Metalinguistic knowledge of female language teachers and student teachers in an English Language department in Saudi Arabia; level, nature and self-perceptions

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Abstract

This study focuses on the metalinguistic knowledge (MLK) of experienced Saudi teachers (ETs) and fourth year student teachers (STs) who had graduated or would graduate from a particular University in Saudi Arabia. The main aim of the study was to investigate the overall level of the participants' MLK (including their knowledge of grammar rules and metalinguistic terms), the more specific nature of the participants' MLK, and their perceptions of their own MLK. Moreover, the study aimed to reveal any significant differences between the two groups. The study drew on a mixed methods research approach. The quantitative data involved an MLK test and questionnaires, and the qualitative data comprised semi-structured interviews, observations and role-playing. The ET group significantly outscored the ST group on the test, demonstrating a higher level of MLK. The study showed that, for both groups, a good level of MLK at sentence level did not guarantee an ability to apply it to more complex grammar items in text. It also revealed that both groups' receptive knowledge of rules was better that than their productive knowledge. Moreover, the teachers in both groups lacked an understanding of phrases and clauses and were poor in their ability to produce the corresponding terms. Despite this, the ETs generally displayed substantially higher levels of confidence in their overall level of MLK and all its individual components, than their actual performance on the test instrument would justify and did not seem motivated to enhance their MLK. The STs, in contrast, generally lacked confidence in their overall level of MLK, and all the related individual components, with the exception of their productive knowledge of terms. For both groups, there was a gap between their awareness of limitations and their actual knowledge. They were aware of gaps in their knowledge, but not precisely what these were.

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Abbreviations

CPD	Continued professional development
EFL	English as a foreign language
ETs	Experienced teachers
FFI	Form-focused instructions
FL	Foreign language
EOP	English for occupational purposes
GJT	Grammatical judgement test
KSA	Kingdom of Saudi Arabia
L1	First language
L2	Second language
МКТ	Metalinguistic knowledge test
MLK	Metalinguistic knowledge
MoE	Ministry of Education
NNS	Non-native speaker
NNS ETs	Non-native experienced teachers
NNS STs	Non-native student teachers
NP	Noun phrase
NS	Native speaker
РСК	Pedagogical content knowledge
SLA	Second language acquisition
STs	Student teachers
TEFL	Teaching English as a foreign language
TLA	Teacher language awareness
TMA	Teacher metalinguistic awareness

CHAPTER 1: INTRODUCTION

1.1 Introduction

This chapter consists of five sections. The first discusses the purpose and aim of the study and presents the research questions. This is followed by an introduction to the significance of the study. Next, the context of the study is addressed, and finally, the overall organisation of the thesis is outlined.

1.2 Purpose of the study

I am a researcher and lecturer in the Department of English Language at Noor University (this is a fictional name used to protect the anonymity of the participants). I have taught the grammar courses at the two levels as well as other EFL courses to the STs. In addition, I have observed classes taught by both STs and ETs. In Saudi schools, when teaching the English language, emphasis is placed on increasing knowledge about the language as well as teaching the four language skills: speaking, listening, reading and writing. Teachers use the textbooks required by the Ministry of Education (for more detail see Section 1.6.2).

Saudi English teachers usually rely on textbooks when teaching grammar lessons and rarely consider other aids or other materials for the classroom. The teachers themselves often find the textbook tasks to be unexciting and express their frustration at being highly dependent on these materials. At the same time, they express a lack of confidence in modifying, changing, eliminating, or adapting materials or designing their own tasks to better cater to their students' needs and interests.

As argued by Nunan (1991), however excellent a textbook may be, no textbook is capable of catering to the diversity of needs which exists in most grammar classrooms. Menkabu and Harwood (2014) also claim that textbooks can never fully meet the needs of individual students and teachers in diverse classrooms, and it is thus not useful for teachers to rely too heavily on textbooks, as appears to be the case with Saudi English teachers. Menkabu and

Harwood (2014) suggest that teachers can artfully manipulate their use of textbooks to suit their individual contexts, making decisions about which parts of a textbook to use, which to adapt, and which to abandon (Menkabu and Harwood, 2014).

The learners in my observations seemed passive, inattentive, and bored. Grammar classes should ideally be interactive (Borg, 1994; Sarangi, 1998; Van Lier, 1998 and Swain, 2000), focusing more on learners' responses than on imparting formulae to them or drilling and textbooks exercises. Students need an interactive environment to remain focused and are more likely to develop language knowledge about the language, when they are concentrating on language input, are affectively engaged (e.g. intrinsically motivated by the task), and are able to participate in social interactions (Svalberg, 2009). The teacher's approach, task design, topic, and type of text are factors that can positively influence the presence or degree of engagement with the language. In other words, more intrinsically interesting grammar tasks and more useful authentic texts can encourage engagement with the language and motivate students (Svalberg, 2009). This is what Peacock (1997) pointed out in his study on the motivating qualities of authentic tasks. He claims that using authentic materials improved learner motivation (Peacock, 1997, cited in Harwood, 2014:17). Thus, such realistic examples can serve an important pedagogic purpose (Swan, 2006). Saudi teachers' heavy reliance on the textbook would, however, seem to rule out such practices.

One question that comes to mind is: what are the reasons behind teachers' over-reliance on textbooks? Brown (2009) argued that teachers' skills, knowledge, and beliefs influence their level of textbook use. Similarly, Harwood (2014) claims that a lack of content knowledge emerged as a factor accounting for teachers' reliance on textbooks. In Hutchinson's (1996) study exploring textbook use, two teachers (Nancy and Marcia) were observed repeatedly over a semester and interviewed. Nancy, who had seven years' teaching experience, stuck closely to the textbook, using nearly all textbook activities in the unit. She did not supplement her textbook with any other materials. Marcia, in contrast, had 17 years' experience and was better-qualified, holding a Master's degree in ESL. She used the textbook more flexibly than Nancy, adapting the textbook lessons to meet her learners' needs (Hutchinson, 1996, cited in Harwood, 2014:12). Because of studies such as these, I was motivated and curious to

investigate Saudi Arabian English language teachers' metalinguistic knowledge (MLK), an important aspect of their content knowledge.

Another feature I noted in grammar lessons taught by experienced Saudi teachers, was their extensive use of Arabic (the first language) in grammar lessons. Many teachers provide explanations of grammar rules in Arabic and seemed to avoid explaining grammar in English. I wondered if this was a deliberate choice or if they were not able to provide explanations in English. In some cases, using the first language in the English classroom has been found to be beneficial for facilitating language learning. A number of writers (e.g. Van Lier, 1995; Swain and Lapkin, 2000 and Turnbull, 2001) believe that using the first language in foreign language classrooms can have a positive effect on students' ultimate mastery, arguing that teachers can use the first language to help ensure that their learners understand a particular grammatical concept or term (for more detail see Section 2.2). However, other writers (e.g. Ellis, 1984; Swain and Lapkin, 2000; Cook, 2001 and Harmer, 2009) warn teachers of excessive first language use, claiming that the use of the first language reduces exposure to the target language and therefore should be minimal (more details see Section 2.2). Thus, teachers should be aware of and monitor their use of the first language in English language classrooms. Afzal (2013), however, argues that judicious use of the first language in English classrooms does not necessarily reduce students' exposure to English. This is what Saudi teachers need to take into account in order to best support the teaching and learning process (Turnbull, 2001).

Thinking that it might be due to insufficient content knowledge, I was curious to investigate the MLK of the experienced English teachers (ETs). Saudi teachers require such knowledge, not only to explain the grammar rules which form part of the syllabuses which teachers are obliged to teach in Saudi schools (see Section 1.6.2), but also in order to respond appropriately to learners by giving feedback on and/or explanations on mistakes which the students are making (Elder, 2001; Andrews and McNeill, 2005). Such knowledge is also important when planning lessons—for example, to assess the potential difficulties that may be encountered in a text and its appropriateness for their class (see Section 2.6). Acquiring this knowledge could encourage Saudi English teachers to rely less on textbooks as well as

help students to feel that their teacher is sufficiently equipped to support them, which could in turn improve their attention during lessons and increase their motivation. Hence I decided to investigate ETs'.

As part of my job, in addition to observing ETs I also observed STs. I noticed that many of STs appear confused and hesitant when dealing with grammar exercises in the lectures. Moreover, the STs' performance in grammar class and the other classes which I taught, as well as on tests, revealed that the majority could not write grammatically correct sentences, even on a familiar topic. The English grammar items on which most STs make mistakes included tense, prepositions, and the function of various types of verbs within sentences, such as finite verbs, participles, modals, etc. In addition, when supervising STs during training in schools, I observed that they tended to avoid teaching grammar and demonstrated a preference for teaching writing or reading lessons. All of this raised questions in my mind regarding the STs MLK and the reasons behind these noticeable behaviours. This motivated me to investigate the MLK of the STs as well, and to explore the depth and range of this knowledge.

The present study thus developed out of my interest in investigating and comparing the grammar-related metalinguistic knowledge (MLK) of English language student teachers (STs) and experienced English teachers (ETs). The importance of this research stems from its generation of useful information to elaborate on and extend the results of previous studies investigating teachers' MLK and the MLK of ETs and STs. As argued above, the range and depth of teachers' MLK in the KSA is extremely important. Accordingly, this study seeks to investigate both STs and ETs in order to discover the extent and limitations of their MLK.

After analysing the data, it is hoped that the results of this study will:

1. Provide Saudi educators and the English Language Department at Noor University with a new understanding of and insights into L2 teachers' MLK.

- Provide Saudi teacher educators with insights which can inform future educational policies, for example, regarding pre- and in-service training courses for language teachers.
- Provide insight into teachers' (both ETs and STs) own views about their MLK in order to inform policymakers (Saudi educators) and the English Language Department.
- 4. Lead to further in-depth research on teachers' MLK.
- 5. Open the way for more research on teachers' subject content knowledge in the Saudi context.

1.3 The aim of the study

The aim of the study is to:

- 1. Investigate the MLK of female Saudi ETs and STs, and determine the range and depth of such knowledge by measuring a number of components of their MLK, and identifying areas of weaknesses and strengths.
- 2. Highlight the nature of their MLK.
- 3. Pinpoint any significant differences between ETs and STs in relation to their MLK.
- 4. Investigate STs' and ETs' perceptions towards their MLK.

1.4 Research questions

The current study aimed to investigate the MLK of ETs and STs in more depth, covering all the components of MLK, investigating the application of MLK in extended texts as well as at the sentence level, and revealing the nature of MLK and teachers' perceptions of their own MLK (see Section 2.11). The following research questions were formulated.

- 1. What is the present level of MLK of female Saudi ETs who have graduated, and fourth year STs who will graduate from Noor University in Saudi Arabia? To what extent is ETs' MLK different from STs' MLK?
- 2. What is the nature of the MLK of these female Saudi STs and ETs?
- 3. What are the STs' and ETs' perceptions of their own MLK? How accurate are the STs and ETs estimates of their existing MLK?

1.5 Significance of the study

Beside a personal interest that originates from working in the context where this study was conducted, this research has both theoretical and pedagogical significance.

The current perceived need in the KSA, is to raise the standard of English learning across all levels of education. The importance of addressing language learning in the Saudi context is that it can bring to the surface issues related to the role of teachers' subject knowledge, and its influence on their professionalism and their students' learning output. Therefore, it is essential to investigate the MLK of English language teachers, to help them to discover aspects of weakness and strength, and thereby, to improve their professional competence. In addition, research that highlights the MLK of teachers in the Saudi context is not only scarce, but also badly needed.

A review of related literature on MLK uncovered no studies investigating the MLK of Saudi female STs and ETs. This study aims to fill this gap by providing a detailed description. It will, therefore, have culturally specific value and the potential to contribute to the development of language teaching and learning in the KSA.

A review of related literature regarding pre-existing MLK tests revealed that these tests have largely focused on specific individualised components of MLK: productive knowledge and receptive knowledge of terms, or/and productive knowledge of rules. It is rare to find a test that covers all the components of MLK. This study designed a written test to assess the MLK

of STs and ETs, covering two core components; namely the knowledge of grammar terms and the knowledge of grammar rules, measuring both productive and receptive knowledge. In addition, a review of related literature about MLK uncovered no studies designed to test MLK that make it possible to relate knowledge of typical features at the sentence level with less typical or more complex features in the text. This study has aimed to fill this gap by designing a written test to permit this. It will therefore, make it easier to predict to what extent teachers would be able to apply their MLK to a text (whether authentic, or in a textbook).

The research will employ a mixed methods methodology in an attempt to contribute to the existing body of literature in the field of MLK, covering a range of components of STs' and ETs' MLK. Thus, the results obtained and the conclusions reached will contribute to the global body of research examining teachers' MLK.

1.6 The background context

A brief review of the study context will be presented here; including a brief description of education in the Kingdom of Saudi Arabia (KSA), the role of English Language teachers in Saudi schools, and the English Language Department at a University in Saudi Arabia.

1.6.1 Education in the Kingdom of Saudi Arabia

There are presently 26,934 schools in the KSA, including educational institutions for both sexes. Saudi Arabian nationals and non-Saudi citizens are all able to access free elementary, middle, and secondary education in the KSA, though higher education remains exclusively available to Saudi citizens (Alamri, 2011). While the study of Islam remains at its core, the modern Saudi education system provides learners with a crucial combination of religion, arts, and sciences that aims to enable them to become successful in the international workplace (Royal Embassy of Saudi Arabia in Washington, DC, 2015). The administration of the education system in the KSA is highly centralised and is controlled through two main agencies, the Ministry of Education and the Ministry of Higher Education. While other

governmental agencies also have some educational responsibilities, these two are the main service providers (Oyaid, 2009).

The Ministry of Education was established in 1954. It includes all educational levels in Saudi Arabia and is responsible for both boys' and girls' schooling. Junior colleges, teacher training, special needs, and adult education are all under the responsibility of the Ministry of Education (Oyaid, 2009). The KSA is subdivided into 42 school districts, each with its own facilities and staff who can liaise with schools and the ministry itself. The Ministry is responsible for the provision of school buildings and the organisation of construction and maintenance work. It also equips schools, by providing materials and supplying students with textbooks (Oyaid, 2009). The Ministry of Education oversees the delivery of standardised and evolving curricula to all districts in the KSA. A specialised curriculum department at the Ministry of Education is responsible for curriculum development and the preparation of subject textbooks, which must be used in all the Kingdom's schools, both public and private. In other words, curricula, syllabuses, and textbooks are uniform across all the schools within the KSA (Alshumaimeri, 1999; Abdan, 1991).

The country's education system has five age-based divisions: kindergarten from 3 to 6 years old; elementary stage from 6 to 11; middle stage from 12 to 14; secondary stage from 15 to 18; and university from 19 to 24 (depending on the subject(s) studied and on the form of higher education) (Alshumaimeri, 1999). In the KSA, the system delivers single-sex education to students at school and university level.

There are currently two types of school: public schools and private schools. Public schools are owned and run by the Saudi government, whereas Saudi individuals own and run private schools but still under the supervision of the Ministry of Education (Abdan, 1991). Public schools are free to all students, whereas private schools charge fees. There is no difference between the two types of schools as regards the curriculum; they are all obliged to follow the national curriculum described by the Saudi MoE. Nor is there any difference between private and public schools in terms of qualifications and calibre of teachers (Abdan, 1991).

According to the guidelines set out by the Ministry of Education, the annual school calendar is comprised of 32 weeks, which are divided equally into two semesters of 18 weeks' duration. Exams take place during the final two weeks of each semester and are based solely on the information contained in the aforementioned textbooks. Teachers must devise exam questions using these materials only. With regard to middle and secondary education, pupils are required to pass all examinations, either on the first attempt or during re-sits, if they are to progress to higher levels of schooling (Oyaid, 2009). The advancement of students from one grade to the next is contingent on passing a final written examination. These examinations are intended to test students on the work they are supposed to have completed during the entire semester, which places considerable pressure on both teachers and students. The main concern of teachers is to prepare students for the examinations and to cover the syllabus in the time allotted; whereas, the students' focus is on what will be covered in the final exams (AlMutairi, 2008). Elementary-age pupils are exempt from this system of endof-term examinations. Instead, they are monitored and graded according to a model of continual assessment. This method of elementary education has only been recently implemented, in line with the evolution of the elementary syllabi as directed by the Ministry of Education.

Turning now to university education in Saudi Arabia, the first university, now known as King Saud University, was founded in Riyadh in 1957. After King Saud University, six other universities were established in Saudi Arabia over the following 20 years: Islamic University was established in 1961, King Fahd University for Petroleum and Minerals was established in 1963, King Abdul-Aziz University was established in 1967, Um Al-Qura University was established in 1967, Imam Muhammad Bin Saud Islamic University was established in 1974, and King Faisal University was established in 1975 (Alamri, 2011).

Until 1975, the Ministry of Education controlled universities, but this changed with the opening of the Ministry for Higher Education. It continually monitors and essentially runs all these facilities on a country-wide basis at both the administrative and academic levels (Alamri, 2011; Oyaid, 2009). In the KSA, there are currently 27 private and 25 public universities. There is also a significant number of other higher-education facilities, such as

colleges (Oyaid, 2009). The amount of time spent at university in the KSA varies. For instance, if a pupil is training to be a doctor or an engineer, they may spend upwards of five years at university, whilst an Arts degree only requires four years. The Ministry of Higher Education confers degrees and also supervises scholarships, international academic relations, and educational offices abroad. Liaison between different universities and their related departments is particularly important for the Ministry of Higher Education, as is facilitating cutting-edge scholarship and ensuring that all universities continue to adhere to the accepted legal framework (Alamri, 2011).

1.6.2 English Language teachers in Saudi schools

Saudi teachers, who have graduated from English language departments at Saudi universities, teach English as a foreign language in elementary, middle and secondary schools, in both the public and private sector. Previous training and experience and higher qualifications, though taken into consideration, are not required, and no regular in-service programmes are provided for English language teachers.

According to the curriculum, the focus in teaching English in Saudi schools is on the four language skills: speaking, listening, reading and writing, and the grammar rules of the language. When teaching the English language, emphasis is placed on increasing knowledge about the language as well as developing communicative competence.

The textbooks, which are taught to students in the middle and secondary stages, have approximately six units in each semester, and each unit is divided into six or seven lessons. Each lesson presents and is concerned with introducing one of the following: practice in listening, reading, writing, speaking, grammar rules and revision of the whole unit. For many English teachers, the central focus of their teaching is to focus on explaining the English grammar rules (Al-Seghayer, 2005). The grammar syllabuses taught at the primary, middle, and secondary levels are presented in Table 1-1 below.

