throughout the Arabian Peninsula. The second stage was called the

27

government education, or regular education, stage. It was established and run by the Ottoman government, and the Turkish language was its basis. The third stage was known as the private education stage, managed and funded by parents in different communities. It was similar to traditional education in its curricula and teaching methods (Al-Roumi, 2013).

Education is considered one of the fundamental pillars of the country. Therefore, King Abdelaziz Al Saud established an organisation called the Directorate of Knowledge in 1925 to establish a network of schools across Saudi Arabia. However, enrolment was restricted to male students only (Ministry of Education, 2021). In 1951, the Directorate of Knowledge expanded to take on more responsibilities. The name was changed to the Ministry of Knowledge, and Prince Fahd Bin Abdelaziz Al Saud was the first Minister of Knowledge.

It was not until 1964 that the Ministry of Knowledge officially launched a female education programme in Saudi Arabia (Alqassem et al., 2016). However, its introduction faced strong resistance from some members of society and extremist groups at that time. Gradually, families started to recognise the importance of education for girls and began to support female education (Al alhareth et al., 2015). In 1975, the Ministry of Knowledge was changed to the Ministry of Education, and a new educational policy was established for general and higher education, aiming to create an effective educational environment to ensure desirable outcomes (Ministry of Education, 2021).

Significant changes have gradually been made to the education system over recent years. At present, the education system in Saudi Arabia is divided into two categories: higher education and general education. Higher education receives enormous attention from the Saudi Arabian government. Currently, there are 25 government universities and 27 private universities, each offering different

programmes for bachelor's, master's, and doctoral degrees (Ministry of Education, 2020). The general education system consists of four stages: early childhood, elementary, intermediate, and secondary. In 2016, the number of government and private schools under the supervision of the Ministry of Education reached 34,784 compared to 3,098 in 1970. According to the latest annual report, the number of students increased from 536,000 in 1970 to six million in 2016 (Education & Training Evaluation Commission, 2017). The Ministry of Education applies the same general policies, curricula, and methods of instruction to both government and private schools. Arabic, Islamic studies, math, science, social studies and English are the main subjects taught in schools.

The early childhood stage in Saudi Arabia is for children aged three to six, aims to teach them basic skills and prepare them for primary education. It is offered by government and private kindergartens, under the supervision of the Ministry of Education. In 2019, the Ministry of Education launched virtual kindergarten. By downloading an application, children have access to educational modules based on the Saudi curriculum, providing a remote means of education to the greatest number of children. The elementary stage lasts six years, starting at age six. The middle school consists of three academic years, and secondary school an additional three. Remote-based education is also available for middle and secondary levels. Madrasati [MySchool] is a national educational platform lunched in 2020 by the Ministry of Education of the KSA, in order to simulate the real system of distance education and learning in response to the COVID-19 pandemic. Students at various educational levels can attend online classes, upload assignments, take online quizzes and exams, and communicate with teachers and other students. It is worth noting that the benefit is not only for students; the platform has provided many online services for parents and all workers in the educational sector.

2.4   English as a Foreign Language in Saudi Arabia

Interest in teaching English as a Foreign Language (EFL) has increased worldwide, due to the steady growth of knowledge and the technological dominance of developed countries in all areas of life. These changes in the global community have required a focus on the English language for new generations. English language fluency has become a vital life skill in the twenty-first century. English is the second most widely spoken language in the world after Chinese (Reddy et al., 2016). Due to the increasing importance of acquiring a foreign language, the Ministry of Education in Saudi Arabia decided to introduce the English language into the national curriculum. Researchers disagree on the exact date that English was first introduced as a foreign language in Saudi Arabian education (Al-Johani, 2009; Al-Seghayer, 2011; Al-Shabbi, 1989; Baghdadi, 1985; Niblock, 2004). The dates proposed in previous studies range between 1924 and 1932.

Initially, English was taught at the elementary level for four hours per week. The number of hours was then increased to twelve per week for grades one, two, and three, and to eight for grades four and five (Al-Seghayer, 2011). The English language was also introduced at the middle and the secondary levels as a compulsory subject for six hours, which then increased to eight and was later reduced to four (Mahboob & Elyas, 2014). In 1970, the Ministry of Education ultimately decided to limit English language teaching to the middle and the secondary level, because of the prevailing belief that learning English at elementary level may affect a student's learning of Arabic (Alrashidi & Phan, 2015). It was not until 2005 that the Ministry of Education reintroduced the subject to the elementary level, starting from the sixth grade and gradually being added into the fifth and the fourth (Al-Seghayer, 2011). In 2020, Hamad Al-Sheikh, the Minister of Education,

announced that it would be introduced at the elementary level from the first grade beginning in 2021 (Ministry of Education, 2020).

2.5   Educational Reforms in Saudi Arabia

One of the goals of educational reform in Saudi Arabia is the introduction of the new English curricula. In 2014, the Ministry of Education in Saudi Arabia launched several international series of English as a second language curricula, such as Macmillan, McGraw Hill, and MM Publication (Ministry of Education, 2020). The new curricula design is based on modern theories and promotes the Communicative Approach, Constructivism, and Triple A, which all stimulate the student to practise the English language in public life through the four basic skills: reading, writing, listening, and speaking, as well as sub-language skills, such as grammar and spelling. The new English language textbooks are standardised and aligned to a comprehensive national curriculum and adhere to Saudi Arabian culture and principles. Supplementing the introduction of the new Saudi Arabian English language curriculum, the Ministry of Education launched training programmes for EFL in-service teachers, to present them with the effective use and teaching of the textbooks and the English language.

Despite the efforts made, some aspects of curriculum knowledge in these training programmes remain largely unaddressed. As Mitchell and Alfuraih (2017) noted, the training programmes were limited and did not fulfil individual teacher training needs. They also called for the rapid expansion of the programmes across different parts of Saudi Arabia, to offer training to approximately 35,000 English language teachers (Mitchell & Alfuraih, 2017).

The Ministry has carried out many educational projects to improve the level of English language education in schools and universities. A significant budget has

been allocated for the creation of such programmes, with the help of experts and educators from the UK and the USA. The goal was to design a curriculum that meets national specifications and aligns with the KSA's educational policy, while still respecting the religious and cultural values that are deeply rooted in Saudi society (Barnawi & Al-Hawsawi, 2017).

One of the key programmes of this initiative is the King Abdullah Project for general education development, known as Tatweer. A five-year programme launched in 2007, Tatweer aims to build national standards for various aspects of the educational process, developing an integrated system for evaluating the quality of education with the objective of developing high-quality curricula for English language learning (Alyami, 2014). Furthermore, Tatweer aims to improve the KSA's education system by creating continuous professional development programmes, developing curricula and learning materials, improving the school environment, employing information technology, and supporting extracurricular activities and student services (Ministry of Education, 2007).

The most recent change to education of Saudi Arabia was as part of Vision 2030. In 2016, Saudi Arabia launched multiple programmes and initiatives to develop the country. The new vision was a step towards transformation from an oil-based to a knowledge-based economy. One of the programmes targeted education in Saudi Arabia. Saudi Arabia considered all stages of education, including general education, higher education, and vocational education (Aldegether, 2020). The ambitious vision aims to bridge the gap between higher education and the job market, enabling students to make successful career decisions. The Ministry of Education announced its aim for at least five Saudi universities to be among the top 200 universities in international rankings by 2030. The Ministry of Education is also working to help students achieve results in global education indicators above

international averages. Furthermore, the Ministry of Education is working on building a centralised student database tracking student progress from early childhood through to K–12 and higher education, to improve education planning, monitoring, evaluation, and outcomes (Ministry of Education, 2020).

In addition, Vision 2030 confirms the importance of innovation in teacher preparation. Indeed, the second strategic goal of the Ministry of Education specifies "improving the recruitment, preparation, qualification and development of teachers"; while the seventh strategic goal is "strengthening the capacity of the education system to meet development requirements and the needs of the job market" (Ministry of Education, 2020, p.3).

2.6   Teacher Education in Saudi Arabia

The educational system in Saudi Arabia has undergone many reforms to cope with rapid changes around the world. Since many aspects of educational reform depend on the success of teachers, the Ministry of Education is keen to build a strong foundation for the educational system, to ensure a well-rounded education for students. Establishing this foundation involves preparing teachers with the necessary knowledge and skills to teach effectively. This section presents the history of EFL teacher preparation programmes in Saudi Arabia and the professional development opportunities offered to in-service teachers.

2.6.1   Historical Overview of Teacher Preparation Programmes in Saudi Arabia

The Ministry of Education in Saudi Arabia started the process of teacher preparation in the 1970s on a national and international scale (Al-Seghayer, 2011). King Saud University in Riyadh was the first university to establish an English department (Al-Abiky, 2019). The first teacher preparation programme for EFL teachers recruited high school graduates aspiring to be EFL teachers to join a one-year English

language program. Upon passing the comprehensive final exam, participants were sent to British universities to train for two years and earn a certificate enabling them to teach English in schools (Ibrahim, 1985).

From the 1980s onward, new programmes offered by Saudi universities replaced the British program. English departments in different colleges offered four-year English programmes designed to prepare Saudi college students to teach the language in public schools at the elementary, intermediate, and secondary levels (Al-Seghayer, 2011). Secondary school graduates joining these programmes are offered courses in general and applied linguistics, curriculum and instruction, English literature, and education. A few universities integrated intensive English-language courses at the beginning of the program, to improve the English-language proficiency level of pre-service teachers (Al-Seghayer, 2011). The following flowchart (Figure 2.2) illustrates the different routes by which secondary school graduates can enter the profession of EFL teaching in Saudi Arabia, concurrent and consecutive models. The students' choice between the two models is influenced by many factors, such as the availability of a university campus in their cities and their grades.

Figure 2.2

Different Routes to Enter the Profession of EFL Teaching in Saudi Arabia
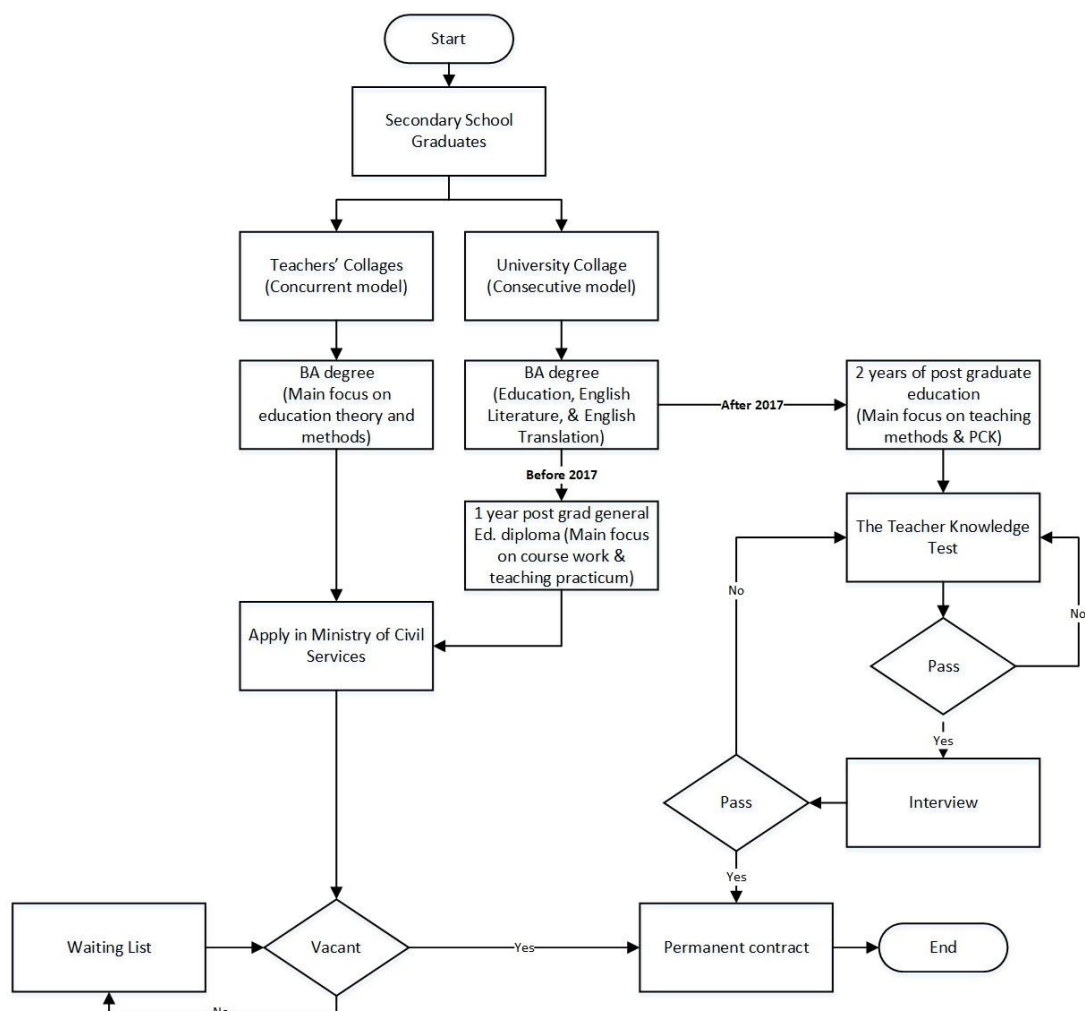
In 2017, the concurrent model was discontinued because of the educational reforms that aimed to improve the initial teacher selection and preparation process in Saudi Arabia. One of the biggest disadvantages of the concurrent model is the very long waiting time for vacant posts. Some teachers even wait for ten years. One of the factors that might contribute to the long waiting list is the student–teacher ratio in Saudi Arabia. The number of teachers is quite large compared with other OECD countries. In 2016, the student-to-teacher ratio in Saudi Arabia was only 11.7 at the primary level and 11.0 at the secondary level according to Organisation for Economic Co-operation and Development report (OECD, 2018). In 2017, the

consecutive model was modified by raising the requirement to two years of postgraduate education (Ministry of Education, 2018).

Moreover, the hiring process has become longer due to the addition of vocational tests and interviews. After passing the interviews, the pre-service teachers are offered a permanent contract upon completing the two-year probationary period. If they are found to be unsuitable for the role, pre-service teachers are dismissed or placed in an administrative position.

Despite intensive efforts and generous government spending, the quality of teacher education in Saudi Arabia remains below expectations (Al-Seghayer, 2011). A possible reason for the decline in the quality of education in Saudi Arabia could be the weakness of teacher preparation programmes (Al-Seghayer, 2014). As noted by Aldegether (2020), "teacher preparation programmes must be re-evaluated, particularly concerning the ability of these programmes to provide the awareness, knowledge, and skills necessary to fulfil Vision 2030 objectives" (p.94).

Developing teacher preparation programmes and adopting an effective policy for selecting and training teachers have thus become the pillars of any successful education reform. The strongest educational systems around the world have adopted strict teacher hiring policies (Mikkilä-Erdmann et al., 2019). For example, the strength of the education systems in Estonia, Finland, and Portugal results from their renewal of teacher preparation programmes, shifting them from the undergraduate to the graduate level and practising strict selectivity in admission (Tonga et al., 2019).

Undergraduate teacher preparation programmes suffered from several flaws, as indicated by many researchers. For instance, AL-Hazmi (2003) describes EFL teacher preparation programmes in Saudi Arabia as "inadequate and non-systematic" (p.341), because undergraduate teacher preparation programmes both fail to provide students with the means to meet the demands of modern teaching and

lack adequate teaching courses and practice (Al-Abiky, 2019). Al-Seghayer (2011) criticises the content of preparation programmes, highlighting their insufficient emphasis on disciplinary, pedagogical, and technological knowledge. Graduates of these programmes are inadequately prepared to enter service, in terms of content knowledge and teaching skills (Al-Seghayer, 2014).

In 2013, a directive of the Ministry of Education instructed all universities in Saudi Arabia to suspend admission to all undergraduate teacher preparation programmes. Currently, teacher preparation programmes are offered at the graduate level, as a master's degree or doctorate. Appendix A lists the EFL teacher preparation programmes currently offered by universities in Saudi Arabia.

In 2016, the Ministry of Education required all bachelor graduates with no educational training who aspired to be teachers to enrol in an intensive educational preparation program. This is a two-year higher diploma, equivalent to a master's degree. It is available in several universities and aims to provide the knowledge and skills needed to become a teacher. After successful completion, pre-service teachers earn a General Educational Diploma (GED). The programme offers courses in curriculum and instruction, such as teaching methods and skills, curriculum design, teaching with technologies, micro-teaching, student assessment and evaluation, and a 12-week practical training placement in public or private schools (Al-Abiky, 2019).

In 2018, these programmes were replaced by professional master's programmes, in an attempt to improve the quality of teacher education (Education, 2020). The Teacher Education Program Development Committee at the Ministry of Education renewed the teacher preparation programmes to comply with the Kingdom's Vision 2030, especially with the increased interest in technology and twenty-first century skills. In order to attract distinguished and qualified students,

the committee has set precise criteria for joining the professional master's programme including:

- The student must have a bachelor's degree from a Saudi university or from another accredited university.

- The student's grade point average (GPA) should not be less than 3.75 out of 5.

- The student must obtain a score of at least 60% in the Teacher Knowledge Test.

- The student must submit a pre-employment medical examination and history report that proves the student's ability to perform his work as a teacher.

- The student must pass the personal interview conducted by the authorised authorities.

The committee has determined that the content of the professional master's programme should cover three areas. The first area is general professional competencies, which include commitment to professional ethics, a positive attitude towards the profession, knowledge of the educational system, and active participation in professional learning teams. The second area is teaching competencies which cover mastery of teaching knowledge, building educational experiences, planning the educational situation, developing twenty-first century skills, taking into account the developmental characteristics of learners, creating a supportive and stimulating classroom environment for learning, effective use of assessment strategies and tools, the ability to deal with national and international tests, and the use of technology in educational process. The third area is competencies according to the academic discipline and school stage. In addition to the primary, intermediate and secondary school stage programmes, new programmes

have been developed such as, the early childhood teacher preparation program, and the school counselling teacher preparation programme (Ministry of Education, 2020).

2.6.2   Practicum in Teacher Education

Practicum in teacher education is the field experiences and teaching activities experienced by pre-service teachers during their programme at the bachelor's or professional master's level, with the purpose of enabling them to have professional teaching experiences through partial or total participation in teaching a school subject related to their academic discipline.

The practicum is one of the main components of teacher preparation programmes, as it allows pre-service teachers to observe and participate in teaching under the supervision of their academic supervisor, an experienced teacher, and a school leader. Its importance lies in providing real opportunities for pre-service teachers to apply the theoretical knowledge they have acquired to an educational context. They can design and plan daily lessons and experiment with various teaching strategies and methods, evaluation methods, and classroom management skills, while dealing with student problems in their natural environment. The practicum is the bridge between theoretical lessons and their practical application. It also plays an important role in the formation of positive attitudes towards teaching and the teaching profession, imparting related ethical values and principles modelled by supervisors and other teachers in real-life situations.

In 2016, the Ministry of Education instructed Saudi universities to include a practicum in all undergraduate and graduate teacher preparation programmes. In undergraduate programmes, the number of hours devoted to the practicum is 12 out of a total of 160 for the program. The practicum is divided into four independent courses, which are distributed over four academic levels within the preparation

program, starting from the fourth level of the program. Table 2.1 provides a

summary of the practicum courses in undergraduate programmes.

Table 2.1

Practicum Courses in Undergraduate Programmes

Course	Description	Percent	Level	Credits	Hours	Duration	Supervision
1	Observation	16.67%	4th	2	9	12 sessions	Academic supervisor
2	Participation 1	16.67%	6th	2	7	9 classes	Academic supervisor
3	Participation 2	16.67%	8th	2	7	9 classes	Academic supervisor
4	Practice	50%	10th	6	Academic term	Academic term	Academic supervisor, expert teacher, and school leader

The practicum is also an essential part of graduate preparation programmes. The

professional master's programme extends for two academic years, covering four

academic levels and three practicum courses. Each practical education course is

independent. These courses include early field experiences. The practicum starts

from the second level of the first year and extends to the third and fourth levels. The

following (Table 2.2) is a summary of the practicum courses in graduate

programmes.

Table 2.2

Practicum Courses in Graduate Programmes

Course	Description	Percent	Level	Credits	Hours	Duration	Supervision
1	Observation	20%	2nd	2	6	8 sessions	Academic supervisor

2	Participation	20%	3rd	2	5	6 classes	Academic supervisor
3	Practice	60%	4th	6	4–6 weeks	4–6 weeks	Academic supervisor, expert teacher, and school leader

2.6.3 Professional Development for In-Service Teachers in Saudi Arabia

There is agreement among stakeholders that in-service English teachers need continuous professional development opportunities, to maintain and improve their knowledge and performance (Johnson & Golombek, 2020). To fulfil this need, the Ministry of Education in Saudi Arabia has implemented several programmes and initiatives.

In the past, professional development programmes for in-service teachers were conducted on a limited scale, by English-language supervisors in local education departments across all regions of Saudi Arabia (Al-Seghayer, 2011). These supervisors sent out a list of training programmes and workshops from which the EFL teachers could choose. Sometimes, the supervisors or the school leaders would nominate several teachers to attend a training program. These programmes were mainly offered in English departments or in schools by experienced English teachers or supervisors. However, many studies criticised the quality and the effectiveness of these training programmes. Criticisms include the lack of quality standards (Muhammad, 2003), the lack of practical training (Al-Saba et al., 2010), the outdated training methods (Al-Anzi, 2009), to name a few. Due to the failure to provide systematic and effective training, many in-service teachers resorted to independently pursuing professional development (Al-Seghayer, 2011). Al-Hazmi (2003) points out the lack of attention given to professional development programmes stating, "it is ironic that the MoE [Ministry of Education], which has

done so much to improve and update English language curricula since 1991, has lagged in doing the same for EFL teacher education programmes " (Al-Hazmi, 2003, p.342).

In 2016, the National Centre for Educational Professional Development (NCEPD) was established to provide efficient professional development opportunities for all workers in the educational field. The NCEPD has launched numerous training initiatives. One of its main projects is an online training portal that offers various online training courses for teachers. Moreover, the NCEPD is the authority responsible for accrediting training programmes offered by national and international training centres, to ensure high-quality training programmes all over Saudi Arabia.

Another programme offered by NCEPD is Khebrat. It is a training programme whereby EFL teachers, school leaders, and English-language supervisors travel abroad to spend six months to one year studying the English language in intensive training programmes. Khebrat also provides the opportunity for teachers to attend classes in local schools, to develop their knowledge and interact with teachers and students. The NCEPD is keen on developing partnerships with the strongest educational systems globally, such as those in Finland, US, UK, Australia, and Canada. This programme aims to enrol 25,000 participants over five years. The participants go through a very competitive selection process, and upon programme completion they are required to share their knowledge and experiences with colleagues and develop a project that they can implement in their schools.

In 2018, the Ministry of Education launched another initiative called *English for All*, to improve the language proficiency of EFL teachers in Saudi Arabia. This initiative aims to enable teachers to enrol in online courses offered by recognised international institutes. The Ministry of Education made an agreement with these

institutes to offer a discount for EFL teachers. Besides the English-language course, the teachers can register with the free International English Language Testing System (IELTS) and Test of English as a Foreign Language (TOEFL) preparation courses. They are able to take a placement test after registering on the educational portal (iEN); upon completion they will be given an electronic certificate.

In 2019, the NCEPD launched another programme specially designed for new teachers. It is an induction programme to provide them with the necessary information to start their teaching careers, ensuring they meet the required performance standards. It is designed to inform teachers about the regulations and professional knowledge needed at the beginning of the academic year. So far, the programme has conducted 366 training programmes for 10,082 new teachers in 39 educational districts (NCEPD, 2020). The NCEPD also partnered with 24 universities in Saudi Arabia, to design and offer online professional development programmes for teachers during the summer holidays. The programmes offer diverse courses, to improve educational outcomes in a supportive and motivating educational environment. The Ministry of Education specified these annual training hours should amount to 150 for bachelor's degree holders, 125 for master's degree holders, and 100 for doctorate holders. Teachers are required to obtain a certificate of completion and submit it online to FARIS (Financial & Administration Resources Information System), an online system created by the Ministry of Education to facilitate online services between the Ministry's employees to increase productivity (Ministry of Education, 2021).

Despite these efforts, professional development of in-service teachers in Saudi Arabia still faces many challenges (Al-Huwaish, 2018). The current programmes have fallen short of their aims of providing appropriate teacher

education. The content, depth, breadth, and duration of the training programmes should be reconsidered, to avoid any impediments (Al-Suwaid, 2015).

2.6.4   *Professional Licensing for Teachers*

In 2020, the Education and Training Evaluation Commission (ETEC) in Saudi Arabia approved criteria for issuing professional licenses to teachers. The ETEC issued a certificate that qualifies the holder to practise the teaching profession at specific grade levels for a specific period of time. These professional licenses contribute to raising the standards of the educational system by ensuring that teacher training and competence meet pre-set standards. It is also one of the requirements for obtaining an approved professional rank issued by the Ministry of Education: teacher assistant, practising teacher, advanced teacher, or expert teacher. Additionally, teachers are required to maintain their license through an ongoing professional development training program. The professional license is given to in-service teachers and recent university graduates aspiring to join the teaching profession after passing the Teacher Knowledge Test (TKT). The TKT is a computerised vocational test pre-service teachers need to pass, in order to qualify for teaching positions offered by the Ministry of Education. Pre-service teachers can apply for the test during the last term of their Bachelor of Arts (BA) programme or after graduation. Due to an increase in the number taking the test, pre-service teachers can enter the test only once a year. If they fail the TKT on the first attempt, pre-service teachers have up to three attempts to retake it.

In-service teachers who had already passed the TKT before the regulations came into effect were automatically given a professional license. To obtain a practising teacher license, in-service teachers with less than five years of educational experience must earn a score of 50 to 69 on the test. An advanced teacher license requires in-service teachers to score 70 to 79 and have educational experience

equivalent to five years or more. The expert teacher license is obtained with a score of 80 or higher and educational experience equivalent to ten years or more. The ETEC will also issue a practising teacher license for pre-service teachers who obtain a score of 50 or higher (ETEC, 2020).

2.7   Challenges and Problems Facing EFL in Saudi Arabia

Despite the long history of teaching English in Saudi Arabia and various reforms, the general educational outcome confirms that the English ability of Saudi students is unsatisfactory (Al-Seghayer, 2014). According to statistics released in 2019 by the Ministry of Education, the overall average IELTS results of the students in Saudi Arabia is 5.4 out of 9, which is second lowest in the Arab countries (Ministry of Education, 2019). This unsatisfactory situation has led many researchers to investigate the challenges and problems facing EFL in Saudi Arabia, as a step towards improving EFL programmes in Saudi Arabia. Mitchell and Alfuraih (2017) state that, although significant developments in EFL teaching and learning have been achieved in Saudi Arabia, there are still challenges facing the English language education system.

In an attempt to solicit the views of English language teachers regarding the students' English language level, two surveys were sent electronically to English teachers throughout the KSA in 2016. Teachers reported that, despite the variety of teaching and assessment methods, the majority of students' abilities did not match their grade level. The factors that negatively affect EFL in the Saudi context could be grouped as: social, cultural, and religious sensitivities; learners' negative attitude towards English-language learning; and unfavourable institutional policies and procedures (Shah et al., 2013). The discrepancy between students' abilities and their grade level could be caused by various factors, such as the restricted number of

English classes per week, the use of the Arabic language during English class, and inappropriate teaching and evaluation methods that might contribute to students' low English proficiency. Alrashidi and Phan (2015) attribute the low level of English competence to the use of traditional teaching methods, the lack of students' motivation, the absence of authentic practice, the underestimation of the value of learning English, and the mistaken belief some people have about the negative effect of learning English on their native language, culture, and traditions.

2.8   Chapter Summary

Saudi Arabia has implemented several reforms, programmes, and structures in an endeavour to develop the country's educational system. However, as Alrashidi and Phan (2015) and Alshaikhi (2020) argue, despite the efforts made by the Ministry of Education, teacher preparation programmes and professional development in Saudi Arabia remain below the desired level, and there has been a significant decline in the output of English-language education (Alrashidi & Phan, 2015; Alshaikhi, 2020).

3 Literature Review

3.1 Introduction

The importance of the English language goes beyond the boundaries of its native terrain, as it is currently used as a second language in many other countries. The English language plays a significant role in daily communication between people worldwide. To be more precise, it has become the language of business, science, technology, and education. As more universities use English as a medium of instruction, a good English language foundation is essential for academic and professional success (Birjandi & Bagherkazemi, 2010). Recognising its importance, many countries have integrated the English language into their educational systems, including Saudi Arabia, where it has recently been introduced as a compulsory subject at the elementary level of schooling (Khan et al., 2020). As a result, many teacher preparation programmes and professional development opportunities in Saudi Arabia have been designed to provide teachers with the necessary knowledge to teach the English language successfully (Al-Seghayer, 2013).

Teacher knowledge has been the focus of many studies (Agbayahoun, 2018; Alharbi, 2020; Anbesie, 2020; Blömeke et al., 2016; Castañeda-Londoño, 2019; Sahragard & Saberi, 2018b; Schleppegrell, 2020) and several existing models have been proposed to describe teachers' knowledge (Chappell, 1995; Elbaz, 1983; Fives & Buehl, 2008; Freeman & Johnson, 1998; Gess-Newsome, 2015; Johnson, 1996; Shulman, 1986; Turner-Bisset, 2001; Woods, 1996), including the models for English language teachers (Andrews, 2001; Day & Conklin, 1992; Lafayette, 1993; Richards, 1998, 2017; Tarone & Allwright, 2005). However, misunderstandings of this knowledge still exist. To address this gap, this study aims to investigate the EFL

professional knowledge base of pre-service and in-service English language teachers in Saudi Arabia, starting with a review of the major themes, definitions and theoretical frameworks that are repeatedly highlighted throughout the teacher knowledge literature. Subsequently, an overview of the literature about EFL professional knowledge is presented. Although the literature presents these themes in a variety of contexts, the current study primarily focuses on the professional knowledge of English language teachers in an EFL context. Moreover, this study proposes a new EFL professional knowledge base, that hopefully inspires future research on EFL professional knowledge in the Saudi context and encourages other Saudi researchers to continue the effort to fill in the gap. In outlining current understandings of what comprises an EFL professional knowledge base, the nine types of knowledge proposed in this study are common to the existing models of teacher knowledge discussed. It also appears that there is a further dimension of macro- and micro-social context, which affects the entire EFL knowledge base.

The current study used a conceptual framework to structure the understanding of the EFL professional knowledge of English language teachers. The conceptual framework of this study is drawn from a review of the literature in the field of general teacher knowledge, ESL, and EFL. Maxwell (2012) defined a conceptual framework as "a system of assumptions, expectations, beliefs, theories, and concepts that support and inform research" (p.279). Conceptual frameworks are tools used to organise and guide the investigation of any inquiry (Shields & Tajalli, 2006). Conceptual frameworks can be a visual or written product that logically explains the relationship between key factors, concepts, or variables under examination (Miles & Huberman, 1994).

In an attempt to understand the EFL professional knowledge base for teachers, a framework was created after a thorough review of the articles in this

subject area of teacher knowledge, EFL, and ESL, exploring the dimensions and variables studied by previous researchers, as well as their proposed conceptual models and frameworks. This framework is based upon the Refined Consensus Model (RCM) of teacher professional knowledge, because it captures the various aspects of professional knowledge that other researchers in related fields have addressed (Carlson & Daehler, 2019). Moreover, the RCM provides a detailed description of the nature of pedagogical content knowledge (PCK) through the introduction of three major domains of PCK: collective PCK (cPCK) personal PCK (pPCK), and enacted PCK (ePCK).

This chapter therefore provides a critical review of the relevant research, focusing most specifically on teacher knowledge and EFL education. Moreover, this chapter aims to review previous frameworks, highlighting the different components of teacher knowledge and pointing out the limitations paving the way for the modifications made to the framework used in the current study.

The chapter is divided into two parts. The first part presents a synthesis of previous research on teacher knowledge and EFL education and then proposes an improved EFL professional knowledge framework. The second part identifies the gaps in the literature and introduces the research questions of the current study.

3.2 Defining Teacher Knowledge

In the last 25 years, the interest in investigating teachers' knowledge has started growing in the research of teacher education (Gass et al., 2020). The academic literature on teacher professional knowledge has revealed several contrasting themes. Faez (2011) noted this a decade ago, but the debate still has not reached a consensus on what teacher knowledge should consist of. The definition of teacher

professional knowledge varies in the literature, causing terminological confusion.

Therefore, it is essential to clarify how this term embodies many concepts.

Teacher knowledge formed the central focus of studies by Gess-Newsome (2015), Guerriero (2013), and Hestness et al. (2018) in which the authors proposed various concepts of teacher knowledge. Other researchers, however, focused on teachers' attitudes (Fives & Buehl, 2008; Oddah & Rajab, 2017; Pajares, 1992). Some authors have been interested in teacher cognition (Borg, 2003, 2006, 2019; Tajeddin & Aryaeian, 2017).

One of the early definitions of teacher knowledge was proposed by Shulman (1986). He defined teacher knowledge as knowledge exclusively applied to teaching. In his article, he talked about three domains of teacher knowledge: subject matter knowledge, pedagogical content knowledge (PCK), and curricular knowledge. He defined subject matter knowledge as the knowledge of facts and concepts and understanding the structure of the subject. Moreover, he introduced the term 'pedagogical content knowledge' to refer to the aspects of subject matter knowledge that are specifically required for teaching. PCK helps teachers to know the ways of representing and formulating the subject to make it comprehensible to students (Shulman, 1986). He defined curricular knowledge as the knowledge of the sequence of topics or concepts to be taught and the materials and resources suitable for a particular topic (Shulman, 1986).

In 1986, Shulman elaborated on the topic of teacher knowledge by providing seven categories of knowledge essential for teaching:

- content knowledge
- general pedagogical knowledge
- curriculum knowledge
- pedagogical content knowledge

- knowledge of learners and their characteristics

- knowledge of educational contexts

- knowledge of educational ends, purposes, and values and their philosophical and historical grounds

Following Shulman's (1986) work, Grossman and Richert (1988) explored the topic of teacher knowledge, aiming to identify the essential knowledge needed for teachers to be effective inside the classroom. In their study, they defined knowledge as "a body of professional knowledge that encompasses both knowledge of general pedagogical principles and skills and knowledge of the subject matter to be taught" (p. 54). Fives and Buehl (2008) used the term "teacher knowledge" to refer to all knowledge related to the practice of teaching. Alexander et al. (1991) define knowledge as "an individual's personal stock of information, skills, experiences, beliefs and memories" (p. 317). Pajares (1992) defined teacher knowledge as the ideas that influence how teachers conceptualise teaching. In 2001, Verloop et al. defined teacher knowledge as "all profession-related insights that are potentially relevant to the teacher's activities" (p.445).

As the above definitions show, the focus of teacher knowledge was on enabling teachers to fulfil their central role: teaching subject matter, using appropriate pedagogical principles and skills. However, it seems that, over time, the term 'teacher knowledge' has expanded and broadened significantly. Other studies started to suggest integrating professional, general, and personal idiosyncratic characteristics of teacher knowledge (Clandinin & Connelly, 1988; Tamir, 1991). Despite the importance of teacher knowledge, there remains a paucity of information on the EFL professional knowledge base (Andrews, 2003).

3.3   Frameworks for Categorising Teacher Knowledge Domains

In the past, many concerns were raised regarding the absence of theoretical frameworks to establish a base for language teacher educational programmes (Nunan & Richards, 1990). Therefore, educators and researchers have paid much attention to the knowledge necessary for teaching and have proposed a number of frameworks. This section reviews the existing frameworks that are commented on and related to the current study.

Teacher knowledge has been investigated in terms of its nature, form, organisation, and content (Grossman et al., 1989). The term "teacher knowledge", as related to instructional competencies in the classroom, is explained by Golombek (1998). This study mainly explored the personal practical knowledge of teachers and how it evolves over time in different contexts. Golombek (1998) defined the content of teachers' personal practical knowledge as the knowledge of self, knowledge of subject matter, knowledge of instruction, and knowledge of context. Edwards and Ogden (1998) focused on the subject matter in teachers' knowledge. They define it as "the transformation of student teachers' subject knowledge into tasks that aim to promote pupil learning of the subject" (p.744).

In 1983, Elbaz was one of the earliest researchers systematically studying teacher knowledge. Based on her two-year study of a very experienced high school teacher, Elbaz (1983) focused on the content of teachers' practical knowledge: knowledge of self, knowledge of the milieu of teaching (e.g., classroom, school), knowledge of subject matter (e.g., math, history, science), knowledge of curriculum development (e.g., objectives, lesson plans), and knowledge of instruction (e.g., learning theories, teaching approaches). Nevertheless, Jiang et al. (2013) pointed out the problematic nature of such methodology of only using "personal materials such

as life stories, conversations, personal writings, metaphor, journals, and story-line methods could potentially lead to a collection of idiosyncratic teacher narratives, without any reference to scientific study" (p.487). Moreover, the methodology employed in investigating teacher knowledge in Elbaz's (1983) study approached the topic with a focus on the biographical histories of teachers which, according to Van Driel et al. (2001), could only present the "out-of-classroom" picture, while missing the fine details of the situation inside the classroom.

Pedagogical content knowledge (PCK) was first introduced by Shulman (1986). He defines content knowledge as "the knowledge, understanding, skill, and disposition that are to be learned by schoolchildren". On the other hand, he argues that PCK is a mix of content and pedagogy that should enable teachers to comprehend how particular aspects of their subject matter are organised, adapted, and represented for instruction. Shulman believes that pedagogical knowledge means 'how' teachers teach. Content knowledge, on the other hand, is 'what' to teach. Shulman (1986) created a conceptual framework of teacher knowledge, introducing different types of knowledge. Shulman's idea of pedagogical content knowledge (PCK) was the starting point for a new direction in educational research. Shulman calls PCK the 'missing paradigm' in the research of teacher knowledge. Since then, many researchers have been interested in this new concept. Despite the huge body of research inspired by his framework, Shulman's (1986) theoretical framework faces criticism by other researchers. For example, Meredith (1995) has challenged Shulman's (1986) framework in two ways. Firstly, Shulman's (1986) framework presumes that subject knowledge is absolute, incontestable, unidimensional and static, offering only partial insight into the complex nature of subject knowledge for teaching. Secondly, the framework is only useful for understanding the pre-service teacher knowledge base, failing to provide a wider

range of pedagogical knowledge that might be useful for the trained teacher. According to du Plessis (2015), this includes the recognition of "different forms of pedagogical content knowledge which depend on the views, understanding and subject knowledge teachers bring to the classroom" (p.90).

Years after the introduction of the new concept, Shulman (2015) named five limitations with PCK: the absence of affect, emotion, and motivation; an overemphasis on teacher thinking versus the teacher's skilled performance in the classroom; the omission of context; the omission of a teacher's vision and goals for education; and the relationship of PCK to student outcomes. Despite these limitations, PCK continues to influence further research in the area of teacher knowledge. Researchers continue developing and working on Shulman's model, trying to avoid the limitations mentioned above.

Fives and Buehl (2008) investigated teachers' beliefs regarding the source and stability of teaching knowledge. They described five types of knowledge: pedagogical knowledge, knowledge of children, content knowledge, management and organisational knowledge, and knowledge of self and others. A serious disadvantage with this model is that it fails to consider the importance of context. One of the earliest studies to acknowledge the importance of social context in the knowledge base of the teacher was conducted by Grossman (1990). In her work, she divided teacher knowledge into four main categories: subject matter knowledge, general pedagogical knowledge, pedagogical content knowledge, and knowledge of context. Each of the categories in this model also covers other areas of the knowledge base. Subject matter knowledge includes content, syntactic and substantive structures. General pedagogical knowledge comprises knowledge of learner and learning, classroom management, and curriculum instruction. Knowledge of context covers the knowledge of community, district, and school.

PCK is perceived as the result of combining pedagogical knowledge, context, and content.

Such an elaboration of Shulman's model of teacher knowledge and a detailed explanation of the teacher knowledge base thus seems adequate. In the model proposed by Grossman (1990), conceptions of the purposes of teachers for teaching subject matter overarch the three knowledge types that constitute PCK: knowledge of students' understanding, curricular knowledge, and knowledge of instructional strategies. As a result, by incorporating the formal and practical character of PCK, this model provides a comprehensive framework for understanding the teacher knowledge base. One limitation of Grossman's model is that she does not attempt to differentiate between different types of context knowledge. Recognising this limitation, Carlsen (1999) modified Grossman's framework, by further dividing knowledge of the context into general and specific. General knowledge of context includes the nation, state, community, and schools, whereas specific knowledge of context consists of the classroom and the students. The Carlsen model (1999) successfully highlighted the relationship between context and other types of knowledge. According to Carlsen (1999), contextual factors could contribute to the formation of new knowledge, which could help teachers in that specific context to better understand the students' educational needs, which in turn could improve the learning environment.

Following Shulman's (1986) framework, researchers continued to build on it and expand it. Turner-Bisset (2001) was another researcher who expanded Shulman's framework, by listing eleven types of teacher knowledge. Some of the knowledge types were divided into two sub-groups; for example, subject matter knowledge was distinguished in terms of substantive knowledge and syntactic knowledge. Moreover, the knowledge about learners was categorised as empirical

and cognitive knowledge, referring to "what children of different ages are like; what interests or preoccupies them; their social nature; and how contextual factors can affect their behaviour and learning" (Turner-Bisset, 2001) (p.74). The framework also included beliefs about subject matter, curriculum knowledge, general pedagogical knowledge, knowledge of teaching, knowledge of self, knowledge of educational context, and knowledge of educational ends, purposes, and values.

While various frameworks have been suggested, Johnson (1996) analysed teacher knowledge from a different perspective. She broadly categorised knowledge as conceptual and procedural. Concept refers to "an abstract or generic idea, generalised from particular instances" (Merriam-Webster,2021). It is the understanding of concepts, principles, theories, models, and classifications. On the other hand, procedural knowledge concerns itself with the practical part of the knowledge. It is the knowledge of how to execute a particular task. Moreover, (Woods, 1996) argued that there are two broad categories of teacher knowledge: declarative knowledge about teaching and procedural knowledge related to classroom procedures. Declarative knowledge refers to knowledge of factual information, while procedural knowledge indicates how to perform skills. Commenting on declarative and procedural knowledge, Salaberry (2018) argues: "within the realm of second language acquisition, the contrast between declarative and procedural knowledge is sometimes equated with a parallel dichotomy between explicit and implicit knowledge" (p.2). Implicit knowledge is acquired without the intention and indirectly. In contrast, explicit knowledge is taught directly and the learners are aware of what they have learned (Williams, 2005). However, such frameworks are unsatisfactory, because they only provide broad categories and fail to offer a detailed explanation of the nature of teacher knowledge.

Verloop et al. (2001) categorised teacher knowledge into six categories: subject matter, students, student learning and comprehension, purposes, curriculum, and instructional techniques. Moreover, Tamir (1991) conducted a study to investigate teacher knowledge, and he proposed four different types of knowledge that teachers need to teach: professional, personal, practical, and theoretical knowledge of teachers. In his study, he refers to personal and practical knowledge as "the store of information and skills that guide and shape a person's behaviour". On the other hand, he refers to theoretical knowledge as "the information which constitutes part of the cognitive structure of a person but, for various reasons, cannot or does not affect practice". He argues that theoretical knowledge will change to practical knowledge through experiences. Tamir (1991) defines professional knowledge as "the knowledge and skills that are needed to function successfully in a particular profession" (p.263).

Andrews (2008) discussed teacher knowledge in terms of being implicit or explicit. Explicit knowledge is "the knowledge that can be readily articulated, codified, accessed and verbalised". Implicit knowledge refers to "skills, ideas and experiences that people have in their minds and are, therefore, difficult to access because it is often not codified and may not necessarily be easily expressed" (Chugh, 2015, p.128). DeKeyser (1998) supports this argument by stating that implicit knowledge becomes explicit knowledge "if learners have the opportunity for plentiful communicative practice".

In 1998, Richards raised concerns about the lack of theoretical frameworks for English language teaching. He argued that teacher education should provide well-balanced programmes, offering the mastery of teaching techniques and enabling future teachers to explore the knowledge, beliefs, and attitudes that influence their teaching. The framework suggested by Richards (1998), in an

attempt to understand the nature of teaching English through English, consists of six knowledge types: theories of teaching, teaching skills, subject matter knowledge, pedagogical reasoning and decision-making, contextual knowledge, and communication skills that involve general communication skills and language proficiency. Freeman and Johnson (1998) suggested that the professional knowledge base of language teachers should include teacher-learner knowledge, social context knowledge, and pedagogical knowledge. While both frameworks emphasise the importance of context and pedagogical knowledge, Freeman and Johnson's framework (1998) acknowledges the power of prior knowledge and beliefs of students' teachers, that shape the way they teach and perform inside the classroom. Nevertheless, Freeman and Johnson's framework lacks communication skills that Richards considered a key element in the knowledge base of language teachers.

A later framework on language teacher knowledge was proposed by Andrews (2003). Agreeing with Richards (1998) on the importance of communication skills, Andrews (2003) included language awareness and communicative language ability in his framework. Andrews (2003) suggested a model with three main elements: PCK, teacher language awareness (TLA), and communicative language ability. Andrews (2003) explored the relationship between PCK and TLA and combined two re-conceptualisations of language teacher knowledge, drawing on data from an in-depth study of 17 EFL teachers (Andrews, 2000). The first one was from the work of Turner-Bisset (1999), who analysed it from the perspective of general educational literature. Turner-Bisset identified ten knowledge types that affect teaching practices: subject matter knowledge; beliefs about the subject; curriculum knowledge; general pedagogical knowledge; knowledge of teaching; knowledge of learners; knowledge of self; knowledge of educational context; knowledge of educational ends, purposes, and value; and

pedagogical content knowledge. Turner-Bisset (2001) placed all knowledge types under the umbrella of PCK. The second re-conceptualisation was proposed by Tsui (2003) from an applied linguistics literature perspective, highlighting four elements of teacher knowledge: knowledge of the English language, language teaching, and language learning; knowledge of how learning should be organised; knowledge of other curricula; and knowledge of students' interests. Tsui (2003) examined the effects of TLA on pedagogical practice, claiming that they are unique knowledge for second-language teachers, since the content of the subject matter and the language of instruction are the same. Andrews (2003) suggested TLA as one of the essential elements of teacher professional knowledge and argued that this model is the bridge between PCK and the teacher's English language proficiency. TLA consists of three main components. The first component is pedagogical content knowledge, which involves knowledge of pedagogy, knowledge of context, knowledge of curriculum, knowledge of learners, and knowledge of the subject matter. The second component consists of language competence, strategic competence, and knowledge of the subject matter, which also falls under the first component. The third component is communicative language ability, which includes psychomotor skills, language competence, and strategic competence, which are shared with the second component. The term 'communicative language ability' was replaced with language proficiency (Andrews, 2003).

In his article, Richards (2010) explored the knowledge, beliefs, and skills that language teachers depend on when they teach. One of the dimensions is the role of content knowledge. He refers to the complex nature of content knowledge or subject matter knowledge of language teaching, calling it "a content knowledge dilemma". The complexity emerges from the unclear distinction between the two types of content knowledge. According to Richards, the professional knowledge

base of language teaching consists of two types of knowledge: disciplinary knowledge and pedagogical content knowledge. Disciplinary knowledge refers to "the body of knowledge that is considered by the language-teaching profession to be essential to gaining membership in the profession" (Richards, 2010, p.5). Disciplinary knowledge could include the history of language teaching methods, second language acquisition, sociolinguistics, phonology and syntax, discourse analysis, theories of language, and critical applied linguistics. The acquisition of this type of knowledge depends heavily on professional teacher education and preparation programmes. Pedagogical content knowledge is the knowledge necessary for language teaching that can provide practical solutions for language teaching. It involves curriculum knowledge, assessment knowledge, teaching young learners, teaching skills in the four domains, and so on. English language teachers need a well-balanced knowledge of both types in order to be effective teachers.

In 2017, Richards revised his teacher knowledge base framework. The new framework consists of content knowledge, pedagogical knowledge and ability, and discourse skills. Content knowledge refers to the teachers' understanding of their teaching subject. If the subject is a second language, it includes linguistics, second language acquisition, sociolinguistics, and discourse analysis. A high level of content knowledge alone is not enough for effective language teaching. Pedagogical knowledge and ability refer to the teacher's knowledge of teaching. This includes curriculum planning, assessments, reflective teaching, and classroom management. The third type of knowledge is the teacher's discourse skills, which enables the teacher to communicate in English fluently and accurately with the students in the classroom while teaching the English language. It is the skill that allows teachers to teach English through English (Richards, 2017).

The frameworks of Andrews (2003) and Richards (2017) were specifically designed to understand the knowledge base of language teachers. Previous frameworks were created to understand the knowledge base of teachers in general, for any subject area. However, the unique situation of language teaching calls for a special framework to express this uniqueness. Both frameworks contain similar elements, aiming to explain the complex nature of language teacher knowledge. Both have three main elements of teacher knowledge. The term 'discourse skills', used by Richards, refers to the same definition as language proficiency. Andrews' framework is more detailed than Richards', in showing the intertwined relationships between the sub-elements and how the main elements share some of the sub-elements. Richards' term 'content knowledge' is considered the main element, expressing the same meaning as 'subject matter knowledge', which is a sub-element under 'pedagogical content knowledge' according to Andrews.

To summarize, Table 3.1 lists the studies included in the previous section of the current chapter and outlines the theoretical models they focused on and the contexts in which they were conducted. As the review of the terminology of the teacher knowledge base showed, there has been a diversity in the terminology used to construct the different models. Unfortunately, such innovation in labelling the new concepts led to some definitional confusion (Borg, 2003). Identical terms have been defined in different ways, and different terms have been used to describe similar concepts, leading to conceptual ambiguity (Clandinin & Connelly, 1987).