Table 1-1. The English	n grammar syllabuses	taught in Saudi schools.
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The English grammer	mar syllabuses taught in Saudi schools
Primary level (primary school)	 Pronouns. Adjectives. Yes/No questions. Possessive adjectives. Prepositions.
Middle level (middle school)	 Verb tenses and verb aspects: simple present, simple past, and future (future with present continuous and 'be' + 'going to', future with 'will'), past continuous, present perfect, and present perfect with 'since' and 'for'. Articles: 'a', 'am', and 'the'. Singular and plural nouns. Possessive nouns. Pronouns (subject pronouns and demonstrative pronouns). Adjectives (possessive adjectives, passive adjectives, and the comparatives of short and long adjectives). Prepositions of place, adverbs (adverbs of frequency, adverbs of manner, sequence adverbs). Modals. Relative clauses. Expressions of time. Direct and indirect objects. Imperatives (affirmative and negative). 'By' + gerund. If-conditional (1st conditional if + present simplewill). If-conditional (2nd conditional if + past + 'would'). Comparatives and superlatives, comparatives of equality. Questions with 'How' + adjective, stative verbs, Wh- and Yes/No questions and short answers /short answers with 'be'. Reported speech. 'Like' + ing (affirmative, negative, and interrogative). Verb + infinitive. 'there' + be. Making rules (No + 'ing'). Suggestions with 'let's,' 'what about'
Secondary level (secondary school)	 Verb tenses and verb aspects taught at the middle level, and other aspects, such as the present perfect and the past perfect. The active and passive. Present and past passive, present perfect passive, past perfect passive. Adjectives, long adjectives, adjectives made from more than one word. Comparing people and things. Countable and uncountable nouns. 'Very' and 'too', 'eitheror', 'know that', 'when -ing' Reporting questions. Verb + '-ing'. Asking for and giving opinions. Reporting the future. 'Has been done'/'has been doing'/'has done'. Verb + '-ing' as a noun. Taking out which, that, and who. Asking questions. Making and replying to suggestions.

• 'If' + present, present'.
• 'If' + present,future'.
• 'If' + past,'would'.
• 'used to' + verb (no ending).
• Time clauses, clauses with although.
Reported speech.
• Questions that expect the answer yes/no.
Polite questions.
• Connectors: 'and', 'too', 'also', 'either'.
 Asking questions, using commas with 'who', 'which', and 'what'.
• 'While' + the past continuous tense.
• Verb + '-ing' at the beginning of a sentence.
• 'While' + the past continuous tense.
• 'Some' and 'any'.
• 'If' + past perfect, 'would have'.

Source: Ministry of Education (2014)

It can be seen in Table 1-1 that the grammar syllabuses taught at primary level (primary school) are quite limited compared with those taught at the middle and secondary levels, including only pronouns, adjectives, yes/no questions, possessive adjectives, and prepositions. The grammar syllabuses taught at middle and secondary levels cover a broad range of grammar features and rules.

Saudi schools commonly apply two approaches to form-focused instruction (FFI): deductive and inductive. Teachers mostly utilise these approaches to teaching in the English language classroom to impart grammar content. Deductive FFI, in which a rule is presented first then examples given, is the method most preferred by English teachers. This approach to FFI "...seeks to establish an awareness of the grammatical rule" (Ellis, 2005:213), and the learners' focus is then on the form, with an intensive focus on the target grammar rules, as part of the activities (drills and/or tasks) (Ellis, 2006). Providing a metalinguistic explanation, i.e. a deductive FFI, is seen as a useful pedagogical technique (Larsen-Freeman, 2000), from which learners will be able to understand rules correctly (Anderson, 1990). This is described as a 'reminder' or 'handy mnemonic', which a learner can refer to whenever a particular language problem arises (Stern, 1992:337). Many Saudi teachers prefer this approach to instruction, as it encourages a teacher-fronted, transmission style classroom (Thornbury, 1999), and encourages students to focus on a specific feature. It is direct and can be very efficient (Thornbury, 1999); moreover, it gives learners a feeling of security (Burgess and Etherington, 2002). Many empirical studies (Erlam, 2003; Freedman, 1982; Pica, 1984; Robinson, 1996; Dekeyser, 1994) have shown that deductive instruction can be very effective, especially for teaching simple grammar rules (Ellis, 2006).

Saudi English teachers also sometimes use inductive FFI, in which they first expose learners to exemplars of grammatical structure, and then ask them to deliver an independent metalinguistic generalisation, followed by a final explicit statement about a rule. In this approach to instruction, students directly attend to particular forms, and try to arrive at a 'metalinguistic generalization on their own' (Norris and Ortega, 2000:437). Through noticing, via attention and awareness, the specific linguistic items as they arise in the input to which students are exposed are assumed to facilitate learning (Al-Hehin, 2004; Svalberg, 2007). This aims to make students active, enabling them to participate in the learning process (Chaudron, 1988; Thornbury, 1999). In addition, it can contribute to motivation, when students are given a chance to undertake analytical studies of the language (Harmer, 1987). Herron and Tomosello's study (1992) revealed that inductive instruction has achieved superiority over the deductive approach for teaching certain grammatical structures to beginner level foreign language students (Herron and Tomosello, 1992).

1.6.3 The English Language Department of the Faculty of Arts at Noor University

Part of the present study was conducted at Noor University in the KSA. This study takes place within the University's English Language Department for female students. The English Language Department is one of many departments within the Faculty of Arts. According to the department's prospectus, the courses offered are aligned with systematic programmed steps, to ensure students obtain a high degree of English language proficiency by graduation (Noor University, 2011). English as a foreign language graduates from the Faculty of Arts will have studied a four-year program covering English language skills, linguistics, applied linguistics, English literature translation and pedagogy (Al-Hazmi, 2003). The preparation of English Language teachers begins with careful selection from among those candidates who have expressed a desire to study in this department. These graduates have skills in linguistics

and English language, which can prepare them to become teachers, translators, linguists and specialists in literary criticism (Noor University, 2011).

Grammar courses were taught to the STs at two levels over a period of six months each. Two approaches to form-focused instruction (FFI)—deductive and inductive—were applied while teaching grammar to the STs. The deductive approach to teaching grammar focuses on instruction before practice and was used frequently. The STs were given an in-depth explanation of a grammatical concept, which they then practiced in a mechanical way, through worksheets and exercises. The inductive method involves presenting several examples to illustrate a specific concept and expecting the STs to notice how the concept works based on these examples. An explanation of the concept is then provided, followed by practise exercises. For more details about the other courses taught in the STs' programme see Section 3.6.1.1.

1.7 Organisation of the thesis

This introduction chapter has outlined the purpose, aims, research questions, significance, and context underpinning the study. Chapter two presents a review of the literature related to MLK, providing a brief overview of the concept of MLK, describing the characteristics of the MLK of L2 teachers, its relevance to teaching grammar, and providing different tests for measuring MLK. In addition, it reviews studies investigating teachers' MLK, concluding by explaining the need for this research study, and the basis for its three research questions. Chapter three presents the methodology, describing and discussing the methodological framework of the study, discussing the mixed-methods research design, the target populations and sampling method, and the qualitative and quantitative methods of data collection used. It also explains the data analysis procedures conducted to answer the specific research questions. It ends with a discussion of validity, reliability, ethical issues affecting the study, and its limitations. Chapter four presents the findings of the current study regarding three components: level of STs' and ETs' MLK, nature of the participants' MLK, and their perceptions of their own MLK. Chapter Five analyses, synthesises, discusses, interprets, and evaluates the results from the different groups, in relation to previous research studies.

Chapter six summarises the overall study, presents the implications, and offers suggestions for future research.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter is organised into ten sections. The first begins with a brief overview of the concept of pedagogical grammar. The two types of knowledge—implicit and explicit—are discussed in the second section. The third section provides an overview of metalinguistic understanding and its development, followed by a discussion of the concept of metalinguistic knowledge (MLK) in the fourth section. The fifth and sixth sections describe the characteristics of the MLK of L2 teachers and its relevance to teaching grammar, and factors that may help improve this knowledge are outlined in the seventh section. Section 8 presents and discusses various tests used to measure MLK, and Section 9 provides an overview of previous studies investigating teachers' MLK. The chapter concludes with a discussion of the significance of this study and the basis for its research questions.

2.2 Pedagogical grammar

Grammar is a central area of language that "provides a whole cohesive system concerning the formation and transmission of language" (Dykes, 2007:4). Dykes (2007:5) provides a simple definition of grammar as "a language to talk about language". Thornbury (1999) defines the word 'grammar' as a description of the regularities in a language and stresses that knowledge of these regularities provides learners with the means to create and generate a potentially infinite number of original sentences. Thornbury (1999) also explains the notion of grammar as incorporating an explanation about the rules for creating sentences, including an account of the meanings that these forms convey.

Within the context of foreign language learning and teaching, descriptive grammar must be distinguished from pedagogical grammar. Linguists typically employ descriptive grammar, which is also occasionally referred to as linguistic grammar. Descriptive grammar focuses primarily on concepts within linguistic theory, and it can be said that it is produced by linguists for other linguists. Additionally, linguistic theory is assessed in relation to the

linguistic theory requirements (Thornbury, 2006). On the other hand, pedagogical grammar refers to rules which are designed to help foreign language learners understand particular aspects of the languages they are studying (Swan, 2012; Thornbury, 2006). These rules might be formulated specifically for learners or for teachers and materials writers for transmission to learners through various methods. Pedagogical grammar serves to enhance a student's understanding about the structure of languages, and according to Taylor (2008), eliminates perceptions regarding the apparent randomness of the language structure. Notably, pedagogical grammar differs from linguistic grammar in terms of content and presentation.

Within the field of second and foreign language pedagogy, whether grammar instruction (i.e. explicit knowledge in the language classroom) is beneficial has now been debated for over a decade. Early research into Second Language Acquisition (SLA) (Dulay and Burt, 1974; Fathman, 1975; Kessler and Idar, 1977; Fabris, 1978; Krashen, 1987), proposed that learners follow a natural order and sequence with regard to language acquisition, thus, the acquisition of grammatical structures proceeds in a predictable order (Krashen, 1982). This led researchers (Krashen, 1981; Schwartz, 1993) to claim that providing the learners with explicit knowledge of language did not benefit acquisition in any way (Ellis, 2008). However, formfocused instruction (FFI) retained its value, with many researchers into second language learning arguing that it was a very effective tool for promoting second language learning (Norris and Ortega, 2000), functioning by "...enabling learners to progress along the natural order more rapidly" (Ellis 2008:863). Thus, if it is accepted that FFI facilitates the acquisition of L2 grammatical forms (Nassaji and Fotos, 2010; Ellis, 2001), providing explicit knowledge might help learners to develop greater L2 proficiency (Ellis, 2008). FFI that encourages learners to develop metalinguistic awareness of rules can be accomplished deductively, whereby the teacher 'provides' the knowledge, or inductively, whereby the teacher helps the learners 'discover' and construct knowledge (Ellis, 2008; Erlam, 2003).

Knowledge of grammar rules can be beneficial for students, and formulating them has been seen as the most important task of pedagogic grammar (Westney, 1994). However, teachers should consider the three aspects of language, form, meaning, and use when teaching grammar. Larsen-Freeman (2003) notes that teachers may see overlaps between the

dimensions of meaning and use or have difficulty in making a clear distinction and Ur (1996) observes that use is often incorporated into meaning.

This raises certain questions, however. How are understandable rules created? What makes a 'good' rule? According to Hammerly (1982, cited in Westney, 1994) and Swan (2006), language pedagogy has identified specific guidelines for creating understandable/good rules: they should be short, clear and simple, true, have predictive value, be productive and easily applicable, be consistent and cumulative, enable discrimination, and be memorable. In addition, they should demarcate boundaries and state what is not possible (Swan, 1994) through, for example, positive and negative evidence (James, 1994). They should have predictive value (Westney, 1994) and should be terminologically and conceptually clear and comprehensible (Swan, 1994; Chalker, 1994). The presumption fundamental to these guidelines, according to Krol-Markefka (2012), is that rules should be easy to understand, remember, and apply.

Swan (2012), listed six criteria for pedagogical grammar rules from an analytical perspective: truth, demarcation, clarity, simplicity, conceptual parsimony, and relevance. Certain overlaps and conflicts between these categories are admitted. The first criterion is that rules should be true. Truth is dependent on the ability of a given rule to reflect what is known about a given grammatical phenomenon (Swan, 2012). Regarding the second criterion 'demarcation', this establishes that pedagogic rules are not useful unless they clearly demarcate the area within which a given form is appropriate. This enables learners to understand when to use the form and when not to (Swan, 2012). The third criterion is that rules should be clear in terms of choice of terminology, to avoid ambiguity. Lack of clarity is often caused by the employment of inappropriate terms. In teacher explanations, this could suggest that a teacher does not fully comprehend the concept in question (Swan, 2012). The fourth is simplicity, which usually contrasts with 'truth' and 'clarity'. Simplicity can be defined as reducing explanations to create a more user-friendly version (i.e. to make it more manageable). This may include reducing the number of categories or subdivisions or excluding inessential details (Swan, 2012). The fifth criterion is conceptual parsimony, which demands that pedagogical formulations be based on concepts and terminology already familiar to learners.

Messages should be delivered through the most comprehensible grammatical concepts possible. Swan (2012) recommends using terminology when formulating good rules. It will sometimes be necessary to introduce new concepts to students to explain a point (Swan, 2012), and teachers can drastically reduce the complexity of an explanation by using terminology that is perfectly precise in its reference. Finally, the criterion of relevance refers to the degree to which a given rule responds to learners' needs/questions.

Meeting every aspect of the previously-discussed criteria may seem impossible for a wide range of linguistic phenomena (Krol-Markefka, 2012). Rules which describe the usage of complex structures, for example, are often exceedingly challenging to describe, explain, and even to identify and verbalise in the first place. Krol-Markefka (2012:103) argues that

Because a semantically and functionally complex structure such as the (in) definite article cannot be easily explained in simple terms, attempts to formulate clear and simple rules either run the risk of oversimplification or end up as lists of numerous, meaningfully unrelated and rather limited rules.

In other words, rules describing complex structures cannot always be formulated readily in simple terms. If they are, a structure's actual usage is often distorted, simplified, or limited only to the most common instances of use, which makes the rules incomplete and thus not entirely reliable (Krol-Markefka, 2012).

Throughout the process of learning English, learners will experience a range of difficulties, and teachers should ensure that their analysis actually meets their pupils' requirements and provides them with the information they need (Swan, 2012). Thus, teachers should consider when formulating grammar rules, that they should be clear (avoid ambiguity) and simple, have predictive value, and be terminologically and conceptually clear and comprehensible. It is important, then, to investigate the nature of the grammatical formulations provided by teachers when teaching grammar; for example, what they do or do not include, their clarity, simplicity, and which aspects of the three areas of language (form, meaning, and use) are taught, and the grammatical terminology is used during lessons, as addressed in this study (see section 2.11).

Use of the first language in the English grammar classroom has been found, in some cases, to be beneficial for facilitating language learning. Many writers believe that using the first language in foreign language classrooms can affect students' ultimate mastery positively. Van Lier (1995) and Turnbull (2001) claim that using the first language in the foreign language classroom can enhance the quality of the input. They argue that teachers can use the first language to help ensure that their learners understand a particular grammatical concept or term. Swain and Lapkin (2000) also claim that teachers can facilitate their students' learning by using the first language, which can enable students to complete their tasks more successfully, and according to Turnbull and Arnett (2002:205-206), the teacher's use of the first language provides "an enhanced form of input that is more salient for the learner, more easily processed and consequently results in a greater understanding of the target language".

Although using the first language in the foreign language classroom can have the advantages and benefits mentioned above (see section 1.2), other writers warn teachers of excessive first language use, claiming that the use of the first language in the learning process should be minimised as it can reduce exposure to the target language. Ellis (1984) claims that when teachers use the first language intensively (i.e. they use it as part of the usual pedagogy), they deprive their learners of valuable input in the target language. In line with this, Harmer (2009) and Swain and Lapkin (2000) assert that teachers' intensive use of the first language restricts the students' exposure to English, which could inhibit their acquisition of the English language. Cook (2001) believes that use the first language can be beneficial when explaining grammar but stresses that teachers should resort to the first language only when it is apparent that using the target language would be ineffective or problematic for the students (i.e. whenever it would be overly difficult or time-consuming for the students to understand in the target language).Thus, teachers should be aware of and monitor their use of the first language in grammar lessons (see section 1.2).

2.3 Implicit and explicit knowledge

Knowledge can be explicit or implicit, and this distinction is often associated with other binary pairs: conscious/unconscious, procedural/declarative, verbalisable/non-verbalisable, etc. (Myhill and Jones, 2015). Several authors, including Roehr (2008:179), see implicit knowledge as "knowledge that cannot be brought into awareness or articulated" and explicit metalinguistic knowledge as "declarative knowledge that can be brought into awareness and that is potentially available for verbal report". Likewise, Ellis (2009:11) sees implicit knowledge as 'tacit and intuitive' and explicit knowledge as 'conscious'. Thus, a learner, for example, may intuitively know that there is something ungrammatical in a given sentence and may also be able to identify the grammatical error in that sentence, but they may have no conscious awareness of the rule that is being broken. In such a case, the learner has implicit, but no explicit, knowledge of the grammar feature. Another learner may know that the sentence is ungrammatical and be able to provide the rule that has been broken; this learner has both implicit and explicit knowledge of the feature (Ellis, 2009).

Another distinguishing element between implicit and explicit knowledge, as argued by Ellis (2009), is that implicit knowledge is procedural, which means that a learner may be able to use a particular form in understanding or producing language without necessarily being able to explain it. Explicit knowledge, on the other hand, is declarative, meaning it is comprised of facts which exist in an analysed form that we are able to articulate informally in our own words if the need arises. In addition, it is often the result of formal instruction. For example, knowing that "verbs like 'explain' require an indirect object with 'to' and, further, that the indirect object follows the direct object" (Ellis, 2009:12). In addition, Ellis (2009) states that implicit knowledge is available through automatic processing; it can be easily and rapidly accessed in unplanned language use. In contrast, explicit knowledge is generally accessible only through controlled processing (i.e. it can be accessed through the application of attentional processes).

The ability to verbalise is a further theoretical concept connected with both implicit and explicit knowledge. A number of academics, such as Kirsh (1991), see implicit knowledge as inaccessible or non-verbalisable. Roehr (2008), as mentioned above, viewed implicit

knowledge as that which is unconscious and cannot be expressed. Conversely, she regarded explicit metalinguistic knowledge as declarative or factual information that can be brought to the conscious mind and which can be used in oral accounts; it "is potentially available for verbal report" (Roehr, 2008:179). Similarly, according to Ellis (2009), implicit knowledge is only evident in learners' verbal behaviour, whereas explicit knowledge is verbalisable. He (2009:13) argues that

Implicit knowledge cannot be described as it exists in the form of statistically weighted connections between memory nodes, and its regularities are only manifest in actual language use. In contrast, explicit knowledge exists as declarative facts that can be stated.

For Gombert (1992), whose research is on first language acquisition in children, implicit or 'epilinguistic' knowledge precedes metalinguistic knowledge (i.e. explicit knowledge), suggesting that children are on metalinguistic developmental trajectories (for more detail see Section 2.4). Implicit knowledge includes unconscious knowledge of grammar rules and marks language activities where it is evident that certain linguistic capacities have been mastered but cannot yet be articulated: "explicit manifestations of a functional awareness of the rules of the organization or use of language" (Gombert, 1992:13). In effect, the ability to express oneself is a crucial indicator of how explicit that knowledge is (Myhill and Jones, 2015).