Table 3.1

Theoretical Models of Teacher Knowledge and Context by Previous Studies

Source	Model of Teacher Knowledge	Context
Elbaz (1983)	1. Knowledge of self 2. Knowledge of the milieu of teaching 3. Knowledge of subject matter 4. Knowledge of curriculum development 5. Knowledge of instruction	Interviews and observations with one high school English language teacher in North America
Shulman (1987)	1. Content knowledge 2. General pedagogical knowledge 3. Curriculum knowledge 4. Pedagogical content knowledge 5. Knowledge of learners and their characteristics 6. Knowledge of educational context 7. Knowledge of educational ends, purposes, values, and their philosophical and historical roots	Theoretical article
Day and Conklin (1992)	1. Content knowledge 2. Pedagogical knowledge 3. Pedagogical content knowledge 4. Support knowledge	In-depth qualitative research of 57 ESL teachers in education programmes at the master's degree level in the US
Chappell (1995)	1. Content knowledge 2. Pedagogical knowledge 3. Pedagogical content knowledge 4. Knowledge of the learners 5. Knowledge of the environment 6. Knowledge of self	Mixed-methodology study to identify Australian TAFE teachers' knowledge, using critical incident interviews and general interviews
Johnson (1996)	1. Conceptual knowledge 2. Perceptual knowledge	Theoretical article
Woods (1996)	1. Declarative knowledge (about teaching) 2. Procedural knowledge (about classroom procedures)	Mixed-methodology study investigating eight Canadian ESL teachers using observations, video-based stimulated recall, teachers' logs, document analysis, and interviews
Freeman and Johnson (1998)	1. Teacher–learner knowledge 2. Social context knowledge 3. Pedagogical knowledge	Theoretical article
Richards (1998)	1. Theories of teaching 2. Teaching skills 3. Communication skills 4. Subject matter knowledge 5. Pedagogical reasoning and decision-making 6. Contextual knowledge	Interviews with five novice language teachers in Hong Kong

Andrews (2001)	1. Pedagogical content knowledge
	  a. Knowledge of pedagogy
	  b. Knowledge of context
		Semi-structured interviews with non-native speaking

	c. Knowledge of curriculum
	d. Knowledge of learners
	e. Knowledge of subject matter
	2. Teacher language awareness
	    a. Knowledge of subject matter
	    b. Language competence
	    c. Strategic competence
	3. Communicative language ability (language proficiency) (2003)
	    a. Language competence
	    b. Strategic competence
	    c. Psychomotor skills
		teachers of the English language

Turner-Bisset (1999, 2001)	1. Subject matter knowledge
	    a. Substantive (content)
	    b. Syntactic
	2. Beliefs about subject
	3. Curriculum knowledge
	4. General pedagogical knowledge
	5. Knowledge/modules of teaching
	6. Knowledge of learners
	    a. Imperative
	    b. Cognitive
	7. Knowledge of self
	8. Knowledge of educational context
	9. Knowledge of educational ends, purposes, and values
	10. Pedagogical content knowledge
		Case study on four postgraduate student teachers

Fives and Buehl (2008)	1. Pedagogical knowledge 2. Knowledge of children 3. Content knowledge 4. Management and organisational knowledge 5. Knowledge of self and others	Mixed-methods study to identify the different types of knowledge using open-ended teaching belief questionnaire of 53 pre-service teachers and 57 in-service teachers and Teaching Ability Belief Scale administered to 351 pre-service teachers in the US
Richards (2017)	1. Content knowledge 2. Pedagogical knowledge and ability 3. Discourse skills	Theoretical article

Since Shulman (1986) first introduced PCK into the field of teacher education, it has been the cornerstone for the subsequent research investigating teacher knowledge in different subjects, including EFL. As a result, researchers have proposed different frameworks to understand the complex nature of this topic. Day and Conklin (1992) were one of the earliest scholars to investigate the professional

knowledge of English language teachers. Agreeing with Shulman's categorisation by including pedagogic content knowledge, pedagogic knowledge, and content knowledge, Day and Conklin (1992) included support knowledge as the fourth knowledge domain in their framework. They used this term to refer to the different disciplines that inform the teaching and learning of the English language, such as psycholinguistics, linguistics, second language acquisition, and sociolinguistics. Chappell's (1995) framework was unique because it proposed a dimension of teacher knowledge overlooked by Shulman, which is knowledge of self. Chappell (1995) argued that knowledge of self could activate the use of the other knowledge domains when deciding on pedagogical action. Johnson (1996) and Woods (1996) proposed more general and broad categorisations of the knowledge domains, dividing them into conceptual, perceptual, and declarative and procedural, respectively. Given the complexity and sensitivity of the subject, a detailed description should be provided to ensure a better understanding of teacher knowledge. Subsequently, the following researchers expanded the lens of investigation in an attempt to capture the intertwined nature of the topic. Freeman and Johnson (1998) highlighted the importance of social context knowledge, whereas Richards (1998) focused on the communication skills of English language teachers. Andrews (2001) introduced the term teacher language awareness and explained the difference compared with communicative language ability.

3.4   The Consensus Model of Teacher Professional Knowledge

Different definitions, terminologies, and conceptualisations of teacher knowledge have led to a great divergence of opinions and confusion between researchers, teacher educators, and teachers themselves (Borg, 2019). In an attempt to avoid

further divergences and join efforts to facilitate collaboration between researchers around this topic, a conference was held in the United States in 2012. The conference is known as the Pedagogical Content Knowledge (PCK) Summit. A total of 22 researchers from different countries participated in the PCK Summit, aiming to rethink the PCK model. They focused on developing PCK in pre-service and in-service teachers, creating the research map for PCK, and connecting PCK to policy. The Summit had two main objectives: to design a consensus model of professional teacher knowledge and to identify future directions in the field. A unified model for PCK was created, avoiding the weaknesses and reinforcing the strengths of the previous models (Gess-Newsome, 2015). The outcome from the PCK Summit is called 'the consensus model of teacher professional knowledge'.

The first part of the model lists the general elements of the teacher's professional knowledge base, which is not content-specific. All teachers, regardless of their fields, should have these general elements: educational assessment knowledge, pedagogical knowledge, content knowledge, knowledge of students, and curricular knowledge (Gess-Newsome, 2015). As Allen (2004) noted, educational assessment is a systematic process used by teachers and policy makers to improve programmes and enhance student learning through documenting and using empirical data on the knowledge, skills, attitudes, and beliefs. The model moves from generic to more topic-specific professional knowledge, aiming to increase students' developmental levels and evaluating the best teaching strategies and content representations to ensure effective delivery of the information. Such knowledge will be processed and interpreted differently by teachers, based on their own personal knowledge and background. This type of knowledge includes knowledge of instructional strategies, content representations, students' understandings, science practices, and habits of mind. The teachers' beliefs, the context, and the orientations

for teaching will act as filters and amplifiers for the specific professional knowledge,

to translate it during classroom practice into personal PCK. Then, this knowledge is

delivered to the students after passing through the students' own beliefs, prior

knowledge, and behaviour, which will be reflected in the students' outcomes.

One of the advantages of this model is that it considers the practical and

theoretical aspects of PCK. However, the model showed a weak link between

students' outcomes and the knowledge base (van Driel & Berry, 2017). The

consensus PCK model has been updated and revised to reflect the multidimensional

nature of PCK (Carlson & Daehler, 2019). The new Refined Consensus Model

(RCM) of PCK (Figure 3.1) presents three major dimensions of PCK: collective

PCK (cPCK), personal PCK (pPCK), and enacted PCK (ePCK). cPCK refers to

shared, present, and accepted understanding of PCK by pre-service and in-service

teachers. On the other hand, pPCK is the unique and personalised understanding and

interpretation of cPCK. With time, pPCK will form the teacher's ideas and

understandings, which will shape their pedagogical reasoning involved in

performing the planning, delivering, and reflecting on the lesson (Mavhunga, 2019).

The RCM illustrates the complex layers of knowledge and factors that form

and inform teaching and learning. The first layer in the model presents the broader

professional knowledge base, which is the foundation to teacher cPCK and teaching

context. The two-way knowledge exchange arrows indicate a mutual influence

between the two parts. The professional knowledge base goes through the different

layers to be filtered to shape the teacher's personal PCK (pPCK). The teacher and

students act as amplifiers and filters that contribute to the formation of enacted PCK

(ePCK).

Figure 3.1

Refined Consensus Model (RCM) of PCK (Carlson & Daehler, 2019)
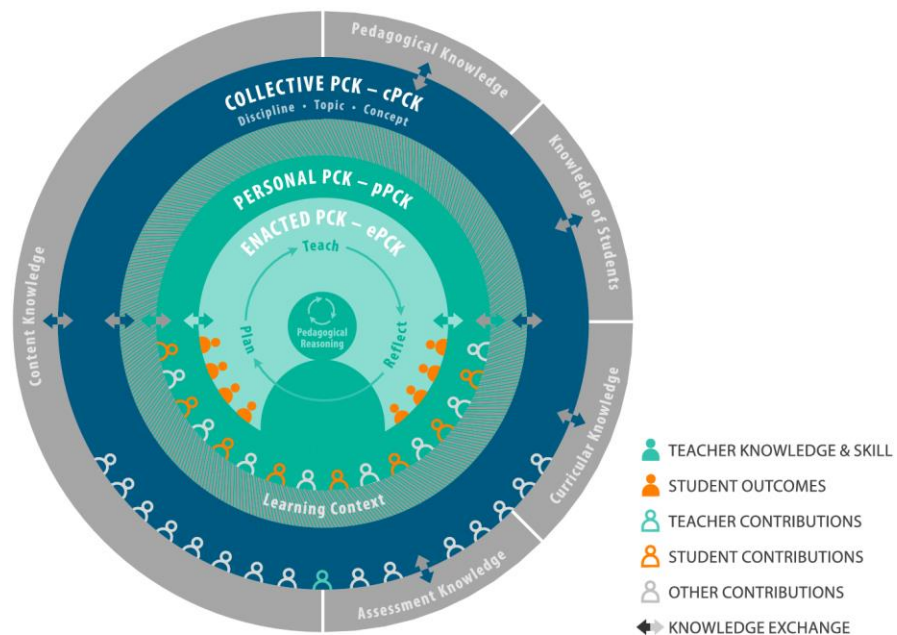
However, the RCM does not attempt to differentiate between different types of social contexts. In the RCM, context is regarded as a filter between cPCK and pPCK, which is insufficient to look in-depth at the factors affecting the teacher's professional knowledge base. The RCM fails to acknowledge the significance of context on the professional knowledge base. I would argue that, as Holliday (1994) suggested, context should be defined more specifically, including various factors that might influence teaching. For example, Holliday (1994) distinguished between two types of social context: micro and macro. The micro-social context refers to the socio-psychological aspect of group dynamics within the classroom. By contrast, the macro-social context refers to societal and institutional influences on what happens in the classroom. According to Vygotskyan socio-cultural theory, human cognition is formed through social activity. Therefore, social interaction is an essential factor in cognitive development and language learning. Social context enables educators, teachers, and researchers to understand the factors affecting the educational process.

67

Thus, I would argue that it is necessary to incorporate both types of social context in any framework to understand teacher knowledge, language teaching, and language learning.

Thus, a framework explaining EFL professional knowledge could be improved by broadening the social context from a micro-social context to a macro-social context (Thorne, 2006). The majority of frameworks in the field of education have focused mainly on mathematics (Baumert et al., 2010; Depaepe et al., 2013; Novikasari, 2017; Petrou & Goulding, 2011; Silverman & Thompson, 2008; Vail Lowery, 2002) and science (Carlson et al., 2019; Gess-Newsome, 2015; Hume & Berry, 2011; Mishra & Koehler, 2006; Novikasari, 2017; Van Dijk & Kattmann, 2007; Verloop et al., 2001), while few modifications were made to make the model more relevant to the EFL context. I have identified specialised EFL knowledge domains from relevant literature, and both types of social contexts have been incorporated. The following section presents the proposed theoretical framework of the EFL professional knowledge base used in the current study.

The synthesis and analysis of previous research published on the topic of teacher knowledge in general and EFL teacher knowledge in particular were the foundation base for the current theoretical framework used in this study. The theoretical framework used in this thesis has the advantage of inclusiveness. The recapitulation of the different knowledge domains that can be applicable to the context of EFL helped examine the topic for different dimensions in the current study. One knowledge domain that is often overlooked in most EFL professional knowledge theoretical frameworks is knowledge of technology. In the framework used in this thesis, knowledge of technology is clearly defined as a core knowledge domain for EFL teachers.

3.5 EFL Professional Knowledge Base: A Revised Conceptual Framework

EFL teacher professional knowledge is the necessary formal knowledge domain identified and categorised by researchers and experts in the field of English language teaching. Empirical studies on teacher professional knowledge have been influenced significantly by several theoretical models, such as Shulman's (1986) framework and the introduction of PCK, Gess-Newsome's (2015) RCM model, Andrews' (2001) EFL professional knowledge model, Richards' (2017) model, and Mishra and Koehler's (2006) TPACK framework for teacher knowledge, among others. This section aims to critically examine the contributions of previous theoretical models in the formation of the framework used in the current study, and presents a rationale for the modification made.

The EFL professional knowledge model used in the current study framework builds on Shulman's (1986) descriptions of the knowledge domains teachers need in the classroom. However, as mentioned earlier, Shulman's model failed to provide a sufficient description of the different dimensions of PCK (Depaepe et al., 2013). Also, few limitations were highlighted by other researchers. Meredith (1995) argued that PCK tends to support a top-down transmission instructional view of teaching and learning, where the knowledge and skills are transmitted from teacher to students. The transmission instructional model tends to be adopted in traditional contexts and teacher-centred classrooms. McEwan and Bull (1991) pointed out the difficulty of theoretically distinguishing PCK from content knowledge, arguing that "content knowledge is inherently a pedagogical task" (p.324). To address these limitations, other researchers focused on PCK, aiming to broaden the concept.

Gess-Newsome's (2015) RCM model was one of the attempts to unpack the ambiguities and difficulties arising from PCK, offering a clear explanation of the

dimensions of PCK in the model: cPCK, pPCK, ePCK. One of the advantages of this model is that it considers the practical and theoretical aspects of PCK. However, I would argue that Gess-Newsome's (2015) RCM model has fallen short in demonstrating the importance of context for a teacher's professional knowledge. In the RCM model, the context is considered as a filter between the topic-specific professional knowledge and classroom practice. However, as supported by Haukås et al. (2021), English language teaching as a school subject differs from teaching a non-language subject, where context plays a vital role in the classroom. Critically, however, the model showed a weak link between students' outcomes and the knowledge base of the teacher (van Driel & Berry, 2017). In other words, although the model clearly presents professional knowledge components, further research is needed to clarify the interaction between teacher knowledge and student outcomes (Neumann et al., 2019).

Andrews' (2001) model is one of the most important conceptualisations of EFL professional knowledge. He introduced a very detailed classification of English teacher language awareness: knowledge of the subject matter, language competence and strategic competence. Discourse skills is another important knowledge domain for EFL teachers that was proposed by Richards (2017). It was important to include the teacher's ability to maintain communication in the English language. EFL teachers need to possess the ability to use English fluently and accurately, to provide comprehensible communication. Nevertheless, all previous models did not explicitly mention knowledge of technology. Therefore, Mishra and Koehler's (2006) explanation of technology knowledge in their TPACK model was used in the current study. They defined it as "the understanding of how technologies and pedagogical content knowledge interact with one another to produce effective teaching with technology" (p.62).

A few modifications were made to adapt the model to suit the subject of English language teaching in the EFL context. One of the main features of the current model is the specific knowledge base of the EFL teachers. Moreover, the proposed framework pays greater attention to contextual factors that are essential in the EFL context. The following Figure 3.2 represents the framework of EFL teacher professional knowledge used in the current study. The section that follows provides a detailed explanation of the main parts of the framework.

Figure 3.2

EFL Teacher Professional Knowledge Model
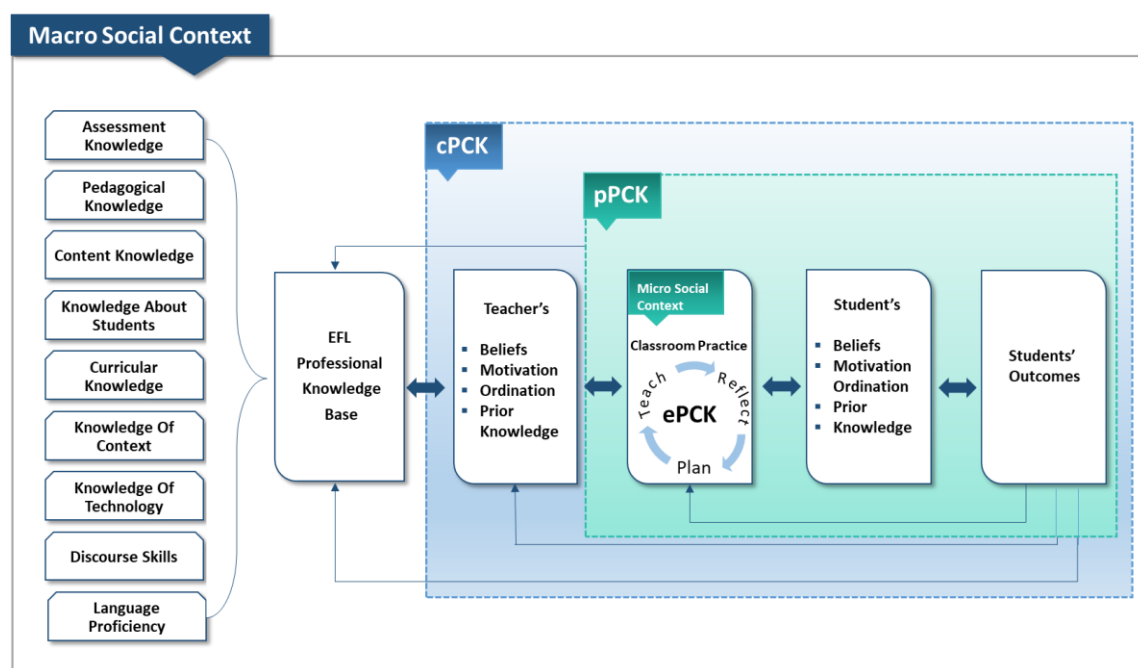
3.6   EFL Teacher Professional Knowledge Base

While a variety of definitions of the term 'professional knowledge base' have been suggested, the term 'EFL professional knowledge base' in the current study refers to "the formal body of knowledge determined and codified by researchers and experts" (Gess-Newsome, 2015, p.23). It includes all the expertise, understanding, awareness, knowledge, and skills that foreign language teachers need to possess, in order to be effective teachers (Faez, 2011). Moreover, the professional knowledge base can be

used to design professional standards and assessment methods to evaluate teachers'
knowledge. The EFL teacher professional knowledge base includes assessment
knowledge, pedagogical knowledge, content knowledge, knowledge about students,
curricular knowledge, knowledge of technology, discourse skills, and language
proficiency.

The following Figure 3.3 represents the EFL teacher professional knowledge
domains. The section that follows provides detailed descriptions of the main
domains of the base.

Figure 3.3

EFL Teacher Professional Knowledge Domains
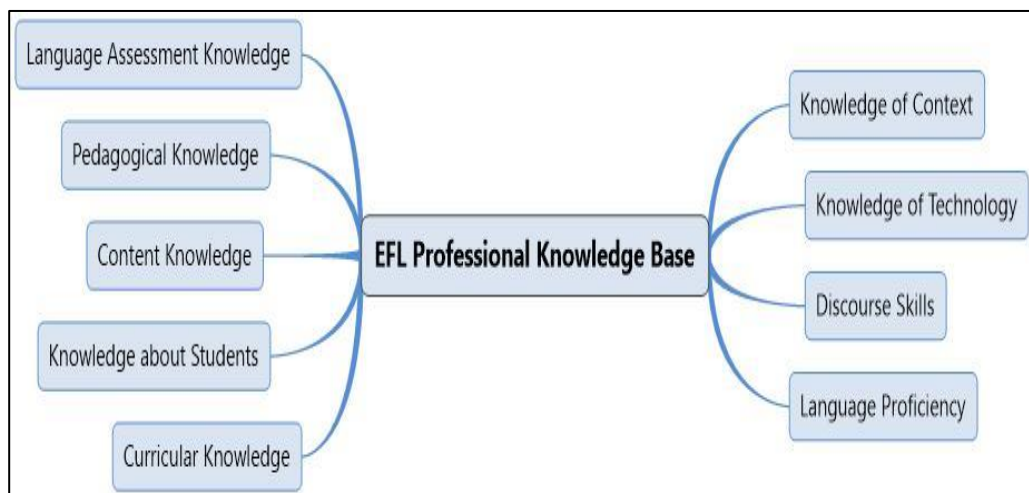
3.6.1   *Language Assessment Knowledge*

Language assessment knowledge can be broadly defined as a basic understanding of
sound assessment practice and the ability to apply that knowledge to measure
language learning in different contexts (Crusan et al., 2016). Language assessment
knowledge should involve the process of developing, validating, and applying
language assessments for various purposes (Yan et al., 2018). Fulcher (2012)
defined language assessment knowledge as "the knowledge, skills, and abilities
required to design, develop, maintain, or evaluate large-scale standardised and/or

classroom-based tests, familiarity with test processes, and awareness of principles and concepts that guide and underpin practice, including ethics and codes of practice" (p.13). Teachers with sufficient assessment knowledge design and implement sound forms of assessment, and use the assessment's results to develop and modify instruction (Gess-Newsome, 2015).

Teacher assessment knowledge is an essential indicator of assessment quality and student achievement (Ashraf & Zolfaghari, 2018). It is essential to have a clear definition of language assessment knowledge, especially where the educational landscape is predominantly exam-driven, such as in Saudi Arabia. One of the challenges facing Saudi education is the lack of teacher training in language assessment, which causes difficulties during the teaching and learning process (Alotabi, 2014). The Admission and Assessment Administration in the Ministry of Education in Saudi Arabia issued two important documents: regulations and procedures of assessment in education and assessment standards, in order to provide teachers with sufficient language assessment knowledge to ensure a reliable and effective assessment process. Nevertheless, these documents mainly focus on summative assessment, since that is the prevailing and favourite assessment type in the Saudi education system (Obeid, 2017). I would argue, as supported by Alotabi, (2014), that the over-dependency on summative assessment has led to a lack of knowledge of other assessment types, such as formative, diagnostic, and continuous assessment, not to mention language assessment types.

3.6.2   *Pedagogical Knowledge*

Shulman (1986) defined pedagogical knowledge as "principles and strategies of classroom management and organisation that are cross-curricular" (p.9). Pedagogical knowledge refers to the pedagogical principles and skills in using

techniques and strategies that are not subject-specific, including classroom management and discipline (Richards, 2017). This type of knowledge is likely to enable the teacher to use instructional time and control classroom events efficiently. As some studies have shown, teachers with good pedagogical knowledge know how to manage and pace their lessons to their students' level of understanding (Guerriero, 2014).

Pedagogical knowledge enables EFL teachers to present and navigate their lessons in a clear, comprehensible way to maximise the students' understanding, by supporting teachers in their choices of teaching methods appropriate to their students (Guerriero, 2014). According to Richards (2010), sufficient pedagogical knowledge is likely to enable EFL teachers to carry themselves through a lesson by using a wide variety of techniques that help with opening the lesson, introducing and explaining tasks, setting up learning arrangements, checking students' understanding, guiding students' practice, monitoring students' progress, making transitions from one task to another, and ending the lesson. Agreeing with Richards' (2010) views on pedagogical knowledge, I would argue that pedagogical knowledge equips the EFL teacher with a command over the main principles, methods, and strategies needed for effective teaching and learning, to analyse pedagogical problems and develop alternative strategies for teaching. This knowledge domain gives the EFL teacher the ability to relate theories of language to actual teaching situations.

3.6.3   Content Knowledge

Content knowledge refers to the academic content of the discipline (Gess-Newsome, 2015). It refers to knowledge of the subject matter in the particular subject a teacher is assigned to teach. It includes all theories, assumptions, facts, concepts, and

principles that are taught and learned in a specific academic context. The terms 'content knowledge' and 'knowledge of subject matter' are used interchangeably in literature. In his definition of language content knowledge, Richards (2017) stated that linguistics, sociolinguistics, discourse analysis, and second language acquisition are parts of content knowledge of English language. I would argue that EFL teachers would benefit from having sufficient content knowledge to cover the fundamental issues in the education of English language learners, such as the four skills, linguistics, applied linguistics, theories of language teaching and acquisition, and TESOL. As supported by Sibomana (2017), a sufficient knowledge of linguistics covering phonology, morphology, syntax, and semantics could enable EFL teachers to understand how language works, which could have an impact on language teaching and learning. Linguistic knowledge could be useful for language teachers in dealing with their students' mistakes. In line with Richards' (2017) argument, Faizin (2019) claims that sociolinguistics knowledge could help EFL teachers understand sociological aspects of language and how to use language in an appropriate way to fit the specific social context.

In addition, Yang (2008) argues that a sufficient knowledge of second language acquisition theory is particularly useful for teachers in offering appropriate content-area instruction to students. These components are lacking and not reflected in current teacher preparation programmes in Saudi Arabia (Al-Abiky, 2019). Additional research is needed on content knowledge of EFL teachers in Saudi Arabia. Such research should focus systematically on the different components of content knowledge and its impact on teaching and learning.

3.6.4   Knowledge about Students

Shulman (1986) argued that teachers should know and understand their students'
ability, gender, culture, motivation, and prior knowledge. Moreover, teachers should
recognise students' cognitive and physical development, different learning styles,
and different educational, cultural, and linguistic backgrounds that might require
modifying instruction (Schrader & Brown, 2008). Knowledge of students also
involves familiarity with the students' learning strategies, problems, and needs in
learning (Lucas et al., 2008). Knowledge of students will help teachers to create
well-balanced lesson plans that fit the students' level of understanding. This, in turn,
will facilitate the learning process and improve students' outcomes (Randall &
Thornton, 2001).

3.6.5   Curriculum Knowledge

Curriculum knowledge is defined as "the ability to apply theoretical principles and
behaviours associated with planning, implementing, and evaluating the curriculum"
(Behar & Ornstein, 1994, p.323). It refers to knowledge about the particular
materials used by the teacher in a specific subject matter. Curriculum knowledge can
be used to understand the curriculum's general goals and structure, the curriculum's
scope and sequence, and the ability to judge curriculum coherence and clarity (Gess-
Newsome, 2015). Curriculum knowledge helps teachers to know and understand
curriculum objectives, providing them with the desired results that will guide their
choice of materials, teaching, and assessment methods.

Behar and Ornstein (1994) identified nine curriculum domains that form
essential curricular knowledge: curriculum philosophy, curriculum theory,
curriculum research, curriculum history, curriculum development, curriculum
design, curriculum evaluation, curriculum policy, and curriculum as a field of study.

76

Bagherzadeh and Tajeddin, (2021) analysed the contents of pre-service and in-service teacher education programmes in 15 English language institutes, to identify the representation of curricular knowledge. They found that curriculum knowledge is not well-presented in these programmes and "the teachers attending these programmes were deprived of the opportunity to get acquainted with materials and their contents. Consequently, they couldn't achieve an appropriate level of curricular knowledge" (p.53).

In the Saudi context, Education and Training Evaluation Commission (2018) published The National Framework for Public Education Curricula Standards, which highlighted the important role of pre-service teacher education programmes and teacher professional development in the implementation of the curricula standards. According to the Education and Training Evaluation Commission, teachers attaining these standards should be able to:

- understand the academic construct of the curricula standards in the area of specialisation, the targeted values, skills, and priorities, the guiding principles, how to analyse the content of these standards, and the targeted level of depth according to educational levels and grades;

- utilise multiple approaches and teaching and learning strategies, and to diversify these in conformity with the curricula standards and the developmental characteristics of learners and their requirements;

- plan instructional modules in light of the curricula standards and their implementation, and the use of educational materials, various learning resources, and technologies and their applications in learning environments, taking into account how students learn and the age-group characteristics according to targeted levels and grades; and

- utilise and diversify various formative assessment approaches and methods, assessment for learning, and summative assessment, to analyse assessment results, use these to improve student learning and teacher performance, and to make appropriate educational decisions about learner progress and enrichment and remedial programmes.

However, to the best of my knowledge, current pre-service and in-service teacher programmes have never been investigated, in terms of curriculum criteria implication in Saudi Arabia. Therefore, a more comprehensive study is needed to identify the status of the components of curricular knowledge in teacher education programmes in more institutes across the country.

3.6.6 Knowledge of Technology

The knowledge of technology in the educational system refers to the utilisation of technology to improve classroom instruction, communication, problem-solving, and decision-making (Mishra & Koehler, 2008). In other words, it is the teachers' ability to operate a variety of technologies for instructional purposes. I would argue that, as supported by Tseng (2014), sufficient knowledge of technology allows teachers to differentiate instruction, which helps to increase students' motivation. It can also facilitate communication between teachers, students, and parents (Özgün-Koca et al., 2010).

In the Saudi context, Bingimlas (2018) investigated Saudi teachers' knowledge of technology, content, and pedagogy, using the self-assessment method to collect data. He found that teachers have an average confidence level of knowledge technology, content, and pedagogy. The study also revealed that the teachers use traditional methods of teaching, because of lack of technology knowledge, educational technology in schools, and effective technological training.

Similar results were obtained by Alswilem (2019), where he attributed the lack of technology knowledge to lack of teacher training, lack of technological infrastructure in schools, and lack of technology resources.

3.6.7   Discourse Skills

A unique element in the professional knowledge base of EFL teachers is discourse skill. Richards (2017) defined it as "the ability to maintain communication in English that is fluent, accurate and comprehensible" (p.14). Such knowledge enables teachers to communicate in English, in both formal and informal situations (Elder, 2001). I would argue, as supported by Richards (2017), that EFL teachers require sufficient discourse skills to enable them to use English as a medium to teach English. According to Canale and Swain (1980), the discourse component is one of four components of communicative competence, along with the grammatical, sociolinguistic, and strategic components.

I would further argue that discourse skill is especially important for EFL teachers, because the classroom is the only opportunity to model to the students the correct way of connecting grammatical forms and meaning in a correct order for various purposes. Practising English language skills outside the classroom is quite rare in an EFL context (Almohideb, 2019). Sufficient discourse skills could enable English language teachers to raise the students' awareness of the discourse forms of the language they are learning. Therefore, teacher preparation programmes and professional development for in-service teachers need to provide them with sufficient language training to equip them with the necessary discourse skills.

3.6.8   *Teachers' English Language Proficiency*

Language proficiency is considered a key element of teachers' competency and learners' learning (Richards, 2017). However, due to its complex and multidimensional nature, language proficiency is difficult to define, which imposes a challenge in researching teachers' target language proficiency (Van Canh & Renandya, 2017). Freeman et al. (2015) presented the definition of language proficiency as "the essential English language skills a teacher needs to be able to prepare and enact the lesson in a standardised (usually national) curriculum in English in a way that is recognisable and understandable to other speakers of the language" (p.4). Thus, as Freeman et al. (2015) argue, the EFL teacher's language proficiency is a specialised subset of language skills that enables the teacher to convey the content of the English lesson in a comprehensible way. In other words, using English to teach English in the EFL context involves using the language to achieve the objectives of the curriculum and to improve the communication skills within the classroom context.

However, despite its importance, insufficient language proficiency is often regarded as one of the biggest challenges that non-native EFL teachers face in their teaching and professional development (Hiver, 2013).

3.7   Teacher's Beliefs, Motivation, and Prior Knowledge

Teachers are considered independent individuals and active recipients of knowledge. The EFL knowledge bases pass through what Gess-Newsome (2015) call 'teachers' filters'. Teachers' beliefs can be defined as teachers' assumptions about their students, classroom, subject matter, and school context (Yuan & Lee, 2014). Teachers will rely on their beliefs about the social goals of schooling or

preferred instructional strategies to apply, reject, or modify new knowledge. Other factors can influence the choice and implementation of new knowledge, such as teachers' motivation (Gess-Newsome, 2015). Han and Yin (2016) defined teacher motivation as "the reasons emanating from individuals' intrinsic values to choose to teach and sustain teaching, and the intensity of teacher motivation indicated by the effort expended on teaching as influenced by several contextual factors" (p.3). Motivated and devoted teachers seek to improve classroom instruction and intercede interdisciplinary topics to enrich the learning process. Moreover, the teachers' prior knowledge can also influence their knowledge and teaching practices. Teachers may replicate their previous learning experiences and apply the same methods to teach them (Gess-Newsome, 2015). Prior knowledge of the teacher can facilitate the acquisition and comprehension of new knowledge. The teachers' beliefs about language learning strategies and prior knowledge influence the way they apply and share the strategies in their teaching practices (Wijirahayu, 2017).

3.8   Classroom Practice

This section explains classroom practice with reference to three concepts from the model: ePCK, pPCK, and cPCK. In the classroom, teachers translate their EFL professional knowledge into practice. Classroom practice refers to the activities and strategies teachers use in class during teaching. The first layer of PCK is present in classroom practice. The enacted pedagogical content knowledge (ePCK) is the knowledge of reasoning behind and planning for teaching a certain topic in a specific way for a particular purpose to a distinct group of students for enhanced student outcomes (Carlson & Daehler, 2019). In other words, the teacher's ePCK is the transformation of knowledge into action. ePCK is the centre of the teaching cycle: plan, teach, and reflect.

The second layer of PCK is personal pedagogical content knowledge (pPCK), a special type of knowledge where teachers can draw from the EFL professional knowledge base and present it in their own teaching and learning experiences. pPCK is unique to individual teachers, where they rely on their own interpretation of the EFL professional knowledge during their teaching practice. This type of knowledge is influenced by different educational researchers, teaching colleagues, scientists, social media, coursework, professional training experiences, beliefs, and previous teaching experience (Carlson & Daehler, 2019).

The third layer of PCK is collective pedagogical content knowledge (cPCK). Carlson and Daehler (2019) refer to cPCK as "a mixture of numerous educators' contributions which include the teacher's own contributions from the combined professional knowledge bases and varied teaching experiences within a given subject matter as understood and documented by many people" (p.83). This type of knowledge is collective, shared, and available to all EFL teachers. cPCK is the collective term for PCK (Carlson & Daehler, 2019).

3.9   Students' Beliefs, Motivation, Orientation, and Prior Knowledge

Students hold strong beliefs about how languages are learned. These beliefs strongly shape classroom situations, instructional practices, and pedagogical decisions (Siebert, 2003). Horwitz (1985) classified the students' beliefs about language learning under five common themes: the difficulty of language learning, foreign language aptitude, the nature of language learning, strategies for communication and learning, and learner motivations and expectations (Horwitz, 1988). Due to the complexity of the notion, there is no consensus on a specific definition of the term. Most of the studies about language learning beliefs use the broad definition of the

term 'belief', such as 'psychologically held understandings, premises, or propositions about the world that are held to be true' (Richardson, 1996). In an attempt to distinguish between the terms 'beliefs' and 'knowledge', Pajares (1992) pointed out that the term 'belief' is based on personal evaluation and judgment, while 'knowledge' is based on objective fact. Moreover, beliefs about foreign languages that students bring into the classroom significantly affect English language teaching and learning (Al-Seghayer, 2017). The knowledge about language learning beliefs that students bring to the classroom can guide the design of realistic learning objectives (Kern, 1995).

Beliefs about language learning and motivation are strongly connected. Students with positive beliefs about foreign language learning are more likely to possess stronger motivation, hold favourable attitudes and higher motivational intensity, use more strategies, be less anxious, have better language achievement, and be more proficient (Al-Seghayer, 2015; Kassem, 2013). Motivation in language learning can be divided into two types. The first type is intrinsic motivation, which refers to motivation to be involved in an activity because the activity is enjoyable and interesting to take (Hayikaleng et al., 2016). The second type is extrinsic motivation, which refers to a performance that an individual performs to gain rewards, such as good grades or increased salary, or avoid punishment (Hayikaleng et al., 2016). Student motivation is one of the key factors to a successful learning process. It can be argued that teachers should know and foster their students' motivation to encourage them to learn English.

3.10 Students' Learning Outcomes

Even though students' outcomes are the end product of the teaching process, they can affect the whole teaching and learning process. Miller et al. (2013) define learning outcomes as the type of performance that a student must achieve during or by the end of an educational context or a programme of study. In other words, students' learning outcomes refer to the accumulated knowledge, skills, and abilities individual students should acquire by the end of the learning process. Teachers should modify the methods of instruction to improve students' outcomes (Gess-Newsome, 2015).

3.11 Contextual Factors in EFL Professional Knowledge

Following the above review of the different domains of EFL professional knowledge identified in the literature, this section presents the role of demographic variables on EFL professional knowledge. Previous studies (e.g. Clotfelter et al., 2007; Doyle et al., 2020; Faez & Valeo, 2012; Gahwaji, 2013; Kane et al., 2008; Maash, 2021; Moosa & Shareefa, 2019; Turkan et al., 2014; Vural & Basaran, 2021) have investigated how contextual factors and demographic variables could be related to professional knowledge. However, many prior studies revealed inconsistent findings. Since the current study seeks to investigate the differences in Saudi pre-service and in-service teachers EFL professional knowledge based on different demographic variables, this section reviews the findings of the previous studies from various subjects, especially English language in terms of gender, academic level, academic discipline, educational training, school type, school stage, and teaching experience.

Previous research have investigated the association between professional knowledge and the gender of teachers (Akbari & Tajik, 2012; Al-Khairi, 2015; Albuloushi, 2019; Bingimlas, 2018; Haroun et al., 2016; Lazarus, 2019). With regards to previous literature, I found consistencies and inconsistencies in terms of gender difference. Haroun et al. (2016) examined the gender differences of math teachers in the Saudi context. In a quantitative study, they employed several instruments to collect data, such as Mathematical Knowledge for Teaching (MKT), Learning Mathematics for Teaching (LMT), Number and Operation Content Knowledge (CK), and Knowledge of Content and Student (KCS) scales. They found that female teachers significantly scored better than their male counterparts in content and knowledge about students. Bingimlas (2018) reported similar findings with special education teachers. He found significant gender difference in knowledge in favour of females in the domains of content, technology, and pedagogy. Ergen et al. (2019) conducted a meta-analysis to investigate whether there is a significant difference in the effect size of Technological Pedagogical Content Knowledge (TPACK) according to gender. They found a statistically significant difference by gender. Male teachers were found to have higher technology knowledge, technological pedagogical knowledge, and technological pedagogical content knowledge than females. On the other hand, pedagogical knowledge was higher for female teachers. Contradicting previous studies, Sulaiman (2021) found no significant difference in the scores of male and female teachers, regarding their TCK, TPK, and TPACK. Sulaiman's (2021) study also revealed that the EFL pre-service teachers' overall level of TPACK was moderate scoring highest in TK, TPK, and TCK and lowest in CK and PK respectively. On the other hand, the in-service teachers' overall level of TPACK was moderate scoring highest in CK, PK, and PCK and lowest in TK, TPK, and TCK respectively. The inferential

statistical analysis (t-test) indicated a statistically significant difference between pre-service and in-service teachers' levels of TPACK. All the seven sub-domains of TPACK were significant, with pre-service teachers scoring higher in TK, TCK, and TPK while in-service teachers scoring higher in CK, PK, PCK, and TPACK. Due to these discrepancies in the findings, the relationship between gender and teacher knowledge remains unresolved and requires further research.

Other studies investigated the teachers' academic level and teacher knowledge. However, previously published studies are not consistent. For example, Vural and Basaran (2021) found that one of the top responses to pursue a master's degree is to have in-depth knowledge in the field. However, Moosa and Shareefa (2019) reported no significant difference in teacher knowledge based on academic qualification. In their investigation of teacher academic level, Clotfelter et al. (2007) found that having a graduate degree has little effect on student achievement. Similar results were also reported by Kane et al. (2008), who found that teacher academic level has little effect on student test performance.

Several studies have investigated the relationship between educational training and teacher knowledge. In their qualitative study, Fritsch et al. (2015) investigated the impact of teacher training on prospective teachers' CK and PCK. The data analysis revealed that educational training had a crucial impact on the CK score. Similar results were reported by other researchers, such as (Blömeke & Delaney, 2014; Kulgemeyer et al., 2020). Nevertheless, educational training had no impact on PCK. In the Saudi context, Alwahibee (2016) used questionnaires to investigate the educational training of EFL teachers. The data revealed that 64% of the English teachers were lacking educational training during their undergraduate programmes. This lack of educational training negatively affected the teachers' pedagogical and content knowledge. This observation has been echoed by Al-

Seghayer (2011), when he mentioned that only 10% of preparation programmes offer educational training for pre-service teachers, leading to a gap in their "disciplinary knowledge, pedagogical content knowledge, and technological pedagogical knowledge" (p. 22). Such expositions are important in understanding the relationship between educational training and EFL teacher knowledge in Saudi Arabia.

Other studies examined teacher professional knowledge and academic discipline, arguing that academic discipline of the English language teacher in the EFL context should be well-designed, in order to fully prepare the teacher for teaching. For example, Hu and Choo (2016) found that disciplinary background influenced the teacher knowledge of assessment knowledge and their evaluative language in feedback. Faez and Valeo (2012) reported that TESOL academic discipline provided teachers with sufficient professional knowledge. Turkan et al. (2014) argue that disciplinary linguistic knowledge should be part of the teachers' knowledge base. In the Saudi context, as reported by Al-Seghayer (2013), English language programmes from different academic disciplines failed to provide teachers with sufficient knowledge. He was therefore in favour of educational reforms in teacher preparation programmes. However, these claims have been contested in recent years by a number of researchers. For example, Alrwele's (2018) findings showed that the level of language proficiency and content knowledge of pre-service teachers is high. She attributed the high level to the nature of the academic discipline: "all the candidates admitted to the department of English language and literature at Al-Imam Muhammed Ibn Saud University must obtain a minimum cumulative average of B in their secondary school study, and a minimum B+ grade in the English language course" (p.207).

Other variables that could relate to teacher knowledge are the school type and stage. Few studies explored whether there is a significant difference in professional knowledge between teachers in government and private schools. To the best of my knowledge, only Gahwaji (2013) and Maash (2021) discuss the differences between the two sectors in the Saudi context. Both studies argue that the differences between government and private schools, in terms of teacher knowledge, could be related to a number of reasons, one of which is the professional opportunities offered in both types. As found by Doyle et al. (2020), professional development has an impact on the professional knowledge of in-service teachers. Similar results were obtained from the Teaching and Learning International Survey (TALIS) results. It was reported that teachers in government schools have more professional development opportunities than teachers in private schools (OECD, 2009).

Several studies have investigated the relationship between teaching experience and professional knowledge. Nazari et al. (2019) conducted a mixed-methods study to investigate whether teachers' years of experience make a difference in English teacher knowledge. The data showed that experienced teachers obtained significantly higher scores, in terms of pedagogical knowledge and pedagogical content knowledge sub-scales. On the other hand, novice teachers achieved significantly higher scores in technological knowledge, technological content knowledge, technological pedagogical knowledge, and TPACK. In line with the results of Nazari et al. (2019), Sulaiman (2021) also reported significant difference in the knowledge of teachers based on teaching experience. In contrast to Nazari et al. (2019), however, Van Loi's (2021) study found no significant differences in the English language teachers' TPACK, in terms of their teaching experience.

Micro and macro-social context were investigated in relation to teacher knowledge. According to Holliday (1994), the micro-context is the direct interactional setting between teachers and students where interactions take place in the classroom. On the other hand, the macro-context refers to the external influence of societal and institutional factors on what happens in the classroom. For example, societal factors include the statutes of the teaching profession, while institutional factors include school management, institutional achievements, teacher assessment, and the Ministry of Education regulation and policy (Salinas, 2017). Spolsky (1989) argues that the social context influences learning in two ways. First, the social context affects attitudes towards the language being taught and the learning situation, which will lead to a higher level of student motivation. For example, the students' positive or negative attitudes toward learning the English language and the importance of second language (L2) acquisition reflects society's attitudes. Second, social context greatly influences formal and informal learning opportunities. Formal learning opportunities are those provided by educational institutions to learn and practise the target language, such as the number of classes per week and the length of the classes. In contrast, informal learning opportunities take place outside the formal institution in the social context, which can provide a chance to interact with speakers of the target language, such as in restaurants and hospitals. However, in some social contexts, informal opportunities are very rare (Ashraf, 2018). Saudi students do not use the English language outside the classroom for many reasons, including lack of confidence in their proficiency level and lack of motivation (Alhmadi, 2014). Therefore, I would argue, as discussed by Palfreyman (2006), that a successful EFL education could comply with the social context in three ways to promote English language teaching and learning: the EFL teaching methodology and

practices inside the classroom, teacher education and in-service training

programmes, and curriculum development.

3.12 Gaps in the Literature

The growing interest in investigating the topic of teacher knowledge in more recent

years has led to a rich and diverse discussion. Shulman's (1986) significant work on

teacher knowledge dramatically influenced the field of teacher knowledge and laid

the foundation for further proposals and frameworks. Furthermore, previous

attempts to design theoretical frameworks clearly show that teacher knowledge can

be identified.

However, a comprehensive conceptualisation of this phenomenon is missing

from most of the research on EFL professional teacher knowledge (König et al.,

2016a). A limited number of studies have investigated other subjects, such as

teacher knowledge in teaching English as a foreign language (Wilson et al., 2001).

The EFL professional knowledge base needs to be investigated with equal

enthusiasm and rigor, due to its unique nature. English language teaching is different

from teaching any other subject because "the content and the medium of instruction

are inextricably intertwined" (Andrews, 2001, p,77). In EFL classrooms, it is

difficult to draw a clear line between language as the content of subject matter and

as a communication tool. As a result, there is a persistent need to establish a clearly

defined professional knowledge base to facilitate language teaching and learning.

Furthermore, previous research has identified a broad array of variables

influencing the educational process in various contexts. One of the variables is

gender. Gender is one of the main variables that can broaden our understanding of

any topic, especially teacher education programmes, as it helps to develop attitudes,

knowledge, and skills in the practice of teaching (Sultana & bin Lazim, 2011).

Despite the importance of considering both genders as a variable in teacher

education, combining male and female participants poses difficulties for educational

researchers in Saudi Arabia for many reasons. One of the reasons arises from the

fact that the Saudi education system is gender segregated. Gender segregation is

recognised as a key factor in explaining the persistence of gender differences in

education (Al-Bakr et al., 2017). It can reveal the reasons behind gaps in educational

attainment and employment opportunities. Despite the widely accepted benefits of

including both males and females in investigating any topic, most of the educational

research studies in Saudi Arabia focus on only one gender, mainly the gender of the

researcher. Due to cultural and practical reasons, many studies in Saudi Arabia are

limited to one gender. Many researchers in Saudi Arabia rarely investigate their

topic with both male and female participants. They prefer to work with the same

gender, to avoid crossing any cultural or religious boundaries, especially in

interviews.

Alsowat (2017) conducted a systematic review of research on teaching

English language skills for Saudi EFL students between 2007 and 2016. He reported

that only 19% of the studies included both male and female participants. However,

cross-gender studies can provide valuable insight into any topic. Balancing gender

and culture in research requires cultural knowledge, continuous critical reflection,

and researcher flexibility (Redman-MacLaren et al., 2014). In this research, the

participants were male and female EFL teachers. It was vital to include both genders

as participants, in order to compare and understand their EFL professional

knowledge.

In addition, few studies in the field of EFL in Saudi Arabia have focused on

teachers. According to Alsowat (2017), 80% of the studies conducted between 2007

and 2016 targeted students as the population to investigate. On the other hand, only

9% of the studies aimed to study teachers, and 10% included both teachers and students. The limited number of studies investigating EFL teachers in Saudi Arabia contributes to the knowledge gap of EFL teachers in general. This lack of research investigating teachers conflicts with Hattie's (2008) results and recommendations. Based on a synthesis of 800 meta-analyses relating to influences on achievement, Hatti (2008) identified numerous elements affecting achievement in his groundbreaking research. He concluded that teachers by far are the top influencers. Therefore, to reform and improve the educational process, much-needed attention in research should be directed towards teachers.

The current research contributes to bridging the gap by shifting the focus to investigate the EFL professional knowledge base of Saudi English language teachers. One of the objectives of this thesis is to draw a comprehensive and clear description of the EFL professional knowledge base. To this end, seven main variables were considered in exploring the EFL professional knowledge of pre-service and in-service teachers: gender, educational training, educational level, academic discipline, school type, school stage, and teaching experience.

According to Alsowat (2017), only 12% of the studies conducted in Saudi Arabia have used a mixed-methods approach. This investigation aims to fill that gap by examining the topic with different variables and providing an in-depth analysis of the EFL system in Saudi Arabia. It is through the application of this method and the analysis process that we are able to gain a well-rounded understanding of the topic.

It is important to present a clear and detailed description of the current situation regarding EFL in Saudi Arabia. Hopefully, this study will pave the way for comparison studies with different contexts and countries. The findings of this research will help to provide some useful recommendations that can be of great value for EFL teachers, teacher educators, and policymakers in Saudi Arabia. A

strong foundation and continuous professional support tailored to meet the needs of Saudi teachers will contribute significantly to the success of the educational process. Al-Seghayer (2013) and Freihat and Alshowaier (2019) highlighted the limited number of studies investigating teacher preparation programmes and professional development training programmes. They call for the urgent need to improve teacher preparation programmes and professional development training programmes. The findings of this study could contribute to the existing body of knowledge, by providing a number of recommendations on how to improve pre-service preparation programmes and in-service professional development training. The findings of the study could also be used to assess, evaluate, and redesign existing teacher preparation programmes and professional development opportunities to improve the knowledge level of teachers in Saudi Arabia.

3.13 Research Questions

The objective of the study is to investigate the EFL professional knowledge of pre-service and in-service teachers in the Kingdom of Saudi Arabia. The research questions also explore the knowledge gaps and preferred educational methods. The detailed research questions of the present study are as follows:

1. What is the level of EFL professional knowledge of Saudi pre-service EFL teachers?

    1.1. Are there any statistically significant differences in Saudi pre-service teachers' EFL professional knowledge in terms of:

    1.1.1.   Gender

    1.1.2.   Educational training

2. What is the level of self-evaluated EFL professional knowledge of Saudi EFL in-service teachers?

2.1. Are there any statistically significant differences in Saudi in-service

teachers' EFL professional knowledge in terms of:

2.2. Gender

2.3. Educational training

2.4. Educational level

2.5. Academic discipline

2.6. School type

2.7. School stage

2.8. Teaching experience

3. How does Saudi pre-service EFL teachers' professional knowledge compare to

Saudi in-service EFL teachers' self-evaluated professional knowledge in terms of:

3.1. Gender

3.2. Educational training

4. What are the gaps in the EFL professional knowledge of Saudi in-service EFL

teachers?

5. What are the preferred educational methods of Saudi in-service EFL teachers?

3.14 Chapter Summary

This chapter first evaluated the existing frameworks of teacher knowledge and also

reviewed the studies that investigated teacher knowledge in different contexts,

especially language teacher context, with the aim of paving the way for the current

study, by establishing familiarity with an understanding of the current state of

knowledge on the topic. The last section of the current chapter presented the EFL

professional knowledge base model used in this study. Finally, a literature review

was presented of the different types of knowledge constituting the EFL professional

knowledge base of the English language teacher and the contextual factors in EFL

professional knowledge.

4   Methodology

4.1   Introduction

The main aim of the current study is to investigate the professional knowledge base of EFL pre-service and in-service teachers in Saudi Arabia and its relationship to relevant demographic variables. Thus, in line with the study aims, this chapter outlines the research methods, participants, and the sampling method used in the current study. The chapter is structured and organised to justify using the mixed-methods approach, selecting the study participants, the data collection methods and instruments, the data collection procedures, and the data analysis procedures. The quality of the criteria to ensure the study's trustworthiness and the ethical considerations guiding the research process are also discussed.