However, a slightly different approach to explicit knowledge has been advanced by Camps and Milian (1999). First of all, these researchers differentiate between knowledge that can be verbalised and that which is non-verbalisable, describing the latter as procedural knowledge used to carry out a task, such as learning how to write, without being able to articulate the process through words. Undoubtedly, procedural knowledge could also be argued to be implicit, since it is instinctive (Gombert, 1992; Kirsh, 1991). In addition, Camps and Milian (1999) differentiate between knowledge, which can be verbalised employing ordinary words as opposed to the utilisation of precise metalanguage (i.e. differentiation between verbalisable knowledge which uses everyday language and that which uses specialised language). This concurs with the arguments proposed by Ellis (2004; 2009), Berry (2005; 2009), and Andrews (2007) that explicit knowledge can be revealed and verbalised without employing metalanguage. In their view, metalanguage is not an essential component of explicit knowledge since verbalising a rule about a feature does not necessarily require the use of metalanguage (see also Section 2.6).

2.4 Metalinguistic understanding and its development

Following Piaget's (1923) publication, researchers have advanced theories as to how children develop awareness about language by combining their observations of this process with psychology. Piaget claimed that children pass through several stages in their language development, starting with using language for themselves. They subsequently progress to using language to refer to things and events in their environment, followed by using language to convey abstract concepts (Piaget, 1959). Piaget's hypothesis of staged language development has been supported by successive studies undertaken by Gombert (1992) and Karmiloff-Smith (1992) exploring children's language, their appreciation of language, and its organisation. These studies indicate that initially, children are only able to use language while the skill of recognising and correcting errors develops later. These stages are a prerequisite for being able to take on board a metaperspective, i.e. perceiving the perception of others as it relates to talk about language and its structure (Veldhuis, 2015).

Gombert (1992) proposed a model of metalinguistic development designed to shed light on certain links between the development of oral language in the early years. He conceptualised metalinguistic development having five subdomains: metaphonological, as metalexical/metasemantic, metasyntactic, metapragmatic, and metatextual. He argued that metaphonological, metalexical/semantic, and metasyntactic understanding develop before metapragmatic and metatextual understanding. He also distinguished between two levels of cognitive control over an individual's own linguistic knowledge: epilinguistic and metalinguistic (Gombert, 1992; 2003). The epilinguistic level is the control automatically exerted on linguistic processing by the linguistic organisations present in memory and at the metalinguistic level when the individual is in conscious control of linguistic decision-making. The second (metalinguistic) level involves control, which is consciously chosen and applied by the individual (Gombert, 2003). Gombert (2003) also argues that there is a developmental hierarchy between epilinguistic control and metalinguistic awareness; linguistic competence precedes conscious linguistic control (i.e. metalinguistic understanding).

It should be remembered that Gombert' research considered first language acquisition in children. In L1 acquisition, his argument that epilinguistic' knowledge precedes metalinguistic knowledge (i.e. explicit knowledge) is generally true; however, in formal education it may not be true, as there are learners who 'know' grammar rules bur are not able to apply them. Many learners 'know' that present tense verbs take -s if the subject is *he/she/it*, but do not apply the rule to their own output. There are probably also teachers who 'know' grammar rules they themselves do not apply.

Similar to the model proposed by Piaget (1959), Karmiloff-Smith (1992) offers a three-stage model of awareness that develops as children begin to recognise processes that they experience. This model is not limited to linguistic encounters, and it differentiates between implicit representations and developing representational explication. Karmiloff-Smith (1992) identifies a stage where the constituents of a process are internally unidentifiable and cannot be individually operated, although the process can be run in its entirety. This is followed by a stage where there is clear knowledge of the constituents, but they remain below the conscious level; clear and conscious knowledge develops later. Karmiloff-Smith (1992) contends that children progress through these stages for phonology, morphology, and lexicography, and they are therefore linguistically all-encompassing. Progression through the stages is not age-dependent, nor are the stages passed through discretely, so a child may be simultaneously in different phases for different linguistic forms, depending upon the child's own internal processes (Karmiloff-Smith, 1992).

The hypotheses advanced by Gombert (2003) and Karmiloff-Smith (1992) support those previously postulated by Piaget. Specifically, language awareness in children appears to be a gradual, phased process of acquisition, and children only become able to express this awareness once it exists (Veldhuis, 2015). It has been postulated by both Piaget (1923) and Karmiloff-Smith (1992) that children's meta-awareness develops as a result of their general capabilities of abstraction. However, with cognitive maturity, children tend to 'distance' themselves from their linguistic product (Karmiloff-Smith, 1992) and may "ultimately

develop conscious explicit metalinguistic awareness of a large variety of linguistic forms" (Veldhuis, 2015:16).

Myhill (2011:250) defines metalinguistic understanding as "the explicit bringing into consciousness of an attention to language as an artifact, and the conscious monitoring and manipulation of language to create desired meanings grounded in socially shared understandings". Bialystok (1987; 1999) argues that metalinguistic understanding is continuously developing alongside language learning and use. Bialystok (1999) has theorised that developments in two related components of language processing—analysis (representation) and control (selective attention)—are responsible for metalinguistic understanding. Analysis is defined as the ability to represent explicit and conscious knowledge, and control is "the ability to selectively attend to and apply knowledge" (Bialystok, 1999:636). Bialystok (1999) argues that developments in linguistic abilities are due to developments of analysis and control. This analysis and control framework provides "a means with which learners' development of metalinguistic understanding can be described" (Myhill and Jones, 2015:847). Hence, metalinguistic awareness is cognitively demanding and can thus be expected to be associated with higher levels of cognitive development (Tellier and Roehr, 2013).

As noted above, existing research into metalinguistic understanding has tended to investigate the context of children, relative to first language acquisition and second language learners. Few studies have examined metalinguistic knowledge in relation to grammar (see section 2.10). Therefore, it is important in this study to address the metalinguistic knowledge of teachers be performing a systematic analysis of what metalinguistic knowledge teachers become aware of, are able to talk about, and use in their grammar explanations.

2.5 Metalinguistic knowledge (MLK)

Due to its grammatical role as an adjective, the term 'metalinguistic' can be considered a troublesome word. Compared to its sister word 'metacognition', which is indisputably an abstract noun, 'metalinguistic' lacks a clear functional designation (Myhill and Jones, 2015).

Indeed, it is ironic that the very word that is used to describe grammatical knowledge is, in itself, indistinct. Its function as an adjective demands that it premodifies another noun, resulting in metalinguistic ideas being conceptually more fluid than those of metacognition (Myhill and Jones, 2015). In research literature, the word 'metalinguistic' is often applied before nouns such as, 'metalinguistic awareness', 'metalinguistic knowledge', 'metalinguistic understanding', and 'metalinguistic behaviour', thereby slightly modifying the conceptual emphasis that is intended. Myhill and Jones (2015) suggest that this raises a theoretical question as to what potentially distinguishes 'metalinguistic awareness' from, for example, 'metalinguistic understanding'. Consequently, it is common for researchers to use synonyms for the various nouns that can be attached to 'metalinguistic' (i.e. to use the various nouns, which can follow 'metalinguistic' as synonyms of each other) or to imply conceptual differences that remain vague (Myhill and Jones, 2015). Similarly, Veldhuis (2015) indicates that numerous terms can be used to indicate 'metalinguistic awareness', such as 'metalinguistic knowledge', 'metalinguistic ability', 'metalanguage', 'metacognition', 'metaprocesses', and 'metalinguistic consciousness'. Each of these terms carries a unique implication that can vary according to the situation in which it is utilised. Nonetheless, these terms are united in referring to the knowledge that people hold about language (Veldhuis, 2015).

Thus, the concept of 'metalinguistic' is used differently in the fields of psychology and linguistics (Gombert, 1992; Myhill et al., 2013), with psychology focusing on the cognitive processes, which accompany text production, rather than spoken or written output. Linguists, on the other hand, are more concerned with language as an artefact, and their focus is on the metalanguage of linguistic description, i.e. the terminology used to describe language (Myhill et al., 2013; Myhill and Jones, 2015).

Depending on the study, there may be a tendency to use 'metalinguistic' either as a synonym for grammatical knowledge or as an over-arching knowledge set of which grammatical knowledge is a subset (Myhill et al., 2013). Explicit grammatical knowledge is often referred to as metalinguistic knowledge which can be brought into conscious awareness and articulated (Hulstijn, 2005; Roehr, 2006). Roehr (2008:179) defined metalinguistic

knowledge as "learners' explicit knowledge about language". Researchers have used various terms to refer to such knowledge. For example, Sorace (1985), Laufer and Hulstijn (2001), Ellis (2005), Elder et al. (2007), Roehr (2006), Hu (2011), and Wach (2014) all use the term 'metalinguistic knowledge' (MLK). Williamson and Hardman (1995), Cajkler and Hislam (2002), and Borg (2003) use the term 'grammatical knowledge', and, others, such as Chandler et al. (1988), use the term 'linguistic knowledge'.

In addition, the place of grammatical terminology within metalinguistic knowledge has also been debated. Andrews (1999c:144) includes terminology in his definition of MLK: "explicit knowledge about language systems and of the terminology used for labelling linguistic features". However, authors such as Laufer and Hulstijn (2001) believe it only includes the knowledge of rules, and Bialystok (1979), Alderson et al. (1997), Roehr, (2006), and Elder et al. (1999) define it as explicit knowledge of grammar but fail to mention whether this should include terminology or not. The fact that Andrews (1999c) includes terminology in his definition makes it the most comprehensive, and so, for the purposes of this study, MLK is understood to mean explicit knowledge of both grammar terms and grammar rules.

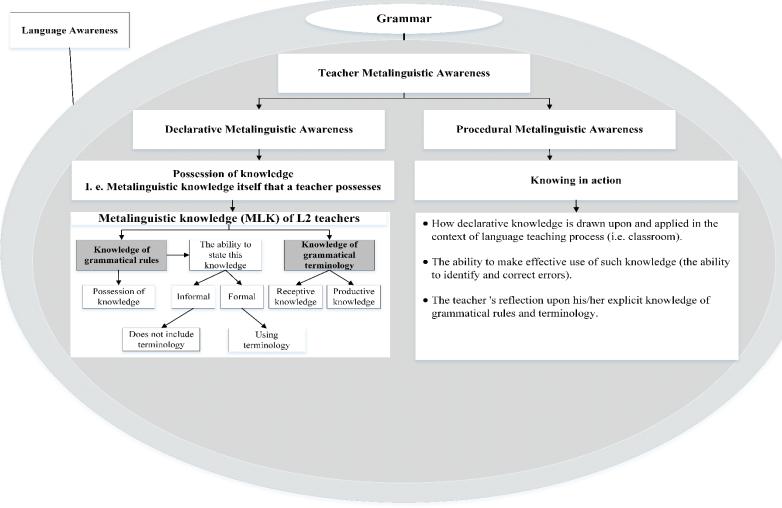
2.6 Metalinguistic knowledge (MLK) for L2 teachers and its characteristics

In recent years, considerable attention has been paid to language awareness (LA), especially the LA of first language (L1) and second language (L2) teachers (for example: Chandler et al., 1988; Wray, 1993; Andrews, 1994a, 1999c, 2006; Williamson and Hardman, 1995; Berry, 1997, 2009; Andrews and McNeill, 2005; Elder, et al., 2007). Thornbury (1997) defines teacher language awareness (TLA) as '...the knowledge that teachers have of the underlying systems of the language that enables them to teach effectively' (Thornbury, 1997: x). TLA is a general term, and the broadness and scope of such an awareness potentially extends to all areas of language (Carter, 1995; Andrews, 1997 and Bolitho et al., 2003). Andrews (1997) uses the term 'teacher metalinguistic awareness' (TMA) in his research, which is predominantly concerned with grammar, stating that the use of the term TMA is intended to:

...underline the importance of the teacher's reflections upon her explicit knowledge about language- the metacognitive dimension of language awarenessand also to emphasise the significance of the interrelationship between the declarative and procedural dimensions of teacher language awareness, i.e. between the knowledge-base itself and how that knowledge is drawn upon and applied in the course of professional activity. (Andrews, 1999c:144)

According to Andrews (2001) there are two different dimensions of TMA; knowledge being the declarative dimension (knowledge about the language), and awareness being procedural (the ability to make effective use of such knowledge in pedagogical practice). Both are considered essential (see Figure 2-1). Thus, declarative metalinguistic awareness refers to the metalinguistic knowledge that a teacher possesses and is able to formulate, whereas, procedural metalinguistic awareness refers to knowledge in action (i.e. how knowledge is drawn upon and applied in the context of the language teaching and learning process, and the ability of a teacher to make effective use of such knowledge) (Andrews, 1999b, 2007). Andrews argues (2003, 2005) that professionalism for teachers of a foreign language demands the possession of both these dimensions in addition to an adequate knowledge of language (language proficiency). In this study, the focus is on just one dimension of TMA: declarative metalinguistic awareness, which will be referred to herein as 'Metalinguistic Knowledge' (MLK).

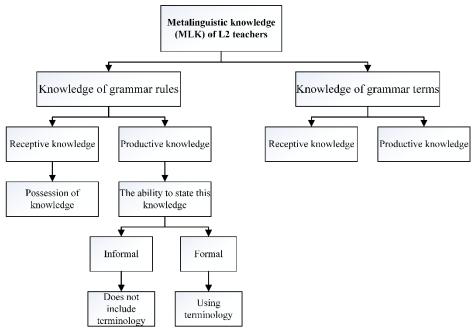
Figure 2-1: Teacher Metalinguistic Awareness



(Source: Author, adapted from Andrews, 1997, 1999b, 1999c, 2007; Ellis, 2004; Berry, 2009)

Ellis (2004), Berry (2009), and Andrews (1997; 1999b; 1999c; 2007) indicate that the MLK (i.e. declarative metalinguistic awareness) of L2 teachers (both student teachers and practicing teachers) has two main components (see Figure 2-1): explicit knowledge of grammar rules, and knowledge of grammar terms. Figure 2-2 below presents the characteristics/components of L2 teachers' MLK. Knowledge of terminology also includes knowledge of the concepts which the terms denote and according to Andrews (1999c; 2007) and Ellis (2004), can be both receptive (i.e. possessing knowledge) and productive (i.e. the ability to produce grammar terms).

Figure 2-2: Metalinguistic knowledge (MLK) of L2 teachers.



(Source: Author, adapted from Ellis (2004), Berry (2009) and Andrews (1997, 1999b, 1999c, 2007))

The issue of whether terminology is a necessary part of teachers' MLK has been a source of debate in the literature. Ellis (2004), Berry (2009), and Andrews (1997; 1999b; 1999c; 2007) argue that verbalisation of a grammar rule can occur with or without terminology, whereas Alderson et al. (1997) view terminology as an essential component of MLK. As these researchers point out, "it would appear that whatever explicit knowledge consists of, it must include metalanguage, and this metalanguage must include words for grammatical categories and functions" (Alderson et al., 1997: 97). Conversely, Ellis (2004), Berry (2005; 2009), and Andrews (2007) argue that terminology is not an essential component of MLK and assert that it is possible to verbalise a rule without using

terminology; there are two kinds of rules (formal and informal), and L2 teachers, potentially, need to access both.

This argument is also endorsed in this research. The author believes that L2 teachers should be able to formulate a grammar rule using terminology but taking into account that the decision regarding whether to use terminology or not will depend on the teaching context and the learners' needs. Tsang (2011) asserts that teachers should employ formal grammar terminology in their explanations and even in their feedback to students, as this approach will increase their students' familiarity with such terms. Borg (1999) suggests that the use of terminology facilitates communication about the language between learners and their teachers. It can also provide a shorthand way of referring to grammatical elements (Halliwell, 1993), representing an economical and precise way of discussing particular functions (Cater, 1990b, cited in Berry, 1997). Similarly, Ellis (2004) claims that terminology can make it easier to understand as well as talk and write about grammar. Thornbury (1997) cautions that if an L2 teacher lacks basic knowledge of terminology, they might lose the confidence of their learners, and this is another good reason why L2 teachers in Saudi Arabia require this knowledge. Shuib (2009) claims that it is crucial for language students to acquire in-depth knowledge of grammatical terms in order for them to achieve linguistic proficiency. This may not be true in all contexts, but teachers who have explicit knowledge of terminology have an advantage in that they can choose when and how to use terms. Thus, it is considered imperative that teachers become familiar with English grammar terms.

It is important, then, to investigate the nature of the grammatical formulations provided by teachers when teaching grammar; for example, what they do or do not include, and their ability to formulate rules with/without using terminology, as addressed in this study (see section 2.11).

In summary, MLK in this study consists of the following (see Figure 2-2):

- 1. Productive and receptive knowledge of grammar terms.
- 2. Productive and receptive knowledge of grammar rules.

2.7 MLK in teaching L2 grammar

The importance of subject knowledge in teachers' professional development has been the focus of a substantive body of research in teacher education (Myhill et al., 2013). Shulman (1987) defines subject content knowledge as the knowledge teachers have of the subject matter they are teaching. A teacher's subject content knowledge (knowledge of an academic domain) differs from pedagogical content knowledge, which has been suggested as a third major component of teaching expertise by Shulman (1987) alongside pedagogical knowledge (knowledge of how to teach). Pedagogical content knowledge is the integration of a teacher's subject content knowledge and their pedagogical knowledge. In other words, it is a type of knowledge in which teachers relate their pedagogical knowledge to their subject matter knowledge. It is a teacher's knowledge about how and when to teach what in order to address learners' needs. Shulman (1987) asserts that 'knowing that' is as significant as 'knowing how'. Shulman (1999), among others such as Edge (1988) and Andrews (2008), argues that L2 teacher instruction must be based on in-depth subject content knowledge.

Grammatical content knowledge is only one element of the broader set of metalinguistic content knowledge required by language teachers. This study sets out to explore teachers' metalinguistic content knowledge, especially their grammatical content knowledge (MLK). This is defined as the academic domain of knowledge about language that includes explicit knowledge of grammar terms and grammar rules. It is declarative knowledge which is conscious and can be articulated. This study does not attempt to explore grammatical pedagogical content knowledge. Teachers' grammatical content knowledge alone is the particular focus of this study.

Johnston and Goettsch (2000: 446) ask the question, "Do L2 teachers need MLK?" and state, "the conscious awareness of grammar structures is as much a part of the teacher's knowledge base as the ability to use them in practice". In the context of the language classroom, teachers' MLK plays a significant role in their ability to improve their learners' understanding of the language (McNamara, 1991) and in shaping their professional capacity to plan for and respond to their learners' language needs (Myhill et al., 2013). McNamara (1991) argues that teachers themselves must have strong subject

content knowledge in order to achieve the purpose of their teaching (i.e. to enhance learners' understanding and language ability). He (1991) claims that

Teachers' subject matter knowledge influences the way in which they teach and teachers who know more about a subject will be more interesting and adventurous in the ways in which they teach and more effective. Teachers with only a limited knowledge of a subject may avoid teaching difficult or complex aspects of it and teach in a didactic manner which avoids pupil participation and questioning and fails to draw upon children's experience (McNamara, 1991:115).

L2 teachers require this knowledge (i.e. MLK), not only to respond to their learners by giving feedback on and/or explanation of identified errors, but also to give more extended grammatical explanations as the context requires (Elder, 2001; Andrews and McNeill, 2005). The practice of explicit grammar teaching continues to dominate in many countries (Borg, 2003a, 2003b). Borg and Burns (2008) observed, in their study of English language teachers from 18 countries, that teachers had a proclivity towards merging grammar and skills instruction. As a result, grammar was taught in context, enabling teachers to draw learners' attention to various grammar aspects in relation to mistakes made by the latter or to a text pertaining to skills teaching (Svalberg, 2012). As Svalberg (2012) points out, due to the requirement of putting things into context and the responsive character of this approach, this places high demands on teachers' grammar awareness.

Moreover, the usefulness of the MLK lies in the fact that it facilitates teachers' performance, and helps them to identify and reflect upon errors. For instance, if a L2 teacher has explicit knowledge of the simple past tense (which usually indicates that an activity or situation began and ended at a particular time in the past), and one of his/her learners produces the sentence: '*I walk to school yesterday*', the teacher's MLK would enable him/her to reflect upon the identified error, and, if needed, explain the nature of the error to the student, and perhaps the class.

When they have a well-developed MLK, teachers can give their learners accurate and appropriate information concerning language form, enabling the learners to develop explicit knowledge (Williamson and Hardman, 1995; Andrews and McNeill, 2005). Schultz (2001) noted, that teachers often prefer a form-focused approach, as maintenance

of grammatical knowledge is crucial; this is especially true in the Saudi educational context, where grammatical accuracy is crucial for the students' grades on important exams. MLK can help teachers answer any questions that learners have about a grammar rule or term. Borg (1999) argues that because foreign language (FL) teachers are professionals, learners would expect to be able to elicit information from them about the FL they are studying; therefore, FL teachers should seek to acquire this knowledge. It is anticipated that a learner may ask for a rule, a term, or perhaps request an exemplar of the term in a text.

Andrews (2005) argues that a teacher with a rich knowledge of grammatical constructions will be in a better position to help and support developing young writers. Gorden (2005:61), drawing on an empirical study working with teachers in New Zealand, concluded that teachers with limited grammatical knowledge "would be unable to see language development in the writing and speaking of their own pupils". Likewise, Myhill et al. (2013) argue that limited grammatical knowledge can prevent teachers from appropriate identification of language development and can create problems for teachers in handling grammatical discussion of particular students' questions. Moreover, teachers with limited knowledge may experience difficulty making the analysis explicit and could even lead learners to develop misconceptions (Myhill et al., 2013). Myhill et al.'s (2013) study found that teachers who have limited MLK struggled with grammar explanation. For example, they found that there was a tendency to explain word classes using semantic rather than functional definitions (e.g. calling a noun a 'naming' word or something you can touch and a verb a 'doing' word). This generated confusion and misconceptions in the students' learning. Thus, as claimed by Edge (1988) and Andrews (2008), teachers' understanding of the language they teach and their ability to analyse it could make a significant contribution to their teaching effectiveness.

In addition, MLK plays a significant role in shaping a teacher's professional capacity to plan for a lesson. For example, a teacher must be able to assess the potential difficulty of a text and its appropriateness for the class as a whole. MLK can also play a significant role in determining the success of a meaning-focused approach; through the teacher responding to the potential linguistic demands of the task, and giving feedback on students' output (Andrews, 1999b). Thus, as claimed by Andrews (1999b), Elder (2001)

and Elder, et al., (2007), L2 teachers need MLK so that they can apply teaching strategies that are appropriate to their particular learning context, in order to ensure that their learners obtain both useful input, and feedback on learning.

Moreover, McNamara (1991) suggests that such knowledge is not only essential for teaching itself but also for assessing the quality of teaching materials and learning aids (e.g. textbooks) and engaging in the diagnostic assessment of pupils' learning.

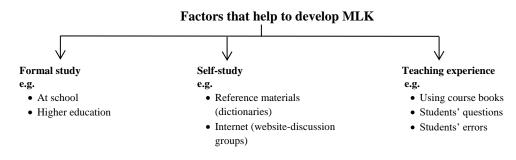
With this in mind, Andrews (2001) and Borg (1999) argue that strong MLK does not necessarily lead to effective teaching of language. Borg (2003) claims that in addition to MLK, teachers need appropriate pedagogical skills to use their knowledge to enhance learning. Thus, language teaching requires the integration of pedagogy and subject content knowledge (Borg, 2003; Bartels, 2005). However, as discussed above, MLK is still important in itself and plays a significant role in the context of the language classroom. The above discussion suggests that in order to function effectively as FL teachers and to enhance their students' learning, L2 teachers require access to in-depth MLK, integrated with appropriate pedagogical skills.

2.8 Factors that help improve the MLK of L2 teachers

Studies concerned with the MLK of L2 teachers (either experienced-teachers (ETs) or student-teachers (STs)) (Chandler et al., 1988; Andrews, 1994a, 1999c; Johnston and Goettsch, 2000; Wray, 1993; Alderson and Horak, 2010), have demonstrated a number of factors that contribute to its development. The majority draw on perceptions of practicing L2 teachers, to identify these factors. Two studies used a test to explore the potential influence of factors (Andrews, 1999c, 2006).

Figure 2-3 presents some of these factors relating to L2 teachers.

Figure 2-3: Factors that help to develop MLK



2.8.1 Formal study (at school - in higher education)

Formal study, for example experience of foreign language learning, or language related subjects at school or at university, has been shown to affect the development of MLK. In Johnston and Goettsch's study (2000) of four teachers, higher education was one of the factors found to correlate positively with grammatical knowledge. Chandler et al.'s study (1988), which involved a postal questionnaire to practicing English teachers, revealed that the majority of respondents acknowledged their own language learning experience at school as their main source of MLK (Chandler et al., 1988, cited in Borg, 2003a). Likewise, in a study by Andrews (2006), one of the participant teachers, Maggie, reported benefitting from completion of an MA in Applied Linguistics, stating that this had influenced her MLK positively. She stated in her narrative (2004):

The course also got me to become more sensitive to the language itself. In a way, this helps a lot. When I was teaching, I found myself doing more textual analysis with the students, and because I understood it more, it was easier for me to communicate the knowledge with the students. (Andrews, 2006:9)

In addition to studies concerning the personal views of teachers, Andrews (1994b) found the same result when he applied a test. He tested respondents' understanding of grammatical terms, and their ability to apply them correctly. He revealed that those students whose subject of study in higher education was relevant to teaching English as a foreign language (TEFL), performed better than those whose university studies were in an area not relevant to TEFL. Likewise, Andrews (1999c) used a test to assess the influence of formal study at university on teachers' MLK, and confirmed that higher education could positively influence MLK. Indeed, several researchers have sought to measure the MLK of STs after taking a grammar course designed to improve their MLK (Wray, 1993; Alderson and Horak, 2010). Wray (1993) conducted a test to assess the level of knowledge of grammatical terminology among selected STs on a primary postgraduate training course. The tests were conducted pre-course and post-course. The test asked the STs to underline particular parts of speech in a sample sentence. This study deviates from the other more positive results, because the results of the test showed little improvement after the students had taken the course. Wray (1993) justified this result by relating it to the course content, stating:

The major ostensible aim of this course was to introduce student-teachers to the study of language in use in primary classrooms and the influences upon this, and the majority of the work on the course had been concerned with this. It is not therefore surprising that these students-teachers demonstrated an enhanced knowledge of functional aspects of language. Neither is it surprising that their knowledge of language structure should have advanced little. Their course had rarely drawn this to their attention. (Wray, 1993:67)

Alderson and Horak (2010) reported on two tests aimed at testing the MLK of undergraduate English Language and Linguistics students, who were potential teachers. In the first study, 64 students at Reading University took a pre-course test at the beginning of the first term to determine who would go on to take a grammar course in the second term of the academic year 2009-2010. The results showed that instruction resulted in improved recognition of parts of speech and grammatical functions. Similarly, in the second study, findings of a test at Lancaster University showed that students' MLK increased after taking a course in grammar. This was demonstrated by comparing the results of a pre-course test that was carried out at the beginning of the academic year 2005-2006, before any formal courses in grammar had been taught, and the results of a post-course test carried out at the end of the same academic year.

A review of previous studies shows, perhaps unsurprisingly, that if teachers had learnt about grammar at school and at university, they would be likely to know more about English grammar than if they had not. It is unclear, however, in these studies how significant an improvement was achieved, and what level of MLK the teachers had achieved.

2.8.2 Self-study

Further factors could help to improve MLK, such as informal self-study; for example, through using reference materials like dictionaries, internet-based discussion groups, or in-service training. Andrews's study (1994a) identified these factors through the collection of views of participant teachers; however, none of the previous studies focused specifically on these methods, and no details were available concerning how the ET and ST teachers might go about undertaking self-study.

2.8.3 Teaching experience

Teaching experience, involving for example, course books, students' questions, and students' errors, can all contribute to the development of the MLK of practicing English teachers. Andrew's study (1999c) showed that non-native-speaker (NNS) L2 teachers with a minimum of two years teaching experience had superior MLK to the other groups tested (NNS-prospective L2 teachers, NS prospective L2 teachers of English Studies, and NS prospective L2 teachers of Modern Languages). However, it was not obvious whether the crucial influencing factor was the quality of teaching experience, or the quantity of teaching experience (Andrews, 1999c). Similarly, a questionnaire-based study carried out by Andrews (1994b) revealed that English teachers in Hong Kong, who had at least six years of experience, were more proficient than teachers with up to one year's experience in tasks that tested their ability to identify specific parts of speech or grammatical functions, or verb forms. Likewise, in Johnston and Goettsch's study (2000), all four participating teachers stated that their teaching experience played a role in developing their content knowledge. Conversely, in Andrews study (2006), although the three teachers studied had been teaching English full-time for eight years (1996 to 2004) after taking the first test, their MLK remained stable, as measured by a Grammatical Language Awareness Test.

There is a possibility that years of experience of teaching grammar may not have led to a more highly developed MLK, because, according to Andrews's (2006), the teachers did not actively seek to develop their knowledge. This suggests that, in order for MLK to

develop, it is important for teachers to be aware of the extent of their own MLK, and to desire continuous self-improvement (Andrews and McNeill, 2005). It can, therefore, be concluded that improvement is not automatic.

2.9 Assessment of MLK

Tests are often used to measure explicit MLK of the target language. Studies such as Bloor (1986), Williamson and Hardman (1995), Alderson et al. (1997), Andrews (1999c), Andrews and McNeill (2005), Elder, et al., (2007), Shuib (2009), Tsang (2011), and Wach (2014), used tests to collect evidence about the level of teachers' (both ETs' and STs') MLK. This section presents some examples of these tests and then discusses the variety of tests used to measure MLK in previous studies.

2.9.1 Examples of tests used to measure MLK

Previous tests used to measure MLK, such as those in Bloor (1986), Alderson et al. (1997), Andrews (1999a; 1999c), Elder et al. (2007), and Elder (2009), have largely focused on measuring specific, individual components of MLK. No previous test has covered such a wide range of knowledge both terms and rules both receptive and productive. Bloor's (1986) test focuses only on measuring the receptive knowledge of terms. Alderson et al.'s (1997) MLK test measures specific components of MLK including teachers' receptive knowledge of terms and their productive knowledge of rules.

Beginning with Bloor's (1986) test (see Appendix A), the first task includes 15 items exploring whether participants can identify particular parts of speech (verbs, nouns, adverbs, etc.) in a sample sentence. They are given a sentence and asked to provide one example of each of the grammatical items requested. The test also includes another task including four items testing the ability to identify grammatical functions (e.g. subject and object). Participants are asked to underline the items requested in brackets. These two tasks reveal whether the students already knew these terms and understood them well enough to find examples/select the item that exemplifies the grammar term requested. In other words, the test focuses only on measuring the receptive knowledge of terms. A similar test was used by Alderson et al. (1997). It consists of three sections. In the first,

borrowed from Bloor's (1986) test, participants are given a sentence and asked to identify a number of different parts of speech. The second section, inspired by Bialystok (1979), requires participants to identify ungrammatical sentences. In addition, participants are asked to correct the errors and to state the grammar rules which have been broken. This aspect of the test was inspired by Sorace's (1985) test.

One potentially critical problem with Bloor's (1986) and Alderson et al.'s (1997) tests is that they measure only specific components of MLK, i.e. the receptive knowledge of terms and the productive knowledge of rules. As mentioned above, these tests include identifying parts of speech and explaining errors using specific rules which have been broken (Alderson et al., 1997). Other components of MLK, however, such as productive knowledge of terms and receptive knowledge of rules, are not measured by these tests, and they therefore lack validity as tests of MLK insofar as they fail to cover all the components of MLK (both terms and rules) and its subdivisions (receptive and productive). Besides, these tests only provide typical example sentences (made-up sentences).

Other tests used by Andrews (1999a; 1999c), and Elder et al. (2007) also focus on specific MLK components. Andrews' (1999a; 1999c) test was largely based on Alderson et al.'s (1997) test, which, in turn, drew on Bloor (1986). Andrews' (1999a; 1999c) test (see Appendix B), however, does measure a majority of the components of MLK, i.e. the productive and receptive knowledge of terms and the productive knowledge of rules (only the receptive knowledge of rules was not measured). The test includes 60 items in total and was designed to measure (i) the subjects' ability to recognise terminology, (ii) their ability to produce the appropriate grammar terms, (iii) their ability to identify and correct errors, thereby testing their language proficiency, and (iv) their ability to explain grammar rules. The first section includes 12 sentences and asks participants to produce the grammatical terms describing the items underlined in each of the sentences. Participants are also asked to provide a full description. The second section is composed of 15 sentences, each of which contains a grammatical error. Here, participants are asked to identify the grammatical error, correct it, and provide an explanation (see Appendix B). All the items on the test are at the sentence level. An example of a sentence taken from Andrew's sample sentences (1999c:4) is provided below:

• What grammatical terms would you use to describe the item underlined in each of the sentences? *NOTE: For each item provide a full description*.

9. Mrs. Wong has been living in that flat for years.

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The test of metalinguistic knowledge used in Elder et al.'s (2007) study only focuses on the ability to formulate rules. The test is an adaptation of a test designed by Alderson et al. (1997) and contains 15 sentences, all of which are ungrammatical with the part of the sentence containing the error underlined. Participants are asked to write a rule that explains why the sentence is ungrammatical. This study also included another kind of MLK test: an untimed 'grammaticality judgement test' (GJT) consisting of 68 sentences wherein test-takers are asked to mark a sentence as either grammatical or ungrammatical (more details about GJTs below).

Finally, the metalinguistic knowledge test (MKT) used by Elder (2009) focuses only on the receptive knowledge of terms and rules. It is an adaptation of Alderson et al.'s (1997) test, which is divided into two parts (see Appendix C). The first task focuses on learners' knowledge of target language grammar rules and presents test-takers with 17 ungrammatical sentences along with multiple-choice options offering possible explanations (both accurate and inaccurate) describing the target grammar rule. Participants are required to select the rule that best explains the error from among the choices provided for each sentence. This test's format departs from that used by Alderson et al. (1997) in that it measures receptive metalinguistic knowledge rather than the ability to state target rules (Elder, 2009). Task 2 requires test-takers to match items from a list of grammatical terms to their corresponding examples in the passage. Although Elder (2009) used a short text in one task, the task testing the receptive knowledge of terms included no comparison between knowledge of terms at both sentence and text levels.

It can be seen that none of the tests described above measures all the components of MLK (terms and rules) with its subdivisions (productive and receptive) (see Figure 2-5 below). Furthermore, it is notable that all the items on these tests are at sentence level.

2.9.2 Different tests of MLK

The different tests of teachers' MLK (whether ETs or STs) used in previous studies described above can be classified according to their purposes (see Figure 2-4 below). Some tests aim to test the explicit knowledge of grammar rules, and others aim to measure knowledge of grammatical terms. The findings of studies by Ellis (2009) and Elder (2009) supported the validity of some of these tests, see more details below, as a measure of explicit knowledge "because [the test used] involved a high degree of awareness, was unpressured, focused attention on form and obviously required the use of metalinguistic knowledge" (Ellis, 2009:46). The following sections present/analyse these different tests.

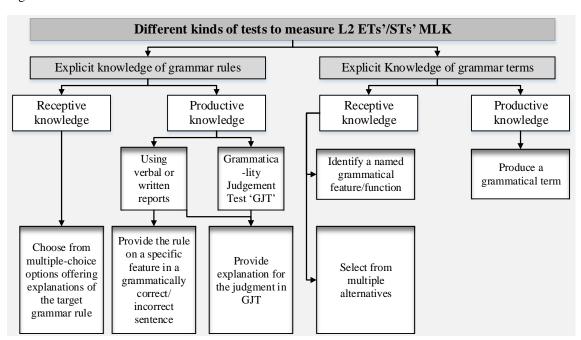


Figure 2-4: Different tests of MLK

2.9.2.1 Tests measuring knowledge of grammar rules

Figure 2-4 above presents an overview of different test possibilities, some aiming to test the explicit knowledge of grammar rules and others measuring knowledge of grammatical terms. The best tests for assessing explicit knowledge of grammar rules are those that elicit verbal or written responses to establish the respondent's ability to present concept/s deemed to be central to each case using metalinguistic terminology (Ellis, 2004). They

involve tasks asking test-takers to provide explanations of grammar. The criteria for the adequate formulation of an appropriate rule normally involve the use of metalinguistic terminology. Several kinds of tasks can be used to elicit verbal or written reports (see Figure 2-4 above). The first is a task that requires participants to provide rationales for their judgements in grammaticality judgement tests (GJTs). In the second, participants are given sentences exemplifying correct or incorrect use of a specific grammatical feature (usually underlined), which they are then asked to explain. The latter is the most popular kind of task, and it has been used in several studies (e.g. William and Hardman, 1995; Alderson et al., 1997; Andrews, 1999a, 1999c; Andrews and McNeill, 2005; Elder et al., 2007; Erlam et al., 2009; Shuib, 2009; Tsang, 2011). The most valid measure of explicit L2 knowledge of grammar rules, especially productive knowledge, involve collecting verbal/written explanations, based either on sentences that the participants have judged to be ungrammatical or relate to already specified features in grammatically correct/incorrect sentences (Ellis, 2004). This task format was used in the current study (see Section 3.7.1.1) to focus on the ability of ETs and STs to state a rule (i.e. productive knowledge) and test whether or not they could do so using metalinguistic terminology. For the purposes of this study, the formulation provided by the participants (ETs and STs) needed to employ terminology in order to be considered full marks. In other words, the criteria for the adequate formulation of the appropriate rule included using metalinguistic terminology.

In a GJT, test-takers are asked to mark a sentence as either grammatical or ungrammatical. It has been used, alongside other kinds of tests, in studies such as those by Wach's (2014), Erlam et al.'s, (2009), and Elder et al.'s (2007). Ellis (2004) analysed GJT as a research tool in some depth. According to Ellis, GJT involves three processing operations: the first is the 'semantic process', which involves understanding the meaning of a sentence; the second is the 'noticing process' which involves searching to establish whether something is formally incorrect in a given sentence, and the third is the 'reflection process', which involves considering what is incorrect about a sentence, and, possibly, also why it is incorrect.