4.2   Research Questions

In order to understand the professional knowledge base of EFL teachers in Saudi Arabia, the current study poses the following questions:

1. What level of EFL professional knowledge do Saudi pre-service EFL teachers have?
   1.1. Are there any statistically significant differences in Saudi pre-service teachers' EFL professional knowledge in terms of:
      1.1.1. Gender
      1.1.2. Educational training
2. Which domains of professional EFL knowledge do Saudi in-service teachers have?
   2.1. What is the level of self-evaluated EFL professional knowledge of Saudi EFL in-service teachers?
   2.2. Are there any statistically significant differences in Saudi in-service teachers' EFL professional knowledge in terms of:

       2.3.   Gender

       2.4.   Educational training

       2.5.   Educational level

       2.6.   Academic discipline

       2.7.   School type

       2.8.   School stage

       2.9.   Teaching experience

3. How does Saudi pre-service EFL teachers' professional knowledge compare to Saudi in-service EFL teachers' self-evaluated professional knowledge in terms of

       3.1.   Gender

       3.2.   Educational training

4. What are the gaps in the EFL professional knowledge of Saudi in-service EFL teachers?

5. What are the preferred educational methods of Saudi in-service EFL teachers?

Based on the research questions in this study, several research methods were employed. Due to the nature of the research questions, the research methods adopted were interrelated. Figure 4.1 shows the data collection methods used to answer the research questions.

Figure 4.1

Research Questions and Their Relationship to Data Collection Methods
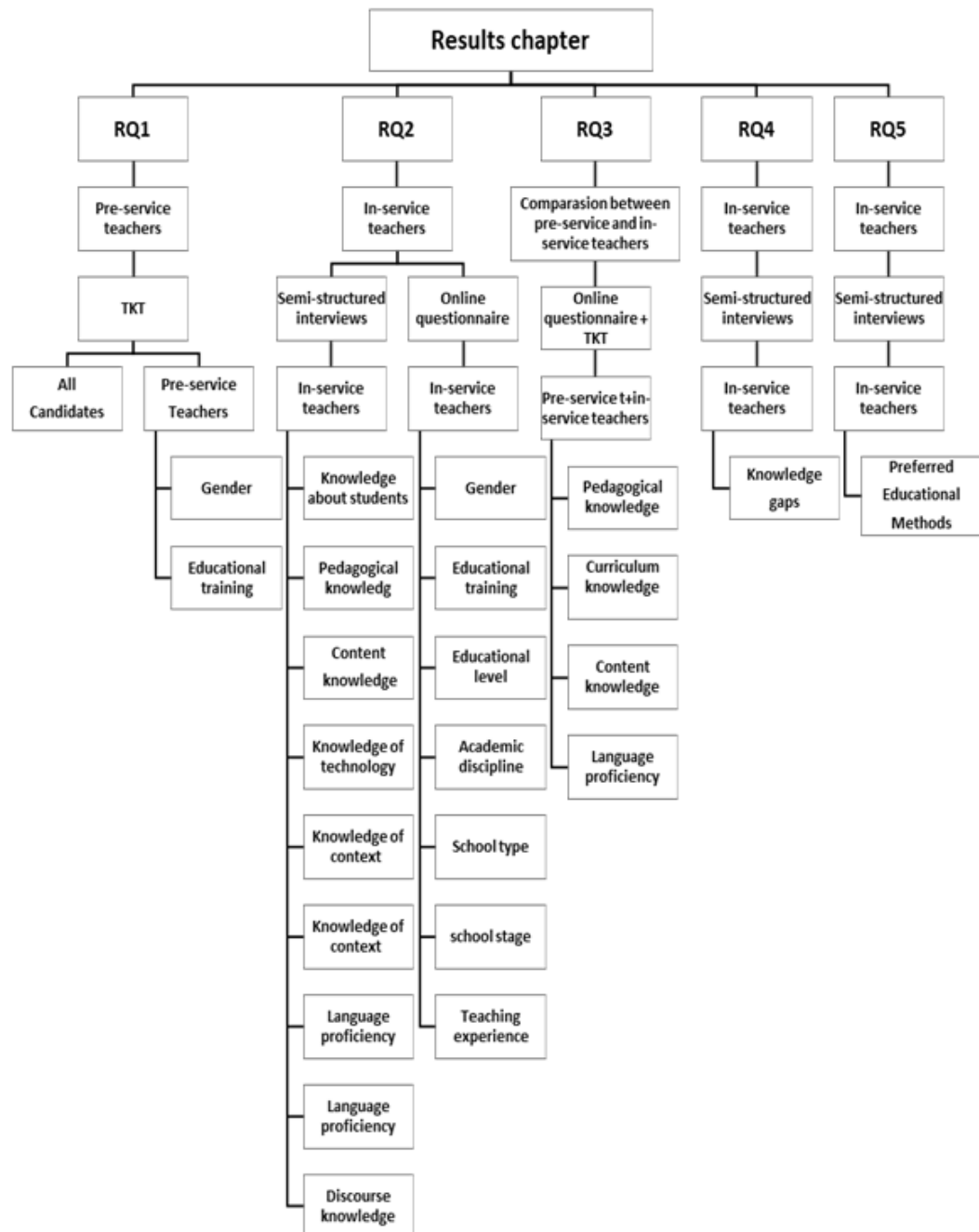
4.3   Philosophical Assumptions and the Research Paradigm

The current study employs a mixed-methods approach to obtain an in-depth, holistic understanding of the EFL professional knowledge of pre-service and in-service teachers in Saudi Arabia. Furthermore, the current study adopts an explanatory sequential design with the mixed-methods approach. Creswell and Clark (2017) referred to the explanatory-sequential method as the approach used by researchers who are interested in following up the quantitative results with qualitative data for the purpose of interpretation and clarification

Mixed-methods research refers to the use of quantitative and qualitative approaches in a single study to collect and analyse the data, then incorporate the findings to create a solid foundation for the conclusion (Tashakkori & Creswell, 2007). In the current study, several reasons provided the rationale for mixing methods. Mixed-method research is the preferred method of investigation when the aim is to understand the contradictions and similarities between quantitative results and qualitative findings (Flick, 2018). In addition, mixed methodology provides methodological flexibility and reflects the participants' points of view, to ensure that the study findings are grounded in the participants' experiences (Wisdom & Creswell, 2013). The mixed-methods approach suits the aims of the current study, because it makes it possible to gain a comprehensive, thorough understanding of the variables and identify how these variables interact to shape the EFL professional knowledge of English language teachers.

It is essential to identify and articulate the philosophical assumptions that the researcher depends upon to shape and guide the research process and the conducting of the inquiry (Meissner et al., 2011). The framework of the research paradigm and research methodology must be specified at the beginning of a study, to provide a

clear guide for the researcher during the different phases of the study (Maxwell & Loomis, 2002). The research paradigm that is finally selected depends on several factors, such as the research objectives, the type of research, and the context (Creswell, 2009; Maxwell & Miller, 2008).

In the 1990s, the philosophy of pragmatism emerged as a third research paradigm, which was typically associated with the mixed-methods approach (Dornyei, 2007). Pragmatic researchers combine quantitative and qualitative data in a single study, incorporating all of the data obtained at different stages of the research process. Descriptive paradigms guide the collection and analysis of quantitative data, while the interpretive paradigm deals with collecting and analysing qualitative data (Creswell et al., 2011).

The mixed-methods approach involves collecting and analysing data using a range of quantitative and qualitative techniques. According to Tashakkori et al. (1998), a significant shift in methodological approaches emerged in the 1960s, when the mixed-methods approach was introduced and began to attract the attention of researchers, as it allowed them to combine different methods during the data collection phase of a study. Despite the differing views regarding the epistemological compatibility of this relatively new method, the mixed-methods design is widely recognised and considered a valid, powerful inquiry approach (Creswell & Creswell, 2005; Hanson et al., 2005)

Creswell et al. (2007) refer to mixed-methods research as a research design based on assumptions that guide the collection and analysis of data and represent a mixture of qualitative and quantitative approaches. Using a mixed-methods approach is feasible and desirable in second-language research, because it combines the respective strengths of the qualitative and quantitative approaches (Bryman, 2016; VanPatten & Benati, 2015). The methodologies that investigate knowledge,

attitudes, and beliefs in teaching and teacher education have undergone considerable changes. Kagan (1990) conducted a systematic review of the different methodological approaches to evaluate teacher knowledge and concluded that the mixed-methods approach is desirable for a comprehensive analysis. She also advocated the use of multiple measures when investigating teachers' knowledge. As supported by Greene and Hall (2010), the use of mixed-methods research emphasises the ability to make comparisons across data. Moreover, mixed-methods research facilitates dialogue and compatibility between the quantitative and qualitative approaches.

A mixed-methods framework strengthens the data collection and data analysis techniques (Bryman, 2016). Denscombe (2008) argues that mixed methods improve the accuracy of data by presenting a more comprehensive view of multifaceted topics. This will reduce the risk of bias, which is associated with using a single approach. Further, mixed-methods research combines collecting, analysing, and interpreting qualitative and quantitative data in a single study (Leech & Onwuegbuzie, 2009).

4.4   Participants of the Study: EFL Teachers

The current study investigates the EFL professional knowledge of EFL teachers in Saudi Arabia. The population of any study should be clearly and accurately defined to determine a representative sample. The population is defined as a group of individuals sharing common characteristics, whereas a 'sample' is a representative subset of a population (Dornyei, 2007). In this study, the population is English language teachers in Saudi Arabia, and the sample is Saudi EFL teachers in Riyadh. The pre-service and in-service teachers in the current study represent heterogeneous samples, where every participant has different values for the variables investigated

in the present study. The educational and training backgrounds of teachers are diverse. The pre-service and in-service teachers have followed different routes into the teaching profession, concurrent and consecutive

Table 4.1 summarises the number of participants for each data collection method. The following sections are a detailed description of the participants in the current study.

Table 4.1

Total Number of Teachers Participating in Current Study

Data Collection Method	Type of Teacher	Number of Teachers
Teacher Knowledge Test	Pre-service	7,253
Online questionnaire	In-service	556
Semi-structured interviews	In-service	30

4.4.1 Saudi EFL Pre-service Teachers

The participants of the current study were pre-service teachers who passed the Teacher Knowledge Test in the years 2015, 2016, 2017, and 2018. The number of candidates who took the test between the years 2015 and 2018 was 27,199, of which 56% were male and 43% were female. The majority of the candidates (84%) did not receive any educational training as part of their BA degree. Only 7,253 (26%) candidates passed the test, which qualifies them to apply for teaching positions offered by the Ministry of Education in Saudi Arabia.

First, I contacted the National Centre for Assessment and submitted a Data Collection Application (November 2018). After the approval was granted, the data was received in a Microsoft Excel document (April 2019). Table 4.2 below presents the number of candidates in four consecutive years.

Table 4.2

Participant Statistics Showing Number of Participants Per Year

Test Year	Number of Participants	Number of Candidates Passed	Percentage of Candidates Passed	Lowest Score (cut-off score 50)	Highest Score (out of 100)
2015	5808	1670	28.75%	51	97
2016	6975	2383	34.16%	50	100
2017	7341	1916	26.09%	50	92
2018	7076	1284	18.14%	50	91
Total	27200	7253	26.6%		

4.4.2 Saudi EFL In-service Teachers

The participants of the current study were in-service EFL Saudi teachers working in government and private schools and teaching different levels (elementary, middle, secondary) in Riyadh. The teachers have different educational backgrounds and teaching experiences. The following table presents the distribution of EFL teachers in Riyadh's educational area.

Table 4.3

Riyadh Educational Area Profile Depicting Total Number of EFL Teachers in Riyadh in Academic Year 2018–2019)

	Educational Area	Gender	School Type	School Stage	Number of Schools	Number of EFL Teachers
Ministry of Education	Riyadh	Male	Government school	Primary	1,219	3,657
				Intermediate	714	1,428
				Secondary	439	878
			Private school	Primary	248	744
				Intermediate	214	428
				Secondary	192	384
		Female	Government school	Primary	1,220	3,660
				Intermediate	772	1,544
				Secondary	499	998

			Private school	Primary	301	903
				Intermediate	189	378
				Secondary	164	328

4.5   Sampling

4.5.1   Online Questionnaire

With the in-service teachers, a list-based sampling frame for the high-coverage population method was chosen, to obtain the data from an online questionnaire (Couper, 2000). This is a simple random sampling method that uses contact information, such as email address or phone number, for each unit in the sampling frame. I chose this sampling method because it is readily applicable to large homogeneous groups for which a sampling frame of contact information can be obtained, such as universities or government organisations (Fricker, 2016).

First, I contacted the English department of the Ministry of Education in Riyadh, to gain permission for data collection through the distribution of the questionnaire and conducting semi-structured interviews with the targeted sample. I submitted the Data Collection Application, a copy of the questionnaire in Arabic and English, interview questions in Arabic and English, and ethical approvals from the University of York and Princess Nourah Bint Abdul Rahman University (September 2018) (as included in Appendix B). After the application was approved, I contacted the Department of Planning and Development in the Ministry of Education – the department responsible for following up the implementation of requirements for conducting educational research and studies. A new form was submitted to the Department of Planning and Development, specifying the target population (November 2018).

Subsequently, the department generated a contact list of all Saudi EFL teachers in Riyadh and sent an invitational text message, encouraging the teachers to

participate in the study. The text message introduced the purpose and the goals of the study with a link directing participants to the questionnaire page on Qualtrics XM. The format of the questionnaire was adjusted to make it mobile-friendly and optimise the mobile experience of the questionnaire. The online questionnaire was sent to 4,827 in-service English language Saudi teachers in Riyadh.

A total of 556 in-service Saudi English language teachers participated in the quantitative part of the study and responded to the questionnaire. Both male and female in-service teachers responded to the survey (163 and 393 respectively). Teachers' educational backgrounds also varied. The substantial majority of the participants hold BA (495) and MA (55) degrees. Only seven teachers hold PhD degrees. More than half of the teachers graduated with an English literature degree (299), followed by education (101), TESOL (63), English translation (42), linguistics (35), and applied linguistics (16). The majority of the teachers had no educational training (374). The participation rate from teachers working at government schools was noticeably higher (481) than teachers at private schools (75). The number of participants was roughly equal across different school stages: 176 teachers from elementary schools, 178 teachers from middle schools, and 202 from secondary schools. The responses from experienced teachers (481) were higher than novice teachers (75). Table 4.4 categorises the participants under gender, educational level, academic discipline, educational training, school type, school stage, and teaching experience.

Table 4.4

Frequency of EFL In-service Teachers Response to Questionnaire

	Variable	Frequency	Percent
Gender	Male	163	29.3%
	Female	393	70.7%
Educational level	BA	494	88.8%
	MA	55	9.9%
	PhD	7	1.3%
Academic discipline	English translation	42	7.6%
	English literature	299	53.8%
	Education	101	18.2%
	Linguistics	35	6.3%
	Applied linguistics	16	2.9%
	TESOL	63	11.3%
Educational training	Yes	182	32.7%
	No	374	67.3%
School type	Government	481	86.5%
	Private	75	13.5%
School stage	Elementary	176	31.7%
	Middle	178	32.%
	Secondary	202	36.3%
Teaching experience	Novice	75	13.5%
	Experienced	481	86.5%

4.5.2   Semi-structured Interviews

I chose participants for the semi-structured interviews by using a random sampling

technique. Initially, along with the distribution of the online questionnaire, the

Department of Planning and Development had sent an invitation, asking the in-service

teachers if they were willing to take part in the interviews. However, no responses were

received from the teachers, presumably due to heavy teaching schedules or lack of

familiarity with the researcher. As a result, I contacted all 12 educational offices in

Riyadh and asked them to provide me with a list of schools under their supervision

(3026 male school, 3145 female schools). Each school was given a number, and I used the random number function (RANDBETWEEN) in Microsoft Excel to generate random numbers. As soon as the schools were chosen, I contacted the headteachers to introduce myself and my research, and to organise a visit to meet the teachers in the school and create an interview schedule that suited their teaching schedules.

Initially, 33 teachers were scheduled to be interviewed over a span of three weeks (April 2019). However, three teachers had to cancel due to a change in their teaching schedules. On the day of a scheduled interview, I visited the school to deliver a letter of approval from the General Directorate of Education in Riyadh and conduct the interviews. Saudi Arabia's gender-segregated education system does not allow females to enter school premises where males are present. With male teachers, phone interviews were conducted – the only appropriate method to comply with the regulations of Saudi Arabia's gender-segregated education system. Face-to-face interviews with female teachers were conducted within their school premises. The interviews with females were conducted in an available room in the school building.

A representative sample of the participants was selected from different genders, educational levels, academic disciplines, educational training, school type, school stage, and teaching experience, to include as great a diversity and symbolic representation as possible. As a result, 30 EFL in-service teachers (16 males and 14 females) were interviewed. From this sample group, 23 of the teachers had BA degrees, and only seven had MA degrees. Their academic disciplines varied: English translation (4), English literature (11), Education (6), Linguistics (2), Applied linguistics (1), TESOL (6). Most of them had no educational training and were working at government schools. The school stages ranged between elementary level (11), middle (7), and secondary (12). The majority of the teachers were considered

as experienced teachers (18), with (12) novice teachers. Moreover, these teachers were selected according to their teaching experience, which was divided into novice and experienced, based on Westerman's (1991) classification. That is, five years of teaching experience was taken as the benchmark time by which expertise may develop. The 30 teachers were chosen because they had different demographic and educational backgrounds with a variety of teaching experiences.

The following Table 4.5 shows the 30 teachers' demographic and educational backgrounds. To ensure anonymity and confidentiality, the teachers' names were replaced by codes in the analysis section. The letter (P) stands for the word 'participant'.

Table 4.5

Profile of EFL In-Service Teachers Participating in Interviews Showing Demographic and Educational Backgrounds

Variable		Gender		Educational level		Academic discipline						Educational training		School type		School stage			Teaching experience	
		Male	Female	BA	Masters	Translation	TESOL	Education	English literature	Applied linguistics	Linguistics	Yes	No	Government	Private	Elementary	Middle	Secondary	Novice	Experienced
Gender	Male	16	-	11	5	2	2	4	6	1	1	5	11	15	1	2	5	8	5	11
	Female	-	14	12	2	2	4	2	5	0	1	3	11	8	7	9	2	3	7	7
Educational level	BA	11	12	23	-	4	5	5	9	0		5	18	17	7	11	5	7	11	12
	Masters	5	2	-	7	0	1	0	2	1	2	3	3	6	0	0	2	4	1	5
Academic discipline	Translation	2	2	4	0	4	-	-	-	-	-	0	4	3	1	1	2	1	3	1
	TESOL	2	4	5	1	-	6	-	-	-	-	1	5	1	4	4	1	1	4	2
	Education	4	2	5	0	-	-	6	-	-	-	2	3	5	1	3	2	1	2	4
	English literature	6	5	9	2	-	-	-	11	-	-	4	7	10	1	3	3	5	2	9
	Applied linguistics	1	0	0	1	-	-	-	-	1	-	1	0	1	0	0	0	1	1	0
	Linguistics	1	1		2	-	-	-	-	-	2	0	2	2	0	0	0	2	0	2
Educational training	Yes	5	3	5	3	0	1	2	4	1	0	8	-	8	0	2	3	3	2	5
	No	11	11	18	3	4	5	3	7	0	2	-	22	14	7	9	5	8	10	13
School type	Government	15	8	17	6	3	1	5	10	1	2	8	14	23	-	7	7	9	5	18
	Private	1	7	7	0	1	4	1	1	0	0	0	7	-	8	4	1	2	6	0
School stage	Elementary	2	9	11	0	1	4	3	3	0	0	2	9	7	4	11	-	-	5	6
	Middle	5	2	5	2	2	1	2	3	0	0	3	5	7	1	-	8	-	3	5
	Secondary	8	3	7	4	1	1	1	5	1	2	3	8	9	2	-	-	11	4	7
Teaching experience	Novice	5	7	11	1	3	4	2	2	1	0	2	10	5	6	5	3	4	12	-
	Experienced	11	7	12	5	1	2	4	9	0	2	5	13	18	0	6	5	7	-	18

4.6   Data Collection Methods

This section provides a detailed description of the methods of data collection used in this study. Creswell and Poth (2016) highlighted the importance of providing a clear explanation of research methods and justification for selecting specific methods. In order to answer the research questions of the current study, three research methods were used to collect quantitative and qualitative data. These methods included the Teacher Knowledge Test, online self-evaluation questionnaires, and semi-structured interviews. The next section presents the purpose and justification for the selection of each method.

4.6.1   Teacher Knowledge Test

The Teacher Knowledge Test sought to establish the level of Saudi EFL pre-service teachers' knowledge. This test is a prerequisite for applying for teaching positions in Saudi Arabia, so the results are a good indicator of a teacher's level of knowledge. It is a standardised vocational test designed and administered by The National Centre for Assessment and Evaluation in Higher Education in Saudi Arabia. The Teacher Knowledge Test was created as a pre-employment test in 2009, to improve the teacher recruitment process in Saudi Arabia (Alsadawy, 2016). The Ministry of Education authorised the National Centre for Assessment to administer the test as a prerequisite for any teaching position, as a step towards educational reform by the Saudi government. In the interests of developing and improving the quality of education, it became a priority to improve the selection process for new teachers to ensure a satisfactory level of competence and skills.

Secondary data analysis is becoming more relevant as technology has improved the collection, archival, and restoration of data (Logan, 2020). Secondary data can be defined as a set of data collected by one party for a purpose other than that of the researcher's current study, to explore the data in a new direction and

110

discover new patterns (Fei et al., 2020). There are a wide variety of potential sources of secondary data, such as government records, public sector records, published data, and large-scale data sets, which are data collected for routine administrative purposes, rather than as the basis of research (Sherif, 2018). One of the reasons for employing secondary data is to eliminate the financial and logistical obstacles related to primary data collection (Trinh, 2018).

The suspension of pre-service EFL teacher preparation programmes in 2013 imposed a challenge in accessing the sample for data collection. Therefore, I used secondary data to gain a better understanding of the pre-service teacher knowledge. The Teacher Knowledge Test consists of two major sections. The first is the general knowledge section, which serves to evaluate an individuals' ability to uphold general standards of educational instruction, including professional knowledge, the promotion and support of learning, and professional responsibility. Teachers in all subject areas are required to complete this section of the test, which is conducted in Arabic and on a different day than the subject-specific section. Pre-service teachers must then complete the subject-specific section according to their academic discipline. The test for English language instruction as a major originally covered the following four areas: language pedagogy, instructional design, theoretical knowledge and application, and linguistic knowledge. Under each knowledge domain, several standards are based on the test questions. The test consists of 75 multiple-choice questions. The time allocated to complete each part is 90 minutes, and each portion can be taken separately. The following table (4.6) summarises the knowledge domain and standards in the Teacher Knowledge Test for the academic discipline of the English language.

Table 4.6

Knowledge Domain and Standards in Teacher Knowledge Test for the Academic Discipline of the English Language

Knowledge Domain	Standards

Language pedagogy	1. Teaching the following four skills:
	  a. Teachers know and understand listening and speaking strategies.
	  b. Teachers know and understand reading comprehension strategies.
	  c. Teachers know and understand the writing processes of English.
	2. Language instruction
	  a. Teachers know how to plan learning activities relevant to EFL learning goals and curriculum requirements.
	3. Language assessment
	  a. Teachers know how to develop and select appropriate methods for assessing EFL student learning that is consistent with learning goals.

Curriculum design	1. Learning resources
	  a. Teachers know how to access and design a range of appropriate learning resources
	2. Learning goals
	  a. Teachers know how to set appropriate EFL learning goals.
	3. Students' backgrounds
	  a. Teachers apply knowledge of student'' diverse backgrounds, abilities, needs, and interests to plan effective learning experiences.
	4. Teaching methods
	  a. Teachers use a variety of teaching methods that promote student engagement in language learning.

Theoretical knowledge	1. Linguistics and applied linguistics
	  a. Teachers know the psychological, cognitive, and social characteristics of EFL students in various stages of language development.
	  b. Teachers have general knowledge of the language as a system.
	  c. Teachers have a thorough knowledge of the structure of English.
	  d. Teachers have a general knowledge of the phonetics and phonology of English.

Theoretical application	1. Language acquisition
	  a. Teachers demonstrate knowledge and understanding of language acquisition.
	2. TESOL
	  a. Teachers are familiar with the theoretical and methodological developments of TESOL.

Language proficiency	1. Teachers know how to read non-specialised reading passages with varying levels of length and difficulty as well as comprehend, analyse, and evaluate them.

4.6.1.1 Reliability of the Teacher Knowledge Test

Based on the reports of the National Centre for Assessment and Evaluation, the test is highly objective and is a reliable tool for the assessment of knowledge against international standards (Alsadawy, 2016), as it measures the level of professional knowledge that a teacher possesses to become an effective EFL practitioner. According to the National Centre for Assessment and Evaluation, Cronbach's alpha of the test is 0.89. Cronbach's alpha of five sub-scales ranged between 0.9 and 0.7, which is considered acceptable according to George and Mallery (2016). The following table (4.7) presents the Cronbach's alpha of the Teacher Knowledge Test and the sub-scales.

Table 4.7

Cronbach's Alpha of Teacher Knowledge Test and Sub-scales

Knowledge Domain	Cronbach's Alpha
Language pedagogy	0.94
Curriculum design	0.83
Theoretical knowledge	0.91
Theoretical application	0.79
Language proficiency	0.86
Teacher Knowledge Test	0.89

4.6.2 EFL Professional Knowledge Questionnaire

An online self-evaluation questionnaire was used to ascertain the professional knowledge of in-service EFL teachers and to explore patterns and trends in participant responses, and to measure the level of their knowledge regarding EFL. Self-evaluation is one of the main characteristics of autonomous learning (Sevilla Morales & Mena, 2016). In education, the importance of teachers' self-evaluation of

knowledge and performance is rapidly gaining attention (Davis et al., 2006). In their recent study, Borg and Edmett (2018) identified several benefits of teacher self-evaluation. By allowing teachers to evaluate themselves, their sense of ownership of the evaluation process and subsequent decisions increases, thereby ensuring that they become more involved in the teaching process and the learning of their students. Moreover, when teachers are responsible for evaluating their work, they are reminded of their status as professionals. Self-evaluation can better measure a teacher's competence than a small number of classroom observations conducted by an external evaluator (Marzano & Toth, 2013). Borg and Edmett (2018) highlighted the need for a change in the teacher evaluation process to introduce a more bottom-up approach.

Several new frameworks have adopted the use of self-assessment in teacher evaluation. These frameworks assume that a teacher who systematically evaluates their own knowledge and performance will tend to recognise the competencies they lack and identify with, for example, suitable professional development programmes for their needs. However, empirical studies focusing on the use of self-evaluation by in-service EFL teachers are rare. Borg and Edmett (2018) argued that more research is needed on teachers' self-evaluation and the implementation of competency frameworks to systematically guide this process.

Given the lack of agreement in the literature of what constitutes an EFL teacher's knowledge, it was deemed important to synthesise the existing explanations of EFL teacher knowledge and design a questionnaire based on that synthesis to include the various relevant knowledge domain types (see also the literature review, section 3.5).

4.6.2.1 **Content of The Questionnaire**

Questionnaires are cost-efficient, practical, and relatively straightforward to analyse, and they can be administered to a large number of participants without the researcher's presence (Lefever et al., 2007). Further, questionnaires can be distributed to potential participants using different methods, such as by post, over the telephone, face to face, and using the internet (McPeake et al., 2014). A well-constructed questionnaire enables researchers to easily convert participants' responses into numerical form and perform statistical analysis (Rattray & Jones, 2007). Thus, designing a questionnaire involves formulating items carefully, to avoid any misinterpretation that could jeopardise the data.

In this study, a structured questionnaire was created based on the existing literature on teachers' knowledge, as well as national and international professional English teaching standards. The questionnaire consists of four main sections: introduction and consent, demographic information, EFL professional knowledge base, and comments. The first page of the questionnaire presents the title of the questionnaire and an introductory paragraph that provides general instructions to guide participants in completing the questionnaire. It offers a brief description of the purpose of the research study, the general orientation of the topic of the questionnaire, the requirements of participation, and the informed consent form. It also introduces the research and the affiliated university and provides contact details. Participants are also presented with the confidentiality, data storage, and privacy considerations of the research. Upon agreeing to participate, teachers sign the consent form to begin the questionnaire, which takes around ten minutes to complete.

The demographic section of the questionnaire collects information on the participant's gender, level of education, academic discipline, whether or not they received educational training, and background information regarding their current teaching position, such as the school type, the stage they currently teach, and their years of experience. Table 4.8 provides the terms used in the demographic information section of the questionnaire.

Table 4.8

Terminology Used in Demographic Information Section of Questionnaire

Variable	Category
Gender	Male
	Female
Educational level	BA
	MA
	PhD
Academic discipline	English translation
	English literature
	Education
	Linguistics
	Applied linguistics
	TESOL
Educational training	Yes
	No
School type	Government
	Private
School stage	Elementary
	Middle
	Secondary
Teaching experience	Novice
	Experienced

The third section of the questionnaire measures the professional knowledge of the EFL teachers through self-evaluation questions. There are 63 items that elicit

responses that reveal the core knowledge of the participants (see also the literature review, p. 60).

1. Assessment knowledge (items 15_1, 15_2, 15_3, 15_4, 16)

2. Pedagogical knowledge (items 28_1, 28_2, 29, 32, 34, 39, 46)

3. Content knowledge (items 19, 22_1, 22_2, 22_3, 31_1, 31_2, 31_3, 31_4, 31_5, 31_6, 40_1, 40_2, 40_3, 40_4, 40_5)

4. Knowledge of student (items 17, 42_1, 42_2, 42_3, 42_4, 42_5, 42_6, 43)

5. Curricular knowledge (items 12, 14, 18, 24, 38)

6. Knowledge of technology (items 13_1, 13_2, 13_3, 27, 30, 33, 35_1, 35_2, 36)

7. Discourse skills (items 10, 21, 25, 37)

8. Knowledge of context (items 19, 23, 44, 45)

9. Language proficiency (items 11, 20_1, 20_2, 20_3, 20_4, 47)

The final section of the questionnaire allows participants to add additional comments before submitting the questionnaire. After the submission, the questionnaire ends with a message that expresses gratitude to the respondents for participating in the study (see Appendix B1 and B2 for full Arabic and English versions of the questionnaire).

The design of the questionnaire followed the five-item Likert scale, which is considered an ordinal scale, to improve the response rate and response quality, along with reducing 'frustration levels' of respondents (Babakus & Mangold, 1992; DeVellis, 2016). In order to determine the level of EFL professional knowledge, the in-service teachers had to evaluate their knowledge by choosing the statement that best describes them. The scale ranges from 'describes me extremely well', 'describes me very well', 'describes me moderately well', 'describes me slightly well' and 'does not describe me'. The lowest possible score on the five-point scale

was 1, referring to 'does not describe me' and the highest was 5, referring to 'describes me extremely well'.

The range is calculated by (5-1 = 4) then divided by five, as it is the greatest value of the scale (4 ÷5 = 0.8). This range gives a weight of the responses equally. Because the scale consists of 63 items, the minimum points that could be achieved are 63 points, and the maximum points are 310 points (M = 118.5378, SD = 37.12225). The following Table 4.9 present mean values based on response scores.

Table 4.9

Mean Values Based on Response Scores

Name of the questionnaire	Likert Scale Value	Equivalent Mean Value	Rating
EFL professional knowledge	1	1-1.80	Does not describe me
	2	1.81-2.60	Describes me slightly well
	3	2.61-3.40	Describes me moderately well
	4	3.41-4.20	Describes me very well
	5	4.21-5	Describes me extremely well

4.6.2.2   Validity and Reliability of the Questionnaire

This section describes measures adopted to ensure the reliability and validity of the current study. According to Singh (2017), reliability and validity are the bases of ensuring well-carried out research that inspires trust in readers as well as other researchers. Therefore, researchers should work hard to ensure that reliability and validity are achieved. In the current study, both the face and content validity of the questionnaire were investigated.

4.6.2.2.1 Validity of the questionnaire

In the current study, the content, face, and construct validity of the questionnaire were investigated. According to Tsang et al. (2017), content validity refers to "the extent to which the items in a questionnaire are representative of the entire theoretical construct the questionnaire is designed to assess" (p.82). To ensure content validity, the final draft of the questionnaire was checked by two experts in educational research methods, to review the items in the questionnaire. These experts were given the list of knowledge types and the questionnaire items, to check that each item was appropriately matched to the contents indicated in the questionnaire. In addition, they were asked to evaluate whether or not the items truly measured the intended contents. Further, the findings and a few of the items in the questionnaire were examined in relation to existing literature, to ensure the validity of the questionnaire and the credibility of the participants' responses. Moreover, construct validity was also tested to determine the degree to which the questionnaire was capable of measuring the EFL professional knowledge of EFL teachers. In order to assess construct validity, Pearson's correlation was employed. Findings showed that each item was significantly correlated to the sub-scale of which it was part at a substantial level (0.01).

4.6.2.2.2 Reliability of the questionnaire

The reliability of a scale refers to the extent to which an instrument consistently measures a construct and how free the scale is from random error (Pallant, 2016). The reliability can be checked using two indicators: test-retest and internal consistency. Internal consistency reliability measures how well the items on a test measure the same construct or idea (Pallant, 2016). This reliability can be measured in different ways.

Reliability analysis was performed on the EFL knowledge base scale comprising 63 items after the addition of language proficiency as the ninth knowledge type. The Cronbach's alpha was 0.973. According to George and Mallery (2016), the EFL professional knowledge scale has excellent coefficients. Most items appeared to be worthy of retention, thereby resulting in a decrease in the alpha if deleted. The Cronbach's alpha of seven out of nine sub-scales ranged between 0.9 and 0.8, which is considered excellent. The Cronbach's alpha of the remaining three sub-scales ranged from 0.765 to 0.797, which is still acceptable for research purposes (George & Mallery, 2016). The following Table 4.10 presents Cronbach's alpha of the questionnaire and the sub-scales.

Table 4.10

Cronbach's Alpha of Questionnaire and Sub-Scales in Main Study

Knowledge Domain	Number of Items	n	Cronbach's Alpha
Assessment knowledge	5	566	0.889
Pedagogical knowledge	7	566	0.890
Content knowledge	15	566	0.937
Knowledge about students	8	566	0.924
Curricular knowledge	5	566	0.797
Knowledge of technology	9	566	0.843
Discourse skill	4	566	0.770
Context knowledge	4	566	0.765
Language proficiency	7	566	0.897
EFL professional knowledge	63	566	0.973

4.6.2.3 Pre-piloting the Questionnaire

The purpose of pre-piloting the questionnaire is to ensure the clarity of the sentence structure, avoid ambiguity, and check the time required to complete the questionnaire. Forsyth and Lessler (2004) identified four principles for testing questionnaire items: expanded interview technique, targeted methods, group methods, and expert evaluation. Experts in the field of education evaluated the current questionnaire. The first draft of the questionnaire was discussed with a staff member at the Centre for English Language Teaching (CELT); the staff member had over 20 years of experience as an EFL language teacher/consultant at the university where the study was conducted. A native English headteacher evaluated the questionnaire in a local school; the headteacher had over ten years' experience in five schools under four different local authorities in the UK and five years in a school in one of the Gulf Cooperation Council countries (GCC). Another native English teacher also assessed the questionnaire, and the questionnaire was further discussed with four PhD students, both Arabic and English native speakers, studying at the university where the study was conducted.

The aim of the pre-piloting was to obtain feedback on the content, structure, length, language and perceived difficulty of the questions used in the questionnaire. Based on the comments of the abovementioned people, minor changes were made in the wording of a few of the items. For example, the word 'possible' was added to item 23 in 'content knowledge'. In addition, the word 'connect' was replaced with 'relate' in item 21. Similarly, the word 'learning' replaced 'acquisition' in item 34.

After the pre-pilot of the English version, the questionnaire was translated into the participants' first language (Arabic) (Cohen et al., 2017). The aim of translating the questionnaire was to enable the teachers to fully comprehend the

items and eliminate any language barriers and ambiguity surrounding certain terminologies which a few of the teachers may not be familiar with. This is an important step, as such ambiguity may prevent some teachers from selecting the item that best describes their knowledge levels (DeVellis, 2016).

The Arabic version of the questionnaire was sent to two native Arabic teachers with degrees in Arabic language studies and over 20 years' teaching experience. They were asked to validate the translated version. After the Arabic version was validated, the translated questionnaire was back-translated by a certified translator, to ensure equivalency and provide feedback on clarity and meaning. Then, the Arabic version was used to build the questionnaire. Qualtrics XM software was used to design, send, collect, and analyse online questionnaires.[1]

4.6.2.4 The Pilot Study of the Questionnaire

4.6.2.4.1 Sampling in the pilot study

It would have been impossible to study the entire population of Saudi EFL teachers, so non-probability snowball sampling was used in the pilot study of the questionnaire, to obtain access to a section of the population. The snowball sampling method is one of the best-known forms of non-probability sampling (Bryman, 2016). It is also known as a chain-referral method and involves contacting a group of relevant participants and inviting them to suggest other potential participants with similar characteristics (Fricker, 2016). After collecting data from the first group of participants, the researcher invites them to suggest other potential participants. The

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[1]   Qualtrics XM is a survey tool offered to students and staff at the university where the study was conducted.

process continues until the researcher has collected sufficient data to answer the research questions (Cohen et al., 2017).

Noy (2008) raises the concern that the latter groups of participants may have different characteristics from the earlier participants, as identified by the researcher. In other words, they might not possess the required characteristics of the target sample. However, such a problem can be avoided if the researcher carefully monitors the progress of the sample, thereby ensuring that the chain of referrals remains within the boundaries of the target sample (Tansey, 2007). One way to ensure that is to clearly state the characteristic of the target sample on the first page of the questionnaire, then examine and filter responses before the analysis.

4.6.2.4.2 *Validity and reliability in the pilot study*

A pilot study was conducted in order to improve the quality and the efficiency of the questionnaire for the main study. It was important to detect any problems and identify modifications before embarking on the main study. The main objectives of piloting a questionnaire are to determine whether the items are consistent and unambiguous for the participants and establish the questionnaire's validity and reliability (Singh, 2017). The validity of a scale refers to the accuracy of the questionnaire in measuring what it is supposed to measure (Goldstein & Simpson, 1995). In the current study, both the face and content validity of the questionnaire were investigated in the pre-pilot stage. Cronbach's alpha coefficient was used in the pilot study to check internal consistency reliability, as it is one of the most commonly applied indicators (Pallant, 2016). Cronbach alpha values of 0.7 or higher indicate acceptable internal consistency (DeVellis, 2016; Taber, 2018). In the pilot study, the EFL professional knowledge base scale reached a Cronbach's alpha coefficient of 0.949.

The EFL teacher professional knowledge questionnaire consists of eight sub-scales, and the reliability of each was calculated. In the pilot study, all sub-scales had a Cronbach's alpha value greater than 0.7, except for curricular knowledge and knowledge of technology. A possible explanation for these two exceptions is the small number of items (curricular knowledge has five items, knowledge of technology has nine). For sub-scales with few items, Briggs and Cheek (1986) suggest an inter-item correlation between 0.2 and 0.4. In the pilot study, curricular knowledge and knowledge of technology had Cronbach's alpha values of 0.606 and 0.634 respectively. The low value for knowledge of technology can be explained by examining the items in this sub-scale, which explore the participants' knowledge of specific programmes and applications used in education. As technology changes rapidly, some of the participants might have limited knowledge of some of the software referred to in these items. The main aim of this category is to assess whether the participants possess sufficient general knowledge of technology to promote and sustain the development of 21st-century skills among their students, using technology-enhanced teaching. Another possible reason for the low Cronbach's alpha in the pilot study is the low number of responses (Pallant, 2016). Small sample sizes do not provide sufficient data for the reliability test; only 16 in-service teachers participated in the pilot study. The values for each sub-scale are reported in Table 4.11 below.

Table 4.11

Reliability Coefficients of Questionnaire Items

Knowledge Type	Number of Items	*n*	Cronbach's Alpha
Assessment knowledge	5	16	0.802
Pedagogical knowledge	7	16	0.789
Content knowledge	15	16	0.904
Knowledge about students	8	16	0.868
Curricular knowledge	5	16	0.606
Knowledge of technology	9	16	0.634
Discourse skill	6	16	0.808
Context knowledge	3	16	0.899
Total	58	16	0.949

4.6.2.5   Modification of the Questionnaire

A few of the participants raised concerns regarding their language proficiency, stating that it had negatively affected their teaching. Given the concerns expressed by the participants in the pilot study regarding their own language proficiency and similar discussions in the language education literature (Eslami & Harper, 2018; Faez et al., 2019; Nakata, 2010; A. Tsang, 2017; Van Canh & Renandya, 2017), it was decided to add language proficiency to the questionnaire in the main study.

The following Table 4.12 presents the questionnaire items in relation to the new sub-section on language proficiency.

Table 4.12

New Questionnaire Sub-section on Language Proficiency

Knowledge Domain	Questionnaire Items

Language proficiency	1. I have full operational command of the language.
	2. My level of English language proficiency is:
	   • Beginner
	   • Elementary
	   • Intermediate
	   • Upper intermediate
	   • Advanced
	   • Proficient
	3. I have sufficient ability to use English appropriately, accurately, and fluently.
	4. I have sufficient ability to use the English language in
	   a) speaking (I can orally express myself);
	   b) reading (I can read and comprehend various kinds of English texts);
	   c) listening (I can understand spoken language);
	   d) writing (I can write in different writing styles).

4.6.2.6 Administration of the Questionnaire

In the present study, the access-controlled questionnaire link was distributed among EFL teachers in Riyadh through the Ministry of Education (February 2019). This sampling method requires a frame or list for the targeted sample, with web access to send invitations to the participants and a link directing them to the online questionnaire page. In order to prevent multiple completions by the same participants, access was controlled and restricted (Couper, 2000).

First, I contacted the English department of the Ministry of Education in Riyadh to gain permission for data collection and the distribution of the questionnaire link to the targeted sample (November 2018). I submitted the Data

Collection Application, a copy of the questionnaire in Arabic and English, and ethical approvals from the University of York and Princess Nourah Bint Abdul Rahman University (as included in Appendix B). After the application was approved, I contacted the Department of Planning and Development in the Ministry of Education – the department responsible for following up the implementation of the requirements for conducting educational research and studies (January 2019). A new form was submitted that specified the target population to the Department of Planning and Development. Subsequently, the department generated a contact list of Saudi EFL teachers in Riyadh and sent a text message to the participants' cell phone numbers (February 2019). The text message contained a link directing the participants to the questionnaire page on Qualtrics XM. The format of the questionnaire was adjusted to make it mobile-friendly and optimise the mobile experience of the survey. The link was active for one month.

The advantage of the sampling method used with the questionnaire is the high coverage rate of the specific population and the low messaging fees and accessibility over a cellular network or Wi-Fi (Fricker, 2016). As supported by Uhlig et al. (2014), I would argue that an online questionnaire is more efficient with respect to workflow, responsiveness, time and financial costs. In the current study, participant responses collected via questionnaires were easily converted into numerical data to conduct statistical analysis (Rattray & Jones, 2007). The online questionnaire used in the current study was user-friendly, to ensure a smooth experience for the participants. Participants can decide on a time that suits them best to respond to the questionnaire. Moreover, to make the participants feel more comfortable in answering questions honestly, the online questionnaire was anonymous and confidential.

Despite having many advantages, online questionnaires also have a number of disadvantages. Differences in understanding and interpretation of the questions could lead to wrong answers or unconscientious responses, which could lead to skewed results. Moreover, in the current study, there were a few incomplete questionnaires. These questionnaires were removed before the analysis.

4.6.3   *Semi-structured Interview*

Semi-structured interviews are used to collect detailed, in-depth information to understand the participants' experiences, where they have to answer pre-set, open-ended questions (Corbin & Strauss, 2014). In this study, semi-structured interviews are considered effective data collection strategies to help explain and explore the knowledge of in-service teachers (Merriam & Tisdell, 2015). A framework for constructing a semi-structured interview guide was used, to ensure that all topics were covered for all participants. Salmons (2014) suggested a five-step framework to design and construct a semi-structured interview guide. First, the researcher identifies the prerequisites and the appropriateness of using the semi-structured interview as a data collection tool. Second, a thorough understanding of the topic must be established, based on previous knowledge. Third, an initial interview guide must be designed. Fourth, a pilot test of the preliminary interview guide must be conducted, to confirm the coverage and relevance of the topic. Lastly, the interview guide must be completed, to collect rich data with a clear and logical guide.

Based on the conceptual and theoretical framework of the study, a list of topics and themes were identified to guide the interviews. Open-ended questions on issues related to EFL professional knowledge were formed, and the initial interview questions were reviewed. Thereafter, these initial interview questions were

discussed with two experts in the field of Education and EFL teaching qualitative research methods.

4.6.3.1   Content of the Semi-structured Interviews

The final list included five main questions and additional probing questions to explore the views of participants. The first interview question starts by soliciting the teacher's views regarding the knowledge domains needed as an EFL teacher, then a question follows asking about the teacher's familiarity with EFL professional knowledge domains in the literature. The third question aims to gather information about the importance of these knowledge domains to the teacher. The fourth question investigates the perceptions of the teacher regarding their own knowledge level. Lastly, the fifth question aims to identify knowledge gaps and their preferred methods of acquiring knowledge. The following Table 4.13 lists the interview questions.

Table 4.13

Interview Questions in Present Study

Main Interview Questions	Suggested Follow-up Questions
1. What domains of knowledge do you need to be a successful EFL teacher? 2. How familiar are you with the domains of knowledge that the literature suggests you need to be a successful EFL teacher?	Would you give me more details, please? What stands out in your mind about that?
3. How important are these types of knowledge to you as an EFL teacher?	What makes you feel that way? Can you elaborate?
4. Do you see your own EFL knowledge base as sufficient to enable you to teach English effectively?	You mentioned "repeating significant words"; could you tell me more about that? What are your main reasons for saying that?
5. What kind of additional knowledge or training do you need in order to feel more confident in teaching EFL?	Can you think of another example of this? How could this knowledge or training be made available to you?

4.6.3.2 The Pilot Study of the Interview

The interview questions were tested in a pilot study with three in-service EFL teachers. The aim of the pilot study was to identify the difficulties and limitations of the interview questions, so they could be improved in the main study (Kvale, 2008). I contacted one of my former students, an EFL teacher in a private school, to ask her if she was willing to participate in the interview. She agreed to take part in the study and provided me with contact details for two of her colleagues who also agreed to participate. The interviews of the pilot study took place in a library meeting room at

Princess Nourah Bint Abdulrahman University (PNU). The duration of each interview ranged from 35 to 40 minutes. The interview framework was revisited and a question was added. For example, after asking the participants about their knowledge gaps, many responses included emergent topics, like preferred educational methods, which had not been previously determined. It was important to add a subsequent question regarding their preferred educational methods, to obtain a comprehensive understanding of the professional knowledge of EFL in-service teachers.

4.6.3.3   The Interviews for the Main Study

After piloting the interview questions, I started interviews for the main study with the in-service teachers. A digital voice recorder was used to record the interviews. The duration of the interviews ranged from 30 minutes to 50 minutes. I asked the teachers about their language preference for the interview. All teachers preferred using the Arabic language, except for one teacher who insisted on using the English language. Also, after completion of the data collection, I thanked the teachers for participating, expressing my gratitude for allocating time to share their knowledge.

To enhance the consistency of data collection, I used the interview guide to ensure that the set of topics was covered by every in-service teacher. One of the advantages of using a semi-structured interview guide is the schematic presentation of the questions, ensuring optimum use of interview time. In the current study, the interview guides helped explore the teachers' views thoroughly and systematically, while maintaining the focus of the interview. After each interview, the recording was transferred to a personal computer in a password-protected file; a USB flash drive was used for backup. To ensure that the research was anonymous and confidential, I coded the participants' information (Kvale, 2008).

131

Although semi-structured interviews are often an effective way to collect data, there are some disadvantages. Semi-structured interviews can be time-consuming and require intensive work to prepare, set up, and conduct. In the current study, 30 teachers were interviewed over a span of three weeks. Considerable time was allocated to contact and arrange the interviews. According to Basit (2010), four to seven hours is the average time to transcribe one hour of audio recording. Nevertheless, I went through the transcription process independently. The transcription process for each recorded interview took four to five hours on average, depending on the length of the responses.

4.7 Data Analysis Methods

A mixed-methods approach was used to collect the data in this study. In other words, the data analysis involved more than one technique. The following section presents the process of analysis of quantitative and qualitative data.

4.7.1 Analysis of Quantitative Data

The data was filtered, and only the candidates who passed the Teacher Knowledge Test (which qualified them to be pre-service teachers) were used. IBM SPSS Statistics 25 (Statistical Package for Social Science) was used to perform descriptive and inferential statistics. The Teacher Knowledge Test and the EFL professional knowledge questionnaire were analysed, to determine statistically significant differences among the participants regarding various variables.

The TKT data was received as a Microsoft Excel file, then the data was imported to SPSS to extract statistics. Descriptive statistics regarding pre-service teachers was performed, to determine the levels of knowledge of Saudi EFL pre-service teachers. First, the data pertaining to the pre-service teachers from 2015 to

2018 was analysed, to provide a general perception regarding the professional knowledge of Saudi EFL pre-service teachers.

Thereafter, individual types of knowledge and the total score on the TKT from the year 2018 were analysed, using the Mann-Whitney test to determine if there were statistically significant differences in the professional knowledge of Saudi EFL pre-service teachers in terms of the only variables provided by the National Centre for Assessment and Evaluation, which are gender and educational training. Although the aim was to represent all variables (such as, for example, educational level and academic discipline), due to practical constraints this was not possible. The National Centre for Assessment (NCA) that provided TKT data only identified two variables among its examinees: gender and educational training, which limited the data analysis. Therefore, the following discussion sections and conclusions that are based on TKT data were generalised wherever applicable, while others represent only a particular sample of the population.

The pre-service teachers' overall professional knowledge was categorised using Bloom's cut-off point (Bloom, 1956). Based on the sum scores, level of knowledge was classified into low-level knowledge (less than 59%; 0-59 points), moderate-level knowledge (60-79%; 60-79 points) and high-level knowledge (80-100%; 80-100 points).

Further, in order to investigate the EFL knowledge of the Saudi EFL in-service teachers, data from the EFL professional knowledge questionnaires were imported from the Qualtrics XM platform to IBM SPSS Statistics 25 for analysis. No missing values were found. The Mann-Whitney U test and the Kruskal-Wallis H test were used to explore statistically significant differences in the knowledge base of Saudi EFL in-service teachers, in terms of gender, educational level, academic discipline, educational training, school type, school stage, and teaching experience.

4.7.2 *Analysis of Qualitative Data*

Braun and Clarke's (2006) thematic analysis framework was used to examine the qualitative data obtained from the semi-structured interviews. The analysis of the semi-structured interviews was done manually, to identify patterns or themes within qualitative data. First, after the transcription process of the recorded interviews, I familiarised myself with the data. One of the challenges I face with qualitative data is that the time required for data collection, analysis, and interpretation is lengthy. In the current study, the number of semi-structured interviews was 30. The first step in qualitative data analysis is transcribing, which converts the audible data into written form, which can be time consuming. This step is guided by the methodological assumptions underpinning a particular research project. Due to a large number of participants, I combined data across participants into a single file to prepare the qualitative data for analysis and to ensure that the presentation of the themes was in a cohesive manner. Moreover, the semi-structured interviews revealed a very rich data set full of details within every sentence or paragraph. Such rich data presented a challenge in identifying which details were useful and which were redundant. In order to avoid such a problem, clear goals were set for the analysis, and research questions were used as a way to redirect the analysis when I was too absorbed in detail. As recommended by Braun and Clarke (2006), during the transcription process, I wrote notes and early impressions and read each transcript multiple times.Then, following Fereday and Muir-Cochrane thematic analysis (2006), I used hybrid approach of inductive and deductive coding to develop a codebook and generate initial codes. Deductive coding allowed me to begin the coding process with a pre-determined coding system identified from the literature review of previous studies, such as different knowledge domains. The inductive approach helped me update the coding system as new content was encountered

during the coding process, such as the teachers' preferred education methods.

According to Brown and Clarke (2006), "a theme captures something important

about the data in relation to the research question and represents some level of

patterned response or meaning within the data set" (p. 82). A code is a word or

phrase that acts as a label for a segment of text.The emergent codesand themes are

represented in the following coding tree chart.