Ellis argued that the validity of GJT as a measure of explicit knowledge is weak, because it is difficult to determine what kind of knowledge participants draw on when they judge the grammar of a sentence. In addition, the kind of knowledge a GJT measures may in part depend on whether the judgement is timed or untimed. Thus, the time allocated during a GJT can be critical. If a participant does not have sufficient time, then it is expected that they will tend to rely on implicit knowledge. Yet if they are given sufficient time, they might then access their explicit knowledge. However, Ellis points out that even if participants are given enough time, there is no guarantee that they will apply explicit knowledge, because they may still choose to rely on their implicit knowledge. Another problem related to this test is that participants might not judge the specific structures that the researcher(s) intended. They might judge other structures contained in the test sentence. For this reason, he suggests that test-takers should be asked to indicate or correct the errors in the sentences, which they have judged as being ungrammatical. Despite this, there are still doubts regarding the validity of a GJT as a measure of explicit knowledge.

Another option for measuring the explicit knowledge of rules is to use a task in which test-takers are presented with ungrammatical sentences and given multiple-choice options offering explanations (both accurate and inaccurate) describing the target grammar rule. Participants are then required to select the rule that best explains the error from among the choices provided for each sentence. This task was used by Ellis (2009) and Elder (2009) to measure the receptive knowledge of rules. Elder (2009:117) justified his use of this task format, stating that it "measures passive metalinguistic knowledge rather than the ability to actively verbalize target language rules". This task format will be employed in the current study (see Section 3.7.1.1) in order to measure the receptive knowledge of grammar rules.

The explicit knowledge of rules cannot be measured by a single task and instead requires more than one task to demonstrate validity. There is a need to measure explicit knowledge of rules involving both productive and receptive knowledge. Thus, two differently-formatted tasks are used in this study. The first asks participants to state the rule that has been broken in order to measure the productive knowledge of rules. The second presents participants with ungrammatical sentences and multiple-choice options offering explanations describing the target grammar rule. Participants are then asked to select the best explanation. This type of task was selected for use in this study to measure receptive knowledge (see Section 3.7.1.1).

2.9.2.2 Tests measuring knowledge of grammar terms

Additional tests can also be used to measure MLK, especially with regard to ETs' and STs' knowledge of terminology (see Figure 2-4 above). In these tests, participants are presented with a sentence and asked to select from multiple alternatives and/or to identify a named grammatical feature/function. The latter has been very popular and has been used in several studies (e.g. Bloor, 1986; Andrews, 1999a, 1999c; Andrews and McNeill, 2005; Erlam et al., 2009; Shuib, 2009; Tsang, 2011; Wach, 2014). Such tasks assess receptive knowledge of terminology. Another receptive task format involves selecting a term for the identified item in each sentence from among multiple-choice options. However, it should be noted that multiple choice options must be carefully worded so as to present plausible alternatives. In addition, it can be difficult to determine whether such tasks measure receptive or productive knowledge. For example, a multiple-choice task format might be as follows:

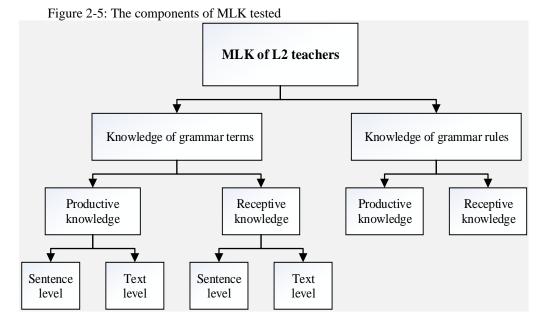
- In the following sentences, underline the term, which is provided in brackets, that describes the item underlined in each of the sentences.
 - <u>*He*</u> was playing. (subject verb object)
 - <u>*Riyadh*</u> is the capital of S.A. (collective noun proper noun plural noun.)

In this case, participants may rely on their productive knowledge to answer the question by looking first at the underlined item in the provided sentence (i.e. he/Riyadh) and thinking of the correct answer (i.e. subject/proper noun) before looking at the choices available. Another possibility is that participants will rely on their receptive knowledge by looking first at the terms provided and, through their understanding of the concepts involved, try to choose the item that represents each one. Due to this difficulty determining which type of knowledge was used to answer the question, this format was not used in this study.

In addition, beside tasks measuring receptive knowledge, MLK tests can involve tasks, which measure the productive knowledge of terms by asking respondents to produce the grammar terms for a pre-identified feature. This type of task was used by Bloor (1986), Wray (1993), William and Hardman (1995), Andrews and McNeill (2005), Andrews (1999a, 1999c), and Tsang (2011).

Thus, the explicit knowledge of terms cannot be measured by a single task but will require more than one type to demonstrate validity. Measuring the knowledge of terms requires a task examining the participants' ability to produce appropriate terms (i.e. productive knowledge) and another task examining their knowledge of grammar terms and understanding of the concepts and terms referred to (receptive knowledge). In order to measure the productive knowledge of terms, this study has selected the type of task mentioned above in which participants are asked to produce the grammar term for a pre-identified feature. In order to measure receptive knowledge, the task in which participants are presented with a sentence and asked to identify a named grammatical feature/function (see Section 3.7.1.1) was selected for use.

This section has reviewed the different tests employed in previous research to measure MLK, explaining the options available to the researcher in designing an appropriate test which will answer the research questions by comprehensively assessing participants' actual level of MLK and thus shedding light on the nature of ETs' and STs' MLK. It has been determined that, for the purposes of this research, employing a pre-existing test may not be enough to measure MLK accurately; in reviewing the tests applied in previous studies, it was concluded that none of these options included tasks measuring all the components of MLK and its subdivisions (productive and receptive). Therefore, in order to demonstrate validity and provide more in-depth insights into MLK, the test used here will cover two core components (knowledge of terms and knowledge of rules) with the relevant sub-divisions (productive and receptive knowledge) (see Figure 2-5 below).



Moreover, reviewing the literature has revealed that no test in the previous research has involved a task investigating the application of MLK in an extended text. Thus, the test used in this study also aims to provide more in-depth insights into MLK by adding additional tasks focusing on knowledge not only at the sentence level, but also at the text level (for more detail about the design of the applied test, see Section 3.7.1). This study aims to provide more in depth insights into MLK, by focusing on knowledge at text level, rather than simply at sentence level. Text is included alongside the typical example sentences in the test used in this study, as a text is longer than a short sentence and can provide contextualised examples of less typical instances of grammatical categories (for more detail see Sections 3.7.1.3 and). It will therefore, make it easier to predict the extent to which teachers would be able to apply their MLK to a text.

2.10 Previous research into teachers' MLK

This section evaluates studies concerned with teachers' MLK, either that of STs or ETs. The studies will be classified according to their specific aim; for example, studies concerned with measuring teachers' MLK, studies interested in conducting a comparison between the MLK of ETs and STs, and studies concerned with ETs and STs' opinions regarding their own MLK.

2.10.1 Studies concerned with measuring teachers' MLK

The volume of research into the MLK of teachers– either STs or ETs, for both native speaker (NS) and non-native speakers (NNS), has increased, especially in relation to the teaching of the English language (Bloor, 1986; Williamson and Hardman, 1995; Andrews, 1999a, 1999c; Hislam and Cajkler, 2002, 2005; Andrews and McNeill, 2005; Elder et al., 2007; Berry, 2009; Shuib, 2009; Erlam et al., 2009; Tsang, 2011; Sangster et al., 2013; Wach, 2014). These studies have been conducted on diverse components of MLK in different educational contexts; e.g. in the UK (Bloor, 1986; Williamson and Hardman, 1995; Hislam and Cajkler, 2002, 2005; Tsang, 2011; Sangster et al., 2013; Hislam and Cajkler, 2002, 2005; Tsang, 2011; Sangster et al., 2013), in China (Andrews, 1999a, 1999c; Andrews and McNeill, 2005; Berry, 2009), in Malaysia (Elder et al., 2007; Shuib, 2009; Erlam et al., 2009), in Poland (Berry, 2009; Wach, 2014), and in Austria (Berry, 2009). The majority of these studies have concluded that there are deficiencies in teachers' MLK.

In studies conducted to investigate the various components of MLK of NS English language teachers, the focus was on measuring the MLK of NS STs, rather than NS ETs, and the findings have largely been that the level of STs' MLK is unsatisfactory. For example, Bloor's (1986) study, which concerned NS STs' knowledge of terminology, included a test with 15 items to explore whether respondents could identify particular parts of speech in a sample sentence (e.g. verb, noun, adverb, etc.). The test also included four items to test ability to identify grammatical functions (e.g. subject, and object). It found deficiencies in STs' knowledge of grammar terms. Hislam and Cajkler's (2002) study, which investigated the level of NS primary teacher trainees' knowledge of grammar terms, by measuring their ability to classify parts of speech, also reached a similar conclusion. In a later study in 2005, they also saw examples of such weaknesses in four NS trainees when they conducted a lesson observation. Likewise, Sangster et al.'s (2013) study, conducted with NS primary teachers-to-be and NS STs secondary teachers-to-be, found knowledge of grammar terms and the ability to classify parts of speech was limited.

Additional studies have included principal components of MLK, knowledge of terms and knowledge of rules, such as Williamson and Hardman's study (1995). This involved 99 NS trainee primary school teachers embarking on a one year primary teacher training

course. The researchers made use of a questionnaire, in which the first section included a question requiring the participants to describe the functions of the underlined items in ten sentences. Another section asked them to define some parts of speech, to list uses of commas, and to describe the difference between a clause and a phrase. In addition, there was a section that asked them to identify grammatical errors in three extracts of writing, and to explain each of these errors. The findings revealed significant gaps, especially in the productive knowledge terminology, among NS STs. In addition, the results showed that they lacked the ability to formulate a grammatical rule. Similar results emerged from Erlam et al.'s (2009) study of the MLK of 33 NS STs, which involved administrating a test, as will be discussed in more detail below.

Understanding the hierarchical nature of language, including concepts such as phrase and clause is important for teachers (see Section 5.3). Orsini-Jones (2008) identified them as threshold concepts for language students when learning how to break down their native and target language into grammatical categories. The participants were 128 first year undergraduate languages students at Coventry University. They were given a grammar analysis task. The objective of the task was to analyse sentences according to the Hallidayan 'rank scale', determining the hierarchical structure of each sentence (Halliday 1985). The aim of the grammar analysis task was to equip students with a conceptual arsenal for linguistic analysis. Coulthard (1985:121) summarises the rank scale concept:

A first assumption of a 'categories' description is that the analytic units can be arranged on a rank-scale which implies that unites are related in a 'consists of' relationship with smaller units combining with other units of the same size to form larger ones. Thus, a sentence consists of one or more clauses, each of which in turn consists of one or more groups, and so on. The structure of each unit is expressed in terms of permissible combinations of units from the rank below, the structure of a clause for example being described in terms of nominal, verbal, adverbal and prepositional groups.

This involved analysis of the structure of sentences, clauses, phrases, and words in terms of the item immediately below each one on the ranking scale, and the taxonomy of clauses, phrases, words and morphemes. The study showed participants were finding certain phrases and clauses problematic. Many students were struggling to see the connections between the various components that form the scaffolding holding the sentence together. Semi-structured interviews were conducted with self-selected groups of students (a third of all students took part); to investigate their attitudes towards grammar learning and their perception of what constituted 'troublesome knowledge'. The analysis of the interview transcripts revealed that the students felt most challenged by the grammatical categories of phrase and clause. The transcripts also showed that while some were becoming 'unstuck', others were in a state of oscillation, swerving more towards misunderstanding than understanding. The study revealed that the grammar categories of phrase and clause are self-standing threshold concepts, which once mastered can open up a new understanding of further concepts and relationships.

Concern over the MLK of NS STs has gradually advanced to focus on the issue of MLK among English language NNS STs and ETs (Andrews, 1999a, 1999c; Andrews and McNeill, 2005; Elder, et al., 2007; Berry, 2009; Erlam et al., 2009; Shuib, 2009; Tsang, 2011; Wach, 2014). What follows is a discussion of these issues.

2.10.1.1 The MLK of English language non-native student-teachers (NNS STs)

The majority of the research into teachers' MLK is recent and much of it has centred on English language NNS teachers, with particular emphasis on STs. These studies have taken three directions; studies covering the two main components of MLK; knowledge of terms and knowledge of rules (Andrews, 1999c; Erlam et al., 2009; Wach, 2014), and studies concerned with measuring only one component of MLK, knowledge of grammar terms (Berry, 2009), or knowledge of grammar rules (Elder, et al., 2007).

One component of Andrew's (1999c) in-depth study in Hong Kong aimed to investigate the level of explicit knowledge of grammar rules and terminology of 20 NNSs, who were prospective English teachers. He used a MLK test (see Section 2.9.1), and his study revealed that STs had gaps in their explicit grammar knowledge, even when asked to address relatively elementary errors. The mean score for their overall tests was just below 50%. In addition, the results returned a mean score that was higher in the recognition task (the mean score was 71.94%) than in production tasks (the mean score was 48.76%). On the other hand, it was noticeable that they were better at producing terminology (the mean

score was 48.76%) than at rule explanations (the mean score was 22.32%). Andrews concluded this was because the task of producing terminology was less cognitively demanding than the task of explaining the rule.

Andrews (1999c) does not, however, provide any details about the extent of the respondents' knowledge of terms, mentioning just a few examples in the discussion; indirect object, preposition, passive verb, and finite verb. Nor were there any details about their abilities to formulate grammar rules. One question that needed to be asked, however, was whether they were able to formulate rules formally or informally. In addition, the relatively small sample size was a limitation of his study.

Elder, et al.'s (2007) study aimed to test productive knowledge of grammar rules among 61 advanced English Language learners from Malaysia who were also trainee English language teachers. They enrolled in a one-and-a half year foundation programme at international languages teacher training institute in Malaysia. They were tested according to a Metalinguistic Knowledge Test (MKT). The test included sentences and asked participants to provide an explanation in the form of a rule for each error identified and marked for them in each sentence. This test was an adaptation of the test produced by Alderson et al. (1997). The items on the tests were all at the sentence level. The participants also used a GJT, with 68 sentences that were either grammatical or ungrammatical. They used the GJT to determine if there was an association between the ability to detect errors and offer an explanation.

The results of Elder, et al.'s (2007) study showed that only 49.4% of STs delivered acceptable rules to explain the tested structures. Overall, the mean average scored for their ability to use appropriate terminology in their explanations was 33.8%. The structures that were easiest to formulate, i.e. the ones in which the participants performed best when formulating an adequate rule, were simple past tense, plural 's', possessive 's' and comparatives. The structures that were most difficult for students to formulate rules about were, from most to least difficult; ergative, verb complements and unreal conditions. In summary, overall, the STs achieved less than 50% in terms of acceptable responses on the rule explanation questions. In addition, their command of grammatical terminology was weak, correlating with their poor ability to formulate rules.

In contrast, on the GJT, the participants scored highly (average 88.54%); this means they were competent in their ability to judge grammatical and ungrammatical structures. In addition, this study showed that there was an association between the ability to detect errors and explanation, arguing that explicit knowledge contributes to the resolution of both types of items. This study differed from others because its key focus was on the ability to formulate a rule. The authors claimed that they aimed to test the MLK of the STs, but in fact, they tested only one component of MLK, i.e. the productive knowledge of rules. There were no questions designed to deal with the other components of MLK such as productive and receptive knowledge of terminology.

Berry (2009) completed a comparative study evaluating the receptive knowledge of grammar terms among 296 STs in Poland, Austria and Hong Kong, through administration of a questionnaire, which included 50 items of terminology. The participants were asked to tick the items that they recognised, and then exemplify them. The finding was that the participants generally had a receptive knowledge of only 40–50% of the grammar terms. Moreover, there were individual differences across the three groups. The main weakness of the study was the failure to measure the receptive knowledge of terms in-depth. The participants may, for example, know the term 'adverb', and if they also believe that each word that ends with –ly is an adverb they could provide 'slowly' as an example for the term 'adverb'. Nevertheless, this does not show that they understand the concepts associated with the term 'adverb', that it is, as 'a word that serves to modify a sentence, a verb, an adjective or another adverb'. Thus, arguably, this format of task does not measure the depth of a participant's receptive knowledge.

Erlam et al. (2009) chose to investigate the level of MLK of 61 Malaysian STs using a two part test. This study found similar results to those of previous studies, revealing that the STs performed poorly on all parts of the test. The first part of the test was a GJT, consisting of 40 sentences, some of which were ungrammatical. The participants' task was to mark a sentence as either grammatical or ungrammatical. The test was used to determine if participants' MLK scores correlated with their ability to recognise errors. The second part was a MLK Test including two sections. The first section involved 15 sentences to test their ability to formulate rules and to highlight their ability to provide terms in their explanations. It asked the participants to explain underlined errors. While

formulating the rules, the participants were expected to use formal terminology. The second section tested their recognition of terms. The first task required the participants to read a brief text and afterwards identify 19 grammatical categories in it. The second task asked participants to underline the items in brackets (grammatical functions) in 4 sentences. The participants achieved less than 50% of acceptable responses on the rule explanation task, and just over 50% on recognition tasks. The STs demonstrated a greater capacity to recognise terms than provide rules. The researchers did not test the productive knowledge of terms, and looked at their ability to produce terms only through their explanations of rules.

They focused on rules and terminology that presented particular difficulties for STs. When identifying grammar structures, the STs found the four easiest terms to identify were subject, noun and verb; conversely, they found the three most difficult to be finite verb and agent. For rule formulation, plural-s, possessive –s, and comparatives were the most straightforward, and the hardest were verb complementation and ergative verbs, and comparatives. In this study, there were no details given about how the participants formulated rules.

Wach (2014) conducted a recent in-depth study to investigate explicit English grammar knowledge in Polish users of English. One category of users was an English language STs' group. The number of participants was 54. The participants were tested using tests adapted from Erlam et al. (2009). The results regarding MLK showed that the STs' performance at giving explanations was the worst (the mean score was 48.1%) when compared with their performance on the recognition task (the mean score was 85.2%). It seemed that they experienced difficulty formulating rules, as well as with using grammar terms while giving explanations (the mean score was 55.4%). In contrast, STs demonstrated a greater ability in regard to recognising terms. The results of the GJT showed that the participants scored highly (83.3%) in their ability to judge grammatical and ungrammatical structures. The researcher did not take into account weaknesses in the validity of a GJT as a measure of explicit knowledge, as was discussed earlier. Returning briefly to this issue, the weakness of that kind of test was that it is difficult to know what kind of knowledge (implicit knowledge or explicit knowledge) participants draw on when they judge a sentence's grammar (see 2.7.1). Another weakness of this study was that the

researcher did not test the participants' productive knowledge of terms. In addition, it relied too heavily on measuring MLK levels, without offering a descriptive analysis of responses. It gave no details about what terminology the respondents knew and did not know, nor did it offer details about how they formulated rules.

These previous studies into NNS STs' MLK—both those measuring the two main components of MLK (i.e. knowledge of terms and knowledge of rules [Andrews, 1999c; Erlam et al., 2009; Wach, 2014]) and those that measured only one component (e.g. knowledge of grammar terms [Berry, 2009] or knowledge of grammar rules [Elder et al., 2007])—have generally found deficiencies in NNS STs' knowledge of terms and rules. Their overall performance has tended to illustrate a low level of knowledge. Having discussed previous studies concerned with measuring the MLK of NNS English language STs, the following section will discuss those related to ETs.

2.10.1.2 The MLK of English language non-native experienced-teachers (NNS ETs)

Previous studies have provided powerful insights into English language NNS ETs' MLK by assessing their MLK level, and focusing on comparison between the components of MLK (Andrews, 1999a 1999c; Andrews and McNeill 2005, Shuib, 2009, Tsang 2011, Wach, 2014).