Figure 4.2

Coding Tree Representing Codes and Themes Emerged in the Interviews

```
                          ┌─────────────────────────────────────────┐
                          │   EFL Professional Knowledge Domains     │
                          └─────────────────────────────────────────┘
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Knowledge about students	Pedagogical knowledge	Content knowledge	Knowledge of technology	Knowledge of context	Curriculum knowledge	Language proficiency	Assessment knowledge	Discourse knowledge
Students' English language level and their previous language-learning experience	Teaching Methods and Strategies	Translation	Audio/visual equipment	Micro contextual factors	Curriculum requirements	Use the English language for communication inside and outside the classroom	Formative assessment	start and carry on a lesson in the English language
Students' need, perceptions, motivation and attitudes toward learning the English language	Lesson Planning	Literature	Educational platform	Macro contextual factors	Curriculum organisation	vocabulary knowledge	Summative assessment	The use of appropriate language in different situations
Students' learning styles and preferences	Teaching Higher-order thinking Strategies	English language skills	Communication		The national and international curriculum in Saudi Arabia	Fluency	Diagnostic assessment	
Students' learning difficulties		Linguistics	Desktop application programmes					
Students' vocabulary size			Instructional application					
Students' learning outcomes			Educational website					
Students' opinions about the teacher			Live online tutoring					
Students' age and cognitive abilities								
Students' socio-economic status								

136

Second, the review tab in Microsoft Word was used in this process to insert comments. Figure 4.3 presents a screenshot of this, showing codes in the margins. Third, I organised related codes under broader initial themes. Fourth, I reviewed the initial themes and examined the codes for relevance in each theme. In the initial stages, some codes could be associated with different themes (Friese et al., 2018). However, clearly defining a code will clarify exactly what is meant by a given code and how to apply it consistently over time. Such a technique could limit assigning multiple codes under more than one theme. Then, the themes were checked in the context of the data within a single interview and across all interviews. Fifth, I refined the final themes and the sub-themes and checked their relation to the main theme. In the final step, I wrote the analysis to present the data in a clear and comprehensible form.

Figure 4.3

Interview Coding by the Researcher

4.7.2.1 Inter-rater Reliability of the Semi-structured Interviews

The responses of the in-service teachers to the interview questions were coded, to pave the way for establishing a thematic framework by identifying and linking similar concepts and themes. The reliability of the data was established using the inter-rater reliability (IRR), which is one method of ensuring the trustworthiness of the study (McAlister et al., 2017). The next section explains the process thoroughly.

For this study, the formula described in Miles and Huberman (1994) was used. They suggest that 80% agreement between coders on 95% of the codes is

sufficient to ensure IRR. The particular IRR test that was conducted was the

percentage agreement test, using the following formula:

$$IRR = \frac{number\ of\ agreements}{number\ of\ agreements + disagreement}$$

First, a sample of the interview transcripts was selected at random, translated

from Arabic to English, then sent to an expert in qualitative research to code, using

the codebook. The second coder was provided with a single interview transcript. The

second coder was also invited to identify other inductive themes or codes. The

second coder used the review tab in Microsoft Word to highlight phrases and insert a

new comment. The second coder used different colours to highlight the passages, in

order to mark where the different selections begin and end, as depicted in Figure 4.4.

Figure 4.4

Interview Coding by the Second Coder
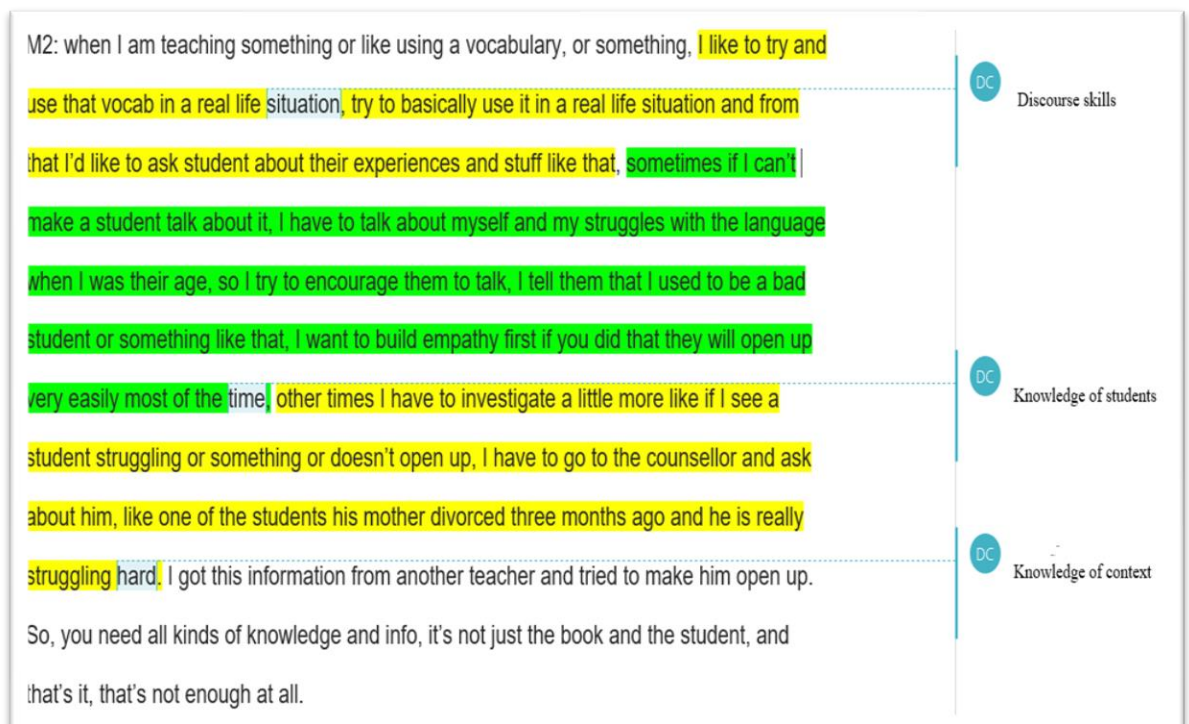
After coding the transcript, a macro was used to extract the comments and create a table in a separate Microsoft Word document. Table 4.14 presents a part of the codes table extracted from the document coded by coder 2.

Table 4.14

A Coding Table Created Using Microsoft Word Macro to Extract Code Data

Page	Comment Scope	Comment Text	Author	Date
1	English language knowledge that is given, basics, grammar, whatever the main skills, reading, writing, speaking, listening	Content knowledge	Coder 2	05-Jun-2020
1	Knowledge about the environment of the students themselves. Knowledge about the background where all these students came from. I have taught like a lot of different students, lots of types, those who have never been to the city, those who have never travelled abroad, those who have lots of experience, and those who have bilingual students. So basically, I have a melting pot in every class, so it is different	Knowledge about students	Coder 2	05-Jun-2020

In order to identify agreements and disagreements between coders, I compared the code labelling of the same excerpts created by the second coder and those created by me. Then, I divided the number of agreed codes by the total number of codes in the document. It is recommended to check the value of IRR both ways between the coders, because the value of IRR can be affected by the total number of codes identified by each coder (McAlister et al., 2017). The number of agreed codes was 43. In addition, the total codes identified by the second coder was 50 codes (IRR = 86%). I identified 52 codes (IRR = 82%). The percentage of agreement was very high (Hallgren, 2012). Due to the high value of IRR, a decision was made to proceed independently.

4.8   Qualitative Trustworthiness

The current section describes measures adopted to ensure the trustworthiness of the qualitative part of the current study. According to Giddings and Grant (2009), explicit criteria should be required to validate the qualitative components of mixed-methods research, to establish and justify the validity and trustworthiness of the study. In qualitative research, Lincoln and Guba (1985) have replaced the concepts of validity and reliability with credibility, transferability, confirmability, and dependability. The following section explains how these criteria were reflected in the current study.

The credibility of qualitative research requires confirming that the results are credible from the perspective of the participants in the research and the readers (Gass et al., 2005). One way to ensure the credibility of the study findings is the lengthy engagement in the field, allowing participants to feel comfortable. The interview data for this study was collected over a period of three weeks. During the three weeks, I contacted the teachers on multiple occasions and visited each school twice to introduce myself, the study, and explain any misunderstanding about the research's objectives which could affect teacher responses. I did this to ensure the teachers felt relaxed about participating in the study.

Transferability refers to the degree to which the results of qualitative research can be transferred to other similar contexts or settings. In the current study, I provided a detailed description of the teachers and their educational and professional backgrounds. Moreover, I presented the educational context of Saudi Arabia with a special focus on EFL teaching and learning, to clarify the context in which the study was situated. The content of the data collection method and procedure were also presented in sufficient detail.

Confirmability indicates the degree to which the results could be confirmed by other researchers. In order to ensure confirmability, I explained in detail the process and the sequence of data collection and data analysis. Additionally, interview transcripts and audio recordings can be made available for other researchers to conduct an audit trail.

Dependability is concerned with whether the same results could be obtained if the research was conducted again. Dependability could be achieved by the use of protocols, such as a data base describing the changes that occur in the setting and how these changes affected the way the researcher approached the study. In the current study, interview protocols were established and followed, guiding data collection from each participant, enabling any future research to replicate the study. Any modifications of the data collection tools were also acknowledged and justified.

4.9   Methodological Limitations

A few methodological limitations emerged in the current study that could influence the data collection or the interpretation of the findings. Firstly, the limited access to information regarding the pre-service teachers' academic discipline in the Teacher Knowledge Test; such information could contribute to an understanding of the EFL professional knowledge of the pre-service teachers. Secondly, despite efforts to ensure an accurate translation of the questionnaire items from English to Arabic, it is possible that the translated questionnaire was not exactly identical to the original. The differences in the translated version could have an effect on the teachers' understanding of the question. Similarly, the translation of the transcripts of the interviews could place a limitation on conveying the exact intended message of the teachers' responses, due to structural and idiomatic differences between English and

Arabic. Thirdly, the different modes of interviewing the participants could introduce bias in the data (Lamanna et al., 2019). As mentioned earlier, due to cultural reasons, phone interviews were used with male teachers and face-to-face interviews were used with female teachers. The presence of the researcher could increase interview anxiety, which could influence the female teachers' responses. On the other hand, behaviour and body language could not be observed with the male teachers. As Tourangeau and Yan (2007) argue, the physical or verbal presence of the researcher could affect the participant's willingness to share some information.

4.10 Ethical Considerations

Any research involving human participants must be conducted in accordance with the highest ethical standards. Ethical issues must be addressed and taken into consideration prior to conducting any study to ensure that valid and reliable data are obtained. One of the first ethical considerations is the protection of the participants' confidentiality or any potential risk (Bryman, 2012). Researchers must respect the participants' rights to privacy and confidentiality. In order to ensure this, researchers must thoroughly follow the ethical procedures outlined by their own universities or institutions

In the current study, data collection and storage have undergone a thorough review to ensure an ethical data collection procedure. The department ethics approval was obtained on 13 July 2018. Following ethical guidelines while conducting research is necessary to establish the validity of a study (Arifin, 2018). The main aim is to protect human subjects, by applying appropriate ethical principles in any research study (Orb et al., 2001). The importance of ethical

considerations plays a prominent role in qualitative research, due to the in-depth nature of the study process (Sanjari et al., 2014).

The current study involved collecting data from people via interviews and questionnaires. The study was conducted following ethical standards required by the Education Ethics Committee. All participants were informed about the estimated time required for the completion of the questionnaire and the interviews. Moreover, the data collection methods used in the current study were appropriate to the context and to the participants. The disruption to their normal routines during the data collection process was kept to a minimum and at an acceptable level to limit any form of physical or psychological stress. In accordance with cultural conventions, men and women are segregated in education. Therefore, the phone interviews with the male teachers instead of face-to-face interviews were used to ensure that the data collection methods were appropriately sensitive to participants' cultural and social frameworks. All participants received a consent form and were asked to sign it, if they agreed to participate. They were informed in advance about the purpose of the research and what their involvement in the research study would entail, as well as the period for which the data would be stored. In addition, participants were given a time period within which they were allowed to withdraw from the study if they so wished.

Written permission was obtained from The National Centre for Assessment in Saudi Arabia, since that is the authority responsible for holding the secondary data (Teacher Knowledge Test). Further, the Education Ethics Committee's Guidance on Data Storage and Protection was followed during the data collection process. To ensure confidentiality and anonymity, the data is securely stored in a password-protected personal computer and a memory flash drive. When reporting

144

the data, the identity of any participant or the institution they attend or work for will not be identifiable by the reader. Actual names were not used when reporting the results of the study. Codes were used when reporting qualitative data.

4.11 Chapter Summary

This chapter presented the methodology used to guide and shape the data collection process of the current study. A multi-method approach was used to investigate the professional knowledge of Saudi EFL in-service teachers. I argued that the Teacher Knowledge Test results, self-evaluation questionnaire, and semi-structured interviews were appropriate data collection tools to establish the levels of teacher knowledge and to identify their educational needs. A pilot study was conducted to test the data collection tools, and the data collection methods for the main study were detailed thereafter.

The results of the Teacher Knowledge Test were used to investigate the knowledge of the pre-service teachers. The data obtained from the National Centre for Assessment included the test results of 27,200 pre-service teachers over a span of four consecutive years. The self-evaluation questionnaire and semi-structured interviews were used to explore the professional knowledge of Saudi EFL in-service teachers; 556 in-service teachers responded to the questionnaire, and 30 in-service teachers were interviewed. In addition, the ethical considerations in the current study were discussed. The following chapter presents the results of the main study.

5 Results

5.1 Introduction

As stated in Chapter 1, the purpose of this study was to investigate and understand the professional knowledge base of EFL Saudi teachers. In the previous chapter, the methodology used in this study was presented. The current chapter presents the data obtained from the different data collection methods.

Chapter 5 is organised in line with the research questions that this study set out to investigate. Section 5.2 presents the EFL professional level of the pre-service teachers. Section 5.3 introduces the EFL professional knowledge of the in-service teachers. Section 5.4 presents the comparison between pre-service and in-service EFL professional knowledge. Section 5.5 presents the knowledge gaps of EFL teachers. Finally, section 5.6 presents the preferred educational methods of the in-service teachers. The chapter concludes with a summary.

5.2 EFL Professional Knowledge of Pre-service Teachers

5.2.1 Introduction

This section aims to answer the first research question and present information regarding the EFL professional knowledge of the Saudi EFL pre-service teachers. Firstly, I will report the results of the Teacher Knowledge Test of all candidates, including those who did not pass the test, in order to give an overview of the current EFL professional knowledge of all graduates with a major in English language. Secondly, I will focus on the results of the candidates who only passed the test because they qualify as pre-service teachers.

5.2.2   EFL Professional Knowledge Level of All Candidates

The data used in the current study are the results of the Teacher Knowledge Test

from the years 2015, 2016, 2017, and 2018. The number of candidates who took the

test between the years 2015 and 2018 was 27,199, of which 56% were male and 43%

were female. The majority of the candidates (84%) did not receive any educational

training as part of their BA degree. Only 7,251 (26%) of candidates passed the test,

which qualifies them to apply for teaching positions offered by the Ministry of

Education. An examination of the data shows the level of EFL professional

knowledge was low in general, as seen in Table 5.1.

Table 5.1
Descriptive Statistics of All Candidates

Test Year	Number of Candidates	Number of Candidates Who Passed Test	Percentage of Candidates Who Passed Test	Minimum Test Score	Maximum Test Score	Mean Score	SD
2015	5808	1669	28.75%	8	97	45.67	14.05
2016	6974	2382	34.15%	11	100	47.06	14.41
2017	7341	1916	26.11%	5	92	41.55	12.76
2018	7076	1284	18.13%	10	91	38.15	12.55
Total	27199	7251	26.66%	5	100	42.96	13.88

The mean in all years was below 50 points, which is the cut-off point; the

largest possible score that could be achieved is 100 points. Moreover, there was a

decline in the candidates' performance from 45.67 in 2015 to 38.15 in 2018, with the

exception of the mean score of 47.06 in year 2016.

Upon further investigation of the EFL knowledge base, candidates' mean scores

were slightly higher in language proficiency, followed by curriculum design,

theoretical application, theoretical knowledge and lastly, language pedagogy. The

mean score of the EFL knowledge domain of all candidates is presented in Table

5.2.

Table 5.2

Descriptive Statistics of EFL Knowledge Domain for All Candidates

Descriptive Statistics						
	Language Pedagogy	**Curriculum Design**	**Theoretical Knowledge**	**Theoretical Application**	**Language Proficiency**	**Teacher Knowledge Test Total Score**
N	27,199	27,199	27,199	27,199	27,199	27,199
Mean	33.38	36.29	34.19	34.63	38.91	42.96
SD	13.61	17.27	15.76	18.25	25.32	13.88

The mean scores of all candidates in all knowledge domains ranged between 33 and

38 points. Language pedagogy is slightly lower than other scores (33.38), while

language proficiency was the highest (38.91).

5.2.3   Saudi EFL Pre-Service Teachers' Professional Knowledge

This section presents the results of the candidates who passed the test and who thus

qualified to be pre-service teachers. Only 7,251 (26%) pre-service teachers obtained

50 points or higher. The following table shows the grade distribution for the 7,251

pre-service teachers from 2015 to 2018.

Table 5.3

Grade Distribution for 7,251 Pre-Service Teachers from 2015 to 2018

Knowledge Level	**Number of Test Takers**	**Percent**
Low	3,739	52%
Moderate	3,006	41%
High	506	7%

The pre-service teachers' overall professional knowledge test scores from 2015 to 2018 were categorised using Bloom's cut-off point (Bloom, 1956). Based on the sum scores, the level of knowledge was classified into low-level knowledge (less than 59% or 0-59 points), moderate-level knowledge (60-79% or 60-79 points) and high-level knowledge (80-100% or 80-100 points). As shown in the Table 5.3, more than half of the pre-service teachers who took the test between 2015 and 2018 fall under the low category, only 7% scored high.

The level of each EFL knowledge domain of pre-service teachers in all years is presented in Table 5.4 below.

Table 5.4
Descriptive Statistics of EFL Knowledge Domain for Pre-Service Teachers in All Years

Descriptive Statistics						
	Language Pedagogy	**Curriculum Design**	**Theoretical Knowledge**	**Theoretical Application**	**Language Proficiency**	**Teacher Knowledge Test Total Score**
Mean score	49.40	55.30	47.93	50.23	60.30	61.78
Number of teachers	7,251	7,251	7,251	7,251	7,251	7,251
SD	11.73	14.72	15.04	17.15	24.06	10.21

As Table 5.4 shows, the level of EFL professional knowledge domain of the pre-service teachers ranged between 49 and 60 points. The score of language pedagogy was the lowest (49.40), and language proficiency was the highest (60.30).

The total mean scores of the pre-service teachers were also examined for each year. The data in Table 5.5 show that the mean score of the Teacher Knowledge Test decreased from 2015 to 2018, despite the slight increase in 2018.

Table 5.5
EFL Professional Knowledge Mean Score of Saudi EFL Pre-Service Teachers by Year

Test Year	Number of Pre-service Teachers Passing Test	Minimum Score	Maximum Score	Total Mean Score	SD
2015	1,669	51	97	63.71	11.24
2016	2,382	50	100	63.70	11.01
2017	1,916	50	92	58.98	8.19
2018	1,284	50	91	59.88	8.52

The cut-off point of the Teacher Knowledge Test was 50 points, with a maximum possible score of 100 points. The mean score of the pre-service teachers was 61.78, which indicated a relatively low level of EFL professional knowledge. The EFL professional knowledge reached the highest levels (63.71 and 63.70) in 2015 and 2016 but decreased in the years 2017 (58.98) and 2018 (59.88).

5.2.3.1 Saudi Pre-Service Teacher EFL Professional Knowledge in Terms of Gender

The most recent test results that include both variables, gender and educational training, are the test results from 2017. Therefore, the test results from 2017 were used to investigate statistically significant differences in Saudi pre-service teacher EFL professional knowledge, in terms of gender and educational training. In order to answer the research question, the Teacher Knowledge Test total score from 2017 was first analysed based on gender. A total of 1,916 pre-service teachers took the test in 2017 (male =785, female =1131).

The test scores of 1,916 pre-service teachers were also transformed into percentage scores, by dividing the scores obtained by the pre-service teachers with the possible maximum scores and multiplied by 100. The pre-service teachers' total scores were categorised using Bloom's cut-off point (Bloom, 1956). The following

table shows the points of distribution in the Teacher Knowledge Test for the 1,916

pre-service teachers.

Table 5.6
Knowledge Level Distribution for Pre-Service Teachers Based on Gender

Knowledge Level	Number of Pre-Service Teachers		Gender			
			Male		Female	
	N	%	N	%	N	%
Low	1146	60%	523	67%	623	55%
Moderate	730	27%	251	32%	479	42%
High	40	2%	11	1%	29	3%

Table 5.6 indicates that more than half of the male and female teachers

obtained low scores, with males at a relatively higher percentage (67%) than females

(55%). Only 3% of females and 1% of males obtained a high score.

The following table presents the pre-service teachers' knowledge level

distribution by knowledge domain, based on gender.

Table 5.7

Pre-Service Teachers' Knowledge Level Distribution by Knowledge Domain Based on Gender

Knowledge Domain	Knowledge Level	Gender			
		Male		Female	
		N	%	N	%
Language proficiency	Low	515	65.6%	802	70.9%
	Moderate	147	18.7%	201	17.8%
	High	123	15.7%	128	11.3%
Curriculum design	Low	579	73.8%	741	65.5%
	Moderate	193	24.6%	362	32.0%
	High	13	1.7%	28	2.5%
Theoretical application	Low	566	72.1%	801	70.8%
	Moderate	203	25.9%	299	26.4%
	High	16	2.0%	32	2.8%
Theoretical knowledge	Low	605	77.1%	596	52.7%
	Moderate	172	21.9%	304	26.9%
	High	8	1.0%	10	0.9%
Language pedagogy	Low	665	84.7%	881	77.9%
	Moderate	116	14.8%	243	21.5%
	High	4	0.5%	7	0.6%

As presented in Table 5.7, more than half of both males and females scored low in all knowledge domains. On the other hand, the percentage of male pre-service teachers with high scores was slightly higher than the females, in only language proficiency (15.7%) and theoretical knowledge (1%).

In order to apply a correct test, a few assumptions were checked first. The normality test revealed that the pre-service teachers' scores were not normally distributed, with skewness of 1.024 (*SE* = .056) and kurtosis of .425 (*SE* = .112). As assessed by visual inspection of the histogram (Figure 5.1), the distribution of pre-service teachers' EFL professional knowledge scores shows that the scores are positively skewed, indicating that most participants obtained low scores on the test.

Figure 5.1
Ddistribution of Teacher Knowledge Test for Pre-Service Teachers
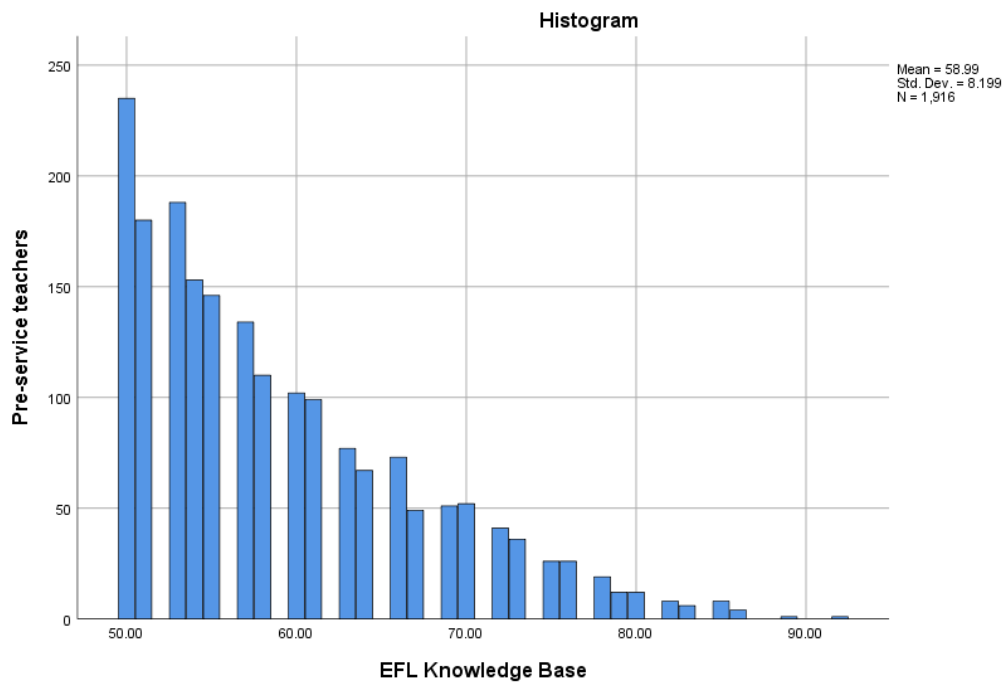
Since the data were not normally distributed and therefore assumptions for a parametric test were not met, a Mann-Whitney test was used to investigate any statistically significant difference between males and females on the Teacher Knowledge Test. The test indicated that the female pre-service teachers' score (*Mean Rank* = 1002.87, *n* = 1131) was significantly higher than the male pre-service teachers' score (*Mean Rank* = 894.58, *n* = 785), U = 393738, z = -4.0225, p = .000. The effect can be described as 'small' (r = .09).

Table 5.8
Mann-Whitney U Test Results of the Teacher Knowledge Test for Pre-Service Teachers in Terms of Gender

	Ranks				Test Statistics		
	Gender	N	Mean Rank	Sum of Ranks	U	Z	P
Teacher Knowledge Test Total Score	Male	785	894.58	702243.00	393738.000	-4.225	.000
	Female	1131	1002.87	1134243.00			

A Mann-Whitney test was also used to investigate the differences between males and females in the different knowledge domains. The following table provides details of the test.

Table 5.9
Mann-Whitney U Test Results for Pre-Service Teachers of Different Knowledge Domains in Terms of Gender

Knowledge Domain	Ranks				Test Statistics		
	Gender	N	Mean Rank	Sum of Ranks	U	Z	P
Language Pedagogy	Male	785	890.32	698900.50	390395.500	-4.516	.000
	Female	1131	1005.82	1137585.50			
Curriculum Design	Male	785	892.26	700425.50	391920.500	-4.424	.000
	Female	1131	1004.47	1136060.50			
Theoretical Knowledge	Male	785	936.23	734939.50	426434.500	-1.486	.137
	Female	1131	973.96	1101546.50			
Theoretical Application	Male	785	941.22	738857.00	430352.000	-1.161	.246
	Female	1131	970.49	1097629.00			
Language Proficiency	Male	785	995.98	781846.00	414494.000	-2.521	.012
	Female	1131	932.48	1054640.00			

The test indicated that female pre-service teachers' knowledge of language pedagogy (*Mean Rank* = 1005.82, *n* = 1131) and curriculum design (*Mean Rank* = 1004.47, n = 1131) were significantly higher than the male pre-service teachers' knowledge of language pedagogy (*Mean Rank* = 890.32*, n* = 785), curriculum design (*Mean Rank* = 892.26, *n* = 785). On the other hand, the male pre-service teachers' knowledge of language proficiency (*Mean Rank* = 995.98, *n* = 785) was significantly higher than the female pre-service teachers' knowledge of language proficiency (*Mean Rank* = 932.48, *n* = 1131). There was no difference between male and female pre-service teachers' theoretical knowledge and theoretical application.

5.2.3.2 Saudi Pre-service Teacher EFL Professional Knowledge in Terms of Educational Training

The Teacher Knowledge Test total score from 2017 was also analysed based on educational training. Only 524 pre-service teachers (27%) from a total of 1916 received educational training. The pre-service teachers' EFL professional knowledge scores were also transformed into percentage scores, by dividing the scores obtained by the pre-service teachers with the possible maximum scores and multiplied by 100. The pre-service teachers' overall professional knowledge was categorised using Bloom's cut-off point (Bloom, 1956). The following table shows the points distribution in the Teacher Knowledge Test for the pre-service teachers.

Table 5.10
Knowledge Level Distribution of Pre-Service Teachers Based on Educational Training

Knowledge Level	Number of Pre-Service Teachers		Educational Training			
			Yes		No	
	N	%	N	%	N	%
Low	1146	60%	294	56%	852	61%
Moderate	730	27%	209	40%	521	37%
High	40	2%	21	4%	19	1%

As displayed in Table 5.10, more than half of pre-service teachers who received educational training and those who did not receive educational training obtained low scores, with teachers who did not receive educational training at a relatively higher percentage (61%). Only 4% of the teachers with educational training obtained a high score, along with 1% of the teachers without educational

training. The following table presents the pre-service teachers' knowledge level

distribution by knowledge domain, based on educational training.

Table 5.11

Knowledge Level Distribution of Pre-Service Teachers in Different Knowledge Domains Based on Educational Training

Knowledge Domain	Knowledge Level	Educational Training			
		Yes		No	
		N	%	N	%
Language proficiency	Low	347	66.2%	970	69.7%
	Moderate	106	20.2%	242	17.4%
	High	71	13.5%	180	12.9%
Curriculum design	Low	334	63.7%	982	70.5%
	Moderate	197	37.6%	358	25.7%
	High	19	3.6%	22	1.6%
Theoretical application	Low	365	69.7%	1002	72.0%
	Moderate	148	28.2%	353	25.4%
	High	11	2.1%	37	2.7%
Theoretical knowledge	Low	406	77.5%	1030	74.0%
	Moderate	114	21.8%	348	25.0%
	High	4	0.8%	14	1.0%
Language pedagogy	Low	406	77.5%	1140	81.9%
	Moderate	111	21.2%	248	17.8%
	High	7	1.3%	4	0.3%

Table 5.11 indicates that more than half of pre-service teachers who had

educational training and those who did not scored low in all knowledge domains. On

the other hand, the percentage of pre-service teachers who had educational training

was slightly higher than pre-service teachers who did not have educational training

in language proficiency (13.5%), curriculum design (3.6%) and language pedagogy

(1.3%).

A Mann-Whitney test was used to investigate a statistically significant difference between pre-service teachers who received educational training and those who did not, as the data were non-normally distributed. The test indicated that pre-service teachers who received educational training (Mean Rank = 1008.57, n = 524) obtained significantly higher scores than pre-service teachers without educational training (*Mean Rank* = 939.65, *n* = 1392), *U* = 338469.000, *z* = -2.437, *p* = .015. The effect can be described as 'small' (r = .05).

Table 5.12
Mann-Whitney U Test Results of Teacher Knowledge Test for Pre-Service Teachers in Terms of Educational Training

Ranks					Test Statistics		
	Educational Training	N	Mean Rank	Sum of Ranks	U	Z	P
Teacher Knowledge Test Total Score	Yes	524	1008.57	528489.00	338469.000	-2.437	.015
	No	1392	939.65	1307997.0			

In order to compare pre-service teachers' scores in terms of types of knowledge based on their educational training, a Mann-Whitney test was also used to investigate the difference. The following table provides details of the test.

Table 5.13

Knowledge Domains of Pre-Service Teachers Based on Educational Training

		Ranks			Test Statistics		
	Educational Training	N	Mean Rank	Sum of Ranks	U	Z	P
Language Pedagogy	Yes	524	1034.79	542227.50	324730.500	-3.721	.000
	No	1392	929.78	1294258.50			
Curriculum Design	Yes	524	1004.69	526455.00	340503.000	-2.272	.023
	No	1392	941.11	1310031.00			
Theoretical Knowledge	Yes	524	891.69	467246.50	329696.500	-3.283	.001
	No	1392	983.65	1369239.50			
Theoretical Application	Yes	524	971.85	509250.00	357708.000	-.661	.509
	No	1392	953.47	1327236.00			
Language Proficiency	Yes	524	984.64	515951.50	351006.500	-1.295	.195
	No	1392	948.66	1320534.50			

The test indicated that pre-service teachers who received educational training had significantly higher scores in language pedagogy (*Mean Rank* = 1034.79, *n* = 524) and curriculum design (*Mean Rank* = 1004.69, n = 524) compared to the scores of pre-service teachers with no educational training: language pedagogy (*Mean Rank* = 929.78, *n* = 1392) and curriculum design (*Mean Rank* = 941.11, *n* = 1392). On the other hand, pre-service teachers who did not receive educational training have significantly higher scores in theoretical knowledge (*Mean Rank* = 983.65, *n* = 1392) than the pre-service teachers who received educational training (*Mean Rank* = 891.69, *n* = 1392). There were no statistically significant differences in theoretical application and language proficiency.

5.3   EFL Professional Knowledge of In-service Teachers

5.3.1   Introduction

This section aims to answer the second research question and present information regarding the EFL professional knowledge of Saudi EFL in-service teachers. Firstly, I will report the results of the online questionnaire, highlighting the different knowledge domains and the level of self-evaluated knowledge. Secondly, based on the results obtained from self-evaluated questionnaires and the semi-structured interviews, I will present the levels of self-evaluated EFL professional knowledge domains of Saudi EFL in-service teachers, also presenting their interpretations of various domains. Thirdly, the differences in Saudi in-service teachers' EFL professional knowledge in terms of gender, educational training, educational level, major, school type, school stage, and teaching experience will be compared.

5.3.2   Self-Assessed Professional Knowledge of Saudi EFL In-Service Teachers

In order to establish how Saudi EFL in-service teachers evaluated their professional knowledge, the data were gathered from semi-structured interviews with EFL in-service teachers. Table 5.14 presents a summary of the teachers' background information.

Table 5.14

Background Information of In-Service Teachers in the Interviews

Code	Gender	Educational level	Academic discipline	Education Training	School type	School stage	Teaching experience
P1	Female	BA	Translation	No	Private	Elementary	Novice
P2	Female	BA	TESOL	No	Private	Secondary	Novice
P3	Female	BA	TESOL	No	Private	Elementary	Novice
P4	Female	BA	TESOL	No	Private	Elementary	Novice
P5	Female	BA	Education	No	Private	Elementary	Novice
P6	Female	BA	TESOL	No	Private	Elementary	Novice
P7	Female	BA	English literature	No	Government	Elementary	Experienced
P8	Female	BA	English literature	No	Government	Elementary	Experienced
P9	Female	BA	English literature	Yes	Government	Elementary	Experienced
P10	Female	BA	Translation	No	Private	Secondary	Novice
P11	Female	MA	English literature	No	Government	Middle	Experienced
P12	Female	MA	Linguistics	No	Government	Secondary	Experienced
P13	Female	BA	Education	Yes	Government	Elementary	Experienced
P14	Female	BA	English literature	Yes	Government	Middle	Experienced
P15	Male	BA	Translation	No	Government	Middle	Novice
P16	Male	BA	Education	Yes	Government	Middle	Novice
P17	Male	MA	TESOL	Yes	Government	Middle	Experienced
P18	Male	MA	Education	No	Government	Middle	Experienced
P19	Male	MA	Applied ling.	Yes	Government	Secondary	Novice
P20	Male	BA	English literature	No	Government	Secondary	Experienced
P21	Male	BA	Education	No	Government	Secondary	Experienced
P22	Male	BA	English literature	No	Government	Secondary	Novice
P23	Male	BA	TESOL	No	Government	Elementary	Experienced
P24	Male	BA	Education	No	Government	Elementary	Experienced
P25	Male	MA	Linguistics	No	Government	Secondary	Experienced
P26	Male	MA	English literature	Yes	Government	Secondary	Experienced
P27	Male	BA	English literature	Yes	Government	Secondary	Experienced
P28	Male	BA	English literature	No	Government	Secondary	Experienced
P29	Male	BA	Translation	No	Government	Middle	Experienced
P30	Male	BA	English literature	No	Private	Middle	Novice

Nine significant themes related to EFL professional knowledge were established initially to analyse the data, and then used to analyse the interviews. These themes were:

- Knowledge about students
- Pedagogical knowledge

160

- Content knowledge

- Knowledge of technology

- Knowledge of context

- Curriculum knowledge

- Assessment knowledge

- Language proficiency

- Discourse knowledge

Code frequencies were used to establish the occurrence of the themes and

how frequently the in-service teachers mentioned different knowledge domains.

Then they were converted into a percentage, to determine the importance of

knowledge domains for the in-service teachers. This percentage was calculated by

taking the number of responses given by each participant for each sub-theme and

dividing it by the total number of responses for all the themes. The following table

lists the knowledge domains, starting from the highest percentage to the lowest.

Table 5.15
Knowledge Domains of Saudi EFL Teachers

Knowledge Domain	N=134	
	Count	**%**
1. Knowledge about students	27	20%
2. Pedagogical knowledge	22	16%
3. Content knowledge	22	16%
4. Knowledge of technology	19	14%
5. Knowledge of context	16	12%
6. Curriculum knowledge	9	7%
7. Language proficiency	8	6%
8. Assessment knowledge	7	5%
9. Discourse knowledge	4	3%

I will describe these results in detail in the following subsections.

5.3.2.1 Knowledge About Students

Knowledge about students was the most frequent type of knowledge reported by the teachers. Indeed, 27 out of 30 teachers said that knowledge about students is a significant part of their knowledge base. Based on their responses, this type of knowledge encompassed nine further aspects. The following table summarises the teachers' responses regarding their knowledge about students, providing the number of teachers who made specific statements when describing this theme.

Table 5.16

Teachers' Knowledge about Students and Their Interpretations

Knowledge Domain	Statement	Number of Teachers Mentioned the Statement (out of 30)
Knowledge about the students	Students' English language level and their previous language-learning experience	17
	Students' need, perceptions, motivation and attitudes toward learning the English language	15
	Students' learning styles and preferences	13
	Students' learning difficulties	8
	Students' vocabulary size	4
	Students' learning outcomes	5
	Students' opinions about the teacher	3
	Students' age and cognitive abilities	2
	Students' socio-economic status	8

More than half of the in-service teachers talked about the importance of knowing the students' English language level. For instance, one teacher reported that knowing the students' English language level, particularly at the beginning of the year, is very important. P2 said:

> It is very important to know the students' levels of language, for example, to know if the students understand the language or not. It is

very important to know that at the beginning of the academic year. It will help me in my teaching (Interview 2).

The importance of knowing the students' levels of language was also emphasised by other teachers, who claimed that knowing the students' English language level is important for understanding their mistakes. P17 commented:

> It is important to be knowledgeable, that makes you deal with the students' mistakes, understand their level, deal with the environment, every point that is related to them (Interview 17).

P9, for example, talked about the importance of knowing students' English language needs as a key to how to approach teaching, as in the following:

> The knowledge that the teacher must have, the first thing to remember is her students' needs. The students' needs in this school are different from the students' needs in the south of Riyadh. It is entirely different. When you know their needs, you know how and what to teach them (Interview 9).

Few teachers talked of knowledge about students, referring to the students' socio-economic status. According to the teachers, socio-economic status has been consistently shown to influence a student's educational achievement. P9 was referring to students' different socio-economic status, related to such factors as parental education level, occupation, income level, and home location. Similarly, P13 talked about her previous experience teaching at a school in the south of Riyadh:

> The English language is not that important in the schools located in the south of Riyadh. It is a school subject you either pass or fail. Very few students realise its importance as a skill for the future (Interview 13).

P16 concurred, stating that geographical location can affect a student's English language needs and English language use. Students from countryside schools and those whose parents have a lower level of education are likely to have a

low level of motivation than students from the city and those whose parents have

higher levels of education:

> Students from the countryside have no access to the internet, and even in this time where everyone is connected, these students don't use devices. They spend the time running around the streets playing football or something. Those students I have a problem with because they never use the language at all; either they don't have access or don't care enough. They don't like to use the language because they don't have to. (Interview 16).

For some parents of low socio-economic status, as some of the teachers

noted, language learning was not valued or seen as an essential skill to improve their

children's future. Some teachers argue that parental influence and involvement affect

the students' learning, stating that students with less involved parents are more

likely to have lower grades and test scores. P1 said the following:

> The problem sometimes is with the parents. For example, the student can have motivation, and she listens to the teacher. However, when she goes home, the mother does not give her any attention. I feel that the mother is careless (Interview 1).

On the contrary, families with high socio-economic status hold English in

exceptionally high regard as a school subject and a life skill. For example, one

teacher, who is currently teaching the English language at a secondary school

located within a university campus north of Riyadh, where most of the students are

the children of faculty members working at that university, talked about the effects

of the parent's educational level on a student's English language level, as in the

following:

> Most of the parents had been studying abroad with a PhD. Therefore, the knowledge and the communication skills of their children are different compared to other students from different schools. It is a massive difference (Interview 12).

164

P13 also taught at a school on a university campus, and she holds the same opinion. She stated families with high socio-economic status hold English language in high esteem and regard it as the means for their children to have better educational and professional opportunities:

> The level of the student in this school is much better. Why? Because they have educated parents, some of them had been studying abroad with PhDs. They know the value of the English language (Interview 13).

P16 also asserted that knowledge of students is essential for any EFL teacher. He explained that his knowledge of students helps him to choose the most appropriate teaching strategies for them. He argued that teaching is more effective and student learning is enhanced when the teacher invested some time to get to know his or her students. He commented as follows:

> I need a lot of information about the students to work with them. Like I take a month or two to understand the students themselves, so I can start working with them. I take my time gathering information about the students so that I can formulate a strategy (Interview 16).

He also recalled a positive experience of how his knowledge of students helped him to solve a problem he was facing when teaching the English language. He explained the following:

> Some students barely pay attention to the English language in class. So, I try to figure out what is the stuff they are interested in and link them together inside the school using the language. Like a football, I made a football match, I made them play, but they only speak English, as soon as they speak Arabic, I have to put them on the bench. I tried it three times last year, and most of the class are still playing. The first time, like barely, I think only eight were left on the field and the rest on the bench. With time, since they were interested in playing football, they tried harder to learn most of the vocab (Interview 16).

P22 was rather keen to talk about his knowledge of students, particularly student psychology, and how this knowledge helped him to solve some of the

problems, such as the students' aggressive behaviour, lack of motivation, and drug addiction:

> My knowledge of my students helped me with, for example, aggressive personalities, sometimes that the student has an aggressive personality, sometimes the student is lazy or unmotivated, for example, these all have reasons. Some teachers may resort to punishment without knowing the real reasons. It could be due to addictions in their family or divorced parents. Even the student counsellor who is supposed to do his job does not do 100% because he does not have a degree in psychology. Teaching here is mechanical more than human interaction (Interview 22).

5.3.2.2 Pedagogical Knowledge

In addition to their knowledge of students, teachers also discussed the importance of pedagogical knowledge and how they utilised it in their teaching. With 16%, pedagogical knowledge and content knowledge ranked second. The following table summarises the teachers' responses regarding pedagogical knowledge, providing the number of teachers who made specific statements when describing this theme.

Table 5.17

Teachers' Pedagogical Knowledge and Their Interpretations

Knowledge Domain	Statement			Number of Teachers Who Mentioned the Statement (out of 30)
Pedagogical Knowledge	Teaching Methods and Strategies	The grammar-translation method		21
		The audiolingual method		
		Communicative language teaching		
		Vocabulary teaching strategies		
		Active learning	Role-playing	
			Group projects	
	Lesson Planning	How to write correct objectives		16
		How to achieve objectives		
		How to introduce the lesson		
		How to employ warm-up activities		
		How to write and evaluate worksheets		
		How to use stories in teaching English		
		How to review the previous lesson		
		How to assign homework		
		How to choose teaching materials		
	Teaching Higher-order Thinking Strategies	Synthesising		1
		Analysing		
		Reasoning		
		Comprehending		
		Application		
		Evaluation		

Many teachers believed that pedagogical knowledge was an essential characteristic of a successful teacher. A teacher's understanding of how to be a successful teacher was linked with optimal preparation for the lesson, where the teacher should ensure that all required tools and teaching methods are appropriate. Moreover, creating effective teaching and learning environments for students was linked with pedagogical knowledge. P24, for example, explained his views on how to be a successful teacher in the following way:

> I think the teacher needs to know, to be a successful teacher in the lesson, you must be fully prepared, prepare the necessary tools to explain the lesson, like teaching methods (Interview 24).

The teachers also reported that pedagogical knowledge informed their decisions about choosing suitable teaching methods for the students. For instance,

one teacher, P16, talked about his knowledge of ESL and EFL teaching methods and

how his pedagogical knowledge enabled him to decide which teaching method was

the most appropriate for the context:

> The basic knowledge of the English language is teaching methods, primarily teaching English as a foreign language. There are methods to teach it as a foreign language. There are methods to teach it as the first language. I have to pay attention to the foreign language thing. I don't care about the first one (Interview 16).

Pedagogical knowledge helped P6 with teaching grammar. Approaching

English language teaching through a context was also crucial for P6, given her

beliefs about the way students responded to explicit traditional instruction:

> I had no experience when I started in this school. I used to allocate an entire lesson for grammar only. The students felt it was difficult and complicated, like math. When I asked a few experienced teachers, they suggested teaching grammar within a story. I ask the students, 'what does she do?' and make them ask each other. I teach grammar indirectly and implicitly. Thank God it was a success. I give them several activities during the lesson; one of them is grammar (Interview 6).

Incorporating higher-order thinking strategies to promote critical thinking

skills was part of P6's pedagogical knowledge. She stated that she felt the need to

employ higher-order thinking strategies with her students to keep them engaged and

motivated, arguing that it should be an integral part of teaching:

> When I used this strategy, my students' interaction was very high. So, I told myself I need to do this more often to make the students understand (Interview 6).

5.3.2.3 Content Knowledge

Teachers also highlighted the importance of content knowledge for EFL teachers in

Saudi Arabia. As with pedagogical knowledge, it was rated as the second most

important knowledge (16%). Figure 5-18 below lists the types of content knowledge that the teachers considered important for their professional development.

Table 5.18

Teachers' Content Knowledge and Their Interpretations

Knowledge Domain	Statement				Number of Teachers Who Mentioned the Statement (Out of 30)
Content Knowledge	Translation				13
	Literature				18
	English language skills	Listening			23
		Reading			
		Writing			
		Speaking			
	Linguistics	Lexicology	Collocation		8
			Vocabulary		
			Headwords		
		Orthography	English alphabets		
			Spelling		
		Grammar			
		Phonetics	Pronunciation	Phonics	
		Phonology	Phonemes		
		Morphology	Morpheme	Prefixes	
				Suffixes	
		Syntax			
		Semantics			

The importance of linguistic knowledge was one of the main topics, when the teachers talked about content knowledge. According to the teachers' responses, linguistic knowledge can support them in explaining a word's origin, which helps students gain a holistic and comprehensive understanding of the language. For example, the knowledge of linguistics can help teachers to explain to students how to pronounce a sound that does not exist in their mother tongue or to talk about their grammatical mistakes and provide the reasons for making them. For example, P19 noted that his linguistic knowledge helped him "to explain many things in phonetics and syntax" (Interview 19).

Teacher P25 concurred, stating the following:

> The teacher should have an excellent linguistic background. It is essential. He can build on that. For example, the English language teacher needs to know English linguistics, to help him explain the lesson to the students by increasing their level of awareness of linguistic facts of the language (Interview 25).

As EFL teachers, some of the teachers in the current study argued that linguistics knowledge is important because it facilitates the understanding of particular problems in learning the target language. P25, for instance, elaborated on how this linguistic knowledge enabled him to provide his students with clear explanations of some of the pronunciation rules, as in the following:

> We mentioned phonetics. Many students face a problem in pronunciation. For example, the letter G sometimes can be pronounced /g/ or /j/. When you give the basic rule, it depends on the letter following it. The students will know the rule, and they will understand and know when to pronounce the letter accordingly. Another example is the rule of glide when we extend the sound; also, the letter E at the end of a word. Many students say, "why do we need to do it?" and these things make it easier for the students to know … if you do not have satisfactory and sufficient answers for the students to explain and simplify the idea behind it, when you give them the justification of rule, it will stick in their minds and they will know how it reads (Interview 25).

Pronunciation was also important for P12, who explained how her major in her master's degree in linguistics helped her to teach students the English language, especially pronunciation. This is what she noted:

> When I was studying in America, I was studying linguistics. Mashallah, I knew the fundamentals of the language and the articulation of sounds which helped me a lot in teaching pronunciation. If I do not have this knowledge, I will have lower performance … this major is very important (Interview 12).

Translation and English literature knowledge were important for P12, to show the structural differences between English and Arabic language and to help

beginner students to understand the lesson, by explaining any difficulties using the

student's mother tongue (Arabic). The teachers reported using translation to teach

vocabulary and using English literature to teach writing. As P30 put it:

> The first things that comes to my mind is literature and translation. These two things are the most important knowledge to help the students make a connection between what they are learning and their Arabic language (Interview 30).

5.3.2.4 Knowledge of Technology

Knowledge of technology ranked fourth with 14%. The teachers talked about

different types of technology and how they utilised them in their teaching. The

following table summarises the teachers' responses regarding their knowledge of

technology and provides the number of teachers who made specific statements when

describing this theme.

Table 5.19

Teachers' Knowledge of Technology and Their Interpretations

Knowledge Domain	Statement			Number of Teachers Who Mentioned the Statement (Out of 30)
Knowledge of Technology	Audio/visual equipment	Projectors		11
		Computers		8
		Smartboards		6
		Speakers and headphones		3
		iPads		1
		Laptops		4
		Printers		1
	Educational platform	National educational portal (iEn)		8
		Education management system (Noor)		
	Educational platform	Learning management system	Classera	7
			Edmodo	
		Social media	WhatsApp	9
			Tweeter	
			YouTube	
			Emails	
	Desktop application programmes	Microsoft Office	Word	12
			PowerPoint	
	Educational website	Coursera		2
	Live online tutoring	Cambly		1

The reasons for using technology that teachers reported were: 1) for educational purposes, to facilitate learning and improve performance; and 2) for professional development and personal growth. In terms of the use of technology for educational purposes, this knowledge helped them to achieve the following:

- select appropriate teaching methods;
- make teaching easier;
- deal with students;
- keep up with students;
- facilitate communication with parents.

In terms of the use of technology for professional development purposes, teacher knowledge allowed them to:

- improve their teaching personality;

- be a successful teacher;

- know different cultures;

- become open to change.

The teachers in the current study talked about the importance of technology knowledge in optimising their productivity and improving the language teaching experience. Almost every language teacher seemed to have employed some form of technology in their classes. Teachers in the current study used technology to diversify classroom activities, in order to create an inclusive and attractive learning environment for students. They also reported using technology for educational purposes to facilitate communication. Talking about the use of technology in education, P13 highlighted how technology, in this case the use of Classera, facilitated communication with her students and their parents.

Teachers also reported that they used an education management system called Noor.[2] The system provides many electronic services for students, teachers, parents, and school administrators. They used it to enter grades to be then released to students to track their educational performance. Moreover, teachers reported using the National Educational Portal (iEN) to access interactive books, create learning communities, design lesson plans, and use a question bank.

Criticising the use of traditional technology, P13 called for the use of more advanced technology in the classroom, to increase student engagement, as the following statement indicates:

> The teacher needs technology. Now, e-learning, whiteboards and markers are not going to work with students in the present time. You need to use something to get their attention, such as iPad, online applications, and websites. They need something good and attractive. Therefore, whiteboards, projectors, and even PowerPoint presentations

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[2] A unique system for all educational operations in Saudi Arabia that links all educational institutions of the Ministry of Education through an integrated database.

are no longer useful. Now, they have exciting educational games on the iPad. They are suitable for the student's age (Interview 13).

A similar point was echoed by another teacher promoting the use of new technology. P14 benefited from her knowledge of technology in encouraging her students to use new technology to improve their English language:

> I encourage my students by giving them the names of applications and online courses. As a teacher, I must encourage them to use other resources and things. I tell them to look for online English courses such as Cambly (an online platform for native English Language tutors) (Interview 14).

Teachers also used technology for professional development to gain and improve their skills, knowledge, and personal growth. Besides facilitating the student learning, teachers also reported using technology for self-education. P9, for instance, admitted that she used YouTube to employ a particular teaching strategy: "I want to see how other teachers apply different strategies in their lessons." Another example was using technology to join communities of EFL teachers to learn and exchange experiences and to access websites to see authentic examples of high-quality teaching practices and materials. Some of the teachers enrolled in online training courses, because they were better tailored to their specific needs. The teachers also asserted that studying online has the advantage of fixable time and location and familiarised them with various course topics. P2 said:

> One of the methods I use to improve myself is an online course. I joined the TESOL course. I mean, it is almost the same as my major, but with a foreign instructor, the course duration was almost a year. I really learned a lot from this course. I even told other teachers about this course and they thanked me (Interview 2).

P9 talked about how being a part of the EFL teachers' WhatsApp group and interacting with other teachers helped her professionally:

> We have a group of English language teachers. If I have a problem or something, I ask them to give me their opinions. Of course, "two heads are better than one". This group is very helpful (Interview 9).

The teachers also talked about how technology helped them to improve their language skills. P10 talked about how she used to struggle with her low English proficiency level and how educational technology helped her improve her communication skills:

> I remember using an online application to improve my speaking skills after I graduated from college. I used to talk to a native speaker on a specific topic, and at the end of the conversation, she will tell me my weakness. With time, I got better. My proficiency level now is much better than it was four years ago (Interview 10).

Technology also helped the teachers to explore new and different educational fields. For example, P22 talked about how he learned about psychology, criticising the traditional methods of learning:

> Honestly, I have learned more from the internet than I have from the university. For example, I have learned about psychology and how to deal with people. Even with the English language, there are things that I have learned from the internet because there were presented in a clearer and better way than books (Interview 22).

5.3.2.5 Knowledge of Context

Based on the responses, knowledge of context ranked fifth with 12%. Teachers highlighted the importance of knowledge of the learning and teaching context. They talked about how they used it to understand the dynamics and relationships within the classroom, school, home, and society. Two broad types of contextual factors were highlighted by the teachers: micro contextual and macro contextual factors. The micro contextual factors were further subdivided into subfactors. The following table summarises the teachers' responses regarding knowledge of context, providing the number of teachers who made specific statements when describing this theme.

Table 5.20

Teachers' Knowledge of Context and Their Interpretations

Knowledge Domain			Statement	Number of Teachers Who Mentioned the Statement (out of 30)
Context Knowledge	Micro contextual factors	Micro contextual factors	Student-teacher bond	3
			Teachers' values, attitudes, and beliefs regarding the teaching profession and the English language	2
			Students' values, attitudes and beliefs regarding the English language	6
	Macro contextual factors	Home environment	Parents' attitudes toward the methods used to teach English	2
			Communication with students' parents	4
			Parents' status (married-divorced; alive-deceased; employed-unemployed)	3
			Parents' educational level	4
			Parents' English language level	4
			Socio-economic status of the families	6
		School environment	School facilities	2
			Administrative work	4
			Ministry of education policies and regulations	3
			School policies	2
			Teachers' assessment and supervision	6
			Incentives and support for staff	3
			Teachers' relationship with the headteacher and staff	2
			Educational reforms and initiatives	2
		Social environment	EFL societal perception	6
			Societal perception of teaching as a profession	5
			Teachers' sense of appreciation	7

The importance of establishing a personal connection with their students was felt by many teachers. Three out of 30 teachers noted that a personal connection

with the students is very important. All three teachers were advocates of building

and maintaining positive student-teacher relationships, to develop trust and respect

in the classroom. As P22's following words reveal, teachers not only have to teach

and explain lessons but also have to have a connection with other people in the

school to establish a healthy educational environment:

> The school role is more than that. The first thing is to have human interaction. We must have a connection in schools with students, curriculum, teachers, and people to have a good working place. We are teaching human beings, not machines (Interview 22).

The teachers also emphasised the importance of the student-teacher bond in

promoting students' mental wellbeing and sense of self-respect, as evident in this

comment by P12:

> A student of mine used to sleep in class and cry, he was sixteen years old. I asked him to come and meet me for one hour after prayer time (after school). I made coffee, and I told him, "I am all ears, tell me your problem." Thank God, from this meeting, I knew a lot of things no one in school knew, not even the student counsellor. The student had, God forbid, self-harming thoughts and family problems. I said to myself, "I need to do something". He told me everything; he trusted me. I asked him to have a meeting every two to three days to talk about his problem at home. I gave him advice and helped him, and he became better than before, and his academic level improved (Interview 12).

A positive student-teacher relationship also assisted the teachers with

professional development. P28 talked about this mutually beneficial relationship on

a personal and professional level as follows:

> The students' opinions are very important. At the end of the semester, the students sometimes cannot say everything face to face. Therefore, I give them evaluation forms; no names are required. They write their opinions, the truth. It is beneficial. I even saved some of the evaluation forms from five or six years ago. For example, many of them told me something I wasn't paying attention to. I had this several times. They said I was too serious. Even my colleagues said the same thing. I tried to change that during the last four years. More than one student said I tend to elaborate too much during the lesson. I also tried changing that gradually (Interview 28).

Positive attitudes towards the teaching profession were frequent comments when discussing the teaching context. This is what one another teacher noted when talking about the school environment and its effect on the teacher:

> This is very important. The teacher should love the teaching profession. However, if the school environment is not supportive, it will negatively affect the teacher's role, even on the most interested and knowledgeable teachers (Interview18).

Some teachers argued that the home environment also affected students' achievements. For example, P8 identified the parents' educational level as a part of her knowledge of context. She maintained the following:

> The parents' educational level, especially in this school. Many students study abroad, because their parents were studying abroad for master or PhD. Their language proficiency level is high. I honestly do not have any difficulties with them. It is different from other public schools (Interview 8).

Being cultural insiders, the teachers in this study had the advantage of recognising and understanding the cultural context of the society. This, in turn, assisted them in identifying and solving some of the problems they faced with their students. For example, P22 talked about how his knowledge of the home environment, especially the different upbringing of students and responsibilities they had at home, helped him to better understand students' behaviour. He explained how he could understand why some of his students missed classes or had a low academic level. This was his comment:

> Some families don't care about school. They spoil their children. They give them money and cars without any responsibilities. Teenagers with hormones going up and down cannot control themselves. Other students cannot go outside the home because they have guests or visitors. They are expected to help the family to welcome and host the guests. Some students miss tests because they have to accompany their parents when travelling (Interview 22).

In an attempt to address the low academic level and attendance, P22 suggested increasing the level of parental involvement in their children's education, urging schools to focus on the family as well. He also emphasised the importance of raising parental awareness of the benefits of engaging in their children's education.

The discussion about the knowledge of context also led some teachers to talk about the importance of the school environment. One teacher, P19, expressed his opinion regarding administrative work, calling it "boring routine". P13 had a similar opinion about administrative work, circulars, and requests for reports. She commented that, "The number of administrative and paperwork is overwhelming and does not benefit the process of teaching. They hinder and delay our work."

The teacher's relationship with the headteacher and staff was another important aspect of the knowledge of the context. Teachers highlighted the importance of maintaining a good relationship within the school and feeling appreciated. For example, P4 stated that a positive atmosphere increased her confidence in her knowledge and her teaching abilities, as in the following:

> We used to have an open-minded school supervisor. She was open to listening to our suggestions and happy to discuss anything with us. Unfortunately, she left the school. Sadly, the new supervisor is the opposite. She will take everything personally. The good thing is that my old supervisor asked me to join her in the new school. She even turned down an application from a native English-speaking teacher. She told me, "I want you with me to the new school" (Interview 4).

On the other hand, the lack of communication and the negative atmosphere between teachers and the administration were perceived as having negative effects on their teaching. Teachers working in such conditions expressed their frustration and discouragement, as evidenced in P27 comment:

> We used to have a communication app to help us communicate with the parents, but the administration decided to stop it without telling us the reason. Now, we went back to using papers and litter for communication. Unfortunately, it became the only way to communicate with parents. I feel we went back in time (Interview 27).

The social environment was the last element that emerged from the teachers' responses regarding the macro contextual factors. It includes the societal perception of English as a foreign language, the societal perception of teaching as a profession, and the teacher's sense of appreciation. Talking about this issue, P28 talked about student perception of English as a foreign language:

> Students are frustrated. They hear from their brothers, neighbours, and friends. They believe that the English language is difficult, which creates this psychological barrier. They do not make any efforts. They say it is hard, so I am not even going to try (Interview 28).

P27 compared the different attitudes towards the English language in two different schools in Riyadh, one located in the north within a university campus and another in the southern part of Riyadh:

> The students here[north] are very educated. Some of them had been studying abroad. Their mothers are working as faculty members at the university. They know the importance of the English language. The other school [south] … not so much. They are not interested in learning English. They want to pass the test. A small percentage of them know how important the English language is (Interview 27).

The teachers also talked about parents' perceptions towards English language learning, noting that "the parents are aware of the importance of English language for their child, and they are keen to help her learn from an early age" (P7).

Another prominent topic in the teachers' responses was society's negative perceptions about the teaching profession. The comment below illustrates how P28 felt unappreciated by the community and, as a result of such an attitude, felt frustrated and depressed:

> For years now, unfortunately, teaching has been the profession of anyone who could not find a job. It is a very harsh statement, but I have to say it. Ignorant without any knowledge. There was no Teacher Knowledge Test nor teaching licenses to make sure that who deserve to be a teacher who is not (Interview 28).

P20 talked about the negative stigma from society and media. He further urged the media to "improve the image of teachers" and restore the social prestige of the teaching profession. This was his comment:

> It is a very negative environment. I have been teaching for 16 years. I have four years left, and I will retire from my job. It is impossible to stay. The situation cannot be improved. Society is very discouraging and negative. They see the profession as disgrace and shame (Interview 20).

The lack of appreciation seemed to have narrowed teachers' opportunities to share their knowledge with other teachers. For example, P18 does not allow other teachers and headteachers to attend and observe his lessons, because he feels they take advantage of his hard work. He said this:

> Some people take advantage of you. They want to use the teachers' hard work to get promotions. Therefore, I said 'no'. They won't give me anything. They asked me to host a group of headteachers and English language teachers in my classroom that I prepared for collaborative learning for my students. I said 'no'. What do I get in return? Nothing. The event requires a budget, preparation, refreshments, time, effort. I will have to take full responsibility for everything alone, financially, physically, and emotionally, for nothing (Interview 18).

5.3.2.6 Curriculum Knowledge

Curriculum knowledge ranked sixth with 7%. The following table summarises the teachers' responses regarding curriculum knowledge, providing the number of teachers who made specific statements when describing this theme.

Table 5.21
Teachers' Curriculum Knowledge and Their Interpretations

Knowledge Domain	Statement	Number of Teachers Who Mentioned the Statement (out of 30)
Curriculum Knowledge	Curriculum requirements	4
	Curriculum organisation	3
	The national and international curriculum in Saudi Arabia	6

The importance of knowing the curriculum requirements was felt by the few

who talked about the curriculum knowledge. Four out of 30 teachers noted that

being familiar with curriculum requirements could facilitate the selection and

organisation of learning experiences around the required goals and objectives of

teaching. For example, P1 argued that curriculum knowledge is the most important

knowledge EFL teachers should have. As she argued, "First thing is the knowledge

of curriculum, the requirements of the curriculum." A few teachers demonstrated

their curriculum knowledge during the interview, by critically evaluating the new

curriculum. For example, P13 expressed his admiration for the new English

language curriculum in Saudi Arabia, although he also highlighted some difficulties

with using it, as the following comments show:

> The new curriculum is excellent. It is modern and up to date. It is under
> the umbrella of MM Publication … the big company from a native
> English-speaking country. However, the important thing is missing.
> Unfortunately, there is no focus on listening skills. Beginner learner,
> they must listen to improve their pronunciation and speaking. The key
> to learning any language is listening, I think (Interview 13).

Similarly, P24 also identified and described the curriculum, arguing that the

new curriculum for middle and secondary schools was somehow difficult. It

contained "too much information with limited time" and "the students' level did not

match the curriculum; it is suitable for international schools with very high-level students". On the other hand, the teacher expressed his satisfaction with the English language curriculum at the elementary level.

5.3.2.7   Language Proficiency

6% of the teachers' comments were about the importance of their own English language proficiency. The following table summarises the teachers' responses regarding curriculum knowledge, providing the number of teachers who made specific statements when describing this theme.

Table 5.22
Teachers' Language Proficiency Knowledge and Their Interpretations

Knowledge Domain	Statement	Number of Teachers Who Mentioned the Statement (out of 30)
Language proficiency	Use the English language for communication inside and outside the classroom	4
	Vocabulary knowledge	7
	Fluency	1

Using the English language for communication inside and outside the classroom was one of the indicators of good language proficiency level, according to the teachers in the current study. When talking about English language proficiency, the teachers recognised the gaps in English teachers' language knowledge. For example, P29 expressed his disappointment with the pre-service teachers coming to the school for the training, noting the following: "It is very sad and embarrassing, they lack writing and speaking skills. They mispronounce the words for the students." This view was echoed by another teacher (P11), who said: "Teachers need to have good language proficiency. It is bad when students ask the teacher

something not related to the lesson, and the teacher can't answer. It is embarrassing".

It is perhaps also worth noting that almost all the teachers who talked about

language proficiency were expressing their dissatisfaction of their own proficiency

level; except for one teacher, P29, who proudly talked about his high level of

vocabulary knowledge and how it benefited him in his teaching.

A number of solutions were also proposed by the teachers to overcome their

limited language knowledge. P15 admitted using audio clips in listening, to

compensate for his limited proficiency in the English language:

> We are forced to use audio clips in listening, because our role as
> teachers is very limited since we didn't experience what these students
> have experienced while living in the UK, for example (Interview 15).

5.3.2.8 Assessment Knowledge

Assessment knowledge ranked eighth, with only a 5% response rate. It included the

following knowledge aspects, as seen in Table 5.23 below. The table summarises the

teachers' responses regarding assessment knowledge, providing the number of

teachers who made specific statements when describing this theme.

Table 5.23
Teachers' Assessment Knowledge and Their Interpretations

Knowledge Domain	Statement		Number of Teachers Who Mentioned the Statement (out of 30)
Assessment Knowledge	Formative assessment	Quizzes	1
		Continues assessment	4
	Summative assessment	Midterms	2
		Final exams	2
	Diagnostic assessment	Pre-test	1
		Post-test	1

Specifically, teachers discussed the various ways in which they used their knowledge of assessment in the classroom. P5 talked about how she used to give her students a diagnostic test at the beginning of the year to evaluate their English language level, in order to tailor her teaching techniques to the different student levels.

The importance of continuous assessment was felt by many teachers, especially elementary teachers teaching grades one, two, and three. P18 pointed out that "it [was] very important to assess the students from time to time and in each lesson, as continuous assessment is very informative" (Interview 18). However, P29 had a different point of view. He noted the following:

> I don't know the real level of my son until he is in middle school because of the continuous assessment. Teachers with 40 or 45 students in each class will give all students a pass to save their time and effort. Therefore, you don't know their level until they take tests (Interview 29).

5.3.2.9 Discourse Knowledge

Discourse knowledge ranked last, with only a 3% response rate. It included two subfactors, as shown in Table 5.24 below. This table summarises the teachers' responses regarding discourse knowledge, providing the number of teachers who made specific statements when describing this theme.

Table 5.24
Teachers' Discourse Knowledge and Their Interpretations

Knowledge Domain	Statement	Number of Teachers Who Mentioned the Statement (out of 30)
Discourse Knowledge	Start and carry on a lesson of conversation in the English language	3
	Facilitates the use of appropriate language in different situations	2

The importance of starting and carry on a lesson in the English language was felt by few teachers. Three out of 30 teachers talked about knowledge needed to maintain the use of English language during class time. For example, P2 argued that teachers should have the knowledge of starting a conversation. P5 also mentioned that "it is very important to know how to start a conversation with students and how to introduce yourself".

The use of slang was seen as part of a teacher's discourse knowledge. P29 argued that his knowledge of discourse helped him to use appropriate language in different situations. Commenting on his knowledge of discourse, P29 stated that he uses slang and street language and teaches it to his students, to create a learning environment where students can communicate more freely and informally. Moreover, he aimed to broaden the English language by adding more vocabulary and phrases arguing that "chunking is an effective way to learn a language" (Interview 29).

5.4 Level of Self-evaluated EFL Professional Knowledge of Saudi EFL In-Service Teachers

This section answers the research question regarding the level of self-evaluated EFL professional knowledge of Saudi EFL in-service teachers and presents a comparison of the knowledge, based on gender, educational level, academic discipline, educational training, school type, school stage, and teaching experience.

In order to apply a correct test, the distribution of the data was checked for normality. It was revealed that the data were not normally distributed. A Shapiro-Wilk test provides significant evidence to reject the null hypothesis that the variable follows a normal distribution, $W (556) = .946$, $p = .000$. A Kolmogorov-Smirnov

test indicates that the EFL professional knowledge does not follow a normal distribution, D (556) = 0.068, p = .000. Given the distribution of the results being non-normal, Mann-Whitney U test and Kruskal-Wallis H test were used.

The distribution, in Figure 5.2, shows that the scores were slightly right-skewed, as the right tail is a little longer. This indicates that most of the participants selected low ratings of their EFL professional knowledge on the questionnaire.

Figure 5.2
Distribution of In-Service Teachers' Responses to Questionnaire
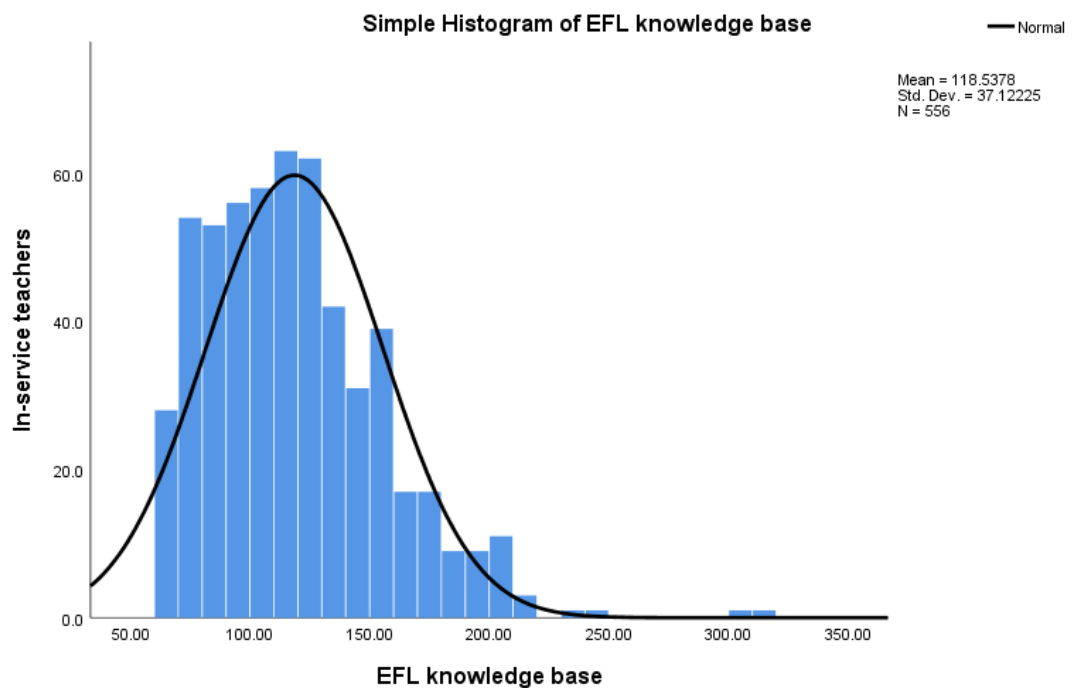
The scores for EFL professional knowledge were transformed into percentage scores, by dividing the scores obtained by the in-service teachers with the possible maximum scores and multiplying by 100. The in-service teacher's total score was categorised using Bloom's cut-off point. The following table shows the points distribution of the self-evaluation questionnaires from the 556 in-service teachers.

Table 5.25

Points Distribution of Self-Evaluation Questionnaire

Knowledge Level	Points	Number of In-Service Teachers Receiving Points	Percentage of In-Service Teachers Receiving Points
Low	0-186	525	94%
Moderate	187-249	29	5%
High	250-315	2	1%

Table 5.25 shows that the majority of in-service teachers (94%) fall under the low knowledge category, while 5% evaluated their professional knowledge as moderate. Only 1% of the in-service teachers in the current study evaluated their knowledge as high.

When analysing the different domains of knowledge, the data showed that the in-service teachers evaluated their knowledge of technology the highest and knowledge about students the lowest. The following Table 5.26 illustrates the distribution of the knowledge level for domains of knowledge of the in-service teachers, ranked in order from highest to lowest.

Table 5.26

In-service Teachers' Knowledge Level Distribution by Knowledge Domain

Knowledge Domain	Knowledge Level	Number of Teachers	Percent
Knowledge of technology	Low	286	51%
	Moderate	213	38%
	High	57	10%
Pedagogical knowledge	Low	425	76%
	Moderate	122	22%
	High	9	2%
Content knowledge	Low	488	88%
	Moderate	62	11%
	High	6	1%
Discourse knowledge	Low	491	88%
	Moderate	63	11%
	High	5	1%
Curriculum knowledge	Low	478	86%
	Moderate	70	13%
	High	8	1%
Context knowledge	Low	496	89%
	Moderate	54	10%
	High	5	1%
Language proficiency	Low	487	88%
	Moderate	57	10%
	High	8	1%
Assessment knowledge	Low	424	76%
	Moderate	121	22%
	High	11	2%
Knowledge about students	Low	465	84%
	Moderate	84	15%
	High	7	1%

5.4.1   Saudi In-Service Teacher EFL Professional Knowledge Based on Gender

The study also aimed to compare the in-service teachers' responses based on gender.

A Mann-Whitney test was used to investigate whether there is a statistically

significant difference between male and female in-service teachers, as the data are

non-normally distributed. The following table presents the test A Mann-Whitney test

results.

Table 5.27

EFL Professional Knowledge of In-Service Teachers Based on Gender

	Ranks				Test Statistics		
EFL Professional Knowledge	Gender	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Z	p
	Male	163	304.69	49664.50	27760.500	-2.476	.01
	Female	393	267.64	105181.50			

The Mann-Whitney U test indicated that the total score of EFL professional knowledge of in-service male teachers (*Mean Rank* = 304.69, *n* = 163) was significantly higher than those of in-service female teachers (*Mean Rank* = 267.64, *n* = 393) U = 27760.500, z = -2.476 (corrected for ties), p = .013. This effect can be described as 'small' (r = .105).

A Mann-Whitney test was also used to investigate if there were statistically significant differences in the different types of knowledge between male and female in-service teachers. Table 5.28 following presents these results.

Table 5.28

EFL Professional Knowledge Domains of In-Service Teachers Based on Gender

Ranks					Test Statistics		
Knowledge Domain	**Gender**	**N**	**Mean Rank**	**Sum of Ranks**	**Mann-Whitney U**	**Z**	**p**
Assessment knowledge	Male	163	288.68	47055.50	30369.500	-.968	.33
	Female	393	274.28	107790.50			
Pedagogical knowledge	Male	163	307.75	50163.50	27261.500	-2.772	.00
	Female	393	266.37	104682.50			
Content knowledge	Male	163	282.62	46067.50	31357.500	-.390	.69
	Female	393	276.79	108778.50			
Knowledge of students	Male	163	300.86	49040.50	28384.500	-2.120	.03
	Female	393	269.23	105805.50			
Curriculum knowledge	Male	163	309.37	50427.00	26998.000	-2.937	.00
	Female	393	265.70	104419.00			
Knowledge of technology	Male	163	318.94	51986.50	25438.500	-3.825	.00
	Female	393	261.73	102859.50			
Discourse knowledge	Male	163	294.24	47961.00	29464.000	-1.501	.13
	Female	393	271.97	106885.00			
Context knowledge	Male	163	285.87	46597.00	30828.000	-.705	.48
	Female	393	275.44	108249.00			
Language proficiency	Male	163	281.56	45895.00	31530.000	-.293	.76
	Female	393	277.23	108951.00			

As the results show, pedagogical knowledge (*Mean Rank* = 307.75), knowledge of students (*Mean Rank* = 300.86), curriculum knowledge (*Mean Rank* = 309.37), and knowledge of technology (*Mean Rank* = 318.94) of the male in-service teachers were significantly higher than the female in-service teachers (*Mean Rank* = 266.37, 269.23, 265.70, 261.73 respectively). These effects can be described as 'small' (*r* = .11, .08, .12, .16 respectively).

Differences in the knowledge of assessment, content, discourse, context, and language proficiency were not statistically significant. Table 5.28 provides details of the test.

5.4.2 *Saudi In-Service Teacher EFL Professional Knowledge Based on Educational Level*

In order to answer the research question regarding Saudi in-service teacher EFL

professional knowledge, the in-service teachers' responses were analysed, based on

educational level. Due to the non-normal distribution of the data, a Kruskal-Wallis

test was used to investigate whether there was a statistically significant difference

between in-service teachers holding a BA, MA, or PhD. The Kruskal-Wallis

indicated that there were statistically significant differences in EFL knowledge base

between BA (*Mean Rank* = 284.29), MA (*Mean Rank* = 244.45), and PhD (*Mean

Rank* = 137.21), H (corrected for ties) = 8.528, df = 2, N = 556, p = 014, Cohen's f =

0.1 This effect can be described as 'small'.

Since the Kruskal-Wallis indicated that there were statistically significant

differences in EFL professional knowledge base between the different educational

levels, a post-hoc Mann-Whitney U test was conducted for all possible pairs (BA

and MA) (BA and PhD) (MA and PhD). In order to control for the increased risk of

making a type 1 error when conducting multiple comparisons on a single set of data,

a Bonferroni adjusted alpha level was used to determine the statistical significance

of each test. This involved dividing the family-wise alpha level by the number of

comparisons being made. The significance of each U was evaluated, using an

adjusted alpha level of .017 (.05/3).

The Mann-Whitney U test indicated that the EFL in-service teachers with

BA degrees had a significantly higher level of knowledge of technology (*Mean Rank*

= 281.16) and context knowledge (*Mean Rank* = 280.59) than those with MA

degrees (*Mean Rank* = 219.64, 224.80), respectively. This effect can be described as

'small' (r = .1). There was no significant difference in content knowledge,

assessment knowledge, pedagogical knowledge, knowledge of students, curriculum

knowledge, discourse knowledge, and language proficiency. The following Table

5.29 provides details of the test.

Table 5.29

Comparison between EFL Knowledge of In-Service Teachers (BA, Masters)

Ranks					Test Statistics		
Knowledge Domain	**Educational Level**	**N**	**Mean Rank**	**Sum of Ranks**	**Mann-Whitney U**	**Z**	**p**
Assessment knowledge	BA	494	275.81	136249.00	13186.000	-.359	.71
	MA	55	267.75	14726.00			
Pedagogical knowledge	BA	494	278.78	137717.00	11718.000	-1.677	.09
	MA	55	241.05	13258.00			
Content knowledge	BA	494	280.31	138471.50	10963.500	-2.353	.01
	MA	55	227.34	12503.50			
Knowledge of students	BA	494	276.44	136560.50	12874.500	-.639	.52
	MA	55	262.08	14414.50			
Curriculum knowledge	BA	494	274.95	135827.50	13562.500	-.020	.98
	MA	55	275.41	15147.50			
Knowledge of technology	BA	494	281.16	138895.00	10540.000	-2.731	.00
	MA	55	219.64	12080.00			
Discourse knowledge	BA	494	275.75	136221.00	13214.000	-.335	.73
	MA	55	268.25	14754.00			
Context knowledge	BA	494	280.59	138611.00	10824.000	-2.504	.01
	MA	55	224.80	12364.00			
Language proficiency	BA	494	276.85	136764.50	12670.500	-.829	.40
	MA	55	258.37	14210.50			
EFL knowledge base	BA	494	278.95	137802.00	11633.000	-1.749	.08
	MA	55	239.51	13173.00			

A Mann-Whitney U test also indicated that the EFL in-service teachers with

BA degrees had a significantly higher level of knowledge of technology (*Mean Rank*

= 253.18) than those of PhD degree teachers (*Mean Rank* = 97.07). This effect can

be described as 'small' (*r* = .1). There was no significant difference in assessment

knowledge, pedagogical knowledge, content knowledge, discourse knowledge,

context knowledge, and language proficiency. The following Table 5.30 provides

details of the test.

Table 5.30

Comparison between EFL Knowledge of In-Service Teachers (BA, PhD)

	Ranks				**Test Statistics**		
Knowledge Domain	**Educational Level**	**N**	**Mean Rank**	**Sum of Ranks**	**Mann-Whitney U**	**Z**	**p**
Assessment knowledge	BA	494	251.53	124254.00	1469.000	-.687	.49
	PhD	7	213.86	1497.00			
Pedagogical knowledge	BA	494	252.55	124759.00	964.000	-2.016	.04
	PhD	7	141.71	992.00			
Content knowledge	BA	494	252.54	124756.00	967.000	-2.006	.04
	PhD	7	142.14	995.00			
Knowledge of students	BA	494	252.67	124819.00	904.000	-2.176	.03
	PhD	7	133.14	932.00			
Curriculum knowledge	BA	494	252.55	124757.50	965.500	-2.021	.04
	PhD	7	141.93	993.50			
Knowledge of technology	BA	494	253.18	125071.50	651.500	-2.835	.00
	PhD	7	97.07	679.50			
Discourse knowledge	BA	494	251.94	124456.00	1267.000	-1.225	.22
	PhD	7	185.00	1295.00			
Context knowledge	BA	494	252.31	124643.00	1080.000	-1.725	.08
	PhD	7	158.29	1108.00			
Language proficiency	BA	494	252.67	124817.50	905.500	-2.190	.02
	PhD	7	133.36	933.50			
EFL knowledge base	BA	494	252.84	124903.50	819.500	-2.391	.01
	PhD	7	121.07	847.50			

A Mann-Whitney U test indicated that the EFL professional knowledge of

the MA degree teachers (*Mean Rank* = 32.95, *n* = 55) was not significantly different

from those of PhD degree teachers (*Mean Rank* = 20.14, *n* = 7) U = 113.000, z = -

1.769 (corrected for ties), p = .077. The following Table 5-31 provides details of the

test.

Table 5.31

Comparison between EFL Knowledge of In-Service Teachers (Masters, PhD)

Knowledge Domain	Educational Level	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Z	p	Exact Sig
Ranks					**Test Statistics**			
Assessment knowledge	MA	55	31.95	1757.00	168.000	-.550	.58	.60[b]
	PhD	7	28.00	196.00				
Pedagogical knowledge	MA	55	32.69	1798.00	127.000	-1.463	.14	.15[b]
	PhD	7	22.14	155.00				
Content knowledge	MA	55	32.32	1777.50	147.500	-1.012	.31	.32[b]
	PhD	7	25.07	175.50				
Knowledge of students	MA	55	33.07	1819.00	106.000	-1.934	.05	.05[b]
	PhD	7	19.14	134.00				
Curriculum knowledge	MA	55	33.15	1823.00	102.000	-2.031	.04	.04[b]
	PhD	7	18.57	130.00				
Knowledge of technology	MA	55	33.13	1822.00	103.000	-1.993	.04	.04[b]
	PhD	7	18.71	131.00				
Discourse knowledge	MA	55	32.37	1780.50	144.500	-1.079	.28	.29[b]
	PhD	7	24.64	172.50				
Context knowledge	MA	55	32.08	1764.50	160.500	-.735	.46	.48[b]
	PhD	7	26.93	188.50				
Language proficiency	MA	55	32.83	1805.50	119.500	-1.670	.09	.10[b]
	PhD	7	21.07	147.50				
EFL knowledge base	MA	55	32.95	1812.00	112.500	-1.780	.07	.07[b]
	PhD	7	20.14	141.00				

5.4.3 Saudi In-Service Teacher EFL Professional Knowledge Based on Academic Discipline

In order to answer the research question regarding the differences in Saudi in-service teacher EFL professional knowledge, the in-service teachers' responses were analysed based on academic discipline. Due to the non-normal distribution of the data, a Kruskal-Wallis test was also used to investigate these differences. The results indicated that there were no statistically significant differences in EFL knowledge base between English translation (*Mean Rank* = 301.70), English literature (*Mean*

Rank = 284.92), Education (*Mean Rank* = 277.79), Linguistics (*Mean Rank* = 229.19), Applied linguistics (*Mean Rank* = 287.63), and TESOL (*Mean Rank* = 260.05), *H* (corrected for ties) = 5.482, *df* = 5, N = 556, *p* = .360, Cohen's *f* = .094.

The following Table 5.32 provides details of EFL professional knowledge domains of in-service teachers based on academic discipline.

Table 5.32
EFL Professional Knowledge Domains of In-Service Teachers Based on Academic Discipline

Ranks				Test Statistics		
Knowledge Domain	**Academic Discipline**	**N**	**Mean Rank**	**Kruskal-Wallis H**	**df**	**p**
Assessment knowledge	English translation	41	293.57	.844	5	.97
	English literature	298	281.01			
	Education	100	274.31			
	Linguistics	34	266.34			
	Applied linguistics	15	275.03			
	TESOL	68	271.43			
Pedagogical knowledge	English translation	41	318.72	3.705	5	.59
	English literature	298	278.93			
	Education	100	277.95			
	Linguistics	34	259.72			
	Applied linguistics	15	277.37			
	TESOL	68	262.82			
Content knowledge	English translation	41	275.99	8.172	5	.14
	English literature	298	290.09			
	Education	100	271.79			
	Linguistics	34	209.78			
	Applied linguistics	15	288.23			
	TESOL	68	271.32			
Knowledge of students	English translation	41	293.78	3.887	5	.56
	English literature	298	281.79			
	Education	100	274.02			
	Linguistics	34	245.78			
	Applied linguistics	15	329.40			
	TESOL	68	266.60			
Curriculum knowledge	English translation	41	330.80	7.039	5	.21
	English literature	298	277.35			

	Education	100	279.01			197
	Linguistics	34	253.85			
	Applied linguistics	15	309.10			
	TESOL	68	256.82			
Knowledge of technology	English translation	41	323.20	8.253	5	.14
	English literature	298	281.91			
	Education	100	286.78			
	Linguistics	34	254.12			
	Applied linguistics	15	256.13			
	TESOL	68	241.57			
Discourse knowledge	English translation	41	311.17	6.939	5	.22
	English literature	298	285.11			
	Education	100	264.74			
	Linguistics	34	230.79			
	Applied linguistics	15	309.13			
	TESOL	68	267.15			
Context knowledge	English translation	41	255.11	12.290	5	.31
	English literature	298	288.68			
	Education	100	293.59			
	Linguistics	34	206.50			
	Applied linguistics	15	312.50			
	TESOL	68	254.28			
Language proficiency	English translation	41	265.22	7.060	5	.21
	English literature	298	290.57			
	Education	100	273.90			
	Linguistics	34	219.79			
	Applied linguistics	15	285.50			
	TESOL	68	268.20			
EFL professional knowledge	English translation	41	301.70	5.482	5	.36
	English literature	298	284.92			
	Education	100	277.79			
	Linguistics	34	229.19			
	Applied linguistics	15	287.63			
	TESOL	68	260.05			

5.4.4 Saudi In-Service Teacher EFL Professional Knowledge Based on Educational Training

In order to answer the research question regarding the differences in-service teacher EFL professional knowledge base, the in-service teachers' responses were analysed based on educational training. Due to the non-normal distribution of the data, a Mann-Whitney test was used to investigate whether there is a statistically significant difference between in-service teachers who had educational training and those who did not, as the data are non-normally distributed.

The test indicated that the EFL professional knowledge of the in-service teachers who had no educational training (*Mean Rank* = 288.72, *n* = 374) was significantly higher than those who had educational training (*Mean Rank* = 257.49, *n* = 182) U = 30210.500, z = -2.151 (corrected for ties), p = .031. This effect can be described as 'small' (r = 0.09).

A Mann-Whitney test was also used to investigate whether there are statistically significant differences in the different types of knowledge between in-service teachers with and without educational training. The pedagogical knowledge (*Mean Rank* = 289.99), content knowledge (*Mean Rank* = 288.65), curriculum knowledge (*Mean Rank* = 289.98), and knowledge of technology (*Mean Rank* = 287.85) of the in-service teachers without educational training were significantly higher than the in-service teachers with educational training (*Mean Rank* = 254.89, 257.64, 254.92, 259.29) respectively. These effects can be described as 'small' (*r* = .1, .08, .1, .08) respectively. Differences in the knowledge of assessment, knowledge about students, discourse knowledge, context knowledge, and language proficiency were not statistically significant. The following Table 5.33 provides details of the test.

Table 5.33

EFL Professional Knowledge Domains of In-Service Teachers Based on Educational Training

Knowledge Domain	Educational Training	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Z	p
Assessment knowledge	Yes	182	265.33	48289.50	31636.500	-1.356	.17
	No	374	284.91	106556.50			
Pedagogical knowledge	Yes	182	254.89	46389.50	29736.500	-2.424	.01
	No	374	289.99	108456.50			
Content knowledge	Yes	182	257.64	46890.00	30237.000	-2.139	.03
	No	374	288.65	107956.00			
Knowledge of students	Yes	182	263.49	47955.50	31302.500	-1.541	.12
	No	374	285.80	106890.50			
Curriculum knowledge	Yes	182	254.92	46395.00	29742.000	-2.431	.01
	No	374	289.98	108451.00			
Knowledge of technology	Yes	182	259.29	47191.00	30538.000	-1.968	.04
	No	374	287.85	107655.00			
Discourse knowledge	Yes	182	260.02	47323.50	30670.500	-1.909	.05
	No	374	287.49	107522.50			
Context knowledge	Yes	182	261.84	47654.50	31001.500	-1.727	.08
	No	374	286.61	107191.50			
Language proficiency	Yes	182	261.79	47645.00	30992.000	-1.732	.08
	No	374	286.63	107201.00			
EFL professional knowledge	Yes	182	257.49	46863.50	30210.500	-2.151	.03
	No	374	288.72	107982.50			

5.4.5 Saudi In-Service Teacher EFL Professional Knowledge Based on School Type

In order to answer the research question regarding the differences in in-service teacher EFL professional knowledge, the in-service teachers' responses were analysed based on school type. Due to the non-normal distribution of the data, a Mann-Whitney U test indicated that the EFL knowledge of the government school teachers (*Mean Rank* = 285.30, *n* = 481) was significantly higher than those who

were working at private schools (*Mean Rank* = 234.87, *n* = 75) U = 14765.500, z =- 2.529 (corrected for ties), *p* = .011. This effect can be described as 'small' (*r* = .107).

A Mann-Whitney test was also used to investigate whether there are statistically significant differences in professional knowledge between in-service teachers based on school type. The assessment knowledge (*Mean Rank* = 286.11), pedagogical knowledge (*Mean Rank* = 285.92), knowledge about students (*Mean Rank* = 285.20), knowledge of technology (*Mean Rank* = 284.81), and language proficiency technology (*Mean Rank* = 285.54) of the in-service teachers in government schools were significantly higher than the in-service teachers in private schools (*Mean Rank* = 229.67, 230.94, 235.53, 238.04, 233.35) respectively. These effects can be described as 'small' (*r* =.1, .1, .1, .09, .1) respectively. The differences in content knowledge, curriculum knowledge, discourse knowledge, and context knowledge were not statistically significant. The following Table 5.34 provides details of the test.

Table 5.34

Types of EFL Professional Knowledge of In-Service Teachers Based on School Type

Knowledge Domain	School Type	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Z	p.
Assessment knowledge	Government	481	286.11	137620.50	14375.500	-2.845	.00
	Private	75	229.67	17225.50			
Pedagogical knowledge	Government	481	285.92	137525.50	14470.500	-2.763	.00
	Private	75	230.94	17320.50			
Content knowledge	Government	481	281.70	135498.00	16498.000	-1.192	.23
	Private	75	257.97	19348.00			
Knowledge of students	Government	481	285.20	137181.50	14814.500	-2.498	.01
	Private	75	235.53	17664.50			
Curriculum knowledge	Government	481	282.03	135655.50	16340.500	-1.320	.18
	Private	75	255.87	19190.50			
Knowledge of technology	Government	481	284.81	136993.00	15003.000	-2.347	.01
	Private	75	238.04	17853.00			
Discourse knowledge	Government	481	280.71	135021.50	16974.500	-.829	.40
	Private	75	264.33	19824.50			
Context knowledge	Government	481	279.53	134452.50	17543.500	-.386	.69
	Private	75	271.91	20393.50			
Language proficiency	Government	481	285.54	137344.50	14651.500	-2.648	.00
	Private	75	233.35	17501.50			
EFL knowledge base	Government	481	285.30	137230.50	14765.500	-2.529	.01
	Private	75	234.87	17615.50			

5.4.6 Saudi In-Service Teacher EFL Professional Knowledge Based on School Stage

In order to answer the research question regarding the differences in the in-service teachers' EFL professional knowledge base, the in-service teachers' responses were analysed based on school stage. Due to the non-normal distribution of the data, a Kruskal-Wallis test was used. The test indicated that there were no statistically significant differences in EFL knowledge base between different school stages:

201

Elementary (*Mean Rank* = 266.83), Middle school (*Mean Rank* = 294.30), and secondary (*Mean Rank* = 274.74), *H* (corrected for ties) = 2.762, *df* = 2, N = 556, p = .251, Cohen's *f* = .06. The following Table 5.35 provides details of types of EFL professional knowledge of in-service teachers based on school stage.

Table 5.35

EFL Professional Knowledge Domains of In-Service Teachers Based on School Stage

Ranks				Test Statistics		
Knowledge Domain	**School Stage**	**N**	**Mean Rank**	**Kruskal-Wallis H**	**df**	**p**
Assessment knowledge	Elementary	176	259.88	3.708	2	.15
	Middle	178	291.16			
	Secondary	202	283.57			
Pedagogical knowledge	Elementary	176	262.28	6.166	2	.46
	Middle	178	302.46			
	Secondary	202	271.51			
Content knowledge	Elementary	176	275.90	2.013	2	.36
	Middle	178	291.93			
	Secondary	202	268.93			
Knowledge of students	Elementary	176	259.45	4.089	2	.12
	Middle	178	293.15			
	Secondary	202	282.19			
Curriculum knowledge	Elementary	176	257.80	4.955	2	.08
	Middle	178	294.96			
	Secondary	202	282.04			
Knowledge of technology	Elementary	176	282.65	2.044	2	.36
	Middle	178	288.58			
	Secondary	202	266.00			
Discourse knowledge	Elementary	176	271.05	.628	2	.73
	Middle	178	279.75			
	Secondary	202	283.89			
Context knowledge	Elementary	176	266.71	2.318	2	.31
	Middle	178	292.18			
	Secondary	202	276.72			
Language proficiency	Elementary	176	269.77	1.395	2	.49
	Middle	178	289.35			
	Secondary	202	276.54			
EFL knowledge base	Elementary	176	266.69	2.771	2	.25
	Middle	178	294.28			
	Secondary	202	274.88			

5.4.7 *Saudi In-Service Teacher EFL Professional Knowledge Based on Teaching Experience*

In order to answer the research question regarding the differences in-service teachers' EFL professional knowledge base, the in-service teachers' responses were analysed based on teaching experience. Due to the non-normal distribution of the data, a Mann-Whitney U test was used. The test indicated that the EFL knowledge of the novice teachers (*Mean Rank* = 315.51, *n* = 75) was significantly higher than experienced teachers (*Mean Rank* = 272.73, *n* = 481) U = 15261.500, z = -2.145 (corrected for ties), p = .032. This effect can be described as 'small' (r = .090).

A Mann-Whitney test was also used to investigate whether there are statistically significant differences in the different types of knowledge between in-service teachers based on teaching experience. The assessment knowledge (*Mean Rank* = 319.43), content knowledge (*Mean Rank* = 318.03), knowledge of students (*Mean Rank* = 313.89), curriculum knowledge (*Mean Rank* = 339.05), discourse knowledge (*Mean Rank* = 332.63), and context knowledge (*Mean Rank* = 323.73) of the novice in-service teachers were significantly higher than the experienced in-service teachers (*Mean Rank* = 272.12, 272.34, 272.98, 269.06, 332.63, 271.45) respectively. These effects can be described as 'small' (r = .1, .09, .08, .1, .1, .1) respectively. The differences in pedagogical knowledge, knowledge of technology, and language proficiency were not significant. The following Table 5.36 provides details of the test.

Table 5.36

EFL Professional Knowledge Domain of In-Service Teachers Based on Teaching Experience

Knowledge Domain	Teaching Experience	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Z	p.
			Ranks		**Test Statistics**		
Assessment knowledge	Novice	75	319.43	23957.50	14967.500	-2.385	.01
	Experienced	481	272.12	130888.50			
Pedagogical knowledge	Novice	75	307.71	23078.00		-1.697	.09
	Experienced	481	273.95	131768.00	15847.000		
Content knowledge	Novice	75	318.03	23852.50	15072.500	-2.295	.02
	Experienced	481	272.34	130993.50			
Knowledge of students	Novice	75	313.89	23541.50	15383.500	-2.057	.04
	Experienced	481	272.98	131304.50			
Curriculum knowledge	Novice	75	339.05	25428.50	13496.500	-3.533	.00
	Experienced	481	269.06	129417.50			
Knowledge of technology	Novice	75	267.51	20063.00	17213.000	-.638	.52
	Experienced	481	280.21	134783.00			
Discourse knowledge	Novice	75	332.63	24947.00	13978.000	-3.165	.00
	Experienced	481	270.06	129899.00			
Context knowledge	Novice	75	323.73	24279.50	14645.500	-2.653	.00
	Experienced	481	271.45	130566.50			
Language proficiency	Novice	75	302.93	22719.50	16205.500	-1.433	.15
	Experienced	481	274.69	132126.50			
EFL knowledge base	Novice	75	315.51	23663.50	15261.500	-2.145	.03
	Experienced	481	272.73	131182.50			

5.5 Comparison of Language Teacher Professional Knowledge Between Pre-Service and In-Service EFL Teachers by Gender and Educational Training

This section answers the third research question in this study regarding the

comparison between pre-service and in-service teachers EFL professional

knowledge, by analysing the data from the Teacher Knowledge Test and the self-

evaluated questionnaire. The comparison was based on the four knowledge domains

included in the Teacher Knowledge Test and their equivalent in the self-evaluated

questionnaire: pedagogical knowledge, curriculum knowledge, content knowledge,

and language proficiency. The comparison was also made between the EFL

professional knowledge domains of the Saudi EFL pre-service and in-service

teachers, in terms of gender and educational training.

5.5.1 Comparison of Language Teacher Professional Knowledge Between Pre-Service and In-Service EFL Teachers by Gender

This section presents the comparison between pre-service and in-service teachers, in

terms of EFL professional knowledge based on gender. Due to the non-normal

distribution of the data, a Mann-Whitney U test was used for both pre-service and

in-service.

Table 5.37
Comparison Between Pre-Service and In-Service Teachers EFL Professional Knowledge Based on Gender

	Ranks					Test Statistics		
	Type of Teacher	**Gender**	**N**	**Mean Rank**	**Sum of Ranks**	**Mann-Whitney U**	**Z**	**P**
EFL Professional Knowledge	Pre-service	Male	785	894.58	702243.00	393738.000	-4.225	.000
		Female	1131	1002.87	1134243.00			
	In-service	Male	163	304.69	49664.50	27760.500	-2.476	.01
		Female	393	267.64	105181.50			

For the pre-service teachers, the Mann-Whitney test indicated that the score

of female pre-service teachers (*Mean Rank* = 1002.87, *n* = 1131) was significantly

higher than the score of male pre-service teachers (*Mean Rank* = 894.58, *n* = 785), *U*

= 393738, *z* = -4.0225, *p* = .000. The effect can be described as 'small' (r = .09).

On the other hand, the Mann-Whitney test indicated that in-service male

teachers (*Mean Rank* = 304.69, *n* = 163) evaluated their EFL professional

knowledge significantly higher than in-service female teachers (*Mean Rank* =

267.64, *n* = 393) U = 27760.500, z = -2.476 (corrected for ties), p = .013. This effect

can be described as 'small' (r = .105).

A Mann-Whitney test was also used to investigate the differences between

knowledge domains within pre-service professional knowledge, in terms of gender.

The following Table 5.38 provides details of the test.

Table 5.38
*Mann-Whitney U Test Results for Pre-Service and In-Service Teachers of Different
Knowledge Domains in Terms of Gender*

Knowledge Domain	Ranks					Test Statistics		
	Type of Teacher	Gender	N	Mean Rank	Sum of Ranks	U	Z	P
Pedagogical knowledge	Pre-service	Male	785	890.32	698900.50	390395.500	-4.516	.000
		Female	1131	1005.82	1137585.50			
	In-service	Male	163	307.75	50163.50	27261.500	-2.772	.00
		Female	393	266.37	104682.50			
Curriculum Knowledge	Pre-service	Male	785	892.26	700425.50	391920.500	-4.424	.000
		Female	1131	1004.47	1136060.50			
	In-service	Male	163	309.37	50427.00	26998.000	-2.937	.00
		Female	393	265.70	104419.00			
Content Knowledge	Pre-service	Male	785	936.23	734939.50	426434.500	-1.486	.137
		Female	1131	973.96	1101546.50			
	In-service	Male	163	282.62	46067.50	31357.500	-.390	.69
		Female	393	276.79	108778.50			
Language Proficiency	Pre-service	Male	785	995.98	781846.00	414494.000	-2.521	.012
		Female	1131	932.48	1054640.00			
	In-service	Male	163	281.56	45895.00	31530.000	-.293	.76
		Female	393	277.23	108951.00			

The data also revealed that pre-service male teachers had significantly higher

language proficiency levels than pre-service female teachers. The in-service male

teachers reported high levels of pedagogical knowledge and curriculum knowledge.

On the other hand, the pre-service female teachers had high scores in pedagogical

knowledge and curriculum knowledge. There was no significant difference in

content knowledge level.

5.5.2 *Comparison of Language Teacher Professional Knowledge Between Pre-Service and In-Service EFL Teachers by Educational Training*

This section presents the comparison between pre-service and in-service teachers in terms of EFL professional knowledge based on educational training. Due to the non-normal distribution of the data, a Mann-Whitney U test was used for both pre-service and in-service teachers.

Table 5.39
EFL Professional Knowledge Between Pre-Service Teachers Based on Educational Training

	Ranks					**Test Statistics**		
	Teacher Type	**Training**	**N**	**Mean Rank**	**Sum of Ranks**	**Mann-Whitney U**	**Z**	**P**
Teacher Knowledge Test	Pre-service	Yes	524	1008.57	528489.00	338469.000	-2.437	.015
		No	1392	939.65	1307997.00			
	In-service	Yes	182	257.49	46863.50	30210.500	-2.151	.03
		No	374	288.72	107982.50			

For the pre-service teachers, the Mann-Whitney test was used to investigate a statistically significant difference between pre-service teachers who received educational training and those who did not, as the data are non-normally distributed. The test indicated that pre-service teachers who received educational training (*Mean Rank* = 1008.57, n = 524) scored significantly higher than the pre-service teachers without educational training (*Mean Rank* = 939.65, *n* = 1392), *U* = 338469.000, *z* = -2.437, *p* = .015. The effect can be described as 'small' (r = .05).

On the other hand, a Mann-Whitney test was used to investigate whether there is a statistically significant difference between in-service teachers who had educational training and those who did not, as the data are non-normally distributed. The test indicated that the EFL professional knowledge of the in-service teachers

who had no educational training (*Mean Rank* = 288.72, *n* = 374) was significantly

higher than those who had educational training (*Mean Rank* = 257.49, *n* = 182) U =

30210.500, z = -2.151 (corrected for ties), p = .031. This effect can be described as

'small' (r = 0.09).

A Mann-Whitney test was also used to investigate the differences between

different knowledge domains in pre-service professional knowledge, in terms of

educational training. The following Table 5.40 provides details of the test.

Table 5.40
*Mann-Whitney U Test Results for Pre-Service and In-Service Teachers of Different
Knowledge Domains in Terms of Educational Training*

Knowledge Domain	Ranks					Test Statistics		
	Type of Teacher	Educational Training	N	Mean Rank	Sum of Ranks	U	Z	P
Pedagogical knowledge	Pre-service	Yes	524	1034.79	542227.50	324730.500	-3.721	.000
		No	1392	929.78	1294258.50			
	In-service	Yes	182	254.89	46389.50	29736.500	-2.424	.01
		No	374	289.99	108456.50			
Curriculum Knowledge	Pre-service	Yes	524	1004.69	526455.00	340503.000	-2.272	.023
		No	1392	941.11	1310031.00			
	In-service	Yes	182	254.92	46395.00	29742.000	-2.431	.01
		No	374	289.98	108451.00			
Content Knowledge	Pre-service	Yes	524	891.69	467246.50	329696.500	-3.283	.001
		No	1392	983.65	1369239.50			
	In-service	Yes	182	257.64	46890.00	30237.000	-2.139	.03
		No	374	288.65	107956.00			
Language Proficiency	Pre-service	Yes	524	984.64	515951.50	351006.500	-1.295	.195
		No	1392	948.66	1320534.50			
	In-service	Yes	182	261.79	47645.00	30210.500	-2.151	.03
		No	374	286.63	107201.00			

The data revealed that pre-service teachers with educational training had a

significantly higher level of knowledge of the pedagogical curriculum than pre-

service teachers without educational training. The in-service teachers with no

educational training evaluated their knowledge of pedagogical knowledge,

curriculum knowledge, and content knowledge higher than in-service teachers with

educational training. There was no significant difference in the language proficiency knowledge level.

5.6   Saudi EFL In-Service Teachers' Professional Knowledge Gaps

This section presents the knowledge gaps identified by the in-service teachers during the interviews. Based on the teachers' responses, the gaps in the EFL professional base are presented in the following table, which lists the knowledge gaps starting from the highest percentage to the lowest.

Table 5.41

EFL Saudi Teachers' Professional Knowledge Gaps

Knowledge Gaps	N=53	
	Count	%
1. Language proficiency	13	25%
2. Pedagogical knowledge	12	23%
3. Knowledge of students	10	19%
4. Knowledge of technology	9	17%
5. Content knowledge	4	8%
6. Curriculum knowledge	4	8%
7. Knowledge of context	1	2%
8. Assessment knowledge	0	0%
9. Discourse skills	0	0%

From the above table, it can be seen that the top three gaps reported by the teachers are language proficiency, pedagogical knowledge and knowledge of students. In terms of language proficiency, the teachers emphasised their lack of speaking fluency and vocabulary.

Pedagogical knowledge came second as a gap in the teachers' knowledge. The teachers wanted to know more about different teaching strategies, classroom

management, time management, and lesson objectives. For example, P5 mentioned her desire to learn more about teaching strategies, noting the following:

> Honestly, I feel I still need to learn more teaching strategies. It is difficult to use strategies because of the students' age, short class time, and content (Interview 9).

This opinion was echoed by P7, who also expressed her wish to learn more teaching strategies. Despite the importance of the knowledge of students for in-service, teachers identified it as one of the top three gaps in their EFL professional knowledge. The teachers wished to know more about motivation, psychology, students' learning needs, English language level, and individual differences. P20 expressed the following:

> I am looking for something essential, which is motivation. We try to motivate the students, but it does not last for long. I am not sure why, maybe because of his family or friends (Interview 20).

Knowledge of technology was identified as a gap by nine teachers. They specifically expressed their need to improve their technical knowledge with educational platforms, smartboard, e-learning, smartphones, educational applications, online assessment methods and online conferences. They justified their need to improve their technical skills mainly "to keep up with the students". P13, for example, said the following:

> For me, it is technology. I need to know more and more. I have taken courses in technology, but I feel the students are always ahead of me. We have to keep up with them (Interview 13).

Similarly, P21 confessed this:

> I need to improve my knowledge of technology. Because students at this age are ahead of us in technology. I have been using smartphone apps to communicate with them, but sometimes it is difficult due to the large number of students (Interview 21).

While talking about the gaps in their knowledge of technology, many teachers expressed their disappointment and frustration with the lack of technology equipment in their schools and, thus, their inability to use their knowledge of technology to facilitate learning. The standout challenge was the lack of language labs and equipment such as computers, speakers, projectors, and smartboards in their teaching contexts. Along the same lines, the lack of budget was one of the popular responses. Some teachers reported using their own money to buy projectors and laptops to be used in classrooms. The lack of technology funds also affected the maintenance of the equipment. Slow and outdated computers forced the teachers or students to carry out maintenance work and, thus, have less class time. Another typical response was the lack of, or slow, internet connection, which led some teachers to avoid using online resources during the lesson. For example, P28 said the following about the current situation in his school:

> In my school, we lack many things. We do not have language labs. They are essential in English language classes. Labs are essential, but unfortunately, this is still our situation. We are using the old system of outdated speakers and equipment. The interactive books provided by the Ministry of Education are not working most of the time. Sometimes it is very time-consuming and exhausting to download materials from the internet or the educational platform … it can take up to a week or even two weeks, and in the end, just like last week, the platform was closed, and they launched a new platform. Unfortunately, this is what happened recently and without prior notice, which confused us for the last ten days (Interview 28).

P28 also talked about the poor internet connection and the lack of maintenance, as in the following:

The internet connection is weak. If I want to play a YouTube video, it is necessary to reduce the quality. The students can't see the video clearly because of the poor internet connection. The internet signal is very weak. Computers and other devices are old and lacking maintenance. We have a smartboard, and we have been using it for six years. Unfortunately, we have no maintenance at all. The school staff some time can do some work. Also, some students, God bless them, have experience with technology and can fix some of the problems (Interview 28).

Teacher P21 concurred, stating the following:

I go to the classroom with a bag full of things like the laptop, speakers, worksheets. I take it with me from class to class. We buy laptops and speakers (Interview 21).

P9 explained:

iPads are not provided. When I go to the south of Riyadh, the financial, economic, and social status of the families is like this; they cannot afford it (Interview 9).

Teachers also reported that the lack of technology could have a negative effect on the work environment, create tension in the workplace, and place an extra financial burden on teachers. Teacher P20 complained about the following:

Yesterday I got into a fight with the headteacher to use the projector. I installed it myself. What can you do? We need to do so to keep things running. The smartboard, material for a classroom activity, we don't have. When I use the printer, they say, "why you are printing?" What can I say? I pay my own money. The situation is very complicated and exhausting. I do not blame the headteacher, and the teacher also should not be blamed. The teacher spends his own money to achieve certain content (Interview 20).

P22 also expressed his frustration with the lack of technology and confessed the following:

The school equipment, networks, and devices are outdated, around 12 years old. I have a background in IT, so I used to do some maintenance for the school. I have computers and servers in my house, and I fixed some of the problems in school. However, the problem now has reached a level where I cannot do anything because these devices are

213

> too old, and I can't find any parts or compatible programmes. Moreover, we do not have an English laboratory at school. These things should not happen. Some schools have fewer potentials and lower academic achievements than us, but they get to have English labs (Interview 22).

He further vented his disappointment by adding the following:

> It is very depressing and frustrating to work under such conditions. The solution is straightforward and does not require a huge budget. Some schools only need simple things, such as English labs and computer labs (Interview 22).

Throughout the interview, P22 repeatedly expressed his frustration and anger regarding the situation in his school. It is worth noting that his religious beliefs together with his beliefs about the importance of his role as a teacher and a human in society helped him to overcome the depression. On the bright side, despite the poor technological conditions, he later proudly added that the school achieved the highest grades in the students' standardised tests for three consecutive years.

Some teachers feel pressure to improve their knowledge of technology. One of the reasons is to keep up with their students' knowledge of technology. For example, P21 noted:

> I need to improve my knowledge because the students at this age, God bless, are ahead of us with technology such as mobile phones. I am trying to find applications compatible with mobile phones so we can communicate with them. I used mySchoolApp in the past, but the problem was the large number of students in my classroom. (Interview 21).

The teachers also recognised gaps in their knowledge in terms of content knowledge, specifically linguistics, translation, phonology, English language literature, different curricula in Saudi Arabia, extracurricular activities, and administrative work. For example, P10 talked about her previous education and how

the programme lacked content knowledge, particularly linguistics and phonetics.

Being a novice teacher who graduated from the college of translation with no

educational training, she reported the following:

> I have a problem with phonetics, I do not like it, and I feel my students do not like it. I need to know linguistics. I go online and learn how to pronounce a particular sound. In my university, we did not cover linguistics and phonetics (Interview 10).

Interestingly, no knowledge gap was considered regarding discourse and

assessment. However, it is worth noting that discourse and assessment knowledge

were the least mentioned types in the EFL knowledge base.

5.7 Saudi EFL In-Service Teachers' Preferred Educational Methods

This section presents data about the preferred educational methods identified by the

in-service teachers in the current study, during the semi-structured interviews. When

asked about preferred educational methods, the majority of teachers (66%) reported

they preferred the self-directed method to acquire knowledge, while 34% preferred

the government-directed method or using both.

The teachers' responses to this question were categorised under

Government-directed and Self-directed, which were further classified as in the

following Figure 5.3:

Figure 5.3

In-service Teachers Preferred Educational Methods
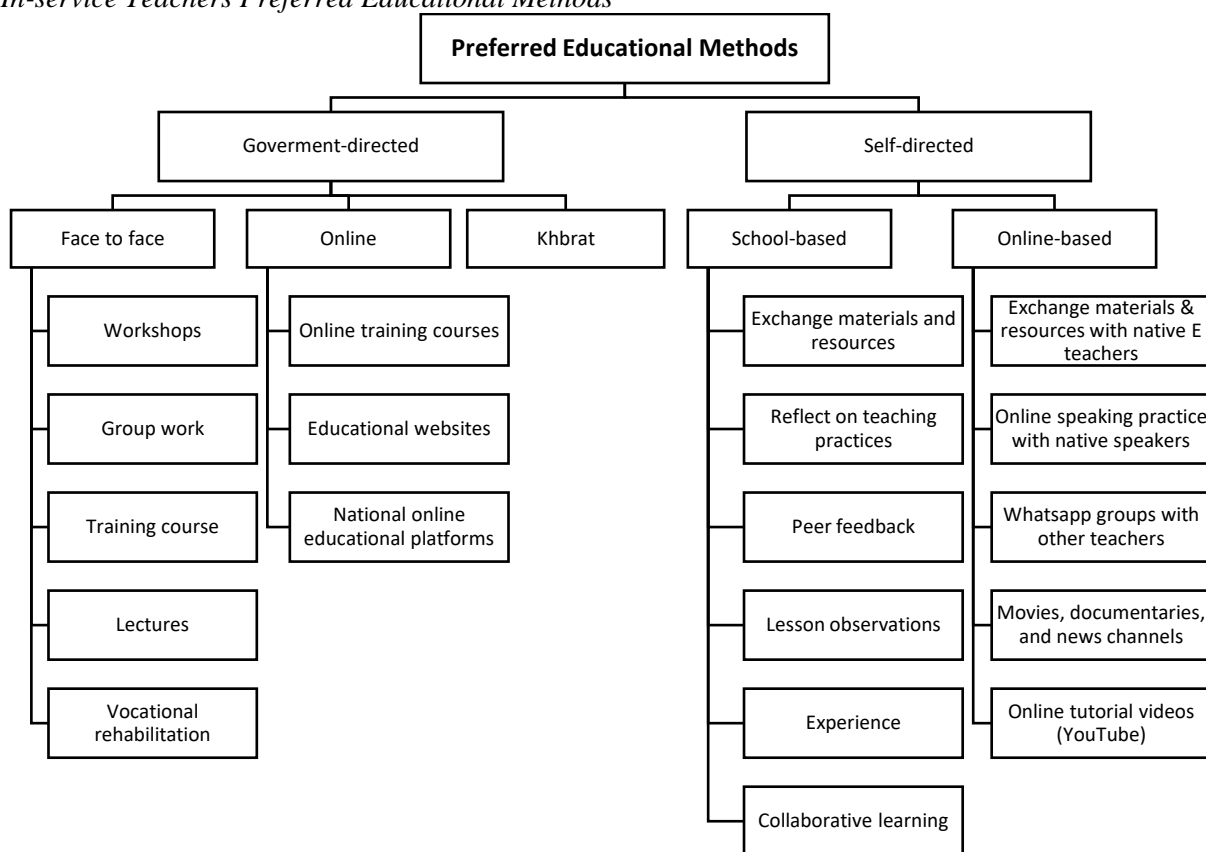
It is worth pointing out that teachers wishing to improve their language proficiency level preferred using technology, because they believed it was "stress-free and convenient" (Interview 22). On the other hand, teachers who reported gaps in knowledge of students, pedagogical knowledge, and content knowledge preferred face-to-face educational methods. For example, when P10 was talking about content knowledge, she said:

> I feel a lack like this needs a lot of listening and a lot of examples, even if it is in a traditional way. I need someone to explain it to me. I feel it is ok. I prefer this way. I need to listen and write at the same time. This is what I missed at the university (Interview 22).

The majority of novice teachers were in favour of the face-to-face training course and collaborative learning, while experienced teachers preferred self-education. P3, a novice teacher with no educational training, said the following:

> When I have a problem I cannot solve, I go and ask another teacher with 25 years of experience. She told me precisely what to do, which made my task easier because I had just started teaching (Interview 3).

On the other hand, P9, an experienced teacher with educational training, maintained that "the most important source of knowledge was self-education". Another experienced teacher with educational training expressed a similar point:

> The first thing the teacher needs to know is how to depend on himself and how to look for the information. This is the most important thing (Interview 12).

5.8   Chapter Summary

This chapter has presented the data relating to the EFL professional knowledge of pre-service and in-service EFL Saudi teachers. The data was collected by means of the Teacher Knowledge Test, questionnaires, and semi-structured interviews. In summary, the results showed that the majority of the pre-service and in-service teachers had a low level of EFL professional knowledge. Indeed, 60% of the pre-service teachers had low EFL professional knowledge levels; the percentage of in-service teachers who evaluated their EFL professional knowledge as low reached 93%.

Further analysis of the pre-service teachers' test results showed that there is a statistically significant difference between males and females. The scores of the female pre-service teachers were statistically significantly higher than the scores of the male pre-service teachers. Additional statistical tests revealed the differences between male and female pre-service teachers' scores in the different knowledge domains. Female pre-service teachers obtained higher scores in language pedagogy

and curriculum design, while male pre-service teachers achieved higher scores in language proficiency. There were no statistically significant differences in theoretical and practical knowledge between males and females. Further analysis of the pre-service teachers' test results revealed that there is a statistically significant difference in terms of educational training. The scores of the pre-service teachers who received educational training were statistically significantly higher than the scores of the pre-service teachers who did not receive educational training. It was also revealed that there was a difference between pre-service teachers' scores in the different knowledge domains based on educational training. Pre-service teachers with educational training obtained higher scores in language pedagogy and curriculum design, while pre-service teachers who did not receive educational training achieved higher scores in theoretical and practical knowledge. There were no statistically significant differences in language proficiency.

Further analysis of the in-service teachers' test results revealed that the teachers' interpretations of the nine knowledge domains related to EFL professional knowledge, including knowledge about students, pedagogical knowledge, content knowledge, knowledge of technology, knowledge of context, curriculum knowledge, language proficiency, assessment knowledge, and discourse knowledge.

The data obtained from the questionnaire set out to explore the different variables and the knowledge base by testing for statistically significant differences in Saudi in-service teachers' EFL professional knowledge in terms of gender, educational level, academic discipline, educational training, school type, school stage, and teaching experience. These results showed that male in-service teachers evaluated their EFL professional knowledge higher than the female in-service teachers. There was no significant difference regarding EFL professional knowledge

between teachers with a BA and a MA degree. However, it was noted that teachers with BA degrees obtained slightly higher results than PhD holders, particularly in knowledge of technology and content knowledge. Additionally, there were no differences in EFL professional knowledge based on academic discipline nor school stage.

There was a significant difference between in-service teachers based on educational training. Interestingly, in-service teachers who did not receive educational training reported a higher level of EFL professional knowledge than those who did receive it. Furthermore, in-service teachers working at government schools reported a higher level of EFL professional knowledge than teachers in private schools. One of the most striking observations that emerged from the data comparison was that novice teachers had a higher level of EFL professional knowledge than experienced teachers.

EFL professional knowledge gaps were also identified in the data. The in-service teachers reported knowledge gaps in language proficiency, pedagogical knowledge, knowledge of students, knowledge of technology, content knowledge, curriculum knowledge, and knowledge of context. The majority of the teachers reported that they preferred self-directed educational methods over government-directed methods. The teachers also reported favouring collaborative learning, self-education, Khbrat, lesson observation and experience.

6 Discussion

6.1 Introduction

The present study aimed to investigate the professional EFL knowledge of pre-service and in-service Saudi English language teachers in Saudi Arabia. An explanatory mixed-methods research design was used to collect the data in the current study. Study participants were pre-service teachers and in-service Saudi EFL teachers in Riyadh from different educational backgrounds, teaching the English language at different levels and types of schools. This chapter seeks to discuss and interpret, in the light of the research questions, the quantitative and qualitative findings presented in Chapter 5. It presents a discussion concerning the professional EFL knowledge base of pre-service and in-service teachers in the Saudi educational context. The discussion is organised according to the research questions of the current study.

The first section of the chapter presents an evaluation of the pre-service teachers' professional EFL knowledge results, while highlighting the gaps therein. The second part of the chapter discusses the results of in-service teachers' assessments of their own professional EFL knowledge. Here, the teachers' knowledge base is evaluated in relation to gender, educational training, educational level, academic discipline, school type, school stage, and teaching experience. These results will be evaluated within the Saudi context, while drawing attention to knowledge gaps and preferred educational methods by in-service Saudi EFL teachers.

The discussion presented in this chapter is based on the data collected from three sources: first, the 2017 Teacher Knowledge Test (TKT) scores of 1,916 pre-

service teachers; second, an online survey of 556 in-service teachers; and third, phone and in-person semi-structured interviews with 30 in-service English language teachers in Riyadh. The results of the TKT helped to define the pre-service teachers' professional EFL knowledge. Responses to the online self-evaluation survey were used to explore the types of professional EFL knowledge possessed by in-service teachers, and how this was affected by different variables. The semi-structured interviews with the in-service teachers served to identify and gather in-depth information on participants' thoughts, feelings, and beliefs about professional EFL knowledge.

6.2   Professional EFL Knowledge of Pre-Service Saudi EFL Teachers

The professional EFL knowledge of pre-service teachers has been widely studied in the first language (L1) and FFL fields, with the purpose of preparing teachers more effectively. To promote skill and knowledge among English language teachers, the NCA in Saudi Arabia designed and implemented the TKT as part of the Teacher Professional Standards project. The project and its assessment tools are considered to be one of the main sub-projects of King Abdullah's Project for Developing Education. The test covers major standards in the English language, which are organised into specific areas. Each area includes one standard or more; under each standard, there are several indicators on which test questions are based.

The NCA administered the TKT for the first time in 2009 (Education & Training Evaluation Commission Annual Report, 2009), when the Ministry of Education set the passing grade at 55 points. This triggered a massive wave of discontent among graduates or those interested in the educational field, who stated

that this cut-off point was too high and that it would only aggravate unemployment among EFL teachers (Zaid, 1993). In response, the NCA changed the format and content of the test, and in 2015 reduced the passing grade to 50 points (Education and Training Evaluation Commission Annual Report, 2015).

In 2015, the knowledge areas covered in the subject-specific test for English language instruction were modified. A fifth knowledge area was also added, so that overall the test measured knowledge in the following areas: language pedagogy, curriculum design, theoretical knowledge, practical knowledge, and language proficiency. As the analysis of the test results across the years showed, no significant differences in test scores were observed. While pre-service teachers' scores increased slightly in 2016, in 2017 they decreased to their lowest level since 2015, which was contrary to expectations. In other words, the test results for pre-service teachers displayed a low level of professional EFL knowledge. Specifically, in 2017, 60% of pre-service teachers obtained low scores, 26% had moderate scores, and only 2% achieved high scores. Such fluctuations in the results deserves a closer look to identify possible causes. The examinees scored highest in the knowledge area of curriculum design, followed in descending order by the areas of theoretical knowledge, language pedagogy, language proficiency, and theoretical application.

Other studies have investigated pre-service teacher knowledge in Saudi Arabia. Dimitrov (2014) used the Teacher Knowledge Test to assess pre-service teacher knowledge in different subjects, such as math, physics, chemistry, science, computer, education, general course, and English language. Dimitrov (2014) found that the pre-service performance is at the national average.

6.2.1 *Professional EFL Knowledge of Pre-Service Saudi Teachers by Gender*

The study found a statistically significant difference between male and female pre-service teachers' scores, with females achieving higher overall scores than males. The test also indicated that female pre-service teachers' knowledge of language pedagogy and curriculum design was significantly higher than that of their male counterparts. On the other hand, male pre-service teachers' knowledge of language proficiency was significantly higher than that of female examinees. There was no difference between male and female pre-service teachers' theoretical knowledge and theoretical application.

This link between knowledge difference and gender has also been shown in other studies (e.g. Alsadawy, 2016; Sideridis, 2014). A study by Sideridis (2014), for example, which aimed to evaluate teachers' attitudes, knowledge, and skills by academic discipline, also investigated the relationship between gender and the total score obtained on the TKT. The participants were 44,853 pre-service teacher graduates of 36 different academic disciplines from 23 national universities across Saudi Arabia. The study revealed that males had significantly lower scores across all knowledge domains in the English language major compared to females.

Furthermore, the findings of the present study in terms of gender are consistent with those of Saadawi (2016). Saadawi evaluated the formal selection processes of 118,108 male and female pre-service teachers from various academic disciplines, using the results from the TKT taken in 2015. The results of the English language pre-service teachers specifically showed that females obtained higher grades in all knowledge areas than males. A possible explanation was offered by Lamprianou (2013) regarding the reasons for such differences of knowledge in

terms of gender. In her study, Lamprianou (2013) investigated whether personal characteristics of the test takers were correlated with their performance on the Teacher Knowledge Test. The sample included 8288 pre-service teachers, both male and female. The results indicated that females slightly outperformed the males. Such differences were found to be attributed to the university of graduation. In other words, certain universities could be more efficient in teaching their students.

6.2.2 Professional EFL Knowledge of Pre-Service Saudi EFL Teachers by Educational Training

The current study found that professional EFL knowledge scores of pre-service teachers with educational training were significantly higher than the scores of those without such training. The test also indicated that pre-service teachers with educational training had statistically significant higher scores in language pedagogy and curriculum design than pre-service teachers with no educational training. On the other hand, pre-service teachers without educational training had statistically significant higher scores in theoretical knowledge than pre-service teachers with educational training. The data showed no statistically significant differences in theoretical application and language proficiency.

There are similarities between these observations and those described by Jehangir (2015). In his study, Jehangir investigated the impact of the background characteristics on pre-service teachers' TKT test scores in Saudi Arabia. The test results of 168,597 pre-service teachers who had graduated from different Saudi Arabia universities were analysed. Jehangir's findings indicated that educational training had a significant effect on test results: teachers with educational training obtained higher

scores on the test. Moreover, test scores were positively correlated with educational training duration.

6.2.3 Reasons for Low EFL Professional Knowledge Level of Pre-Service Teachers

There are several possible explanations for low levels of professional EFL knowledge of pre-service teachers. Such results may be due to the fact that less attention is given to these knowledge domains during teacher preparation programmes. Alharbi (2015) supports this explanation, saying that:

> From the English departments' perspective, the candidates are qualified based on their secondary school grades, regardless of their English language proficiency. Consequently, students do not require any further training in English before they join an English department, which is an unrealistic assessment of secondary school students' English abilities (p.106).

Another possible explanation for pre-service EFL teachers' lack of English language proficiency in Saudi Arabia is the inadequacy of teacher preparation programmes (Al-Hazmi, 2017). Most of the English language programmes in Saudi universities are taken from programmes taught in universities in the US, Canada, or the UK, for example. Such programmes were designed for native English language speakers or for students who have already attended English language courses and obtained high scores on tests such as IELTS and TOEFL (Al-Seghayer, 2014). However, the situation in Saudi Arabia is different. Many Saudi students graduate from high schools with weak English language skills and enrol in teacher preparation programmes without passing a language proficiency test. As a result, they begin their teacher preparation programmes lacking an essential, fundamental

skill. Very few universities offer teacher training programmes with English language courses targeting pre-service teachers' English language proficiency (Al-Hazmi, 2009). Low levels of English language proficiency have led some instructors to resort to Arabic as a means of delivering the content of their courses, which deprives pre-service teachers of a valuable opportunity to practise English (Al-Seghayer, 2011). Required course textbooks are also written in Arabic.

Furthermore, many studies have labelled teacher training programmes in Saudi Arabia as inadequate and non-systematic (Al-Hazmi, 2009; Al-Seghayer, 2014; Malihi, 2015), with the latter assessment referring to a failure to meet basic educational standards and address the specific needs of Saudi English language teachers. To this day, three English language programmes have been given complete public accreditation in Saudi Arabia: English language programmes at Imam Abdulrahman Bin Faisal University, King Saud University, and Effat University. Only two English language programmes have been given partial accreditation: English language programmes at Jubail Industrial College and Imam Mohammad Ibn Saud Islamic University (The Education and Training Evaluation Commission Annual Report,2021). Al-Hazmi (2003), for example, criticised the content of these programmes, saying that there is a lack of courses that meet the needs of would-be EFL teachers. Al-Seghayer (2011) similarly disapproved of how preparation programmes were designed, explicitly pointing out the lack of training in disciplinary knowledge, pedagogical content knowledge, and technological pedagogical knowledge. Another reason for low levels of teacher knowledge could be related to the claim that training programmes for English teachers in Saudi Arabia provide only a superficial understanding of weak, incomplete content for

professional knowledge domains (Al-Hazmi, 2017; Al-Seghayer, 2014; Alhamad, 2018).

The current study contributes to the development of a comprehensive plan to address professional development needs and educational development initiatives in Saudi Arabia. There is no doubt that the restructuring of teacher preparation programmes and the adoption of an effective policy for recruiting and educating teachers is the cornerstone of educational reform. Quality education heavily depends on the quality of teachers. However, despite concerted efforts, the low rates at which pre-service teachers pass tests, along with their low level of knowledge, still pose a serious challenge to the processes of educating and hiring teachers in Saudi Arabia (Al-Seghayer, 2014)

The findings of the current study have important implications for the Ministry of Education. The acceptance of pre-service teachers with low levels of professional EFL knowledge into the teaching profession is likely to impede any improvement in the educational process. Teacher knowledge, as Hattie (2008) noted, is a significant factor influencing student learning. It is clear that the Ministry's goal for educational reform is to make the teacher selection process as rigorous as it is in Singapore, for which the Government has signed a Memorandum of Understanding (MOU) with the Singapore National Institute (NIE). To achieve this goal, however, the Ministry should revise the education of English language teachers in the country to improve teacher knowledge scores, which will ultimately lead to the desired educational outcome. It would be therefore important for teacher preparation programmes, especially in the EFL context, to equip students with the skills needed to teach the language, while improving their overall language proficiency.

Any teacher training programme should be designed to balance different types of knowledge and provide students with various opportunities to develop theoretical and practical knowledge. Any deficiency in teachers' preparation programmes, especially in terms of how well they prepare pre-service teachers to meet the complex demands of their future profession, will have a negative effect (Al-Hazmi, 2009). In addition, as Alhamad (2018) claimed, poorly designed preparation programmes only serve to aggravate the lack of knowledge and skills and widen the knowledge gap. For example, language proficiency and theoretical application are domains of knowledge that require continuous training and regular practice. Pre-service teacher preparation programmes should reinforce the teachers' theoretical knowledge and sharpen their skills on a pedagogical and practical level, by exposing them to various aspects of teaching in real-life situations (Alamoudi, 2021).

6.3   Professional EFL Knowledge of In-Service Saudi EFL Teachers

A self-evaluation online questionnaire and semi-structured interviews were used to gather information regarding the professional EFL knowledge of in-service English language teachers in Riyadh, Saudi Arabia. The questionnaires asked the teachers to self-evaluate their EFL professional knowledge, based on nine knowledge domains (see also the literature review, section 3.5). The questionnaires were completed by 556 in-service EFL teachers, 30 of whom also participated in semi-structured interviews, where they elaborated on the topic and talked about knowledge gaps and preferred educational methods. Nine knowledge domains representing the core of teacher knowledge were initially established for the purposes of the data analysis. The resulting quantitative data from the questionnaires indicated that the

228

participants' level of professional EFL knowledge in all nine domains was relatively low: the overall mean score was 1.9 out of 5. The vast majority (93%) of the in-service teachers obtained low scores, 5% moderate scores, and only 1% achieved high scores.

The quantitative findings from the self-evaluation questionnaire in particular showed that the knowledge domain deemed most important by participants was knowledge of technology. This was followed in descending order by pedagogical knowledge, content knowledge, discourse knowledge, curriculum knowledge, context knowledge, language proficiency, assessment knowledge, and knowledge about students.