For example, part of Andrews' (1999a) in-depth study, explored explicit knowledge of English grammar terms and grammar rules among 187 secondary teachers in Hong Kong. These teachers, who all had fewer than 5 years teaching experience, were tested using the same test as described in Andrews, 1999c. The overall mean score for these subjects was 65%, revealing that there were gaps in these teachers' MLK; however, this is still a stronger performance than that reported in many other studies. Furthermore, their performance on the recognition task was the highest as they scored 75.1%. They scored 63.2% on the task designed to test their productive knowledge of terms. This indicated that their receptive knowledge of terms was superior to their productive knowledge. The results also revealed that these teachers experienced difficulty giving explanations for errors, scoring only 38.9%.

Similar results were also reported in Andrews' subsequent study (1999c), in which one of the groups investigated was a practicing teacher group comprised of 20 participants. These teachers had an average of two years' teaching experience, and their overall score was nearly 60%, with their performance on rule explanation being the lowest (they scored 42.5%), their performance in the productive task higher (65.8%), and highest in the recognition task (82.8%). The results of Andrews's studies (1999a, 1999c) concluded that the MLK of ETs is not high and suffer from gaps and weakness in some components of MLK, especially as regards the productive knowledge of rules.

Interestingly, similar results were found in another study carried out by Andrews and McNeill (2005), which involved the testing of three ETs teachers in Hong Kong. Part of this study aimed to measure the teachers' MLK. The test used was the same one as that used in Andrews' (1999a and 1999c). Despite all the participants being proficient in English, all three performed badly when asked to explain the errors they had corrected, and when they were asked to provide grammar terms. On the other hand, the teachers demonstrated a comparatively better receptive knowledge of terms.

Shuib (2009) conducted another study to evaluate the MLK of 71 Malaysian primary teachers of English language, and reported similar findings to Andrews having used an adapted version of Andrews (1999a, 1999c). The mean score for the overall test was 39.5%, reflecting a low level of MLK. The mean score for their receptive knowledge of terms was 61.4%, the mean score for productive knowledge 33.6%, and for their productive knowledge of rules only 10.7%. Therefore, this study added little to the discussion, unlike Tsang's (2011) study in Hong Kong, which redesigned Andrews' (1999a, 1999c) test. The aim was to explore the MLK of local English teachers in primary schools, based on 20 practicing English teachers with from 1 to 17 years of teaching experience. Tsang reordered Andrews (1999a, 1999c) test; beginning with the production task, and then following it with recognition and explanation. Notably, in this study, in the fourth task, the errors were categorised into three levels; word level, phrasal level and clausal level (Example 4).

Example 4:

(i) Word level; (e.g. subject-verb agreement):

Everyone thinks that the design of the jeans are good. (Where the main verb 'are' does not agree with the subject 'design'.)

(ii) Phrasal level; (e.g. location of modifying/prepositional phrase):

The in the blue basket kitten belongs to the orphan. (Where the post-modifier/prepositional phrase 'in the blue basket' is placed in between the determiner 'the' and the noun being referred to.)

(iii) Clausal level; (e.g. sentence fragment/incomplete sentence):

While I was reading the guidebook written by a famous tour guide. (Where the main clause, e.g. 'the phone rang.', is missing).

• Examples of sentences taken from Tsang's sample test items (2011:5).

On this test, the participants performed better in the recognition and production tasks than in the explanation task, corresponding with previous studies. However, interestingly, while in Andrews's study (1999a, 1999c), Andrews and McNeill, (2005) and also Shuib (2009), the mean scores of the teachers in the recognition task were higher than their mean scores in the production task, in Tsang's study (2011) the reverse was true. That is, the participants' mean scores in the production task were higher than their mean scores in the recognition task. The researcher interpreted this as follows:

The difference in the score for the production task and that for the recognition task might relate to the test items of the two tasks. The recognition task involved the identification of examples of both grammatical functions (e.g. 'direct object') and grammatical forms (e.g. 'noun') while the production task involved only the grammatical forms. The questions on grammatical functions seemed to have dragged down the overall score of the recognition task. (Tsang, 2011:8).

Examination of the results of Tsang's test (2011) confirm that the participants found it easier to identify grammatical forms (e.g. 'noun' and 'determiner') than to identify grammatical functions (e.g. 'subject' and 'indirect object'). However, the paper does not specify what these forms and functions are. Moreover, the teachers were more competent in their explanations at the word level than at the phrasal and clausal levels. Tsang's (2011) study can be criticised for the following reasons. Firstly, the sample size was small, which makes it difficult to generalise results across all primary school English teachers

in Hong Kong. Second, there was no explanation about how the students delivered their explanations, i.e. whether they used terminology or not. In addition, no details were provided about what terminology participants knew and did not know.

Wach's (2014) study measured MLK among ETs, as one of the three groups of Polish users of English in his aforementioned study. They were teachers at primary, middle and secondary school, and their teaching experience ranged from 0.5 to 7 years. The results of this study confirmed the findings of the other studies; i.e. that ETs demonstrate a greater ability to recognise terms than produce terms or provide rules. They scored 73.1% in the task that tested their recognition of terminology, and 53.7% in the rule formulation task. In addition, they scored 36.8% in their ability to use grammar terms while giving explanations. On the GJT, the participants scored highly (78%), in their ability to judge grammatical and ungrammatical structures.

These previous studies into ETs' MLK reveal that, although their performance may only be said to be moderate, there are distinct limitations in their explicit knowledge of rules and terms. Andrews (1999a, 1999c), Andrews and McNeill (2005), Shuib (2009), and Wach (2014) concluded that ETs demonstrate a greater receptive than productive capacity. Meanwhile, Tsang (2011) reported better performance among ETs in production tasks. Tsang (2011) justified this different result by claiming that it might relate to the test items on the two tasks in the applied test (more details were presented above). Moreover, Andrews (1999a, 1999c), Andrews and McNeill (2005), Shuib (2009), Tsang (2011), and Wach (2014) concluded that ETs find formulating grammar rules somewhat problematic. This finding is predictable, because the task of explaining rules makes greater cognitive demands on subjects, requiring them to make explicit the rule that has been broken and to employ the appropriate metalinguistic terms in order to explain why (Andrews, 1999c; Andrews and McNeill, 2005; Tsang, 2011). Nevertheless, these studies failed to specify whether the problem of the difficulty in formulating rules was due to language or lack of knowledge about the rules.

This section discussed previous studies measuring teachers' MLK. The next section discusses comparative studies evaluating ETs' and STs MLK.

2.10.2 Studies concerned with STs' MLK versus ETs' MLK

Teaching experience, as discussed in (2.8.3), can contribute to the development of the MLK of English ETs (Andrews, 1999c, 1994b; Johnston and Goettsch, 2000). This is, however, not true of all teachers. Andrews (2006) found evidence that teachers' MLK did not necessarily improve over time. Nevertheless, an earlier study (Andrews, 1999c) comparing NNS ETs, who had at least two years of teaching experience, with NNS STs, had found that the MLK of ETs, related to their productive and receptive knowledge of terms as well as their productive knowledge of rules, was superior to that of STs. This led to the hypothesis that teaching experience (since that is what all ETs have and all STs lack), could be an influential factor affecting the development of a teacher's MLK. The overall score for ETs in that study was nearly 60% and for STs 50%. The ETs performance in the recognition task was 82.8% whereas the STs scored 72%. Likewise, the ETs score 65.9% in the productive task, which was higher than that of the STs, who scored only 48.8%. The ETs scored 42.5% in the task asking them to provide the rules, whereas the STs scored only 22.32%. In the case of Andrews work, a serious limitation has been sample size (Andrews, 1999c).

Wach's (2014) study, also aimed to pinpoint any difference between NNS ETs and NNS STs, and found that ETs' productive knowledge of rules was superior to that of STs (ETs scored 53.7% on that task, whereas STs scored 48.1%). On the other hand, he found that STs demonstrated higher capacity to recognise and use terminology during rule formulation than ETs. The mean score of STs on recognition tasks was 85.2%, and it was 73.1% for ETs. The STs' mean score for using grammar terms while giving explanations was 55.4%, whereas it was 36.8% for ETs. Wach argued that this result could be anticipated, as STs have higher MLK "…because of their intensive language study: they still had instruction in EFL, including a grammar-oriented course, and in linguistics, which probably often involved the use of metalinguistic terminology" (Wach, 2014:60). An alternative explanation might be that the ETs have learnt through experience to avoid terminology that their learners might not understand, preferring to use every day words.

Thus of the few studies that have explored the differences between ETs' and STs' MLK (Andrews, 1999c; Wach, 2014), the findings are contradictory, implying a need for

further research. The following section explores the contrast between STs and ETs further, by highlighting the teachers own opinions regarding their MLK.

2.10.3 Studies concerned with the ETs' and STs' opinions of their MLK

There is relatively little recently published research on ETs' and STs' opinions of their own MLK. However, some of the research reviewed in the preceding paragraphs has raised concerns regarding this issue (Andrews, 1999b; Andrews and McNeill, 2005; Shuib, 2009; Pahissa and Tragant, 2009; Tsang, 2011; Sangster et al., 2013). Those that touch on it have focused on eliciting teachers' views regarding their performance in an MLK test. Interestingly the findings show that, although the results of these studies, did not address the issue directly, they did show that teachers, especially ETs have some awareness of their MLK limitations.

The three teachers (ETs) interviewed for Andrews' (1999b) study, briefly stated that they felt that their explicit knowledge has gaps and that their confidence in this regard is low. Andrews and McNeill's (2005) were also concerned with measuring the MLK of three ETs, in which the researchers conducted interviews with participants to understand the characteristics of good teachers. One of these characteristics was their self-awareness of the limitations of their own MLK.

In Shuib's (2009) study, the researcher interviewed primary school teachers (ETs) and asked them about their views about the aspects of grammar that posed a difficulty for them, and about their perceptions of the possible causes of those difficulties. The researcher found that the majority of participants admitted difficulties providing rules, although it was easy for them to recognise terms. Their responses supported the researcher's findings in the quantitative test results; they claimed that the reason for their weakness in providing the rules was the complexity and multiplicity of grammar rules and insufficient exposure to grammar during their teacher training, and subsequent lack of interest in improving their grammar. Tsang (2011) devised a questionnaire to ask 20 primary teachers (ETs) to provide their views on the tasks in the test they had completed, and their perceived performance in these tasks. The participants reported finding it easier to identify examples of grammatical forms, than grammatical functions.

In Sangster et al.'s (2013) study, a key aim was to investigate how accurate NS primary STs and NS secondary STs were in their estimations of their existing grammar knowledge. The findings revealed that the participants had a high level of confidence and a positive perception, but that this was in contrast to their poor performance on the test employed in this study.

Pahissa and Tragant (2009), conducted a qualitative case study aiming to shed light on the beliefs underling the behaviours of three NNS ETs, teaching English in secondary schools in Catalonia. An interesting finding of this study was that the teachers admitted compensating for inadequacies in their L2 proficiency, by relying on use of terminology to provide rules.

Overall, the studies that touched on teacher opinions about their MLK discovered a measure of self-awareness. Having discussed studies concerned with teachers' MLK, the following section addresses the gaps in the literature in this area.

2.11 Gaps in the literature on investigating teachers' MLK

After evaluating the previous studies investigating NNS STs' (Andrews, 1999c; Elder, et al., 2007; Berry, 2009; Wach, 2014) and NNS ETs' MLK (Andrews, 1999a 1999c; Andrews and McNeill, 2005; Shuib, 2009; Tsang, 2011; Wach, 2014), it becomes evident that there remains a need for extensive research to measure MLK. There is a critical shortage of research investigating MLK, especially if we consider the increasing interest in this area in recent years. Therefore, the proposed study aims to elaborate on and extend the results of previous studies, to advance understanding of this topic.

The research to date (Andrews, 1999a, 1999c; Andrews and McNeill, 2005; Shuib, 2009; Tsang, 2011; Wach, 2014) has largely focused on specific individual components of MLK: productive knowledge and receptive knowledge of terms, or productive knowledge of rules. It is rare to find a study that covers all the components of MLK (see Figure 2-5 below). No study has looked at receptive knowledge of rules of ETs and STs. Productive knowledge of grammar rules (the ability to formulate a rule) and the receptive knowledge of rules are not the same thing. If teachers are able to formulate a rule, we can assume that they also have receptive knowledge of it, but not the reverse. The assumption by Ellis (1997) is that teachers need to have both, as this is necessary if they are to have the ability

to state these rules to their learners. Ellis (2004) motivated the author to include receptive knowledge of grammar rules as a component of MLK to be investigated. Thus, investigating receptive knowledge can reveal whether the difficulty in formulating rules that teachers faced in previous studies resulted from a lack of receptive knowledge of rules or not (and how much that was a knowledge problem); something previous studies have failed to address.

Therefore, this study will measure the two components of MLK: knowledge of terms and knowledge of rules with the relevant sub-divisions: productive and receptive knowledge (see Figure 2-5), in order to provide more in depth insights into MLK.

Previous researchers have confined themselves to measuring MLK at the sentence level, providing example sentences in their tests. No study has investigated the application of MLK in an extended text. Although, Wach (2014) used a short text in one task, in his test to test word classes only, there was no comparison conducted between MLK performance at sentence level and text level. This study aims to provide more in depth insights into MLK, by focusing on knowledge not only at sentence level but also at text level. It targets their explicit knowledge of English terminology at different levels (productive and receptive; see Figure 2-5). Finally, by collecting opinions, it also aims to get a more indepth understanding of the participants' MLK than has been achieved previously.

All of the studies reviewed above reveal gaps in the MLK of both STs and ETs. By critically examining these studies, we can, however, see that they cannot tell us how deep their MLK was, or how they formulated rules. In most of the previous studies, although there was a question that asked participants to provide a rule, the researchers chose not to analyse that ability. In other words, they limited their scope to assessing the 'level' of MLK, and not the 'nature' of MLK. For this reason, there is a need to address the nature of MLK in the present study.

By investigating the nature of their MLK, a more in-depth and richer understanding of key features and patterns of the participants' knowledge will be obtained, regarding, for example, their ability to formulate rules with/without using terminology, which grammatical features they know best, and their knowledge of the subcategories of grammatical features (more details see Sections 3.2, 3.7 and 3.8).

As the literature review has revealed, there is also an important shortage of empirical research comparing ETs with STs. No study has looked at STs and ETs with a similar educational background. One of the author's interests when designing this study was to pinpoint any significant differences between the two groups. A novelty in the present study lies in the fact that the two participant groups, STs and ETs share a similar educational background, which enables the researcher to observe how MLK might change as a result of teaching. This could provide very informative findings, regarding whether grammar is best learnt on the job. This constitutes one of the primary strengths of this study.

In previous studies, there have been few details regarding ETs' and STs' opinions of their own MLK; in particular, how they see their knowledge and whether they recognise their areas of weakness. This study aims to fill this gap by investigating their perceptions of the range and depth of their MLK, and explaining whether their subjective views correspond to the more objective measurements provided by the test. It is important to discover if teachers are aware of the range and depth of their MLK, because such awareness can be seen as the first step to improvement, the second step being awakening the desire for self-improvement (Andrews and McNeill, 2005).

As mentioned above, the current study aimed to investigate the MLK of ETs and STs in more depth, covering all the components of MLK, investigating the application of MLK in extended texts as well as at the sentence level, and revealing the nature of MLK and teachers' perceptions of their own MLK. To investigate these aspects of MLK, three research questions were formulated (see Section 1.4).

2.12 Summary

This chapter commenced with a brief overview of the concept of pedagogical grammar, including implicit and explicit knowledge, and was followed by a discussion of metalinguistic understanding and its development. The chapter then discussed L2 teachers' MLK, its characteristics, its relevance to teaching grammar, and the factors that might help to improve that knowledge. Next, it provided a detailed description of the different tests available for assessing teachers' MLK, and it then reviewed the existing literature related to 1) measuring teachers' MLK, 2) comparing the MLK of ETs and STs,

and 3) teacher opinions regarding their own MLK. This led to the development of the three research questions outlined in Chapter 1. The next chapter will discuss the study's research design and methodology.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

This chapter details the research design and methodology applied in the present study, and introduces the target populations and sampling method. The quantitative and qualitative data collection methodologies are discussed, and the data analysis procedures employed are explained. Following this, there is a description and discussion of the validity, reliability, limitations and ethical issues associated with the chosen research methods.

3.2 Mixed methods research approach

Before embarking on this study to investigate issues related to MLK, there was a need to locate it within an educational paradigm. In the social sciences, there are a number of paradigms available; principally positivism, interpretivisim, post-positivism, and criticality (Cohen et al., 2011). These paradigms offer alternative ways of viewing the social world, different understandings about how knowledge is sought and gained through social inquiry (Thomas, 2013; Bryman, 2012), and provide conceptual and philosophical frameworks to guide researchers (Creswell, 2009). Paradigms can be characterised in reference to their ontology (understanding of reality), epistemology (understanding of how one acquires knowledge) and methodology (the methods applicable to gathering knowledge). When researchers align themselves to a particular ontology, this will often lead them to embrace either a qualitative, quantitative, or mixed methods approach to data collection (Creswell, 2014).

Positivism emerged from the work of 19th century French philosopher Auguste Comte, and is defined as "the belief that objective accounts of the world can be given and that the function of science is to develop explanations in the form of universal laws, that is, to develop nomothetic knowledge" (Punch, 2009:18). According to positivist researchers, a single and objective reality exists, that is separate from the researcher (Sekaran and Bougie, 2013). Positivists assume that knowledge about the social world can be obtained

objectively, without scope for subjective interpretation by the researcher (Thomas, 2013). This objective approach involves the use of scientific, quantitative methods, such as survey techniques, structured observations, and experiments, and often involves statistical analysis of data (Oakley, 2000 and Saunders et al., 2012; Punch, 2009; Newby, 2010; Thomas, 2013). Positivist researchers begin their inquiry deductively, generating hypotheses, and then engaging in the collection of data that either confirms or rejects their hypothesis (Bryman, 2012).

The majority of this current study accords with the positivist paradigm. It aims to establish the range and depth of Saudi female teachers' (ETs' and STs') MLK, by establishing the exact level and nature of their knowledge, and identifying any areas of weakness or strength. The positivist paradigm is the most relevant to this part of the study, as it is principally concerned with acquiring knowledge through objective quantitative methods such as tests and questionnaires.

Interpretivisim holds the opposing view, specifying that reality is a subjective and multiple construction, based on individual descriptions, experiences and interpretations (Creswell, 2014 and Thomas, 2013). This paradigm relies on the acquisition of knowledge through attaining understanding of, and exploring human and social reality (Cohen et al., 2011). Interpretivists aim to understand the world from the point of view of target social actors; they are not concerned with the generalisability of their findings (Sekaran and Bougie, 2013). Interpretivist researchers interpret the meanings others have derived about the world; making inquiries that generate or inductively develop a theory or pattern of meaning (Creswell, 2014; Thomas, 2013) using qualitative methods (Sekaran and Bougie, 2013; Punch, 2009).

In addition to testing the participants' MLK, the study investigates ETs' and STs' perceptions of their MLK (using semi-structured interviews and a questionnaire) and sheds light on their ability to apply knowledge by giving explanations which reflect the nature of their MLK (using semi-structured observations for ETs, and role-playing for STs). The use of qualitative methods (semi-structured interviews, semi-structured observation, and role-playing) and analysis which involves some level of interpretation were chosen for this purpose. This has resulted in a mixed methods study although the

quantitative element dominates. For more details about the role of the quantitative and qualitative methods used in this study, see Sections 3.7 and 3.8.

The qualitative techniques used in this study are crucial to enabling the researcher to include teachers' explanations as a component of their MLK, particularly the lesson observations and the role-playing. The researcher's aim was to find out whether the participants had an underlying knowledge and understanding of MLK and to what extent they can articulate grammatical points to their students clearly and accurately. Observing teachers' explanations and/or reflections on a particular student's response/question will reflect their understanding regarding their knowledge of grammar rules, and also assist in clarifying their knowledge of grammatical concepts and terms. Moreover, their explanations could disclose strengths and weaknesses in their knowledge, to gain a more in depth picture of their MLK. Furthermore, it be possible to obtain a richer understanding of the nature of the grammatical explanations available; for example, what they include or do not include, their clarity, simplicity, and which aspect of the three aspects of language (form, meaning, and use) are considered by teachers when teaching grammar, as well as how far grammatical terminology is used during lessons. Thus, using observations and role-play could help corroborate the results obtained from the tests. In addition, it will be beneficial to have different and complementary data to develop a clearer understanding of the nature of the participants' MLK to produce an in-depth and rounded impression of their MLK and to enhance the credibility of the study findings overall.

Research approaches "are plans and the procedures for research that span the steps from broad assumptions to detailed methods of data collection, analysis, and interpretation" (Creswell, 2014:3). They can be qualitative, quantitative, or mixed methods, and each has its own characteristics and functionality (Newby, 2010). The choice of methods typically depends on the purpose of the study and the research questions being asked (Punch, 2009).

The mixed methods approach chosen in this study involves collecting and analysing data using a range of quantitative and qualitative techniques. The ratio of each approach will vary according to the parameters of the study (Newby, 2010; Creswell, 2014). The rationale for the selection of techniques is guided by the aim to collect a wide ranging set

of data that is both empirical and meaningful. The researcher will achieve this by comparing the findings generated by each method to reach conclusions that are more accurate and valid (Creswell, 2014). The purpose of selecting this approach was to validate and corroborate results, and to expand on the quantitative results with qualitative data for the sake of developing a more complete understanding of ETs' and STs' MLK. It was to enhance validity, corroborate the results from the different methods, and obtain a more complete understanding (Creswell and Plano Clark, 2011; Dörnyei, 2007). Other reasons for selecting this approach included illustrating quantitative results using qualitative findings, synthesising complementary quantitative and qualitative results to develop "a more complete understanding of a phenomenon, and comparing multiple levels with a system" (Creswell and Plano Clark, 2011:77).

According to Punch (2009), the aim of the mixed methods approach is to take advantage of the benefits associated with qualitative and quantitative methods, and to integrate each into a research design in a manner that complements the parameters and requirements of the research question. Thus, the use of both approaches circumvents the limitations associated with each method were they to be applied independently (Creswell, 2014). In addition, the collection and analysis of quantitative and qualitative data facilitates a comparative analysis and cross-validation of research findings. The advantages of the mixed methods approach convinced the researcher that it was an ideal option for the purposes of this study investigating the MLK of ETs and STs.

3.3 The triangulated mixed methods design

Use of a mixed methods study design (also referred to as the convergent design) to triangulate data, as in this study, is a common approach (Creswell et al., 2003). It is a one-phase design, in which the researcher collects both quantitative and qualitative data concurrently, but subsequently analyses the two data sets separately before merging the two sets of results during interpretation (Punch, 2009; Creswell, 2014). The design used provides the researcher with different but complementary data to analyse the topic. Quantitative instruments included a test to measure the level and nature of ETs' and STs' MLK, and questionnaires to investigate the perceptions of both groups toward their MLK. Concurrent with this data, the qualitative methods included interviews to explore the

participants' perceptions of their knowledge, and the observations and role-plays used to highlight the nature of that knowledge.

3.3.1 The procedures for triangulating a mixed methods design

The data collection procedures were carried out concurrently but separately and the two data sets were analysed separately and independently. Quantitative data analysis procedures included using percentages, statistical analysis, descriptive statistics and group comparisons. The procedures for qualitative data analysis involved thematic analysis, and patterning. The results chapters that follow are thematically arranged and report on the findings from the analysis of both the quantitative and qualitative data sets. The two sets of results are then merged to provide an overall conclusion. This interpretation appears in a discussion chapter, where there is a discussion of how different types of data produced a more complete understanding of the study's topic.

3.4 Research design

The aim informing the research design was to describe MLK in a defined population: ETs and STs at a public university in KSA. The research population are all Saudi females, and the ETs are experienced English language teachers who had previously graduated from Noor University, and the STs are fourth year student teachers who would shortly graduate from that University. The general purpose of the study was to collect data on the MLK of ETs and STs that would be pertinent to answering the research questions and obtaining a detailed understanding of ETs' and STs' MLK.

A significant part of this study, but not the whole study, is a survey which included quantitative instruments: a test and questionnaires. According to Cohen et al. (2011), a survey allows a researcher to collect data at a single point in time so that an overview of current attitudes, conditions or events can be obtained. In addition, a survey collects data which conveys the knowledge, attitudes, beliefs and principles of a specified research population (Fink, 2003). This data can then be considered representative of a wider research population (Cohen et al., 2011). Thus, a survey is able to provide a diverse range of generalisable data, which can be collected relatively quickly from a sample group. Surveys provide data that is descriptive, explanatory and inferential (Cohen et al., 2011). The data collected can be extensive and diverse (Cohen et al., 2011).

The design framework used here is a cross-sectional survey. This is a framework that is common in educational research (Cohen et al., 2011) that seeks to examine one or more variables in different groups with diverse characteristics (Thomas, 2013), to produce a 'snap-shot' of that population at a particular point in time, and to allow conclusions about phenomena across a broad population to be drawn (Cohen et al., 2011). The survey relied on large-scale data from test scores and questionnaires.

The findings of this study are generalisable in a way that is quite different from how a sample survey is generalisable. Stake (2000) proposed the concept of naturalistic generalisation which is described as a partially intuitive process arrived at by recognising the similarities of objects and issues in and out of a context. His argument was based on the harmonious relationship between the readers' experiences and the study itself. In his view, naturalistic generalisations are conclusions arrived at through personal engagement in life's affairs or by vicarious experience which is so well constructed that the person feels as though the experience has happened to them. Naturalistic generalisation emphasises the practical and functional application of research findings that intuitively fall naturally in line with the readers' ordinary experiences. Consequently, it is essential that the research report is descriptive as, as the readers recognise essential similarities to cases of interest to them, they establish the basis for naturalistic generalisation. Thus, although this study was conducted using only a small sample size (see Sections 3.5 and 3.6), the researcher anticipates that the findings (the MLK of the STs) could be generalisable to other STs at other universities elsewhere (e.g. in the Middle East), assuming they have similar previous educational experiences before starting university, as the educational context and the courses taught at universities are similar. The same applies to ETs. Findings related to ETs could be generalisable to other ETs from other universities or elsewhere in the Arab world, or even in other parts of the world, if they have similar present contexts and educational background to the participants in this study (for details about the participants' educational background see Sections 1.6, 3.6.1.1 and 3.6.1.2).

The study was processed according to the followings stages (following Cohen et al.'s stages (2011)). Table 3-1 below illustrates the stages of the study.

Table 3-1: The stages

The stages			
Stage 1	Defining the objectives		
Stage 2	Deciding the framework of the study		
Stage 3	Formulating the research questions		
Stage 4	Deciding the sampling		
Stage 5	Generating the data collection instruments		
Stage 6	Piloting the instruments		
Stage 7	Refining the instruments		
Stage 8	Collecting data		
Stage 9	Analysing the data		
Stage 10	Reporting the results		

The following sections present more details regarding these stages.

3.5 Data collection procedure

The first target population were fourth year STs, studying in the English Language Department at Noor University. The researcher included the entire year group of 122 STs in the study (for more details see Section 3.6.1.1). The second target population were experienced ETs, who had previously graduated from Noor University. Only 61 ETs agreed to participate in this study, so the total sample comprised 61 ETs (for more details see Section 3.6.1.2). At Noor University, the syllabus and the grammar components of the curriculum have not changed since the ETs graduated. Thus, the two set of participants took the same grammar courses (see Sections 3.6.1.1 and 3.6.1.2).

Table 3-2, below, shows the two steps taken to collect data for this study, in chronological order.

S	Data collection phases		
First step (March 2013–April 2013)	Qualitative data collection	ETs 1. Observation 2. Interviews	
(11401 2010 11511 2010)		STs Role-plays and interviews	
Second step	Quantitative data collection	STs Questionnaire + Test	
(May 2013)	Quantitative data concertor	ETs Questionnaire + Test	

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rable	3-2:	Ine	steps	IOT	uata	collection

The first step in the data collection began with qualitative data collection for both the ETs and STs (ETs' lesson observations and interviews and STs' role-plays and interviews). The qualitative data collection was carried out in the period of March 2013 to April 2013, the second school semester. The next step involved collecting the quantitative data (the questionnaire and test) for both the ETs and STs. The quantitative data was carried out in May 2013, during the second school semester. The researcher chose to follow this particular procedure for several reasons. The researcher collected the data in this order because had the researcher collected the quantitative data beforehand, by the time the survey questions (questionnaire), or even the test were given, the participants would have a sense of what the researcher was looking for at the qualitative stage, which would then alter the findings from the observations and the role-plays. Thus, the researcher aimed not to share with the ETs and STs the focus of the lesson observation and the role-play, in order to avoid the problem of reactivity (more details see Sections 3.8.2 and 3.8.3). Moreover, the researcher decided to conduct the interviews (qualitative method) prior to administering the test (quantitative method). Indeed, had the participants taken the test first, this might have influenced their perception of their own knowledge during the interviews. Therefore, to avoid the participants evaluating themselves in reference to the test, the interviews were administered before the test. For the same reasons as those explained in reference to the test, the researcher conducted the ETs' observations before the interviews. In the case of the STs, each participant was asked to participate in a roleplay alongside the individual interview, and the timing of the role-play was prior to the interview (more details see Section 3.8.3). Thus, the research design was structured to ensure minimal influence on the behaviour of the participants at each stage of the data collection.

Thus, the first step included observations and interviews for the ETs and role-plays and interviews for the STs. The ETs were observed and interviewed first (before the STs). The English language supervisors in the General Administration in Noor city (fictitious name) contacted teachers from different schooling levels and asked them if they were willing to participate in the research. Only 8 ETs agreed to be observed and 14 ETs agreed to be interviewed. The researcher then visited the schools of those teachers who had expressed their willingness to be involved and collected qualitative data (observations and interviews) from these participants. There were observations made of 8 teachers: 6

middle class teachers and 2 secondary class teachers (for more detail see Section 3.8.2). After the observations, the researcher conducted interviews with 14 teachers, including the observed teachers: 3 teaching at the primary stage, 8 at the middle stage, and 3 from the secondary stage (for more detail see Section 3.8.1). The STs were approached next. During the first phase, the researcher conducted role-plays and interviews with STs. Due to the time constraints on the researcher and the participants, as well as the difficulty of ensuring participants who were available or/and willing to be interviewed, from the entire year group of 122, only 15 were selected for the role-plays and interviews. These 15 were selected randomly to reduce the potential for bias in the sample (Drever, 1995) (for more detail see Sections 3.8.1 and 3.8.3).

The second step in the data collection was the quantitative data collection using the questionnaires and tests for both groups, the ETs and STs. The researcher decided to conduct questionnaires prior to administering the test (which formed the final element). The rationale for this was similar to that mentioned above. Had the participants taken the test first, it might have influenced their perception of their own knowledge. Thus, the test might have prompted them to focus on areas of strength and weakness in their knowledge, of which they were unaware before taking it. Therefore, to avoid the participants evaluating themselves with reference to the test, it was administered after the questionnaire collection methods had been completed. The first phase began with the STs. The researcher included 'quantitative data collection' as the second step, enabling the whole year group of 122 STs to complete the questionnaire and the test. The STs, who were in their fourth year, were divided into 5 classes. This meant that because of the STs' lecture timetables, and to guarantee that all the participants attended, it was not possible to allocate one day to the questionnaire and the test. Therefore, the questionnaire and test were conducted separately in each class during the regular course lectures. Therefore, this phase took 5 days to complete. The number of participants in each class is shown in Table 3-3 below.

class	Number of STs
1	10
2	37
3	16

Table 3-3: STs' classes and their numbers

4	44
5	15
Total	122

On the day of the administration of the questionnaires and test, the researcher introduced the study to each class, in the presence of the head of the department and the course lecturer. The STs were then given the questionnaire to fill in. After taking a 10 minute break, the STs then completed the test.

The procedures for collecting data from the ETs were as follows. Of the 61 participating ETs, only 20 responded to the questionnaires and the test at their school and 41 completed the test and filled in questionnaires at the meetings (more details below). For those teachers who were the subjects of an observation and/or interview, the questionnaire and the test were administered in their schools, to avoid drop out. Table 3-4 below presents the number of teachers who answered the questionnaire and the test in their schools.

Type of school	Number of ETs	
Secondary school	5	
Secondary school	3	
Middle school	5	
Middle school	4	
Primary school	3	
Total	20	

Table 3-4: The number of ETs who responded to the questionnaires and the test

For the 41 other participants, who completed the test and filled in questionnaires at the meetings, the procedure was as follows. The General Administration for Education in Noor city has 3 offices; each office is responsible for the schools in its designated region of Noor: north, south, and east. In order to save time and effort on the part of the researcher, as well as to provide a timely and uniform atmosphere for all participants during the test, three days for administering the questionnaire and the test were agreed. Each day was linked to teachers from a particular office. To get the largest possible number of ETs in Noor city to participate in the study, invitations for ETs to attend the meetings were sent to all the schools at the office. The researcher met with the manager of each office and did not mention a test. Instead, the researcher mentioned that a meeting would be conducted to collect the opinions of English language teachers regarding their

grammatical knowledge. They were also promised some materials - booklets related to Tense and Aspect (verb forms) - to thank them for their participation. The total number of teachers who completed the test and filled in questionnaires at these meetings was 41. The General Administration for Education were keen to motivate the ETs to participate in the study. To make the meetings easy to attend, they were organized in the final weeks of the academic year, when there were no lessons (usually students are preparing for exams). The ETs were informed that their attendance at the meetings (about 3 hours) would be a substitute for their attendance at the school. In spite of the fact that all these arrangements were made, only 41 ETs attended these meetings. The meetings all began at 8 am. There were certificates issued for attendance and to thank the ETs.

The procedures on each day included an introduction of the researcher and the study, and a brief summary of the purpose and the stages of the meeting after which the participants were given the questionnaire to complete. Then there was a 10 minute break (free coffee, tea and sweets were available), before the test. After the test, the participants were thanked, given certificates of thanks, certificates of attendance and the booklets. The General Administration for Education provided the researcher with assistants to help with the distribution of papers, collection of signatures, invigilation and any other services needed during the meeting.

Cohen et al. (2011) have suggested several ways to increase response rates on tests and questionnaires. All the STs completed the questionnaire during the test in their lecture room during their lecture time. The ETs completed the questionnaire working in a separate room. The participants were reminded to review all parts of the test and the questionnaires, so as not to omit any item. The reminders were short and polite, explaining the value of the respondents' participation. In addition, the test and questionnaires were designed to be easy to read and complete, with clear instructions given. Information about the research was given on the cover page and oral advanced notification assured the participants of their anonymity and the study's confidentiality.

To allow responses to all the study instruments (test, questionnaire, interview, observation, role-playing) to match, the participants were asked to use the same name or pseudonym throughout the whole study.

3.6 Population

A study population is the group of people whom a study is about (Dörnyei, 2007). It is generally impossible to study an entire population; therefore, researchers typically rely on sampling to acquire data from a representative section of the population (Dörnyei, 2007). Thus, a research sample is the group of participants selected for investigation as a subset of a target population (Bryman, 2012; Dörnyei, 2007). In this study, there are two target populations, as described below.

3.6.1.1 The first population: STs

The first target population was fourth year STs, studying in the English Language Department at Noor University. They were expected to graduate shortly, to take up positions as English Language teachers. The researcher included the whole year group in the study. The number of participants was 122 STs. The researcher was able to access the students, as she is a lecturer at the university. The participants were all females aged between 22 and 27 years old (this is an estimate based on the list of the Council of Higher Education and Universities in Saudi Arabia. 'Terms of Admission of Students to Universities', which state, 'students should enter no more than five years after finishing high school or its equivalent').

The researcher chose to conduct the study at a single university (Noor University in KSA) and the population were all the fourth year STs at that university. If the syllabus and teaching methods at the university remain unchanged and if they have similar previous educational experiences before they start university, it might be expected that next year's (and so on) final year students will have roughly the same MLK.

A description of the participants and the context is provided below to enable researchers/teacher educators in similar circumstances to judge the relevance of the findings of this study to their own contexts (see Section 3.4). It is possible that there are similar courses implemented, to similar students, elsewhere in the Arab world – or even in other parts of the world. Thus, as mentioned earlier (see Section 3.4), the researcher anticipates that the findings (the MLK of the STs) would be generalisable to other STs at other universities elsewhere (e.g. in the Middle East), as the educational context and

courses taught at universities are similar, assuming they have similar previous educational experiences before starting university.

The courses relating to grammar taught during the ST programme were approved by the Department of English Language's 'Study Plan'. During their four years of study, the students take a grammar course three hours per week, taught at two levels over a period of six months each. The course aims to enhance the students' general English proficiency, with a heavy focus on form. In addition, they take an 'English morphology and syntax' course, consisting of three hours per week, taught over a period of three months (the beginning of the fourth year). According to the Study Plan, the course aims to provide the students with a general introduction to English morphology and syntax. It is designed to give the students a brief glimpse of the theory and practice of the structural grammar of the English language. A detailed analysis of English morphemes and word formation processes, as well as of the structure of English sentences and phrases, constitutes part of the course (from 'The Study Plan' of the Department of English Language). The participants' responses to the introductory background questions asked during their interviews, confirmed that they had been taught these courses.

To produce meaningful data and add to the trustworthiness of the study (Creswell, 2012), the STs' questionnaire began with items asking about their educational background. All the participants had studied for four years at Noor University. They reported having learned grammar terms and rules at middle and secondary school, and university. In addition, nearly a quarter of them stated that they were now learning grammar by attending university lectures. The majority said that during their period of study at university, they had developed their knowledge of grammar terms and also of rules. Most also said that when they were at school, their teachers used short sentence examples; less than a quarter said their teachers used texts. The majority had been taught grammar terms and rules at school and most of them reported that their teachers taught them the grammar rules in English, but that when they explained them, they used Arabic. When considering their expectation regarding their future teaching, the majority reported that they would aim to teach their own students terms and rules. In addition, the majority said that they would teach grammar using short sentences whereas less than half intended to teach grammar using text. (For more details, see Appendix D)

3.6.1.2 The second population: ETs

The second target population were experienced English language teachers (ETs) who had previously graduated from Noor University. The researcher used sampling to obtain access to a section of the population, as it would have been impossible to study the entire population of graduates. The total sample was 61 ETs, and it was a stratified sample; see Table 3-5 below.