The following subsections present a discussion of these different domains, what adequate knowledge in each would entail, and the reasons for overall low knowledge levels.

6.3.1   *Knowledge of Technology*

Despite the fact that 63% of participants cited a knowledge of technology as most essential to EFL teachers, their own knowledge in the area fell in the low category, with a mean score of 2.5 out of 5. According to the teachers' responses in the interviews, a knowledge of technology refers to audio and visual equipment, educational platforms and applications, social media, desktop application programmes, educational applications, and live online tutoring websites. When teachers talked about their knowledge of technology, they distinguished between knowledge of technology for educational purposes and for personal and professional growth. When teaching, teachers reported using their knowledge in this domain to facilitate learning and improve their teaching performance, by helping them to select

appropriate teaching methods, make teaching more accessible, and communicate with students and parents. For personal and professional development purposes, teachers stated that their knowledge of technology allowed them to attend online training courses, communicate with other EFL teachers through online learning communities, improve their personality, learn about different cultures, and become more open to change.

Consistent with the present results, previous studies of teachers in Saudi Arabia have also demonstrated that in-service teachers' knowledge of technology is relatively poor. For example, Alqurashi et al. (2017) and Bingimlas (2018) found that Saudi in-service K-12 teachers' knowledge of technology received the lowest scores in the self-evaluation questionnaire. Furthermore, Al Harbi (2014) found that in-service high school teachers had a low to moderate-level knowledge of technology. As pointed out by Gamlo (2014), the majority of in-service teachers in Saudi Arabia lack sufficient theoretical and methodological grounding in the classroom implementation of digital technologies, due to their low level of knowledge of technology.

A possible explanation for these results may be inadequate preparation programmes and a lack of professional development in this domain (Al-Seghayer, 2011). According to the teachers in the current study, the attention given to teacher preparation programmes and professional development opportunities do not match the targeted level of educational reform and digital transformation in Saudi Arabia. While the Ministry of Education has launched many initiatives to promote the introduction of technology in schools, the reforms have mainly targeted school curricula and the development of infrastructure with insufficient and inadequate in-service training and teacher preparation programmes (Al Harbi, 2014). Such

unbalanced attention could undermine the entire educational reform. For example, Farid (2010) reported negative attitudes toward the use of technology in the classroom, from teachers who lack sufficient knowledge of it. Knowledge of technology was also one of the domains mentioned by in-service teachers in the current study, when asked about knowledge gaps. They pointed out the shortcomings of existing preparation programmes and a lack of technological support in schools.

These findings raise intriguing questions regarding the nature and extent of in-service training programmes and pre-service preparation programmes in Saudi Arabia. The progress and revolution in the field of technology necessitate regular, scaffolded, and sustainable professional development opportunities for in-service teachers as well as up-to-date teacher preparation programmes. This finding has important implications for the development of training programmes that give teachers sufficient knowledge and experience to utilise technology in education. It also sheds light on the importance of providing adequate technical support for in-service teachers, to encourage the integration of technology into their curriculum.

6.3.2   Pedagogical Knowledge

The quantitative results of this study showed that in-service teachers' scores in pedagogical knowledge fell into the low category, with mean scores of 1.9 out of 5. Out of 30 teachers, 22 emphasised the importance of using teaching strategies to make vocabulary instruction meaningful, fun, and effective, especially for younger students. The quantitative findings of the current study are in keeping with other studies carried out in Saudi Arabia, including studies by Albuloushi (2019), Alharbi (2020), and Alnajjar and Al-Jamal (2019), all of which found low levels of

pedagogical knowledge among teachers, highlighting the growing concern for their pedagogical knowledge.

Teachers also talked about the teaching methods and strategies they used for English language instruction, such as the grammar-translation method, the audiolingual method, and the communicative language teaching approach (CLT). The majority of those interviewed reported that they preferred to use the grammar-translation method and the audiolingual method for several reasons – one of which was that these methods were the ones through which they themselves learned English. Using semi-structured interviews with four Saudi EFL teachers, Assalahi (2013) investigated beliefs surrounding grammar instruction and associated practices in Saudi Arabian public schools. Similar to the qualitative findings mentioned above, Assalahi (2013) found that the teachers preferred the grammar-translation method in their English instruction. In spite of this preference for the grammar-translation and audiolingual methods, all teachers in the current study agreed that the CLT is actually the most commonly-used method, due to the implementation of the new CLT-based curriculum in Saudi Arabia (Alharbi, 2020).

Teachers also talked about active learning strategies as a part of pedagogical knowledge. However, there is a clear division between perspectives on active learning among in-service teachers. Some expressed their satisfaction with the educational outcomes of using active learning strategies, while others felt that active learning strategies were a waste of time, and that they were forced to apply them. The Ministry included such strategies in the evaluation forms used by educational supervisors, in order to encourage teachers to apply them. Each time a teacher used active learning strategies in a lesson, to encourage their students and promote higher-order thinking, they received an Active Learning Card. If the teacher attained

four cards in two years, they received a letter of thanks from the educational office

and preferential points in nomination for the popular Khebrat program. For example,

one of the teacher participants spoke proudly of the Active Learning Card she had

recently received, stating that only 20% of teachers in her school had received it. It

is worth pointing out, however, as Alrashidi et al. (2016) noted, that teachers might

overuse such strategies in their lessons, without providing much rationale or clear

educational objectives for their use. In spite of the efforts to promote the use of CLT

by the Ministry of Education in Saudi Arabia, the current study's findings indicated

that traditional methods such as the grammar-translation and audiolingual methods

were still preferred over CLT by in-service teachers.

In fact, participants reported many challenges with CLT, which could stem

from individual and contextual factors. Individual factors, as reported by Abahussain

(2016), could be related to a limited understanding and misconception of the nature

and application of CLT. Such factors could negatively impact teachers' confidence

to apply CLT in their teaching practice. Abahussain (2016) attributed the limited

understanding and misconceptions regarding CLT to insufficient pedagogical and

linguistic preparation in the teachers' pre-service programmes. As for contextual

factors, Abahussain (2016) highlighted the lack of in-service training programmes

offering the needed support in CLT. Moreover, large classes, teaching loads, and the

availability and suitability of teaching materials were among the challenges facing

in-service teachers tasked with implementing CLT (Abahussain, 2016; Siddiqui &

Asif, 2018).

The data contributes to a clearer understanding of how teachers' pedagogical

knowledge can lead to better learning outcomes (Heilala, 2018; Guerriero, 2014).

Having sufficient pedagogical knowledge enables the teacher to analyse and

evaluate specific learning events within a specific context, to make informed

pedagogical decisions (Guerriero, 2014).

6.3.3 Content Knowledge

This knowledge domain was found to be another core area of teacher knowledge

which fell in the low category, with a mean score of 1.7 out of 5. Despite the low

level reported, the above quantitative findings are supported by the qualitative data.

In interviews, 22 of the 30 teachers mentioned content knowledge as being central to

the professional EFL knowledge base for English language teachers. The

quantitative data also revealed that content knowledge in the current study refers to

linguistics, translation, English language literature, and teaching the four language

skills (reading, writing, listening, and speaking). These findings were similar to what

König et al. (2016) found in Germany: that content knowledge in EFL teacher

education is determined by academic disciplines, which include the study of English

literature, culture, and English linguistics.

The teachers in the current study stated that they used content knowledge to

provide the students with sufficient information to gain a comprehensive

understanding of the language being taught. For example, teachers used knowledge

of linguistics to explain to students how to pronounce a sound that does not exist in

the Arabic language, such as /v/ and /p/. Moreover, they talked about the importance

of content knowledge when correcting students' grammatical mistakes, and how it

gives them the confidence to explain errors and provide effective corrective

feedback.

Some teachers also reported using translation to teach the English language.

They would select English language texts and ask students to translate them into

Arabic and vice versa. Furthermore, teachers noted that they used their knowledge of English literature when teaching English to young learners. For example, they exposed children to the language in different contexts (such as stories), as a means of presenting important cultural aspects alongside the four skills in an enjoyable learning environment.

The low levels of content knowledge observed in the current study are in line with those of previous studies of EFL teachers, such as by Messina et al. (2018), who employed a self-evaluation questionnaire to investigate teachers' knowledge. Their results indicated that teachers had insufficient disciplinary knowledge. Similarly, Alnajjar and Al-Jamal (2019) used a self-reported questionnaire to examine professional EFL knowledge in English language teachers. Their results indicated that teachers had a low level of content knowledge.

6.3.4 Knowledge of Discourse

The quantitative data also showed that the in-service teachers had a low level of knowledge of discourse, with a mean score of 1.7 out of 5. The quantitative data revealed that the teachers saw the knowledge of discourse as the knowledge that allowed them to start and carry on a lesson in the English language, and that facilitated the use of appropriate language in different situations.

There are similarities between the meaning of knowledge of discourse expressed by the teachers in this study and those described by Celce-Murcia et al. (1995). They defined it as the knowledge that enables teachers to select, sequence, and arrange words, structures, sentences, and utterances to achieve a unified spoken or written text. The teachers' views of discourse skills are also in line with Richards' (2017) definition of knowledge of discourse:

The ability to maintain communication in English that is fluent, accurate and comprehensible and, more importantly, the extent to which the teacher can use English as a medium to teach English, particularly teachers who may be at Level A2 or B1 on the CEFR.

Richards' (2017) definition above suggests that EFL teachers need knowledge in two domains. The first is the person's general ability to communicate in English, referred to as "language proficiency". The second is knowledge of a specific genre of English "knowledge of discourse" used in instruction for specific purposes. According to Elder (2001), the combination of language proficiency and knowledge of discourse enables the EFL teacher to use the English language as both the medium and target of instruction, adjust the English language input based on the student's proficiency level, and draw the learner's attention to the features of the English language.

Discourse knowledge has also been the subject of investigation of a few research studies in Saudi Arabia (e.g. Alanazi & Widin, 2016, 2018; Hamdan & Elandeef, 2021). Alanazi and Widin's (2016) work mainly focused on the socio-cultural aspect of discourse knowledge and how it was affected by cultural and sociological factors. Meanwhile, the research of Hamdan and Elandeef (2021) investigated the maximum output of minimised teacher discourse and activated classroom interactivity in the EFL context. However, the level and the construct of discourse knowledge of English language teachers in Saudi Arabia is rarely discussed. A possible explanation for the lack of studies on discourse knowledge in the EFL context is the confusion between classification and terminology in this knowledge domain (Andrews, 2003). A possible explanation for the low level of discourse knowledge in the current study could be the depth and breadth of language

training which the teachers received during their teacher preparation programmes. According to Al-Seghayer (2014), the English teacher preparation programme failed to provide the teachers with a solid academic foundation and professional development opportunities. Knowledgeable and competent EFL teachers need general and academic language training, to equip them with the discourse or pragmatic knowledge necessary to cope with classroom communication (Elder, 2001).

6.3.5   Knowledge of Curriculum

Another knowledge domain that was rated low by participants in the current study was curriculum knowledge, with a mean score of 1.7. The quantitative data revealed that only seven teachers out of 30 talked about curriculum knowledge as a domain in the professional EFL knowledge base. The teachers used this domain to refer to curriculum requirements, curriculum organisation, and the national and international curriculum in Saudi Arabia.

More specifically, the teachers who mentioned knowledge of curriculum referred to the framework developed by the Ministry of Education and the principles on which the English language curriculum was based. They were aware that, according to the Saudi Ministry of Education, the content of the English language curriculum must achieve certain objectives using more than one method of teaching. In addition, they argued that the curriculum required them to help students to self-learn and that they should teach the English language based on the student's previous experiences. The teachers also showed their awareness that English language instruction should incorporate modern learning technologies and that it should highlight some of the efforts made by Muslim scholars to generate

knowledge, while enabling students to use the English language to spread Islam. Furthermore, knowledge of the national and international curriculum in Saudi Arabia was mentioned as part of curriculum knowledge. They did this in line with the Saudi government's enforcement of the national and international curricula in a top-down approach, through the processes of planning, designing, and developing (Alnefaie, 2016). Teachers are expected to implement the curriculum without any participation in developing it. However, sufficient knowledge of national and international curricula could help the teachers to broaden their minds and see the progression of national and international curricula, as well as the overall perspective of the student learning journey (Alghamdi, 2019).

The low level of curriculum knowledge in the present study was also observed in previous studies investigating this knowledge domain in the EFL context. For example, Mahjaty (2017) evaluated in-service teachers' curriculum knowledge by means of a questionnaire about a new curriculum that had been introduced in 2013, as part of educational reforms in Indonesia. Mahjaty's results showed that teachers' knowledge of the curriculum was weak. Sahin and Soylu (2017) used an explanatory research design to investigate the development of curriculum knowledge among teachers in Turkey. They found that teachers' knowledge in the area was inadequate, especially in terms of their ability to apply the necessary strategies and skills and to justify the goals of the curriculum. They also had limited knowledge about changes made to the curriculum. In support of the findings of the current study, the studies by Mahjaty (2017), Alghamdi (2019), and Alnefaie (2016), all indicated low levels of curriculum knowledge among teachers.

The reforms in the English language curriculum in Saudi Arabia are unprecedented (Alnefaie, 2016), and the introduction of a new curriculum is an

excellent opportunity for teachers to implement new strategies and teaching methods. However, to ensure the successful delivery of the new curriculum, teachers must be well-prepared and have sufficient knowledge of it. In other words, they need training and time to adapt and rise to the level of any changes. Otherwise, a lack of genuine understanding of the various complex elements of the curriculum could hamper reform efforts. The findings of the current study might contribute to solutions to the low level of curriculum knowledge mentioned above. For example, teacher educators could focus on curriculum knowledge as one of the main topics in preparation programmes. The Ministry of Education may address the issue in the form of training programmes for in-service teachers.

6.3.6   Knowledge of Context

Quantitative data revealed that the in-service teachers' knowledge of context was low, with a mean score of 1.7. The qualitative data showed that 16 out of 30 participants viewed knowledge of context as an important domain for EFL teachers. According to them, knowledge of context fell into two major categories: micro and macro contextual factors. Micro contextual factors included any internal factors affecting teaching and learning, such as classroom environment; student-teacher bond; teachers' values, attitudes, and beliefs regarding the teaching profession and the English language; and students' values, attitudes, and beliefs regarding the English language. Macro contextual factors were categorised as any external factors affecting teaching and learning, such as home environment, school environment, and social environment. The teachers often talked about the importance of knowing about their students' home environment; their parents' attitudes toward the methods used to teach English; communication with students' parents; parents' status

(married or divorced, alive or deceased, employed or unemployed); parents' educational level; parents' English language level; and the socio-economic status of the family. This knowledge domain, according to the teachers, enabled them to recognise, understand, and solve various problems they faced with their students.

The overall quantitative and qualitative findings regarding context knowledge in this study are consistent with Sharkey's results (2004), which revealed that knowledge of context involves more than geographical location and classroom context. Sharkey (2004) also identified socio-cultural and socio-political elements as being helpful in the development of a conceptual framework that would guide EFL teachers' instruction. The understanding of the level, nature, and elements of context knowledge could help EFL teachers to gain awareness regarding the complexity of social context and the factors that affect the processes of teaching and learning.

6.3.7   English Language Proficiency

Another important domain in which the teachers reported a low level of knowledge is English language proficiency, with a mean score of 1.6. The quantitative data revealed that only eight teachers mentioned language proficiency, when speaking of the professional EFL knowledge base. According to the teachers, language proficiency refers to use of the English language for communication inside and outside the classroom, vocabulary knowledge, and fluency in speaking. In short, the teachers used language proficiency to refer specifically to oral language proficiency.

The quantitative findings of the current study are in line with those reported in existing literature. The low level of language proficiency matches observations made in earlier studies carried out in the EFL context. For example, Yusuf and Novita (2020) investigated teachers' perception of their own language proficiency,

which was low. They also reported that this low level of language proficiency could negatively affect a teacher's ability to manage the classroom, understand and communicate lesson content, assess students, and give feedback. Nation (2003) also found that low proficiency is one of the reasons why native language is sometimes used in the classroom – a finding that was corroborated by the qualitative data of the current study. Teachers in the current study resorted to the Arabic language to explain grammatical rules and the meaning of vocabulary.

The low level of language proficiency observed here is also in line with the findings of previous studies on teachers in Saudi Arabia, like the studies carried out by Al-Hazmi (2017), Al-Seghayer (2014), Alharbi (2015, 2016), Barnawi and Al-Hawsawi (2017), and Daif-Allah and Aljumah (2020). For instance, Al-Seghayer (2014) claimed that the majority of English language teachers in Saudi Arabia suffer from low proficiency levels, hindering them from fully understanding the materials that they are attempting to teach. Mitchell and Alfuraih's (2017) study analysed a self-reported questionnaire of 2,500 English teachers throughout Saudi Arabia. They found that 70% of the teachers who completed the survey reported low language proficiency. These findings raise interesting questions regarding the nature and extent of language proficiency among EFL teachers. The data of the current study could contribute to the understanding of the complex construct of language proficiency in the field of English language teaching.

Despite extensive research on the subject, however, a consensus has yet to be reached on what constitutes language proficiency. The discrepancies are due to the fact that the definition and nature of language proficiency heavily depends on a diverse range of content, tasks, contexts, cultures, and classrooms in teaching and learning (Elder & Kim, 2013). For example, Andrews (2003) used the term

"language proficiency" to refer to knowledge *of* a language, which should be distinguished from knowledge *about* language (content knowledge), arguing that both types of knowledge contribute to the teacher's language awareness, which is essential for any EFL teacher. According to Andrews (2003), language proficiency also includes psychomotor skills, strategic competence, and language competence. Freeman et al. (2015) proposed another concept of general proficiency. They described teacher language proficiency as "a specialized subset of language skills required to prepare and teach lessons" (p.129), arguing that it should be separated from general proficiency. Such variations in the interpretation of teachers' language proficiency are problematic, because they could lead to confusion and divergence of opinion in conducting research in this knowledge domain (Tsang, 2017).

6.3.8   Knowledge of Assessment

The quantitative data revealed that in-service teachers had a mean score of 1.9 in the knowledge of assessment, which falls into the low category. According to the participants, assessment knowledge includes diagnostic, formative, summative, and continuous knowledge. The assessment method to be used at each school level in Saudi Arabia is the Ministry of Education's decision. Assessment at the elementary, middle, and secondary levels in Saudi Arabia is explained in Table 6-1.

Table 6.1

Assessment Methods at Elementary, Middle and Secondary Levels in Saudi Arabia

Elementary	Middle and Secondary
- The assessment of the student at this stage is continuous and based on various assessment methods, including tests and performance tasks. - The year is divided into two terms. - Uses a variety of assessment tools appropriate to the nature of the learning objectives or outcomes. - The student is transferred to the second grade if he achieves 75% of the criteria in each subject. - Effectively employs evaluation results for the purposes of formative evaluation based on evaluation strategies for learning and for the purposes of summative evaluation based on reliable and valid evidence. - The student's performance is evaluated in each criterion of any subject based on four performance levels. - The students' results are submitted once in each term, documented with evidence of his level. - The school's guidance and counselling committee monitors the student's level and progress from the beginning to the end of the school year. - The teacher provides the school administration, student advisor, and student's parents with copies of the assessment report on a regular basis.	- The assessments of the student at this stage are formative and summative, and based on various assessment methods, including tests and performance tasks. - The year is divided into two terms. - Uses a variety of assessment tools appropriate to the nature of the learning objectives or outcomes. - The minimum pass mark is 40% of the total mark in social and science subjects, and 50% for other subjects. - The teacher diversifies assessment tools in order to collect evidence of students' learning, such as quizzes, homework, and tests. - Allocation of 100 marks for each academic subject, divided equally into two terms. - Thirty percent of the total mark is given to formative assessment during the term (usually by periodic test). - Seventy percent of the grade is allocated to the final examination at the end of each term.

As shown in Table 6.1, the Ministry of Education provides the teachers with

very rigid and strict assessment guidelines, with no room for teacher judgement,

innovation, or preferences. The teachers are expected to follow the guidelines, even if they do not approve of them.

Diagnostic tests were mentioned by three teachers as a way of evaluating students' levels in English and of identifying any weaknesses or gaps at the beginning of the year in order to inform decisions about their education. The qualitative data also revealed that teachers used formative assessment to informally check the students' understanding during instruction. On the other hand, summative assessment was used to formally measure the students' acquired knowledge of curriculum content. Written summative assessment is the most common assessment method in Saudi Arabia (Al-Abdulkareem, 2004). Alnabelsy (1988) attributed this preference in Arab countries to the common misconception held by many educational officials that written summative assessment is the most valid method to observe and document teachers' work. However, the focus on summative examinations limits the evaluation process to one aspect of learning and reinforces the traditional view of education in Saudi Arabia, which is that teaching and learning serve only to pass the exam (Al-Sadan, 2010).

The quantitative data of the present study also revealed that 18 out of 30 teachers reported dissatisfaction with continuous assessment, especially of elementary students. Although more than 20 years have passed since the introduction of continuous assessment in Saudi education, the debate continues between teachers and educators about the feasibility, success, and effectiveness of this method (Alotabi, 2014). Some argue that it has led to a decline in educational levels, especially in reading and writing (Al-Zahrany, 2012). Some believe that it lacks objectivity and credibility, and does not take into account individual

differences among students, which creates many challenges (Al-Arabi, 2012). According to the teachers in the current study, these challenges include:

- Poor adherence to the instructions and regulations of continuous assessment methods, as a result of a lack of preparation and training of teachers, supervisors, and school principals;
- A decrease in the student's ability in reading and writing;
- A lack of reliable remedial programmes for students;
- A lack of parental awareness of the process of continuous assessment, which leads to a lack of parental interest and involvement;
- Difficulty evaluating all the required skills due to their sheer number;
- A small number of specialists supporting programmes;
- A large number of students in the class, which could range between 40 and 50 individuals;
- The lack of a unified and straightforward mechanism for applying continuous assessment methods;
- An overall lack of motivation among students, due to a lack of competition; and
- Overloading of teachers with administration and reports.

These challenges seem to be consistent with earlier research. Previous studies have revealed a significant negative influence of continuous assessment on students' educational levels. Al-Tewagry's (2013) study, for instance, explored continuous assessment from the teachers' perspective and found that it was one of the main reasons for the notable decrease in students' reading and writing abilities. Almulla's (2015) study explored the suitability of continuous assessment in the classroom environment in Saudi Arabia and found that many students created obstacles for teachers striving to apply continuous assessment.

The Ministry of Education in Saudi Arabia has sought to lessen the negative effects caused by the inadequate application of continuous assessment on the

educational process. It did so by adopting a series of decisions that have had a positive effect on student outcomes. For example, in 2021, Hamad bin Mohammed Al Al-Sheikh, the Minister of Education, announced that the continuous assessment system would be replaced with summative assessment starting from the fourth grade, citing incorrect application of continuous assessment as the reason (Ministry of Education, 2021). He also highlighted the importance of raising awareness and providing sufficient support for all the stakeholders, and developing a comprehensive and up-to-date guide for continuous assessment. Moreover, changing the structure of the academic year was another ministerial decision aimed at improving the assessment system. In Saudi Arabia, the academic year is divided into two terms. Student evaluation relies heavily on exams that are held at the end of each term. A specific grade percentage must be achieved to move to the next level. In 2021, the Ministry of Education updated the 1970 Educational and Assessment Policy for Public Education in Saudi Arabia and introduced new changes regarding the education system. Instead of two terms, the academic year is now divided into three (Ministry of Education, 2021).

The importance of assessment knowledge for EFL teachers aligns with existing research (Alotabi, 2014; Kourieos, 2014; Sahragard & Saberi, 2018a). The low level of assessment knowledge observed in the current study was also reported by Al-Abdulkareem (2004), who found that Saudi teachers have a lack of knowledge to assess their students appropriately. Alsamaani's (2014) study revealed that teacher preparation programmes in Saudi Arabia failed to provide future teachers with sufficient assessment knowledge. His study also found that teachers acquire assessment knowledge through on-the-job experience, and that teacher-made tests do not meet the standards for student achievement test development.

6.3.9 Knowledge About Students

The quantitative data revealed that knowledge about students received the lowest score, with a mean score of 1.5 out of 5. A total of 27 out of 30 teachers mentioned knowledge about students as their first response, when talking about the topic of knowledge domains of EFL teachers. According to the teachers, knowledge about students included knowing their English proficiency level; previous language-learning experience; perceptions, motivation, and attitudes toward learning the English language; learning styles and preferences; learning difficulties; vocabulary size; learning outcomes; opinions about the teacher; age; cognitive abilities; and socio-economic status.

The low level of knowledge about students found in the current study aligns with my earlier observations in the EFL context, which showed that a lack of knowledge about students negatively affects the learning process. As suggested by Stronge (2018), teachers with a sufficient level of knowledge in this domain are able to utilise such information to design, plan, and deliver lessons more effectively. Teachers gathered such information in order to establish a relationship and connection with their students, to help them understand a student's background, and to tailor their lessons to the student's level and needs. Knowledge about students could help establish a close match between a student's learning style and the teacher's teaching style, which could lead to a higher grade point average (Dunn et al., 1995).

Saudi Arabian cultural factors may explain the low level of knowledge about students observed in the current study. According to Alsamaani (2016), the rich and traditional Islamic culture deeply rooted in Saudi society had an impact on the classroom, leading to a high level of power distance between teachers and learners.

The teacher's authority is accepted and respected with high reverence, inside and outside of the classroom. Such high-level status dictates highly formal communication and relationships, which creates boundaries between teachers and students.

Context may also contribute to the low level of knowledge about students. For example, participants cited overcrowded classrooms as one of the main obstacles that prevented them from gaining knowledge about their students. Ashraf's (2021) study identified the major problems of EFL teaching in the overcrowded classrooms of Saudi Arabia. The data from the questionnaire and semi-structured interviews in Ashraf's (2021) study revealed that overcrowded classrooms lead to:

- failure to maintain discipline in the classroom;
- demotivation of both teacher and learner;
- failure to evaluate strengths and weaknesses of each individual;
- teachers struggling with physical and mental stress;
- failure to achieve course learning outcomes; and
- failure to create a sound teacher-student relationship and establish an effective teaching environment.

Another contextual factor that could contribute to the low level of knowledge about students is work overload. The teachers in the current study expressed their frustration with overload, due to their teaching hours, long curriculum, and administrative duties. Heavy teaching schedules were found to be one of the issues restricting teachers from investing time in getting to know their students (Almohideb, 2019). Alzaidi's (2011) study also found that EFL teachers faced overload due to their teaching hours. In 2019, the Ministry of Education announced that the teaching hours of EFL teachers would increase from 24 classes per week to

30 classes per week to cover the shortage of English language teachers (Ministry of Education, 2019), ultimately exacerbating the problem.

The low levels of knowledge in domains central to EFL instruction observed in this study support observations made in many previous studies (Al-Abdulkareem, 2004; Al-Arabi, 2012; Al-Sadan, 2010; Al-Tewagry, 2013; Al-Zahrany, 2012; Almohideb, 2019; Almulla, 2015; Alnabelsy, 1988; Alrabai, 2018; Alsamaani, 2016; Alzaidi, 2011; Ashraf, 2021). Tredwell (2017) argued that improving the knowledge of teachers should be a priority in any education reform, because of its direct effect on other educational inputs.

The data on knowledge domains and levels gathered in the current study contribute to a better understanding of reasons for low knowledge levels in pre-service and in-service teachers. This kind of information could be beneficial to teachers, teacher educators, and policymakers in the EFL context. Teachers could use the findings of the current study to identify their own knowledge gaps and create a professional development plan to guide their career goals as well as their research for available training opportunities. Teacher educators could also benefit from the current study by adapting and updating teaching materials to include the various knowledge domains found to be essential for EFL teachers.

The curriculum for teacher education should be designed to meet the needs of EFL teachers and equip them with sufficient knowledge to meet the learning needs of their students. The data found in the current study could also be used by policymakers to design and create reliable and valid assessment methods to evaluate EFL teacher knowledge.

6.4 Comparison of Pre-Service Versus In-Service Professional EFL Knowledge

A comparison of in-service and pre-service teachers' professional EFL knowledge revealed two things. First, the pre-service teachers' scores on the TKT showed that language proficiency was the knowledge domain in which they received the highest points, followed by curriculum knowledge, content knowledge, and pedagogical knowledge. An opposite pattern was found with the in-service teachers. Second, despite obtaining statistically higher scores on the TKT than males, female in-service teachers rated their knowledge statistically lower than male teachers. Moreover, pre-service teachers with educational training had statistically higher points than those who did not receive educational training. However, in-service teachers with no educational training rated their knowledge higher than their trained counterparts.

The qualitative and quantitative data revealed a few differences between pre-service and in-service teachers' EFL knowledge. While pre-service teachers had higher overall scores in knowledge tests than in-service teachers, this knowledge was perceived as lacking when faced with the reality of classroom teaching. Such a discrepancy could indicate a gap between the theory and reality of teaching.

The same gap has been reported in existing literature. Helfrich and Bean's (2011) study compared pre-service teachers' experiences in reading instruction during their teacher preparation programmes and their experiences as in-service teachers. They found that pre-service teachers perceived their knowledge as sufficient to teach reading to their K-8 students. However, when they began their service, they named further instructional needs in terms of how to differentiate reading instruction for diverse learners, using assessment to drive instruction, and

managing the classroom. Rots et al. (2012) investigated the gap between teacher education and teaching reality and found that it could be one of the factors contributing to a high rate of early career attrition. They also reported that new teachers experience a "reality shock" caused by the differences between their preparation programmes and the classroom. For example, P15 said:

> In university, we only had theories. However, in the classroom, it is very different. Lecturing is very different from reality. My previous education did not explain these things. We used to study poetry and drama. However, in reality, it is not the reality of teaching. Teaching is very, very different from what we have learned. (Interview15)

Therefore, teacher education programmes should be designed to balance theory and practice (Green et al., 2018). To design effective teacher preparation programmes, the right level of challenge and support should be achieved (Mariani, 1997). According to Mariani's framework model, effective learning occurs in a high-challenge and high-support learning environment that includes authentic context, social interaction, and a constructivist learning approach (Green et al., 2018). Therefore, it is recommended that pre-service teachers are trained in high-challenge and high-support conditions that reflect reality.

Another reason for the observed differences between pre-service and in-service teachers' knowledge is the format of the TKT. As presented in the methodology chapter, the test consists of two parts: general and specialised written tests. One of the knowledge domains covered by the test is language proficiency. In the current study, pre-service teachers received the highest points in language proficiency, but the in-service teachers perceived language proficiency as their weakest knowledge domain. According to Faez et al. (2019), language proficiency should include the mastery of the four language skills: reading, writing, listening, and speaking. However, the TKT only measures reading and writing. According to

the NCA, no part of the test addresses teachers' speaking or listening abilities. Previous research on language proficiency asserted the importance of measuring the four language skills, in order to obtain an accurate result. For example, Marashi and Azizi-Nassab (2018) used a TOEFL as an objective proficiency measure to test listening, writing, reading, and speaking.

The nature of the knowledge domains could explain the differences identified between pre-service and in-service teachers. In-service teachers' self-evaluation of EFL knowledge revealed that they rated their pedagogical knowledge the highest, followed by knowledge of content, curriculum, and language proficiency. Nineteen out of 30 in-service teachers reported that they gain professional knowledge from practising teaching. For example, P14 said, "85% to 90% of my knowledge came from experience". Pedagogical, content, and curriculum knowledge could increase over time, with practice and in-service professional development.

Similar patterns were reported in previous studies. Kutluca's (2021) study revealed that more extended teaching experience contributes to higher pedagogical and content knowledge. When the majority of teachers started their preparation programmes, their knowledge of learning and teaching was less developed, but after years of experience and professional development, their level of knowledge could improve (Caena, 2014). Moreover, the content of professional development programmes in Saudi Arabia could further explain why pedagogical, content, and curriculum knowledge was high for in-service teachers while their language proficiency was low. According to the study participants, professional development in Saudi Arabia rarely focuses on language proficiency. Many teachers expressed their frustration over insufficient professional development, heavy teaching

schedules, and a lack of rewards or benefits. They also reported that the training

courses offered by the Ministry of Education are limited and mainly focus on

pedagogical knowledge. Some past research has criticised teacher education and

training, primarily for failing to meet the needs of EFL teachers (AL-Hazmi, 2003).

Similar findings were reported by Al-Seghayer (2014), who stated that "training

programmes are currently conducted on a limited scale via the local education

departments that are scattered all over Saudi Arabia and are handled in a poor

manner" (p.21). Similar views were echoed by Oudah and Altalhab (2018), who

raised concerns regarding the training programmes in Saudi Arabia.

The current study contributes to narrowing the gap between theory and

practice, as well as to our understanding of the differences between the knowledge

possessed by pre-service and in-service teachers. While existing research in the field

primarily investigates pre-service and in-service teachers separately, the current

study aims to broaden the scope of investigation in this field by analysing the

differences between them. Teacher educators and policymakers may use the data

gleaned from the current study to ensure complementarity between preparation

programmes for pre-service teachers and professional development training for in-

service teachers. Additionally, the data could contribute to the design of a more

accurate and comprehensive test for measuring pre-service teachers' professional

EFL knowledge – one that includes a speaking and listening section to assess

language proficiency.

6.5 Role of Factors in Development of EFL Teacher Professional Knowledge

The current study aimed to investigate whether there are any statistically significant

differences between in-service Saudi teachers' professional EFL knowledge base, in

terms of gender, educational level, academic discipline, educational training, school type, school stage, and teaching experience. To address this, Mann-Whitney U and Kruskal-Wallis tests were used to detect any statistically significant differences among teachers, based on these seven demographic variables. Statistically significant differences were found between some of the variables. However, the effect size was small. The effect size reveals how meaningful the relationship between variables is. A large effect size means that a research finding has practical significance, while a small effect size indicates limited practical applications. However, as discussed by Schäfer and Schwarz (2019), large sample size studies produce smaller effect sizes than small studies. Effect sizes in small studies are more highly variable than in large studies. The following subsections discuss each variable in turn.

6.5.1   Role of Gender in Development of EFL Teacher Professional Knowledge

The knowledge difference in terms of gender is consistent with most studies conducted in the Saudi context. For example, Sideridis (2014), who evaluated pre-service teachers' attitudes, knowledge, and skills by academic discipline, also investigated the relationship between gender and the total score obtained on the TKT in Saudi Arabia. The participants were 44,853 pre-service teacher graduates from 36 different academic disciplines in 23 national universities across Saudi Arabia. The study revealed that males had significantly lower scores across all knowledge domains in the English language major compared to females. The findings of the present study are also consistent with those of Saadawi (2016), who investigated the formal selection processes of male and female pre-service teachers from various academic disciplines, using the results from the TKT taken in 2015. The results for

English language pre-service teachers specifically showed that females obtained higher grades than males in all areas.

However, the present findings are not consistent with those reporting that teachers' gender did have a significant relationship with EFL professional knowledge in other EFL contexts. For example, Prasojo et al. (2020) carried out an Indonesian study in which the perceptions that EFL teachers had of their own knowledge were explored. The study found that female teachers had significantly higher estimates of themselves than male teachers did. On the other hand, Van Loi (2021) investigated the EFL knowledge of English language teachers in Vietnam, and did not find a significant difference between males and females.

The results of the current study also showed that female pre-service teachers had higher grades than males. On the other hand, male in-service teachers evaluated their knowledge level higher than the females did. This study supports evidence from previous observations (Dammas, 2020; Kim et al., 2016; Mahmood, 2016). For example, Pallier (2003) found that participants tend to be overconfident and overestimate themselves in the cognitive domain. Pallier (2003) also found that male participants were more confident and accurately evaluated their knowledge statistically higher than females. Another possible interpretation of the data is that teachers might also overestimate their teaching abilities, because they are unaware of their lack of knowledge (Kruger & Dunning, 1999).

The findings of previous research render the relationship between gender and professional EFL knowledge and reasons for such differences to be uncertain. The involvement of a gender-based study would be worth pursuing to better define the exact relationship, but the results of the current study already take steps in that direction. The findings presented herein could lead teacher educators and

255

policymakers to design preparation and training programmes aimed at strengthening the weakness in EFL knowledge of males and females. Moreover, the findings suggest that factors such as gender need to be considered when designing self-evaluation tools for EFL teachers.

6.5.2 *Role of Educational Training in Development of EFL Teacher Professional Knowledge*

The present study found that professional EFL knowledge was significantly impacted by educational training; pre-service teachers with educational training obtained higher grades than those without. On the other hand, in-service teachers without educational training had a higher estimation of their knowledge than did teachers with training.

There are similarities between the results of the pre-service teachers in this study and those described by Chan et al. (2021), who found significant differences in pre-service teachers' knowledge based on educational training. The findings of the current study are also consistent with Alshawaf (2020), who reported a significant increase in the perceived knowledge level of pre-service teachers by the end of the training programme in their Saudi university.

However, the findings about in-service teachers in the current study do not support previous research that investigated the effectiveness of educational training for in-service teachers. Relevant literature revealed the positive impact of educational training on teacher knowledge and performance (Ulvik et al., 2018). Authors including Dhakal (2016), Ravandpour (2019), Ramanan (2021), and Chen and Goh (2014) also reported a positive relationship between educational training and professional EFL knowledge.

It is difficult to explain the discrepancy between the results of the in-service teachers in this study and previous findings, but it might be related to contextual factors. For example, according to the participants in the current study, the length and content of educational training are not sufficient for teachers to acquire EFL knowledge and apply it in real-life situations. In the current study, 73% of the teachers clearly stated that the focus of their educational training was on theory, and that only experience gave them the fundamental knowledge needed to teach the English language effectively. These results indicate that the educational training currently offered in Saudi Arabia may be sufficient to prepare individuals to pass vocational tests, but not adequate enough to equip them with the necessary knowledge and skills to teach in a real-life situation. Some of the issues that emerge from this finding relate specifically to the gap between theory and practice in teacher education. Teacher preparation programmes should be re-evaluated to determine the effectiveness of educational training, then be redesigned to maximise the benefits.

6.5.3 *Role of Academic Discipline in Development of EFL Teacher Professional Knowledge*

No statistically significant relationship was found between EFL knowledge and academic discipline. This negative finding in the quantitative data of the study is consistent with the qualitative results: in interviews, 19 out of the 30 in-service teachers clearly stated that the source of their EFL knowledge came from experience, not from their previous education. Moreover, some teachers clearly stated that they regretted joining their preparation programmes, because they failed to provide them with sufficient knowledge to effectively teach the English language.

The fact that academic discipline demonstrated no marked difference among the in-service teachers contradicts previous research. For example, Shaqour and Al Saadi (2015) found statistically significant differences between the average knowledge of teachers who had studied different academic disciplines. Goldhaber and Brewer (2000) also found that teachers' academic discipline had a statistically significant positive impact on students' test scores. Finally, Al-Nouh et al. (2014) reported significant differences in teachers' knowledge and skills, in relation to their undergraduate major.

This finding is interesting, but not particularly surprising, given the nature of English academic disciplines in Saudi Arabia. The different academic discipline programmes offered in the country do not prepare teachers to teach, because they lack early exposure to practical classroom experience, and the majority of the content is theoretical (Al-Seghayer, 2015).

6.5.4   *Role of Level of Education in Development of EFL Teacher Professional Knowledge*

The present study found significant differences in professional EFL knowledge based on the teachers' educational level. Teachers with a BA had significantly higher scores than those with an MA or PhD. No significant difference was found between individuals with an MA and those with a PhD. In public education, from elementary to secondary school, all teachers are Saudis, including the English language teachers. The academic qualifications required to teach in Saudi schools varies by level of education. In the past, a two-year teaching diploma from Teachers College qualified teachers to instruct in elementary and middle school, while a bachelor's degree was the minimum qualification required to teach English in

secondary schools. However, the government now seeks to ensure that all teachers have at least a bachelor's degree in any English language academic discipline, such as English language literature, English language translation, linguistics, applied linguistics, TESOL, and curriculum and instruction (Alfahadi, 2012). Moreover, in-service teachers have the opportunity to complete their higher education in Saudi universities or in universities abroad, to obtain qualifications such as bachelor's, master's, or doctoral degrees. However, such a process is very complicated and is only available to some outstanding teachers. According to the latest report of the Education Evaluation Authority Annual Report(2018), only 6% of teachers hold a master's or doctorate degree.

However, studies examining professional EFL knowledge and teachers' educational level have yielded mixed results. The present findings are not in line with those of Ghazala and Muhammad (2004), for example, who found statistically significant differences in teachers' pedagogical and assessment knowledge based on educational level in favour of teachers with the highest qualification. Awajan (1993) conducted research aimed at identifying educational competencies and the degree of their practice among primary school teachers in Jordan. The results of the research showed that there were statistically significant differences attributed to educational level, in favour of those with the highest qualification. On the other hand, other studies have reported no significant differences in knowledge based on teachers' educational levels, such as Momani and Khazali (2010), Al-Najjar (1997), and (Jainini, 2000).

A possible explanation for why teachers with a BA were shown to have significantly higher scores than MA and PhD holders could be the programmatic gap in postgraduate programmes. Postgraduate programmes need to be restructured, with

regard to their duration and the content, to ensure they meet the requirements of the Ministry of Education and the Education & Training Evaluation Commission. Improving the quality of the teacher regarding knowledge base, thinking skills, effective communication and leadership skills may call for changing programmes in some institutions. For example, it may be beneficial to offer a more professional master's programme alongside an academic master's degree that promotes scientific research – highlighting the role of the teacher as a researcher. Another idea would be to offer more Doctor of Education (EdD) programmes, to qualify teachers for educational leadership roles.

A final possible explanation for the data could be that teachers with lower educational qualifications tend to overestimate their knowledge, because they are unaware of their lack of knowledge. This is known as the Dunning-Kruger effect.

6.5.5 *Role of School Type in Development of EFL Teacher Professional Knowledge*

A statistically significant difference in professional EFL knowledge was found among in-service teachers based on school type. Teachers in government schools evaluated their knowledge of assessment, pedagogy, students, technology, and language proficiency higher than teachers working in private schools. These results are consistent with studies by Abdullah (2020), who found that English language teachers in public schools had greater pedagogical knowledge than those teaching in the private sector.

A possible explanation for the difference observed between in-service teachers in government and private schools may be the prevailing view in Saudi society regarding teaching positions in private schools. Saudi teachers perceive

teaching at private schools as a temporary stage, while waiting for a permanent, more secure teaching position in the government sector.

Many Saudi university graduates start their teaching careers in private schools, due to a lack of teaching positions in government schools. This allows them to gain a certificate of experience that increases their chances of employment in government schools. The relatively easy hiring process in private schools also attracts new graduates. However, Saudi private school teachers face several issues that may contribute to a low level of EFL knowledge, such as lack of job security, heavy teaching schedules and administrative work, and longer working hours with a lower salary, compared to teachers in government schools. Together, these factors could negatively affect private school teachers' motivation to pursue in-service training.

6.5.6   Role of School Stage in Development of EFL Teacher Professional Knowledge

Studies reported in existing literature have disagreed over the relationship between school stage and professional EFL knowledge. The current study found that school stage had no significant relationship to teacher knowledge base. This finding is inconsistent with that of Depaepe et al. (2015), who reported secondary school teachers as having significantly higher content knowledge than elementary teachers. Alharbi (2020) found significant differences among teachers' knowledge levels based on school stage, in favour of secondary school teachers. Similarly, Zhang and Burry-Stock (2003) investigated the assessment knowledge of teachers in different school stages using a self-evaluation tool. They also found that secondary school teachers had significantly higher assessment knowledge.

The OECD's (2018) report highlighted the differences in the structure and content of teacher education programmes for primary and secondary school teachers, which could explain different knowledge levels:

> While most OECD countries require both primary and secondary teachers to hold a similar tertiary qualification, a larger share of primary teachers' education is dedicated to pedagogical and practical training than lower secondary teachers. This may leave primary teachers insufficiently trained in the content they are expected to teach and lower secondary teachers underprepared for the daily practice of teaching (p.2).

However, this is not the case in Saudi Arabia, where the structure and content of teacher education programmes are the same for all teachers. There are no differences in teacher preparation programmes or in-service training based on school stage. According to The Educational Employment Regulation and Policy in Saudi Arabia (2020), prospective teachers are assigned to different schools based on demand. Teachers are distributed among the educational stages by the school administration according to need. The stage taught could change in the future, depending on the school's need. Therefore, such a random process of allocation could explain the results of the current study.

6.5.7 *Role of Teaching Experience in Development of EFL Teacher Professional Knowledge*

The present study found significant differences in EFL knowledge based on teaching experience. Novice teachers evaluated their knowledge higher than experienced teachers did. Statistically significant differences were also observed between levels

of knowledge in the areas of assessment, content, students, curriculum, discourse, and context. It is interesting to note the gap between novice teachers and experienced teachers regarding technology and technology integration knowledge. In the current study, novice teachers were more knowledgeable and willing to utilise new technology to improve students' performance. For example, P16, who is a novice teacher, said, "more experienced teachers in my school ask for my help when using technology". On the other hand, the majority of experienced teachers relied on more traditional educational technology, such as overhead projectors, and expressed their reluctance to implement advanced technological tools.

The outcome of the current study regarding EFL knowledge level and teaching experience is contrary to that of Alharbi (2020), who investigated the degree of teaching knowledge in Saudi EFL teachers. Alharbi found no statistically significant differences among teachers in the degree of technological, pedagogical, and content knowledge attributable to their years of experience. Alyafaei and Attamimi (2018) suggested that a teacher's experience does not impact on their willingness to adopt new technology. With regard to teachers' beliefs about the use of technology in particular, Kimmons and Hall (2018) found that teachers' beliefs and values were congruent with their use and integration of technology in the classroom. They also found that teachers who used technology on a personal level were more than likely to employ technology to improve instruction (Kimmons & Hall, 2018). Al-Nouh et al. (2014) reported significant differences in teachers' knowledge and skills in relation to their teaching experience.

There are several possible explanations for this result in the current study. One is the lack of adequate in-service training programmes. The majority of participants reported a lack of professional development opportunities. Spending

years in the profession with limited training and a limited selection of topics that do not serve teaching needs negatively affected teachers' knowledge and practice (Alzahrani, 2021). The problem may be exacerbated by the introduction of the new educational reforms in Saudi Arabia, leading to curriculum change and technological advancement and innovation in education. This is supported by Mohan (2016), who found that experienced teachers need training on topics such as new policies and reforms, community partnership, and the use of the latest technology in student learning and instruction. Ferreira and MacDiarmid (2019) also reported similar results emerged from focus groups and individual interviews. The teachers reported a lack of formal training and education.

Another possible explanation may be that novice teachers tend to overestimate their knowledge and teaching abilities, due to a lack of knowledge (Luo et al., 2020). Furthermore, experienced teachers are more cautious about rating their knowledge and teaching abilities (Zhao et al., 2016). These results match those observed in earlier studies, mentioned in the systematic review of 53 English language studies conducted by Mahmood (2016), where he collected empirical evidence on the existence of the Dunning-Kruger Effect in the area of English language studies. Participants of low ability inaccurately rated themselves higher than average, because they were unaware of what they did not know (Kruger & Dunning, 1999). They did not have the knowledge and skills to assess their capability and identify their lack of ability (Turk, 2020). Davari et al.(2017), who investigated the knowledge of non-native novice and experienced Iranian English language teachers using a self-assessment questionnaire, found that novice teachers tended to overestimate their English-teaching ability and knowledge. Zell and

Krizan (2014) stated that "existing self-evaluation research suggests that overrating may be more prevalent than underrating" (p,181).

The current study also revealed that novice teachers favour government-directed professional development (PD), and especially face-to-face training, while experienced teachers prefer self-directed online educational methods. It is difficult to explain this result, but it might be related to context. Due to their lack of knowledge and experience, novice teachers do not know where and how to seek help, so they wait for guidance from the Ministry of Education in the form of a list of training courses. Therefore, they prefer government-directed educational methods with a particular preference for a face-to-face approach. On the other hand, experienced teachers' preference for self-controlled educational methods could be explained by the fact that the training course offered by the Ministry of Education does not match their needs (Al-Seghayer, 2011). These findings raise important questions regarding the nature and extent of professional EFL knowledge and professional development opportunities in Saudi Arabia. The findings can help develop effective programmes that support EFL teachers and provide them with the required knowledge and skills based on their needs.

6.6   Professional EFL Knowledge Gap

The current study's data revealed that in-service teachers reported that they experienced difficulties in teaching English, due to a lack of professional knowledge. The quantitative results of the TKT also revealed a low level of knowledge, indicating a gap in pre-service teachers' knowledge. The qualitative data supports the questionnaire results, wherein participants reported a lack of

professional EFL knowledge in seven of the nine domains previously identified. The gaps were in the domains of language proficiency, pedagogy, students, technology, content, curriculum, and context. None of the teachers reported having any gaps in assessment and discourse knowledge.

The gaps in the teachers' professional knowledge base corroborate the findings of a great deal of research documenting gaps in professional EFL knowledge in Saudi Arabia (e.g. Al-Hazmi, 2017; Al-Seghayer, 2017; Alharbi, 2020; Almazroa, 2020; Alrashidi & Phan, 2015; Ashraf, 2018; Barnawi & Al-Hawsawi, 2017; Fareh, 2010; Hestness et al., 2018; Khan, 2012; Mahboob & Elyas, 2014). These studies all agreed that the low level of professional EFL knowledge is alarming and requires immediate intervention from the Ministry of Education.

Al-Hazmi (2017) investigated the current issues in English language education in Saudi Arabia. One of the issues he highlighted was the lack of an established EFL knowledge base, which led to a weak foundation and possible knowledge gaps for any preparation programmes or professional development training. Al-Hazmi's (2017) work reflects that of Al-Seghayer (2017), who also emphasised that inadequate teacher preparation programmes and professional development failed to provide teachers with sufficient professional EFL knowledge. In a previous study, Al-Seghayer (2011) described preparation programmes as "inadequate with regard to disciplinary knowledge, pedagogical content knowledge, and technological pedagogical knowledge" (p.22). Some teachers in the current study talked about using certain EFL teaching methods "without knowing [their] name". This lack of metalinguistic knowledge could be attributed to the teachers' low language proficiency. It also aligns with earlier observations of strong

correlations between metalinguistic knowledge and second language proficiency level (Hu, 2010).

Gaps in teachers' knowledge may limit the impact of other educational inputs and negatively affect student learning (Metzler & Woessmann, 2012). For example, a lack of language proficiency and a limited vocabulary could force English language teachers to rely on the Arabic language during English class, causing the students to lose out on valuable learning opportunities (Dmour, 2015). Another example would be the lack of technical knowledge. The most commonly cited reason for the lack of technology implementation in the classroom is inadequate teacher preparation and professional development and training (Johnson et al., 2016). Currently, educational technology is a very important part of any lesson, especially in the EFL classroom. Due to a lack of equitable access to technology, classrooms could be the only window for some students to enhance the relationship between foreign cultural learning and language competency (Alshenqeeti, 2016). Insufficient knowledge of technology could also negatively affect teachers' confidence, leading them to limit their use of technology (Hughes, 2005).

This issue is often exacerbated in a technically advanced world, where students "are raised in an environment saturated by computer technology" (Johnson et al., 2016, p.24). This point was raised by five teachers in the current study. For example, M2 said that she "[felt] embarrassed when [she called] one of [her] students to fix the smartboard". Another teacher also talked about the same problem, stating that she "[needed] to improve [her] knowledge because the students at this age, God bless, are ahead of us with technology such as mobile phones" (P7). In order to develop teachers' knowledge of technology to a sufficient level, it is

essential that teachers' confidence be raised through training and continuous support (Johnson et al., 2016).

Another reason for the lack of knowledge of technology could be teachers' attitudes and beliefs regarding technology in education. The teachers' perception of the effectiveness of technology in classrooms could have a significant effect on their knowledge and implementation of it (Ghavifekr & Rosdy, 2015). Three teachers in the current study maintained that using technology was not effective with large classes, that it was a waste of time, and that it added more responsibilities on top of their already busy day. Therefore, they felt that they did not need to further their knowledge. This finding conflicts with those of Zehra and Bilwani (2016), who reported that teachers said that technology "save[s] time and hassle and relieves their burden, and is not an added burden to their already hectic lives" (p.13).

Another possible reason for gaps in teachers' knowledge may partly be explained by the new educational system reforms in Saudi Arabia. The introduction of new educational technologies and a new English language curriculum, without any preparation or training, could contribute to the knowledge gap. P7 commented, "sometimes we do not know anything about the new changes until the first week of school, just like the students" (Interview,7). The feeling of being ill-equipped, in terms of knowledge and skills, to implement the policy changes was reported by many participants in the current study. Continuous change without prior knowledge creates an unstable learning environment for teachers and students alike, which could negatively affect the learning process (Mironov, 2013). Alghamdi (2019), who explored the recent educational reforms in Saudi Arabia, found that a lack of training and adequate technical support, along with limited participation of teachers in curriculum development, all contributed to teachers' knowledge gaps.

A common objection of many teachers in the current study was their lack of voice in the changes, which led them to feel forced to apply change without believing in it. For example, P14 expressed his frustration, saying, "no one asked us what we think. We are the ones inside the classroom in the real world. All decisions come from people [sitting around] a table in an office in the Ministry" (Interview,14). A similar point was raised by Mironov (2013), who discussed the challenges plaguing Russia's attempts to implement educational reform due to a lack of discussion about the new policies with the public and community educators. To achieve the objectives of any reform, teachers should be part of the design, implementation, and evaluation process (Terhart, 2013).

A possible reason for not reporting any knowledge gaps in assessment knowledge could be explained by examining the educational system is Saudi Arabia. As mentioned in section 6.3.3, the Ministry of Education is solely responsible for creating the assessment policies and criteria. For that reason, teachers might not feel the need to know more about something they will have handed to them with instructions to follow strictly.

Not reporting any knowledge gaps in discourse knowledge could be due to the confusion between the terms 'discourse knowledge' and 'language proficiency'. As Andrews (2003) argues, the intertwined terminology in the field of EFL, especially when referring to teacher language knowledge and ability, is confusing and obstruct the understanding of the research. Moreover, teachers in the current study did not report a gap in discourse knowledge because they may not have recognised its importance.

6.7   Preferred Educational Methods of In-Service EFL Teachers

The qualitative data in the current study revealed that 18 out of 30 in-service teachers preferred formal educational methods to acquire knowledge, while five teachers chose informal educational methods and seven reported using both. The teachers also distinguished between government-directed educational methods and self-directed educational methods, preferring the latter. The data showed that teachers preferred face-to-face training, online study, school visits, collaborative learning, Khbrat, and self-education.

These findings are in line with those of previous studies of teachers in the EFL context. There are similarities between the attitudes expressed by the teachers in this study and those described by Alshaikhi (2020), who found high preferences for formal self-directed learning over government-directed educational methods. Alshaikhi (2020) also named networking, collaboration, reflection and collegiality as some of the main features of self-directed professional development reflected in teachers' current practices. Similar results were reported by Yurtsever (2013), who investigated English language teachers' beliefs on professional development models in Turkey. His quantitative study in Turkey revealed a high preference for self-directed models. Professional networks for sharing and developing expertise was also reported by Ferreira and MacDiarmid (2019) as one of the preferred forms of professional development used by teachers.

In the Saudi context, formal professional development consists of training activities that are organised and scheduled by the government. The government-directed PD mainly utilises face-to-face instruction, delivered at specific times and locations (AL-Hazmi, 2003). Government-directed PD mostly takes place during work hours throughout the academic year, at regional education offices or training

centres under the supervision of The National Training and Evaluation Centre. Such programmes present time and location conflicts and are often criticised for their lack of relevant content, professional trainers, and high-quality materials (Omar, 2014). Despite these problems with the government-directed PD, teachers continue to attend because it is certified, and because they are required to achieve a minimum number of training points each academic year. The total points are then used in promotions or in the evaluation of transfer requests (Ministry of Education, 2020). In addition to the reasons mentioned above, three participants in the current study added that they would attend government-directed PD to escape from the hectic teaching day. For example, P9 said, "[it is] nothing new. It is the same list of topics every year. Sometimes I register and go just to take the day off. Sometimes the head teacher or my supervisor insists on me going. I do not benefit from it at all." P12 added, "it is not fair. I go and work hard for nothing. We are treated the same compared to the teachers who do not attend. No reward, incentive, or appreciation."

These problems with traditional government-directed PD have encouraged officials to consider diversifying government models and integrating new technologies in PD. In 2018, the Ministry of Education launched the Summer Teacher Training Platform, by which the ministry offers many PD opportunities and training programmes during the summer holidays (Ministry of Education, 2018). Such programmes are optional for in-service teachers and obligatory for newly-appointed ones. The Ministry announced that the training programmes were designed according to the teachers' training needs, offering an opportunity for distinguished and experienced teachers to provide training courses that would be added to their portfolio. Another attempt to diversify the training methods is Khbrat, where teachers spend a year in a native English-speaking country, as part of an

immersive training program. To date, the US has received more than 80% of the program's trainees (Saudi Arabian Cultural Mission to the US, 2019). According to the teachers in the current study, the programme has a very detailed and competitive selection process, as well as age restrictions and a limited number of places, due to large applicant numbers. Al-Seghayer (2014) proposed a similar programme for the pre-service teachers, stating that:

> A possible way to help Saudi students/English teachers to reach a threshold proficiency level in English is to require them to spend time in an English-speaking country during the pre-service preparation programme part of the bachelor's degree programmes. Creating joint university degree-granting programmes with foreign universities would make this proposal even more beneficial (p.147).

The high cost of the programme is one of the impediments to Al-Seghayer's (2014) proposal. According to the Royal Embassy of Saudi Arabia Cultural Bureau, the tuition fees and living expenses of studying the English language for one academic year in the UK range from 50 to 60 thousand pounds, excluding plane tickets, application fees, and health insurance. Another challenge is the large number of pre-service teachers. In 2018, 7,076 pre-service teachers applied for the TKT in the city of Riyadh alone.

Another challenge is the length of time needed to learn a language. Investigating the relationship between intensive English language study and band score gain on IELTS, Catherine Elder and O'Loughlin (2003) found that a motivated adult learner with access to good learning resources and competent teachers moves up half an IELTS band after 10-12 weeks of intensive study (200-240 hours of instruction). This indicates that students need six weeks to three months for half a

band, and six months to one year for a full band. Collectively, such challenges create practical difficulties for the implementation of such a programme with pre-service teachers in Saudi Arabia.

Despite the tremendous efforts being made by the Ministry of Education in Saudi Arabia, the data in the current study revealed that teachers prefer self-regulated PD for two reasons. The first reason is the freedom of choice, where teachers attend PD based on their own training needs, work schedule, location, and delivery modes. Freedom of choice is one of the main factors influencing the interest of PD among teachers (Yurtsever, 2013). Teachers with more choices also report much higher levels of satisfaction with professional development (Bayar, 2013).

The second reason is the teachers' attitudes towards PD activities and trainers. The unsatisfactory level of depth and breadth of activities in PD and the lack of qualified and competent trainers were the teachers' main concerns. The criticism of the formal government-regulated PD and the preference for self-regulated PD was also noted by Assalahi (2016). Using semi-structured interviews, he investigated TESOL teachers' perspectives on their attitudes towards and engagement with professional development in Saudi Arabia. Assalahi's (2016) study revealed that the current professional development led teachers to view PD as "policed and top-down within a wider culture of compliance which leads them to feel professionally compromised and lacking in voice and autonomy" (p.90). Similar findings were reported by Alshaikhi (2020), who explored Saudi EFL teachers' perspectives, attitudes, and experiences with regard to professional development. The semi-structured interviews and reflective essays revealed that many teachers had high preferences for self-directed learning over institutional learning. Moreover, Bayar (2013) explored the relationship between internal and external factors and

teachers' participation in professional development programmes in Turkey. Teachers' attitudes towards PD activities, time, and funding, in addition to colleague influence, affect teachers' participation in PD activities in statistically significant ways.

The availability of a technology-based training mode could explain the teachers' preference for self-directed learning. According to Arraya and Porfírio (2017) there are two types of technology-based learning: "First, synchronous learning uses instructor-led facilitation. Asynchronous learning is self-directed, and there is no instructor facilitating the course." (p.357). Both types of learning were used by the teachers in the current study to overcome the aforementioned difficulties with PD. Additionally, technology-based training offers the possibility of collaboration, peer learning, and networking among communities of teachers in Saudi Arabia and around the world, which was very important for the teachers in the current study. McAleavy et al. (2018) argued that peer learning could be improved by professionals' contributions, which could be facilitated by technology. Technology integration in PD will introduce various means of collaborative learning and networking, leading to better thinking, teaching, and training (Drexler, 2010).

Another reason that could explain the teachers' preference for self-regulated PD is their attitude towards PD trainers. Based on previous experience, teachers perceived government-regulated PD as being poorly designed and lacking qualified and competent facilitators, who had no teaching experience. Such negative perceptions could lead to a lack of trust in the content being delivered. For example, F9 commented on what she deemed to be unqualified trainers, saying that they were "unreliable sources of information". Unqualified teacher trainers were named as one of the barriers negatively affecting PD (Assalahi, 2016a; Badri et al., 2016)

Despite their dissatisfaction with the current PD offered by the Ministry of Education, teachers were aware of its potential as a tool to improve their teaching knowledge and skills, which explains the clear preference for self-regulated PD. These findings raise intriguing questions regarding the nature and extent of the professional development opportunities in Saudi Arabia. These findings can help develop effective programmes that support EFL teachers and provide them with the necessary knowledge and skills, based on their training needs. Policymakers could benefit from the findings of the current study to help restore trust in government-regulated PD, by designing relevant and interactive PD opportunities delivered by highly qualified trainers with teaching experience and sustained over time. The data clearly shows the importance of integrating technology in PD, in order to overcome obstacles such as cost, time, capacity, and location.

6.8   Chapter Summary

This chapter discussed the results obtained from the TKT, self-evaluation questionnaire and interviews with teachers, to establish the levels of EFL professional knowledge for both pre-service and in-service teachers in Saudi Arabia. The professional EFL knowledge base of English language teachers in Saudi Arabia was found to be generally low for pre-service and in-service teachers alike. The teachers evaluated their knowledge of technology the highest, followed by knowledge of pedagogy, content, discourse, curriculum, context, language proficiency, assessment, and knowledge about students. The comparison of pre-service and in-service professional EFL knowledge revealed that language proficiency was the domain that received the highest points, followed by curriculum

knowledge, content knowledge, and pedagogical knowledge. An opposite pattern was found with the in-service teachers. The comparison also showed that male teachers and teachers with no educational training tended to overestimate their knowledge level.

Furthermore, the teachers in the current study reported having knowledge gaps in language proficiency, pedagogy, students, technology, content, curriculum, and context. None of the teachers reported having any knowledge gaps in assessment and discourse knowledge. A marked preference for self-directed education methods was identified among Saudi teachers.

Finally, with regard to demographic variables in the current study, there were statistically significant differences in the professional EFL knowledge among Saudi English language teachers, based on their gender, educational training, educational level, school type, and teaching experience. However, academic discipline and school stage were not statistically significantly associated with EFL professional knowledge.

The next chapter, which concludes the thesis, will highlight the study contributions, implications, and limitations, as well as provide important recommendations for future research.

7 Conclusion, Implications, Limitations and Directions for Future Research

7.1 Introduction

This chapter concludes the current study by introducing its key elements. It begins by presenting the aims of the study and the research questions. Next, the study design and its main findings are summarized and then implications concerning teacher preparation, professional development, and educational research are discussed. Finally, limitations are highlighted, and directions for future research are identified.

This thesis aimed to investigate the EFL professional knowledge of pre-service and in-service English language teachers in Saudi Arabia, while also seeking to identify their knowledge gaps and preferred educational methods. Moreover, this study explored the relationship between EFL professional knowledge and various demographic variables, such as gender, educational level, academic discipline, educational training, school type, school stage, and teaching experience.

A mixed-methods research approach in the form of an explanatory sequential design was used to achieve the aims of the study. The participants were 1,916 pre-service teachers, 556 in-service teachers, and 30 in-service teachers who were contacted for follow-up interviews in Riyadh, Saudi Arabia. The Teacher Knowledge Test results measured the pre-service teachers' EFL professional knowledge level and assessed the impact of gender and educational training on professional knowledge. Online self-evaluation questionnaires were also used to measure the in-service teachers' knowledge levels and to assess the impact on the

demographic variables. Semi-structured interviews with in-service teachers were conducted to explore these results in more depth.

7.2 Types and Levels of EFL Professional Knowledge of Saudi English Teachers

The present study found a low level of EFL professional knowledge among the pre-service and in-service teachers, with knowledge gaps related to language proficiency, pedagogy, students, technology, content, curriculum, and context. In addition, statistically significant differences in the professional EFL knowledge were identified among Saudi English language teachers in terms of their gender, educational training, educational level, school type, and teaching experience. However, academic discipline and school stage were not statistically significantly associated with EFL professional knowledge. Self-directed education was identified as the preferred educational method for Saudi teachers.

In terms of the **level of EFL professional knowledge of Saudi EFL pre-service teachers**, the results of the Teacher Knowledge Test indicated a low level of professional knowledge. The majority of the participants obtained low scores on different parts of the test. The data showed that the pre-service teachers obtained the highest scores in curriculum design, followed by theoretical knowledge, language pedagogy, language proficiency, and theoretical application, respectively.

In terms of the **nine knowledge domains of EFL professional knowledge that Saudi EFL in-service teachers rated as important**, the results from a self-evaluation online questionnaire and semi-structured interviews revealed that knowledge of technology was the most essential domain, followed by pedagogical

knowledge, content knowledge, discourse knowledge, curriculum knowledge, context knowledge, language proficiency, assessment knowledge, and knowledge about students. The in-service teachers stated that their knowledge of technology enabled them to use audio and visual equipment, educational platforms and applications, social media, desktop application programmes, educational applications, and live online tutoring websites. Pedagogical knowledge helped them choose appropriate teaching methods and strategies, design lesson plans, and incorporate higher-order thinking strategies. The teachers stated that knowledge of translation, English language literature, English language skills, and linguistics contributed to their content knowledge. They used their knowledge of context to understand the dynamics and relationships within the classroom, school, home, and society. The teachers' curriculum knowledge facilitated their understanding of Saudi Arabia's curriculum requirements, organisation, and national and international curricula. The teachers' language proficiency enabled them to use the English language both inside and outside the classroom, thereby increasing their vocabulary and fluency. Assessment knowledge assisted the teachers in implementing different classroom assessments, such as formative, summative, and diagnostic assessments. Finally, discourse knowledge helped the teachers start and continue lessons in the English language and facilitated the use of appropriate language in different situations.

Furthermore, seeking to determine the **levels of different types of self-evaluated EFL professional knowledge of Saudi EFL in-service teachers**, the results of the online self-evaluation questionnaire indicated that the EFL professional knowledge level of EFL in-service teachers was low. The teachers' knowledge of technology received the highest rating, followed by their knowledge

of pedagogy, content, discourse, curriculum, context, language proficiency, assessment, and students.

Regarding the **gaps in the EFL professional knowledge of Saudi EFL in-service teachers***,* the in-service teachers' responses indicated knowledge gaps in language proficiency, pedagogy, students, technology, content, curriculum, and context. With respect to language proficiency, the teachers reported a lack of speaking fluency and a limited vocabulary. The gaps in the teachers' knowledge also included such areas as EFL teaching strategies, time and class management, lesson objectives, the new Saudi Arabian curriculum, smartboards, educational platforms, students' motivation, psychological developments, and different learning styles. None of the teachers reported having any knowledge gaps in assessment or discourse knowledge. The knowledge gaps were reasoned to have stemmed from inadequate teacher preparation programmes and limited professional development opportunities.

In terms of the **in-service teachers' preferred educational methods***,* most teachers preferred self-regulated professional development, particularly through face-to-face and online courses. The teachers also preferred practical training, such as school visits and collaborative learning. Finally, the teachers preferred the teacher professional development programme (Khbrat), but this is a highly competitive programme with limited spaces and strict admission requirements.

7.3 Role of Factors in Development of EFL Professional Knowledge of Pre-Service and In-Service Teachers

To understand **the role of gender in the development of EFL teacher professional knowledge***,* the data collected from the Teacher Knowledge Test revealed statistically significant differences in EFL professional knowledge levels between male and female pre-service teachers. The score of the female pre-service teachers was significantly higher than the score of the male pre-service teachers. With respect to the different knowledge domains, female pre-service teachers' knowledge of language pedagogy and curriculum design were significantly higher than the male pre-service teachers' knowledge of language pedagogy and curriculum design. On the other hand, the male pre-service teachers' knowledge of language proficiency was significantly higher than the female pre-service teachers' knowledge of language pedagogy. There was no difference between male and female pre-service teachers' theoretical knowledge and theoretical application.

The data collected from the online self-evaluation questionnaires also revealed statistically significant differences in EFL professional knowledge levels between male and female in-service teachers. Male in-service teachers obtained higher scores than female in-service teachers. With respect to the different knowledge domains, male in-service teachers' knowledge of language pedagogy, curriculum design, knowledge about students, and technology was higher than that of female in-service teachers. There was no difference between male and female in-service teachers' knowledge of assessment, content, discourse, context, and language proficiency.

Educational training played an important role in the EFL pre-service teacher knowledge development. The data collected from the Teacher Knowledge

Test revealed that pre-service teachers who received educational training obtained significantly higher scores than the pre-service teachers without educational training. With respect to the different knowledge domains, the test indicated that pre-service teachers who received educational training had significantly higher scores in language pedagogy and curriculum design than the pre-service teachers with no educational training. On the other hand, pre-service teachers who did not receive educational training have significantly higher scores in theoretical knowledge than the pre-service teachers who received educational training. There were no statistically significant differences in theoretical application and language proficiency.

Educational training did not play an important role in the EFL in-service teacher knowledge development. The EFL professional knowledge of in-service teachers with no educational training was significantly higher than that of in-service teachers who had educational training. The data also showed that the pedagogical knowledge, content knowledge, curriculum knowledge, and technology knowledge of the in-service teachers without educational training were significantly higher than those of the in-service teachers with educational training. The differences in assessment knowledge, knowledge of students, discourse knowledge, context knowledge, and language proficiency were not statistically significant.

Educational level was also important for the development of the EFL teacher knowledge of both pre-service and in-service teachers. Teachers with BA degrees had higher scores than teachers with MA or PhD degrees. No statistically significant differences were found between teachers with MA and PhD degrees. Further, EFL in-service teachers with BA degrees had significantly higher technology and context knowledge levels than teachers with MA degrees. There

were no significant differences in content knowledge, assessment knowledge, pedagogical knowledge, knowledge about students, curriculum knowledge, discourse knowledge, or language proficiency. Similarly, EFL in-service teachers with BA degrees had significantly higher technology knowledge levels than those with PhD degrees. There were no significant differences in assessment knowledge, pedagogical knowledge, content knowledge, discourse knowledge, context knowledge, or language proficiency.

The academic discipline was not found to play a significant role in EFL professional knowledge development. The data indicated no statistically significant differences in teachers' EFL knowledge according to academic discipline.

In terms of **the role of school type in the development of EFL professional knowledge**, a statistically significant relationship was found. Specifically, teachers in government schools had statistically higher EFL professional knowledge than teachers in private schools.

No relationship was found between school stage and the teachers' development of professional knowledge.

Teaching experience was an important factor in knowledge development. The EFL professional knowledge of novice teachers was significantly higher than that of experienced teachers. Further, the assessment knowledge, content knowledge, knowledge about students, curriculum knowledge, discourse knowledge, and context knowledge of the novice in-service teachers were significantly higher than those of the experienced in-service teachers. The differences in pedagogical knowledge, technology knowledge, and language proficiency were not significant.

7.4   Implications for EFL Teacher Education

The study's findings have several implications for EFL teacher education. First, the findings could contribute to the design of comprehensive teacher preparation programmes for prospective EFL teachers, balancing theory and practice. Teacher educators could use the research findings concerning teachers' knowledge to create programmes that focus on the knowledge domains necessary for English language teachers in the EFL context. Teacher educators could use the current study's findings to improve teacher education programmes, by bridging the gap between what is being taught and learnt in teacher preparation programmes and real teaching situations. Raising awareness among teacher educators of the contexts of teaching practice in schools and encouraging reflection on their courses is one way to link educational theory and classroom practice, to best meet the needs of pre-service teachers. Providing future teachers with sufficient knowledge can support mastery of competencies and ensure positive learning outcomes for students (Greenhill, 2010). Thus, policymakers and teacher educators could use the findings of the current study to gain insight into the opportunities and limitations of the Teacher Knowledge Test and to reform the ways in which pre-service teachers' knowledge is assessed. Current assessment measures do not cover the various knowledge domains needed by future EFL teachers. It is therefore recommended that knowledge assessment should be holistic and relevant to the current and future needs of pre-service teachers. For example, EFL education programmes should ensure employing technology in the educational process through the use of different teaching media and techniques that suit the educational process in planning, implementation, and evaluation. EFL education programmes should include materials on how to contribute to improving learning and providing an attractive, interactive learning

environment and ensuring the effective use of evaluation strategies and tools at various stages. EFL education programmes should provide the teachers with the ability to deal with national and international tests and understand the components and standards of national and international tests. Moreover, EFL education programmes should include topics that help the teachers to enhance the skills of critical and creative thinking, problem-solving, cooperative work among students, and effective communication, in addition to cognitive skills.

Furthermore, the analyses of the self-evaluation questionnaire and the semi-structured interviews revealed useful data that teacher educators and policymakers could leverage in their professional development efforts to improve teacher knowledge and performance in the classroom. The current study revealed a low level of EFL professional knowledge, knowledge gaps, and a variety of preferred educational methods among in-service teachers. These findings could be used to design effective in-service training opportunities tailored to teachers' needs. Diversifying training delivery modes and topics could increase teachers' attendance. Networking and collaborative learning could be fostered through school/university partnerships. As Moolenaar et al. (2012) noted, networking and collaborative learning could help maximise teachers' professional knowledge and performance, leading to continuous development through collaboration with colleagues.

The study data revealed a misalignment between the content of government-directed PD and the actual needs of in-service teachers, making teachers reluctant to attend the training courses. Moreover, the teachers in the current study expressed dissatisfaction with trainers' knowledge and performance, which could affect their attitudes and contribute to the poor attendance seen in continuous PD programmes. These findings could help policymakers and teacher educators restore trust in

government-directed PD programmes. Teachers should be part of the planning process, initial needs analysis, and evaluation phases of any PD program. The needs analysis phase should include identifying goals, desired outcomes, gaps, and preferred educational methods. Furthermore, teachers should evaluate the content and the trainer at the end of each training program.

7.5   Implications for Curriculum Development

The current study revealed that some of the Ministry of Education's policies and regulations could be limiting teachers' knowledge – a perspective expressed by several teachers. Teachers should be made responsible for interpreting the Ministry of Education's curriculum into teachable forms for the classroom (Wallace & Priestley, 2017). In this sense, a successful curriculum should first pass through the teachers' knowledge filter or lens (Verloop et al., 2001). For this reason, it is suggested that EFL teachers participate in the design of school curricula, to incorporate their points of view and ensure effective curriculum implementation. In its curriculum decisions, the Ministry of Education must be careful to avoid any incompatibility between knowledge, policies and regulations, and the desired learning outcomes.

Educational reform of curricula in schools, pre-service training programmes, and in-service PD should also stem from explorations of teachers' knowledge. In other words, teachers' contributions to curriculum design should be prioritised. The current study has provided a platform for teachers' voices to be heard by state policymakers. With sufficient professional knowledge, teachers can mould the

curriculum to fit the context of the teaching/learning process and best fit students'
learning needs.

7.6   Contributions of the Current Study

The present study claims to have made a number of theoretical, methodological and
pedagogical contributions to the research on TESOL and teacher education. This
thesis constitutes an original contribution to the international research knowledge
base. The contribution of the current study with regard to the theoretical framework
of EFL professional knowledge could be used to develop teacher education and
professional development in different contexts. Another contribution is the design of
the data collection instrument. The self-reported questionnaire could be used by
other researchers to investigate teacher knowledge around the world
Due to the lack of a unified framework of EFL professional knowledge base, the
present study synthesised previous work in the field of teacher knowledge and then
created a modified teacher knowledge theoretical framework, to be used in the
investigation of EFL teacher professional knowledge. The current study also used
the framework to create a questionnaire to measure the EFL teacher professional
knowledge (see also the literature review, section 3.5).

The findings of the current study contribute to a clearer understanding of the
importance of context, when designing any teacher preparation programmes.
Knowing the target audience is one of the pillars of a successful programme whose
content is tailored to student needs. It is also imperative that informed decisions be
made to modify the program's content to align with any future trends. Aligning with
research on teacher knowledge, the current study suggests some implications for

teacher preparation programmes, and identifies in detail the fundamental weaknesses and deficiencies therein. Such important information could be beneficial for pre-service teachers, their educators, and policymakers. Pre-service teachers could use the findings of the present study to increase their awareness and understanding of professional EFL domains. This could, in turn, help them to create a development strategy that focuses on their specific development needs, and to begin addressing them. Teacher educators and policymakers could use the findings of the study to design effective teacher preparation programmes.

The findings of the current study can help teacher educators and policymakers understand the role and nature of EFL teachers' content knowledge. In order to help English language teachers succeed in their classrooms, a sufficient and robust foundation in content knowledge should be available to them during their preparation programmes and in-service training.

7.7   Limitations and Directions for Future Research

The current study has several limitations. Firstly, the access to data from the Teacher Knowledge Test was limited. As mentioned in the methodology chapter, the National Centre for Assessment and Evaluation is responsible for many national tests, including the vocational test for teachers. The Ministry of Education uses the results of this test during its teacher hiring process. The Centre offers researchers access to the tests' data sets, provided they submit an application explaining the purpose of the study and the data required and also agree to protect both the data and the participants' privacy. My application request included four variables: the participants' gender, educational training, level of education, and academic discipline. Though I provided all the required documents, presented the study's

ethical approval, and ensured the confidentiality of the participants, the Centre only provided data on the participants' gender and educational training. A more complete data set including level of education and academic discipline could widen our understanding of pre-service EFL professionals' knowledge. Moreover, comparing data on pre-service and in-service teachers' education levels and academic disciplines could support a more in-depth and comprehensive understanding of their EFL professional knowledge. Additionally, based on the EFL professional knowledge framework, only five out of nine knowledge domains are reflected on TKT. To make the TKT a more comprehensive exam, the test should be designed to cover all knowledge domains.

Secondly, the study population was limited to the city of Riyadh and cannot be considered representative of Saudi Arabia. Gathering data from a large and representative sample with a high response rate was challenging in Saudi Arabia, due to the country's large geographical area. Saudi Arabia is divided into 13 administrative regions, and each region is divided into a different number of governorates. Any effort to cover such a large area and target a population representative of the whole country would have faced challenges. Thus, the decision to limit the study to the city of Riyadh was done for both practical and economic reasons. However, as the number of English language teachers in Riyadh reached 4,737 in the 2018 to 2019 academic year, and the online self-evaluation questionnaire response rate was 566, the research results can be considered generalisable within the study context.

Thirdly, while the use of self-assessment has considerable promise in gathering valuable data, it is not without potential problems and limitations (Harris & Brown, 2018). Despite the various benefits of teacher self-assessment identified

in previous research, teacher assessments of their own knowledge may not always be accurate (Borg & Edmett, 2018). The use of self-assessment to evaluate knowledge level introduces subjectivity, since teachers may not be honest or may over-evaluate or under-evaluate their own knowledge. It should be noted that the quantitative data from the in-service teachers are subjective. Subjective data are information reported by teachers regarding their own knowledge level as the data collection method is a self-report measure based on questionnaires

Moreover, questionnaire length also could affect data quality (Lavrakas, 2008). Though the online questionnaire used in the current study took approximately 12 minutes to complete, a few teachers commented on the questionnaire's length. Teachers' busy workdays and long teaching hours could be one of the reasons for incomplete responses. Additionally, unfamiliarity with the assessment criteria could negatively affect the accuracy of teacher assessments of their own knowledge.

Fourthly, this study could be affected by cultural and religious limitations. Since the Saudi education system is segregated by gender, it was not possible to access male schools or interview male teachers face to face. However, gender is a key demographic variable in investigating EFL professional knowledge. To overcome this problem, male participants were interviewed over the telephone; however, a disadvantage of this approach is that telephone interviews tend to be shorter than face-to-face interviews (Brick et al., 2007). Moreover, with telephone interviews, the researcher does not have access to information revealed by an interviewee's body language (e.g., agreement, disagreement, or boredom). The lack of physical interaction in telephone interviews made it hard to ensure the attentiveness of the interviewees, which could have affected the flow of the interviews. Moreover, as noted by Benstead (2011), in Middle Eastern and Islamic

countries, a strong correlation exists between social desirability bias and gender, such that male participants' responses to a female researcher tend to be affected by social desirability. Moreover, the researcher's positionality could impose some limitation .To ensure appropriate data analysis and interpretation of results, explicit recognition of the researcher's positionality should be provided. My educational background, training, and employment played a significant role in designing, conducting, and interpreting the data revealed in this study. Bonner and Tolhurst (2002) argued that there are three key advantages of being an insider researcher. First, insider researchers have a greater understanding of the culture being studied. Second, they have the ability to avoid changing the flow of social interaction unnaturally. Third, they have established familiarity with the context that supports reporting and analysing the data. As an EFL student myself, I know some of the obstacles that most of the students in my country struggle with when learning English. My five-year BA in English translation provided me with a sufficient knowledge base in areas such as linguistics and semantics. This knowledge helped me understand why some mistakes are more common among Saudi students. I chose to learn more about English language learning, so I decided to study ESL/bilingual education for my master's. As a teacher educator, I was directly dealing with pre-service and in-service teachers, which gave me a better understanding of the challenges they faced during their education and practice. Nevertheless, I was conscious of the possible disadvantages that might have hindered the conduct of the study and my objectivity in data interpretation. All measures to ensure reliability and validity of data collection and analysis were employed.

7.8   Suggestions for Future Studies

The current study used a mixed methodology approach to investigate teachers' EFL professional knowledge and produce valid and reliable results. Building upon findings of the current research could contribute to the resolution of several challenges in the fields of teacher education and professional development. This section presents suggestions for other researchers who plan to investigate professional teacher knowledge:

- Due to limitations in accessing the Teacher Knowledge Test, the present study did not investigate the impact of education level or academic discipline on the EFL professional knowledge of pre-service teachers. Future researchers might explore such information, by developing different data collection methods to use with pre-service teachers in Saudi Arabia. Expanding the area of comparison between pre-service and in-service teachers would enhance our understanding of the EFL professional knowledge of teachers in Saudi Arabia.

- Future studies of EFL professional knowledge could be conducted in other contexts, locations, and cultures. The current study investigated EFL professional knowledge in Riyadh, the large, advanced, modern capital city of Saudi Arabia. It would be interesting to conduct similar research in large cities from different regions or in rural small cities and towns in Saudi Arabia. Data from other EFL contexts could provide further insight into the topic, and conducting similar studies and comparing results from different EFL contexts could add yet another layer of understanding. Further studies could also be conducted to investigate other languages.

- The current study investigated the EFL professional knowledge base of English language teachers, which is one dimension of the current study's proposed theoretical framework. Future research should investigate other dimensions and pursue an understanding of the relationships among the different dimensions. This would be a fruitful area for further work.

- Further research should examine the links between teachers' knowledge and practice in more detail. Context-sensitive data collection tools should be developed to capture teachers' knowledge in practice.

- A natural progression of this work is to analyse EFL professional knowledge in the higher education context in Saudi Arabia. This study could be replicated with a sample drawn from English language teachers at the university level, and the results of such an extension would help us establish a greater degree of accuracy in our findings.

Appendices

Appendix A

EFL Teacher Preparation Programmes Currently Offered by Universities in Saudi Arabia

University Name	Degree	Programme Title	Total Hours	Courses
Umm Al Qura University	Master's	Curricula And Teaching Methods (English Language)	40	Reading in the Curriculum in the English Language 1 Education Curriculum Teaching Methods of English Language 1 Scientific Research Methods Educational Supervision Developing and Constructing the Curriculum Modern Trends in Teaching the English Language 1 Information and Communication Technology in Education 1 Islamic Fundamentals of Education Teaching Methods of the English Language for Specific Purposes Evaluation of Educational Programmes Teacher Preparation and Development Research Seminar in English Language Curricula 1 English Language Teaching Problems
King Abdulaziz University	Master's	Curricula And Teaching Methods (English Language)	36	English Language Curriculum and Its Instruction in General Education Issues and Field Problems in Teaching the English Language Modern Trends in Teaching the English Language Effective Teaching and Strategies Modern Trends in Curriculum and Instruction Research Methods Curriculum Desigen Educational Statistics Curriculum and Instruction Seminar Thesis

	Master's	Teaching English to Speakers of Other Languages (TESOL)	35	TESOL Methodology Second Language Acquisition Curriculum Design and Development Special Topics in TESOL Teaching Practicum Testing and Assessment Research Methods in TESOL Introduction to Applied Linguistics (Elective) TESOL and Modern Technology (Elective) Approaches to Instruction and Learning (Elective) English Language and Culture (Elective) English for Specific Purposes (Elective) English Grammar and Lexis (Elective) Teaching Reading and Writing (Elective) Teaching Listening and Speaking (Elective) Intensive Conversational English (Elective) History of Teaching English in Saudi Arabia (Elective) Professional Development in English Language Teachers (Elective) Portfolio Development (Elective) Discourse Analysis (Elective) Thinking Skills in EFL Classes (Elective) Contexts and Approaches in TESOL (Elective) Thesis
King Saud University	Master's	TESOL	42	Educational Research Methods Teaching the English Language Advanced English Language Teaching Methods 1 Educational Statistics Curriculum Foundation English Lanaguge Curriculum Design Advanced English Language Teaching Methods 2 Curriculum Design Assessment in Teaching English Computer-Aided Language Learning (CALL)

				Teaching English to Young Learners English Language Teacher Preparation Designing and Developing English Language Curriculum Thesis
Al-Imam Muhammad Ibn Saud Islamic University	PhD	Curricula and Teaching Methods (English Language)	34	Islamic Fundamentals in Education Advanced Research Methods in Education Curriculum Development and Application Educational Systems Advanced Statistics Curriculum Theories Teaching Design Modern Trends in Teacher Preparation Curriculum and Development of Thinking Research Seminar Readings on a Topic Curriculum and Current Issues eLearning Modern Trends in Teaching Methods Comprehensive Exam Thesis
	Master's	Curricula and Teaching Methods (English Language)	42	Education in Saudi Arabia Education in Islam Educational Assessment Islamic Culture Research Methods in Education Statistics The Application of Computers in Education Curriculum Design Curriculum Organisation Educational Technology Curriculum in Saudi Arabia Current Trends in Education Modern Trends in Teaching Curriculum Assessment Research Seminar Thesis
Northern Border University	Master's	Curricula and Teaching Methods (English Language)	40	Research Methods in Education Learning and Teaching Theories Educational Statistics English Language Curriculum in Public Education Readings in English Curriculum

				Issues and Challenges in Curriculum Application of Educational Technology Curriculum Design Teacher Preparation and Development English Language Seminar Curriculum Development Modern Trends in Teaching English Thesis
Taibah University	Master's	TESOL	42	Designing and Implementing Educational Research Topics in Second Language History of the Curriculum Teaching Strategies Contemporary Trends in Teaching Methods Second Language Learners Introduction to Qualitative Data Collection and Analysis Introduction to Quantitative Analysis Language Assessment Seminar in Teaching English as Foreign Language TEFL Researching Second Language Classroom Evaluation of EFL Curricula Principles of Language Learning and Teaching Research Project TEFL Theory and Practice
Altaif University	Master's	TESOL	42	Introduction to Linguistics Applied Linguistics Second Language Acquisition Continuous Professional Development Teaching Methods for the English Language Language Assessment Lesson Planning and Evaluation Teaching English Language and Culture Research in Linguistics English for Specific Purposes CALL Issues in Learning EFL Advanced Practical Training Research Project
Najran University	Master's	TESOL	45	Linguistics Academic Writing Applied Linguistics

				Discourse Analysis English Language and Culture English for Specific Purposes Second Lanaguge Acquisition TESOL Methodology Curriculum Design and Development CALL Research Methods Testing Assessment Topics in TESOL Teaching Practice Research Project
Jeddah University	Master's	Curricula and Teaching Methods (English Language)	36	Models and Strategies for Effective Teaching Modern Trends in Curricula and Their Applications Psychological and Educational Statistics Curriculum and Instructional Programmes Design Research Methods in Education and Psychology Seminar in Curriculum and Instruction English Language Curriculum and Instruction in Public Education Modern Trends in Teaching the English Language Issues and Field Problems in Teaching the English Language Thesis

Appendix B1

EFL Teacher Professional Knowledge Questionnaire – English version

EFL Teacher Professional Knowledge
Dear participant, My name is Norah Alsalamah and I am writing to ask if you are able to take part in the study. What would this mean for you? You will be invited to: Respond to an online questionnaire which will take about 10 minutes. Anonymity The data that you provide (e.g. questionnaire responses) will be stored by code number. Any information that identifies you will be stored separately from the data. No participants will be named in the write up of this study. All data will remain anonymous. Storing and using your data Data will be stored in secure filing cabinets and on a password-protected computer. The data will be anonymised within one month of collection. Anonymised data will be kept for no more than three years after which it will be destroyed. Anonymised data may be used for future analysis and shared for research or training purposes, but participants will not be identified individually. If you do not want your data to be included in any information shared as a result of this research, please do not sign this consent form. You are free to withdraw from the study at any time during data collection and up to one week after the data is collected by contacting me via email. Information about confidentialityThe data collected may be used in an anonymous format in different ways. Please indicate on the consent form with a (yes) if you are happy for this anonymised data to be used in the ways listed. You will be given an opportunity to comment on the written record within two weeks of your interview by emailing the researcher. We hope that you will agree to take part. If you have any questions about the study that you would like to ask before giving consent or after the data collection, please feel free to contact Norah Alsalamah by email (nsia500@york.ac.uk) or the Chair of Ethics Committee via email education-research-administrator@york.ac.uk. Thank you for taking the time to read this information

I agree to participate in the study

○ Yes

○ No

Gender

○ Male

○ Female

Age

○ 23-25

○ 26-30

○ 31-35

○ 36-40

○ 41-45

○ 46-50

○ 50 and more

Education Level

○ Bachelor degree

○ Master degree

○ PhD

Academic Discipline

○ Translation

○ English Literature

○ Education

○ Linguistics

○ Applied linguistics

○ TESOL

○ Other

Educational training

○ Yes

○ No

Type of school currently working in

○ Government

○ private

The stage you currently teaching

○ Elementary

○ Intermediate

○ Secondary

Teaching experience

○ less than one year

○ 1-5 years

○ 6-10 years

○ more than 10 years

Please select the answer that accurately describes you

I have sufficient knowledge to modify target language input to make it comprehensible to students

○ Describes me extremely well

○ Describes me very well

○ Describes me moderately well

○ Describes me slightly well

○ Does not describe me

I have sufficient knowledge to use the English language appropriately and accurately

○ Describes me extremely well

○ Describes me very well

○ Describes me moderately well

○ Describes me slightly well

○ Does not describe me

I have sufficient knowledge about the national English materials (textbooks) in Saudi Arabia

○ Describes me extremely well

○ Describes me very well

○ Describes me moderately well

○ Describes me slightly well

○ Does not describe me

I have sufficient knowledge about how to use social media (e.g. WhatsApp, Twitter …) to communicate with

	Describes me extremely well	Describes me very well	Describes me moderately well	Describes me slightly well	Does not describe me
Students	○	○	○	○	○
Parents	○	○	○	○	○
Other teachers	○	○	○	○	○

I have sufficient knowledge about how to use different learning resources (lesson plans, activities) to meet the curriculum's objectives

○ Describes me extremely well

○ Describes me very well

○ Describes me moderately well

○ Describes me slightly well

○ Does not describe me

I have sufficient knowledge about how to use assessment to:

	Describes me extremely well	Describes me very well	Describes me moderately well	Describes me slightly well	Does not describe me
Motivate learning	○	○	○	○	○
Monitor students' progress and achievement	○	○	○	○	○
Diagnose problems	○	○	○	○	○
Measure students' learning	○	○	○	○	○

I have sufficient knowledge about how to provide the students with constructive feedback

○ Describes me extremely well

○ Describes me very well

○ Describes me moderately well

○ Describes me slightly well

○ Does not describe me

I have sufficient knowledge about suitable teaching resources related to EFL (e.g. lesson plans, activities, stories)

○ Describes me extremely well

○ Describes me very well

○ Describes me moderately well

○ Describes me slightly well

○ Does not describe me

I have sufficient knowledge about how to relate the lesson to the students' personal lives

○ Describes me extremely well

○ Describes me very well

○ Describes me moderately well

○ Describes me slightly well

○ Does not describe me

I have sufficient knowledge about the supplementary materials that can facilitate the understanding of different parts of the curriculum

○ Describes me extremely well

○ Describes me very well

○ Describes me moderately well

○ Describes me slightly well

○ Does not describe me

I have sufficient knowledge about the effects of the 1st language (Arabic) on EFL learning

- ◯ Describes me extremely well

- ◯ Describes me very well

- ◯ Describes me moderately well

- ◯ Describes me slightly well

- ◯ Does not describe me

I have sufficient knowledge about the effects of the 1st language (Arabic) on EFL learning

- ◯ Describes me extremely well

- ◯ Describes me very well

- ◯ Describes me moderately well

- ◯ Describes me slightly well

- ◯ Does not describe me

I have sufficient knowledge to use the English language in

	Describes me extremely well	Describes me very well	Describes me moderately well	Describes me slightly well	Does not describe me
Speaking	◯	◯	◯	◯	◯
Listening	◯	◯	◯	◯	◯
Writing	◯	◯	◯	◯	◯
Reading	◯	◯	◯	◯	◯

I have sufficient knowledge about English language curriculum in Saudi Arabia

○ Describes me extremely well

○ Describes me very well

○ Describes me moderately well

○ Describes me slightly well

○ Does not describe me

I have sufficient knowledge about the EFL

	Describes me extremely well	Describes me very well	Describes me moderately well	Describes me slightly well	Does not describe me
Cognitive system	○	○	○	○	○
Communicative system	○	○	○	○	○
Social system	○	○	○	○	○

I have sufficient knowledge about the possible effect of the home environment (parents' educational level) on learning the English language

○ Describes me extremely well

○ Describes me very well

○ Describes me moderately well

○ Describes me slightly well

○ Does not describe me

I have sufficient knowledge about the sequence of the curriculum

○ Describes me extremely well

○ Describes me very well

○ Describes me moderately well

○ Describes me slightly well

○ Does not describe me

I have sufficient knowledge about the various classroom discourse structures (e.g. initiation- response- feedback IRF)

○ Describes me extremely well

○ Describes me very well

○ Describes me moderately well

○ Describes me slightly well

○ Does not describe me

I have sufficient knowledge about teacher's talk time and students' talk time

○ Describes me extremely well

○ Describes me very well

○ Describes me moderately well

○ Describes me slightly well

○ Does not describe me

I have sufficient knowledge to encourage the students to use educational technology (e.g. electronic dictionaries, smart boards, and iPads)

○ Describes me extremely well

○ Describes me very well

○ Describes me moderately well

○ Describes me slightly well

○ Does not describe me

I have sufficient knowledge to plan learning activities that are relevant to English as a foreign language (EFL):

	Describes me extremely well	Describes me very well	Describes me moderately well	Describes me slightly well	Does not describe me
Learning goals	○	○	○	○	○
Curriculum requirements	○	○	○	○	○

I have sufficient knowledge to develop assessment methods appropriate for learning goals and content.

○ Describes me extremely well

○ Describes me very well

○ Describes me moderately well

○ Describes me slightly well

○ Does not describe me

I have sufficient knowledge about electronic educational platforms (e.g. National educational platform; IeN)

○ Describes me extremely well

○ Describes me very well

○ Describes me moderately well

○ Describes me slightly well

○ Does not describe me

I have sufficient knowledge about the English language

	Describes me extremely well	Describes me very well	Describes me moderately well	Describes me slightly well	Does not describe me
Reading	○	○	○	○	○
Writing	○	○	○	○	○
Speaking	○	○	○	○	○
listening	○	○	○	○	○
Grammar	○	○	○	○	○
Vocabulary	○	○	○	○	○

I have sufficient knowledge about a variety of teaching methods that promote students' engagement in English language learning

○ Describes me extremely well

○ Describes me very well

○ Describes me moderately well

○ Describes me slightly well

○ Does not describe me

I have sufficient knowledge about digital assessment to assess students' development (e.g., online tests)

○ Describes me extremely well

○ Describes me very well

○ Describes me moderately well

○ Describes me slightly well

○ Does not describe me

I have sufficient knowledge about educational blogs (e.g., Edmodo) to:

	Describes me extremely well	Describes me very well	Describes me moderately well	Describes me slightly well	Does not describe me
Hold online discussions	○	○	○	○	○
Share information, document, and files	○	○	○	○	○

I have sufficient knowledge about technological tools to assist my teaching (e.g., PowerPoint)

○ Describes me extremely well

○ Describes me very well

○ Describes me moderately well

○ Describes me slightly well

○ Does not describe me

I have sufficient knowledge about the turn-taking system of classroom interaction

○ Describes me extremely well

○ Describes me very well

○ Describes me moderately well

○ Describes me slightly well

○ Does not describe me

 I have sufficient knowledge to use learning resources to meet the educational objectives

○ Describes me extremely well

○ Describes me very well

○ Describes me moderately well

○ Describes me slightly well

○ Does not describe me

I have sufficient knowledge about effective teaching methods and strategies based on EFL learning theories and research.

○ Describes me extremely well

○ Describes me very well

○ Describes me moderately well

○ Describes me slightly well

○ Does not describe me

I have sufficient knowledge to design learning objectives suitable for the content

○ Describes me extremely well

○ Describes me very well

○ Describes me moderately well

○ Describes me slightly well

○ Does not describe me

I have sufficient knowledge about the fundamentals of linguistics of English language

	Describes me extremely well	Describes me very well	Describes me moderately well	Describes me slightly well	Does not describe me
Phonology (the study of the language at of sound level)	○	○	○	○	○
Morphology (the study of the language at the word level)	○	○	○	○	○
Syntax (the study of the language at the sentence level)	○	○	○	○	○
Semantics (the study of the meaning of the language)	○	○	○	○	○
Pragmatics (the study of the language in different contexts)	○	○	○	○	○

I have sufficient knowledge how to open and end discussions inside the classroom

○ Describes me extremely well

○ Describes me very well

○ Describes me moderately well

○ Describes me slightly well

○ Does not describe me

I have sufficient knowledge about how to create inclusive learning environment based on the students':

	Describes me extremely well	Describes me very well	Describes me moderately well	Describes me slightly well	Does not describe me
Educational background	◯	◯	◯	◯	◯
Learning styles	◯	◯	◯	◯	◯
Language proficiency level	◯	◯	◯	◯	◯
Learning purposes	◯	◯	◯	◯	◯
Students' age	◯	◯	◯	◯	◯
Students' motivation	◯	◯	◯	◯	◯

I have sufficient knowledge about theories of foreign language learning.

◯ Describes me extremely well

◯ Describes me very well

◯ Describes me moderately well

◯ Describes me slightly well

◯ Does not describe me

I have sufficient knowledge about the possible effects of culture and society on EFL learning

○ Describes me extremely well

○ Describes me very well

○ Describes me moderately well

○ Describes me slightly well

○ Does not describe me

I have sufficient knowledge about the possible effects of the educational environment (schools) on EFL learning

○ Describes me extremely well

○ Describes me very well

○ Describes me moderately well

○ Describes me slightly well

○ Does not describe me

 I have sufficient knowledge of EFL teaching strategies (grammar-translation, direct method)

○ Describes me extremely well

○ Describes me very well

○ Describes me moderately well

○ Describes me slightly well

○ Does not describe me

My English language proficiency is

○ Beginner

○ Elementary

○ Intermediate

○ Upper intermediate

○ Advanced

○ Expert

Comments:

Appendix B2

EFL Teacher Professional Knowledge Questionnaire – Arabic version

المعرفة المهنية لمعلمي اللغة الإنجليزية

المعرفة المهنية لمعلمي اللغة الإنجليزية كلغة أجنبية في المملكة العربية السعودية

عزيزي/ عزيزتي المشارك/ـة ، أنت مدعو للمشاركة ببحث علمي لدراسة المعرفة المهنية لمعلمي اللغة الإنجليزية كلغة أجنبية في المملكة العربية السعودية عن طريق تعبئة استبيان إلكتروني يستغرق أقل من 10 دقائق. الرجاء أن تأخذالوقت الكافي لقراءة المعلومات التالية بتأن قبل أن تقررذا كنت تريدالمشاركة أم لا بإمكانك طلب إيضاحات أو معلومات إضافية تخص هذه الإستمارة أو عن الدراسة ككل ترغب في طرحها قبل الموافقة أو بعد جمع البيانات عن طريق مراسلة الباحثة عبر البريد الاكتروني التالي nsia500@york.ac.uk أوعبر توجيه بريد الكتروني لرئيس لجنة البحث العلمي على البريد التالي
الخصوصية سيتم تخزين البيانات التي تقدمها برمز خاص و research-administrator@york.ac.uk أي معلومات تدل على هويتك سوف يتم تخزينها بشكل منفصل عن البيانات. لن يتم تسمية أي مشارك في كتابة هذه الدراسة. ستبقى جميع البيانات مجهولة الهوية. **تخزين و إستخدام البيانات الخاصة بك** سيتم حفظ البيانات في خزائن حفظ الملفات وعلى جهاز كمبيوتر محمي بكلمة مرور. ستكون البيانات مجهولة الهوية خلال شهر واحد من جمعها. سيتم الاحتفاظ بالبيانات مجهولة الهوية لمدة لا تزيد عن ثلاث سنوات بعد ذلك ، سيتم التخلص منها. يمكن استخدام البيانات مجهولة الهوية للتحليل المستقبلي لأغراض البحث أو التدريب ولكن لن يتم تحديد المشاركين بشكل فردي. إذا كنت لا ترغب في تضمين بياناتك التي تمت مشاركتها كنتيجة لهذا البحث ، يُرجى عدم التوقيع على نموذج الموافقة هذا. لديك كامل الحرية في الإنسحاب من الدراسة في أي وقت أثناء جمع البيانات أو بعد أسبوع واحد من جمع البيانات عن طريق الإتصال بالباحثة عبر البريد الإلكتروني.
شكرا لتخصيصك الوقت الكافي لقراءة هذه المعلومات.الباحثة

اذا كنت موافق/ـة على المشاركة في البحث، يرجى الضغط على الخيار التالي

◯ موافق

X→

Q1 الجنس

◯ ذكر

◯ أنثى

X→

Q2 العمر

◯ 23-25

◯ 26-30

◯ 31-35

◯ 36-40

◯ 41-45

◯ 46-50

◯ 50-فما فوق

X→

Q3 المؤهل الدراسي

◯ بكالوريوس

◯ دبلوم تربوي

◯ ماجستير

◯ دكتوراة

X→

Q4 التخصص

◯ ترجمة اللغة الإنجليزية

◯ أدب اللغة الإنجليزية

◯ التربية

◯ اللغويات

◯ اللغويات التطبيقية

◯ تدريس اللغة الإنجليزية لغير الناطقين بها

◯ غيرها

X→

Q5 قمت بدراسة فصل دراسي تربوي إضافي أثناء مرحلة البكالوريوس

◯ نعم

◯ لا

X→

Q6 نوع الدراسة

◯ إنتظام

◯ إنتساب

X→

Q7 نوع المدرسة التي تعمل/ين بها حاليا

○ حكومية

○ أهلية

○ عالمية

Q8 المرحلة التي تقوم/ ين بتدريسها حاليا

○ الإبتدائية

○ المتوسطة

○ الثانوية

Q9 عدد سنوات الخبرة في مهنة التدريس

○ أقل من سنة

○ سنة الى 5 سنوات

○ 6 الى 10 سنوات

○ أكثر من 10 سنوات

Page Break

الرجاء إختيار الإجابة التي تصفك بدقة

لدي المعرفة الكافية لتعديل مدخلات اللغة الانجليزية المستخدمه داخل الصف لجعلها مفهومة اكثر للطلاب Q10

○ تصفني بشكل تام

○ تصفني بشكل جيد جدا

○ تصفني بشكل جيد

○ تصفني قليلا

○ لا تصفني أبدا

Q11 لدي المعرفة الكافية لإستخدام اللغة الإنجليزية بشكل مناسب بدقة وطلاقة

○ تصفني بشكل تام

○ تصفني بشكل جيد جدا

○ تصفني بشكل جيد

○ تصفني قليلا

○ لا تصفني أبدا

Q12 لدي المعرفة الكافية بمنهج اللغة الإنجليزية (مثل الكتب الدراسية في المملكة العربية السعودية)

○ تصفني بشكل تام

○ تصفني بشكل جيد جدا

○ تصفني بشكل جيد

○ تصفني قليلا

○ لا تصفني أبدا

X→

Q13: لدي المعرفة الكافية بإستخدام وسائل التواصل الاجتماعي (مثل تويتر و وتساب) للتواصل مع

	لا تصفني أبدا	تصفني قليلا	تصفني بشكل جيد	تصفني بشكل جيد جدا	تصفني بشكل تام
الطلاب	○	○	○	○	○
أهالي الطلاب	○	○	○	○	○
مدرسون آخرون	○	○	○	○	○

X→

Q14 لدي المعرفة الكافية بإستخدام مصادر التعلم المختلفة لتحقيق أهداف المنهج الدراسي

○ تصفني بشكل تام

○ تصفني بشكل جيد جدا

○ تصفني بشكل جيد

○ تصفني قليلا

○ لا تصفني أبدا

Q15 لدي المعرفة الكافية حول كيفية استخدام التقييم من أجل

لا تصفني أبدا	تصفني قليلا	تصفني بشكل جيد	تصفني بشكل جيد جدا	تصفني بشكل تام	
○	○	○	○	○	زيادة دافعية الطلاب للتعلم
○	○	○	○	○	مراقبة إنجازات وتقدم الطلاب
○	○	○	○	○	تشخيص مشاكل التعلم لدى الطلاب
○	○	○	○	○	قياس كفاءة الطلاب

Q16 .لدي المعرفة الكافية حول كيفية تزويد الطلاب بتغذية راجعة بنّاءة

○ تصفني بشكل تام

○ تصفني بشكل جيد جدا

○ تصفني بشكل متجيد

○ تصفني قليلا

○ لا تصفني أبدا

Q17 لدي المعرفة الكافية حول كيفية ربط الدرس بحياة الطلاب الشخصية

○ تصفني بشكل تام

○ تصفني بشكل جيد جدا

○ تصفني بشكل جيد

○ تصفني قليلا

○ لا تصفني أبدا

لدي المعرفة الكافية حول المواد التكميلية (مثل أوراق عمل) التي يمكن أن تسهل فهم أجزاء مختلفة من المنهج. Q18

○ تصفني بشكل تام

○ تصفني بشكل جيد جدا

○ تصفني بشكل جيد

○ تصفني قليلا

○ لا تصفني أبدا

Q19 لدي المعرفة الكافية حول التأثير المحتمل للغة الام (اللغة العربية) على تعلم اللغة الإنجليزية كلغة أجنبية

○ تصفني بشكل تام

○ تصفني بشكل جيد جدا

○ تصفني بشكل جيد

○ تصفني قليلا

○ لا تصفني أبدا

X→

Q20 لدي المعرفة الكافية لإستخدام اللغة الانجليزية في

	لا تصفني أبدا	تصفني قليلا	تصفني بشكل جيد	تصفني بشكل جيد جدا	تصفني بشكل تام
التحدث	○	○	○	○	○
القراءة	○	○	○	○	○
الإستماع	○	○	○	○	○
الكتابة	○	○	○	○	○

Q21 لدي المعرفة الكافية عن أنماط الأسئلة الصفية(مثل أسئلة نعم/لا- الخيارات المتعددة(

○ تصفني بشكل تام

○ تصفني بشكل جيد جدا

○ تصفني بشكل جيد

○ تصفني قليلا

○ لا تصفني أبدا

X→

Q22 : لدي المعرفة الكافية عن اللغة كـ

	لا تصفني أبدا	تصفني قليلا	تصفني بشكل جيد	تصفني بشكل جيد جدا	تصفني بشكل تام

○	○	○	○	○	نظام معرفي
○	○	○	○	○	نظام تواصل
○	○	○	○	○	نظام إجتماعي

Q23 لدي المعرفة الكافية عن تأثير البيئة المنزلية للطلاب (مثل المستوى التعليمي للوالدين) على تعلم اللغة الإنجليزية كلغة أجنبية

○ تصفني بشكل تام

○ تصفني بشكل جيد جدا

○ تصفني بشكل جيد

○ تصفني قليلا

○ لا تصفني أبدا

Q24 لدي المعرفة الكافية عن تسلسل المنهج

○ تصفني بشكل تام

○ تصفني بشكل جيد جدا

○ تصفني بشكل جيد

○ تصفني قليلا

○ لا تصفني أبدا

Q25)لدي المعرفة الكافية حول بنية التخاطب في الصف الدراسي)مثل المبادرة - الاستجابة - تغذية راجعة(

○ تصفني بشكل تام

○ تصفني بشكل جيد جدا

○ تصفني بشكل جيد

○ تصفني قليلا

○ لا تصفني أبدا

Q26. لدي المعرفة الكافية عن الوقت المخصص لحديث المعلم و الوقت المخصص لحديث للطلاب

○ تصفني بشكل تام

○ تصفني بشكل جيد جدا

○ تصفني بشكل جيد

○ تصفني قليلا

○ لا تصفني أبدا

Q27 لدي المعرفة الكافية لتشجيع الطلاب على استخدام التكنولوجيا التعليمية)مثل القواميس الإلكترونية ، والسبورة الذكية والاياد(

○ تصفني بشكل تام

○ تصفني بشكل جيد جدا

○ تصفني بشكل جيد

○ تصفني قليلا

○ لا تصفني أبدا

Q28 لدي المعرفة الكافية لتصميم أنشطة باللغة الإنجليزية كلغة أجنبية ذات صلة بـ

لا تصفني أبدا	تصفني قليلا	تصفني بشكل جيد	تصفني بشكل جيد جدا	تصفني بشكل تام	
○	○	○	○	○	أهداف التعلم
○	○	○	○	○	متطلبات المنهج

Page Break

Q29 لدي المعرفة الكافية لتصميم أهداف تعليمية مناسبة لمحتوى الدرس

○ تصفني بشكل تام

○ تصفني بشكل جيد جدا

○ تصفني بشكل جيد

○ تصفني قليلا

○ لا تصفني أبدا

Q30 لدي المعرفة الكافية بالمنصات التعليمية الإلكترونية)مثل عين بوابة التعليم الوطنية(

○ تصفني بشكل تام

○ تصفني بشكل جيد جدا

○ تصفني بشكل جيد

○ تصفني قليلا

○ لا تصفني

X→

Q31 :لدي المعرفة الكافية بماهية

لا تصفني أبدا	تصفني قليلا	تصفنس بشكل جيد	تصفني بشكل جيد جدا	تصفني بشكل تام

○	○	○	○	○	القراءة
○	○	○	○	○	الكتابة
○	○	○	○	○	التحدث
○	○	○	○	○	الإستماع
○	○	○	○	○	قواعد اللغة الانجليزية
○	○	○	○	○	مفردات اللغة الأنجليزية

Q32 لدي المعرفة الكافية بمجموعة متنوعة من طرق التدريس التي تعزز مشاركة الطلاب في تعلم اللغة

○ تصفني بشكل تام

○ تصفني بشكل جيد جدا

○ تصفني بشكل جيد

○ تصفني قليلا

○ لا تصفني أبدا

331

لدي المعرفة الكافية بأساليب التقييم الرقمي لتقييم تطور الطلاب)مثل الإختبارات القصيرة عبر الإنترنت(Q33

○ تصفني بشكل تام

○ تصفني بشكل جيد جدا

○ تصفني بشكل جيد

○ تصفني قليلا

○ لا تصفني أبدا

لدي المعرفة الكافية بالموارد التدريسية المناسبة)مثل خطط الدروس ، الأنشطة ، القصص ، و المتعلقة باللغة الانجليزية كلغة أجنبية Q34

○ تصفني بشكل تام

○ تصفني بشكل جيد جدا

○ تصفني بشكل جيد

○ تصفني قليلا

○ لا تصفني أبدا

[X→]

Q35 :لدي المعرفة الكافية بالتطبيقات التعليمية)مثل ايدمودو (والتي تخولني لــ

	تصفني بشكل تام	تصفني بشكل جيد جدا	تصفني بشكل جيد	تصفني قليلا	لا تصفني أبدا
عقد مناقشات عبر الإنترنت	○	○	○	○	○
مشاركة المعلومات والمستندات والملفات	○	○	○	○	○

332

Q36 لدي المعرفة الكافية بالبرامج الحاسوبية التي تساعد العملية التعليمية (مثل بوربوينت)

○ تصفني بشكل تام

○ تصفني بشكل جيد جدا

○ تصفني بشكل جيد

○ تصفني قليلا

○ لا تصفني أبدا

Q37 لدي المعرفة الكافية حول نظام تناوب الأدوار أثناء التفاعل داخل الصف

○ تصفني بشكل تام

○ تصفني بشكل جيد جدا

○ تصفني بشكل جيد

○ تصفني قليلا

○ لا تصفني أبدا

Q38 لدي المعرفة الكافية حول أهداف منهج اللغة الإنجليزية في المملكة العربية السعودية

○ تصفني بشكل تام

○ تصفني بشكل جيد جدا

○ تصفني بشكل جيد

○ تصفني قليلا

○ لا تصفني أبدا

لدي المعرفة الكافية حول أساليب واستراتيجيات التدريس الفعالة القائمة على الأبحاث و نظريات تعلم اللغة
الإنجليزية كلغة أجنبية Q39

○ تصفني بشكل تام

○ تصفني بشكل جيد جدا

○ تصفني بشكل جيد

○ تصفني قليلا

○ لا تصفني أبدا

X→

Q40: لدي المعرفة الكافية حول أساسيات علم اللغويات الخاص باللغة الإنجليزية

لا تصفني أبدا	تصفني قليلا	تصفني بشكل جيد	تصفني بشكل جيد جدا	تصفني بشكل تام	
○	○	○	○	○	علم الأصوات (دراسة اللغة على مستوى الصوت)
○	○	○	○	○	الصرف (دراسة اللغة على مستوى الكلمة)
○	○	○	○	○	النحو (دراسة اللغة على مستوى الجملة)
○	○	○	○	○	علم الدلالة (دراسة معنى اللغة)
○	○	○	○	○	البراغماتية (دراسة اللغة في سياقات مختلفة)

Q41 لدي المعرفة الكافية عن كيفية بدء و ختام المحادثات داخل الصف

○ تصفني بشكل تام

○ تصفني بشكل جيد جدا

○ تصفني بشكل جيد

○ تصفني قليلا

○ لا تصفني أبدا

X→

Q42: لدي المعرفة الكافية عن كيفية تدريس وخلق بيئة تعليمية شاملة تتناسب مع

	تصفني بشكل تام	تصفني بشكل جيد جدا	تصفني بشكل جيد	تصفني قليلا	لا تصفني أبدا
الخلفية التعليمية السابقة للطلاب	○	○	○	○	○
أساليب تعلم الطلاب	○	○	○	○	○
مستوى إجادة الطلاب للغة الإنجليزية	○	○	○	○	○
حاجة الطلاب لتعلم اللغة الإنجليزية	○	○	○	○	○
عمر الطلاب	○	○	○	○	○
دافعية الطلاب لتعلم اللغة الإنجليزية	○	○	○	○	○

335

Q43 لدي المعرفة الكافية عن نظريات تعلم اللغات الأجنبية

○ تصفني بشكل تام

○ تصفني بشكل جيد جدا

○ تصفني بشكل جيد

○ تصفني قليلا

○ لا تصفني أبدا

Q44 لدي المعرفة الكافية عن تأثير المجتمع والثقافة على تعلم اللغة الإنجليزية كلغة أجنبية

○ تصفني بشكل تام

○ تصفني بشكل جيد جدا

○ تصفني بشكل جيد

○ تصفني قليلا

○ لا تصفني أبدا

لدي المعرفة الكافية عن تأثير البيئة التعليمية (مثل المدرسة، وزارة التعليم) على تعلم اللغة الإنجليزية كلغة أجنبية Q45

○ تصفني بشكل تام

○ تصفني بشكل جيد جدا

○ تصفني بشكل جيد

○ تصفني قليلا

○ لا تصفني أبدا

Q46 (المباشرة لدي المعرفة الكافية بطرق تدريس اللغة الإنجليزية كلغة أجنبية)مثل طريقة ترجمة القواعد النحوية و الطريقة

○ تصفني بشكل تام

○ تصفني بشكل جيد جدا

○ تصفني بشكل جيد

○ تصفني قليلا

○ لا تصفني أبدا

X→

Q47 مستوى إتقاني للغة الإنجليزية هو

○ مبتدئ

○ متوسط

○ جيد

○ جيد جدا

○ متقدم

○ متقن

Page Break

لدي المعرفة الكافية بطرق تدريس اللغة الإنجليزية كلغة أجنبية)مثل طريقة ترجمة القواعد النحوية و الطريقة Q46 (المباشرة

هل ترغب/ي بإضافة إقتراح أو ملاحظة

_____

_____

_____

_____

_____

Appendix B3

Data Collection Application

Kingdom of Saudi Arabia
National center for assessment in
higher education

المملكة العربية السعودية
المركز الوطني للقياس والتقويم
في التعليم العالي

رقم الإصدار: 1.0 رمز النموذج: F- TRS-0009 تاريخ الإصدار: 1435/08/01هـ

نموذج طلب بيانات

المعلومات الشخصية:	
اسم الباحث/ الباحثة:	نوره سلطان براهيم السلامه
جهة العمل:	جامعة الأميره نوره بنت عبدالرحمن

معلومات التواصل:		
رقم الجوال: 0504483555 -0506444450	رقم الفاكس:	
البريد الإلكتروني:	Nsia500@york.ac.uk	
اسم المشرف: أيرينا كوزبورسكا	الجامعة:	جامعة يورك
الكلية: التربية	التخصص:	TESOL

البيانات المطلوبة:
الحصول على الدرجات التفصيلية لكل جزء من إختبار كفايات معلمي اللغة الانجليزية ، التخصصي و العام من عام 2013-2017 شاملة بذلك معلومات عامة عن المتقدمين، على سبيل المثال لا الحصر، الجنس،(ذكر- انثى) و العمر

الغرض منها:
تحليل المستوى الحالي لمعلمي اللغة الانجليزية في الاختبار ومقارنتة بمستواهم في الخمس سنوات السابقة وإلى تصميم معايير تقييم و قياس أداء المعلمين في التعليم العام وإيجاد مكامن النقص في برامج إعدادهم

في حال حصولي على البيانات المطلوبة، أتعهد بعدم استخدامها لغير الغرض المبين أعلاه، وعدم إتاحتها لطرف ثالث إلا بإذن خطي من المركز الوطني للقياس والتقويم.	
الاسم: نوره سلطان براهيم السلامه	التوقيع:

- في حال الموافقة على إرسال البيانات سترسل على العنوان المدون أعلاه ويعد الباحث مسؤولاً عن سريتها
- لابد من إرفاق نسخة إلكترونية من خطة البحث الذي طلبت البيانات من أجله

339

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