	School stage	The number of ET participants
	Primary	22
Stratification	Middle	25
	Secondary	14
Total sample		61

Table 3-5: ET participants

This method of sampling seeks to strengthen the generalizability of the findings from the participants to an entire population (Newby, 2010). It is important that the group selected represents all of that population and is not subject to bias (Cohen et al., 2011), because the strength of the conclusions depends on how accurately the sample represents the larger population (Milroy and Gordon, 2003, cited in Dörnyei, 2007:96; Cohen et al., 2011; Thomas, 2013).

This type of sampling is generally used when a population is heterogeneous, but where certain homogeneous sub-populations can be isolated (Cohen et al., 2011). It is the technique of grouping members of the population into relatively homogeneous subgroups before sampling. These groups are then formed based on members' shared characteristics (Cohen et al., 2011). When sub-populations of a study vary considerably, it is useful to sample each one independently. The researcher knew how the ETs' population was composed, and that it could be stratified into different subgroups, based on the school stages (primary stage, middle stage and secondary stage). This method of sampling improves the population's representativeness and reduces sampling error. When all parts of a population are represented in a sample, this decreases errors of approximation, by resembling the entire population (Hunt and Tyrell, 2001; Thomas, 2013; Newby, 2010)

thereby ensuring more valid inferences can be made from the sample to the population (Shehavan and Bougie, 2013).

At the first stage of the study, the researcher chose not to set out any criteria for selecting the sample from each of the sub groups. The English language supervisors at the General Administration in Noor city contacted different schools from different stages and asked the teachers if they were willing to participate in the research. The researcher was then given a list of schools where teachers were willing to participate in the study (primary stage, middle stage and secondary stage). At the second stage, the researcher invited all the teachers in Noor city from all stages (primary, middle and secondary) to attend the meeting on the day of administrating the questionnaires and the test. The procedures undertaken were as described above (See 3.5).

The ET sample was homogeneous in terms of gender (all female) and in terms of qualification (all have a BA in English language). The ET questionnaire began with items asking for general information and educational background to describe the sample. All the participants had studied at Noor University. Nearly a third of the ETs had more than 10 years' experience, and another third had 7-9 years, and less than a quarter had 4-6 years. More than half of the ETs had over 25 students in their classes. The level of their students ranged from beginner to intermediate. They reported having learned grammar terms and rules at middle and secondary school, university, and through self-study. The most commonly reported source of knowledge of rules was their teaching experience. In addition, more than a third of them stated that they continued to learn grammar from textbooks. More than three quarters claimed that their knowledge of terms and rules had developed since graduation. More than three quarters learned grammar terms at school. More than three quarters of the ETs said that when they were at school, their teachers used short sentence examples, whereas nearly half said their teachers used texts. The majority had been taught grammar terms and rules at school and most of them reported that their teachers taught them the grammar rules in English, but that when they explained them, they used Arabic. Nearly all of the participants reported teaching their students terms and rules and explaining in English. In addition, nearly three quarters reported also using Arabic when explaining a grammar rule. (For more details, see Appendix E)

The total number of participant ETs was 61(as mentioned before). The sample had many positive features, such as the different levels of schooling covered, the range of teaching experience represented, the good response rate of those who volunteered, and the high level of cooperation received from the participants (Bryman, 2012).

Although, the study focus is limited to ETs who graduated from Noor University in S.A., the findings could be generalisable to teachers from other universities (see Section 3.4). The description of the participants and the context aims to enable researchers/teacher educators in similar circumstances to judge the relevance of the findings of this study to their own contexts. Thus, as mentioned earlier, the researcher anticipates that the findings (regarding the MLK of the participants) should be generalisable to other ETs from other universities or elsewhere in the Arab world, or even in other parts of the world, if they have similar present contexts and educational background to the participants in the present study context.

3.7 Quantitative data collection

The quantitative instruments in this study were a test and questionnaires. These were distributed to both ETs and STs. Additional details are presented below.

3.7.1 The Test

Tests can be a useful source of information for the researcher, but a poorly designed test will only produce information of limited value (Taber, 2007). In order to ensure its validity, it is vital to ensure that the objectives of the research are addressed fairly in the test items (Cohen et al., 2011). This study employed a written test (see Appendix F) to answer the first and second research questions. The test assessed the MLK of STs and ETs, to help determine its exact level and identify areas of strengths and weaknesses. The test covered two core components; namely knowledge of grammar terms and knowledge of grammar rules. In addition, it assessed knowledge at sentence level and at text level. It measured both productive and receptive knowledge (for more details see 3.7.1.1).

Given the study's intention to look broadly at MLK, it was not possible to employ a preexisting instrument without major modifications. A review of the literature revealed that none of the tests included tasks measuring all the components of MLK and its subdivisions (productive and receptive) (see Section 2.9.1 and 2.9.2). Therefore, in order to demonstrate validity and provide in-depth insights into MLK, the test used in this study will cover two core components (knowledge of terms and knowledge of rules) with the relevant sub-divisions (productive and receptive knowledge). Moreover, reviewing the literature revealed that no test by previous researchers has investigated the application of MLK in an extended text. Therefore, the test used in this study will assess knowledge at the sentence level and at text level.

Thus, the test applied in this study was devised by the researcher, based on that of Andrews' test (1999b, 1999c), which followed Alderson et al. (1997), drawing on an earlier test designed by Bloor (1986) with some modifications (see below) (for more details about the design of these previous tests see Section 2.9.1). Andrews's test had already been trialled in Andrews' own studies (1999b, 1999c, 2005). In addition, it would seem to have construct validity as a measure of MLK, in that it was designed to reveal both productive and receptive knowledge of terms, and the ability to identify and state grammar rules; i.e. the receptive and productive knowledge of rules (Andrews, 1999c). Andrews' test, however, does measure a majority of the components of MLK, i.e. the productive and receptive knowledge of terms, and the productive knowledge of rules (only the receptive knowledge of rules was not measured). In addition, all the items on the test were to test knowledge at the sentence level (for more details about Andrews' test see Section 2.9). The inclusion of knowledge of terms at text level and on receptive knowledge of rules meant that Andrews' test did not meet the objectives, and there was a need for the researcher to design a test. Thus, when designing the test applied in the study, some of the task formats were taken from Andrews's test with some modifications; in addition, wholly new tasks were devised to meet the study's aims (for more details about how the test used in this study was developed see Sections 2.9.1, 2.9.2 and for details about its structure see Sections 3.7.1.1).

The test was devised for use with both groups; the ETs and the STs (Appendix F). No time limit was placed on completion of the test, as this posed a threat to the standardisation and reliability of the results. After identifying the objectives and elements to be covered in this test, the next step was to construct the test. Following Cohen et al.'s guidance

(2011) on constructing a test, the test was constructed and designed to answer the research question concerning the present level of ETs' and STs' MLK.

3.7.1.1 The structure of the test

The test (Appendix F) consisted of two sections, with a total number of 61 items; each focusing on a different facet of MLK (see Table 3-6 below).

The test						
	Sections	Sub-sections	The facet of MLK tested		Questions and item numbers	
MLK	Section1: Knowledge of grammar terms	1: Productive knowledge of terms	Sentence level	Productive tasks (at sentence level)	A: Describe the item underlined in each sentence (parts of speech).	Q (2) A. 1-7
					B: Describe the item underlined in each sentence (clause/phrase/senten ce).	Q (2) B. 1-4
					C: Describe the item underlined in each sentence (grammar roles).	Q (2) C. 1-5
			Text level	Productive tasks (at text level)	A: Describe the item underlined in the text (clause/ phrase/ sentence).	Q (3) A. 1-5
					B: Describe the item underlined in the text (grammar roles).	Q (3) B. 1-5
		2: Receptive knowledge of terms	Sentence level	Receptive task (at sentence level)	Select from the following sentences the items that represent the terms requested.	Q (5). 1-16
			Text level	Receptive task (at text level)	Select from the text All the items that represent the terms requested.	Q (4). 1-5
	Section2: Knowledge of grammar rules	1:SentenceProductiveSentenceknowledgelevelof rules		Productive task	Provide an explanation for the rule that has been broken in each of the following sentences.	Q (1). 1-7
		2: Receptive knowledge of rules	Sentence level	Receptive task	Select the correct rule that has been broken in each of the following sentences.	Q (6). 1-7

Table 3-6: The structure of the test

The MLK test starts with Section 2, Q (1).

E.g. Q (2) is a 'sub-section'. Q (2) A is a 'question' which includes seven 'items'. E.g. Q (2) A.5 is the fifth item in question Q (2) A.

Section 1 (see Table 3-6) tested the participants' knowledge of terms, and was made up of two sub-sections with a total of 47 items. The first tested productive knowledge; and aimed at shedding light on the participant's ability to produce appropriate terms at sentence level and text level. The two sub-sections (Q (2) and Q (3)), included five questions (Q (2) A, Q (2) B, Q (2) C, Q (3) A, Q (3) B) with several items in each. The first sub-section (Q (2)), was based on that devised by Andrews' test (1999b, 1999c), but with some modifications, and included three questions (Q (2) A, Q (2) B, Q (2) C) that tested the productive knowledge at sentence level; the participants were given separate sentences with an underlined item and asked to provide a grammar term to precisely describe the underlined item. The first question (Q(2) A) was comprised of seven items. Each item consisted of a sentence with an underlined item, and the participants were asked to describe the part of speech underlined in each of the sentences precisely. In that question, each of these items should be classified using two terms (e.g. *countable + noun*), the participants were given two lines to write on, and in the instructions, it was mentioned that each one would be classified using two terms, and an example was provided for clarification. The second question (Q (2) B) was comprised of four items and had the same format as the previous question (Q (2) A), but the participants were asked to describe the underlined item, which is a kind of *clause* or *phrase* or *sentence*. The third question (Q (2) C) was also comprised of five items, and shared the same format as the previous questions (Q (2) A and Q (2) B), although the participants were asked to describe the grammatical role of the underlined items. The second sub-section (Q (3)) included two questions (Q (3) A and (Q (3) B), and tested productive knowledge at text level. These questions were designed especially for this test, and required participants to do the same for the previous sub-section (Q (2); however, there was a text instead of separate sentences. The first question (Q (3) A) was comprised of a text and five items selected from that text, and the participants were asked to describe the particular items precisely, explaining which of each item was a *clause* or *phrase* or *sentence*. Likewise, with regard to the second question (Q(3) B), which was comprised of five items; the researcher was asked to describe the grammatical role of the five particular items selected from that text.

Knowledge of terms also includes the concepts they denote. The second sub-section of section 1 tested receptive knowledge; aiming to shed light on their knowledge of grammar terms and understanding of the concepts and terms referred to. It consisted of two

questions (Q (5) and Q (4)); Q (5) was at the sentence level and Q (4) at text level. Q (5) was based on that devised by Andrews's test (1999b, 1999c), which itself was from Alderson et al. (1997), originally taken from Bloor, (1986), with some modification. The participants were provided with 16 separate sentences and 16 grammatical categories (for instance, countable noun, direct object, main clause, conjunction), and were asked 'what item in each of the sentences they would select to exemplify the grammar terms requested'. Q (4), which was designed especially for this test, asked them to do what they had been told to in the previous question, but there was instead a text of separate sentences. To clarify, the participants were provided with a text and five different grammatical categories (for instance, subject, adjective clause, noun phrase), and asked to select ALL the items that exemplify the grammar terms requested.

Section 2 of the test focused on knowledge of rules and was divided into two sub-sections with a total of 14 items. According to Hu (2002), cognitive psychologists argue that the ability to verbalise a rule is different from having conscious awareness of that rule. In other words, people may possess MLK (explicit knowledge of a specific rule) and might fail to formulate it in an acceptable way, because they do not have the necessary skill to talk about language (Ellis, 2004). For this reason, the first sub-section tested the participants' productive knowledge; their ability to state a grammar rule. It comprised of one question (Q (1)) including seven items; each consisting of a sentence that contained an underlined grammar error, asking the participants to explain the grammar rule that had been broken. This question was based on that of Andrews's test (1999c); it was originally taken from Alderson et al. (1997) with some additions. In this question, the researcher asked the participants to state the rules in Arabic language as well as in the English language. The reason being, that they require a conscious awareness of the rule, but might find difficulty in formulating it in English; thus, they might provide more information in Arabic, as the language might be a barrier to them.

The second sub-section tested receptive knowledge; particularly, their conscious awareness of the rule. In other words, their possession of the explicit knowledge of a grammar rule. It comprised of one question (Q (6)), this question was designed for the test, made up of 7 items. Each item consisted of a sentence with an underlined item, which had an error, with four multiple-choice options offering explanations (accurate and inaccurate) regarding target grammar rules. The participants were required to select the

rules that best explained each error out of the four choices provided for each sentence. This tested their receptive knowledge. This task is an adaption of an earlier test (the Metalinguistic knowledge Test) used in Ellis (2009) and Elders (2009). Elder's study (2009) mentioned that this test format "measures passive metalinguistic knowledge rather than the ability to actively verbalize target language rules" (Elder 2009:117).

3.7.1.2 The sequence and layout of the test

The test comprised sections and sub-sections (See Appendix F for the layout of the test). To ensure full use of all the participants' energies to the maximum extent possible (see Table 3-6 above), the test began with production tasks, which were then followed by receptive tasks. There was the possibility that the receptive tasks could have caused a crossover effect providing input for participants doing the production task if they had followed (Tsang, 2011). It was felt that starting with productive tasks followed by receptive tasks might reduce this possibility. In addition, in the instructions the participants were asked not to refer back to the previous question, or the following question, but to follow the order of sequence of the questions.

In terms of the productive tasks, the test began with a question that tested their productive knowledge of rules. The nature of the task is highly demanding, cognitively and productively. It requires participants to make explicit the rules that have been broken, employing appropriate metalinguistic terms to explain why; this is expected to test the limits of the participants' knowledge. The results of previous studies (Andrews, 1999c; Andrews and McNeill, 2005; Tsang, 2011) revealed that the participants did not perform as well in the explanation task as compared with other tasks. In order to avoid any possibility of the participants not answering the question because of fatigue, it was positioned at the beginning. It was then followed by the productive tasks of terms. The receptive tasks for both terms and rules were ordered sequentially at the end of the test as they required less work. This meant the test was likely to leave the participants with a positive impression. Had it ended with difficult questions, the participants might have felt depressed or upset.

The test was a pen and paper test. The participants took approximately 35-45 minutes to answer the questions. There was no time limit. Allowing the participants time might help the researcher obtain valid and reliable data, as well as increasing response rate (Cohen et al., 2011). The instructions of the test were written in English, with a translation in Arabic to avoid misunderstanding of the requirements. The front page set out the purpose of the test, the importance and value of the answers, data confidentiality procedures, the personal details required, such as name/pseudonym, whether the respondent was an ET or a ST, and (for the ETs) years of teaching experience. In addition, the participants were provided with instructions for how to answer, and how long they should expect the test to take. The participants were informed that participation in any part of the study was voluntary and that they could withdraw consent at any time.

3.7.1.3 Text examples inclusion

The researcher sought to determine the accuracy and depth of the subject's knowledge. One of the features of this test was therefore the inclusion of text alongside the typical example sentences as a text is longer than a short sentence and can provide contextualised examples of less typical instances of grammatical categories. The selected texts in the test were chosen because they were longer than a typical example sentence, and because they offered context above the sentence level.

An example of a typical example sentence (sentence level item) is:

'We will go swimming tomorrow.'

An example of a text example (text level item) is:

'If we are to provide learners with language experience which offers exposure to the most useful patterns of the language, we might as well begin by researching the most useful words in the language.'

(From Willis, D. 1990 The Lexical Syllabus. London: Harper Collins, p. 38).

I wondered what would happen if they were to be given both sentences and texts with items representing different levels of knowledge. For example, would they be able to identify a typical subject in a sample sentence? Would they also be able to identify less typical subjects in more complex texts? Would they be able to identify all of the subjects, noun phrases, adverb clauses and so on in a text?

It was not, however, deemed necessary to include text level items in the section concerning rules. Texts provide more context, but the rules the participants were asked to explain did not require them to look beyond the sentence.

In order to ensure equivalence of meaning and cultural validity (Cohen et al., 2011), there was a translation of words that may be unknown to the participants. Otherwise, misleading information/results could be obtained due to poor comprehension of meaning.

3.7.1.4 The content of the test

For all practical purposes, grammar is infinite and it is impossible to include everything in a test. For this reason, there was a selective process, undertaken to ensure a test of an appropriate length. In order to test the limits of the participants' knowledge of terms and rules, the grammatical features tested covered a broad range of elements of English language pedagogic grammar that teachers use in the classroom. Thus, the researcher aimed to ensure that the test offered representative coverage of the content of the objectives that it was originally designed to measure, and by doing so to guarantee content validity (Brown, 2000; Cohen et al., 2011). The majority of the test content was based on the grammar course textbooks used in the schools, and information regarding what is taught to STs in their first year at the English Language Department at Noor University.

The purpose was not to evaluate the course. However, the course syllabus appeared to cover the majority of the main elements of the pedagogic grammar components the English language teachers needed to use in the classroom, the main area of interest for the study. Second, the course is compulsory for all STs in the Department, so it could be assumed that the participants had at some point studied most of the elements included in the MLK test but the test also included additional grammar features, not in the syllabus, to assess the depth and limits of the respondents' knowledge.

3.7.1.5 The grammar features tested

The test aimed to cover as many features of English grammar as possible, to test the limits of the respondents' knowledge of terms and rules. The grammar features tested in the section concerning grammar terms were *word classes* (e.g. noun, adjective), *grammatical roles* (e.g. subject, object), *types of sentences* (e.g. complex sentence, minor sentence), *clauses* (for instance, noun clause, adjective clause) and *phrases* (e.g. noun phrase, adjective phrase).

All the grammar features were tested at sentence level, and also at text level, except for *'word classes'*, which were tested only at sentence level. Text provides context that is not present at sentence level, but this is arguably of less importance when addressing *word classes* than, for instance, subject, object, noun phrases.

In the section about grammar rules, The grammar rules tested related to the formation and use of *tenses* (*simple present, present continuous and simple past*), *superlative adjective, definite article, relative pronoun, adjective clause, modals, subject- verb agreement, expression of quantity* (*many*), *question tags, verbs followed by infinitive.*

3.7.1.6 The criteria followed when designing the test

With this test, there was an attempt to give the participants sufficient opportunity to show what they knew, and what they did not know. The researcher was interested in determining not whether they had reached a given benchmark but rather the depth and range of their MLK. Therefore, the researcher designed a test that met these criteria.

To discriminate between the participants' abilities there was a need to have tasks with varying levels of difficulty. Discriminability refers to:

The potential of the item in question to be answered correctly by those students who have a lot of the particular quality that the item is designed to measure and to be answered incorrectly by those students who have less of the particular quality that the same item is designed to measure. (Cohen et al., 2011: 484)

Thus, this feature would provide variability, and a range of scores, thus improving reliability (Cohen et al., 2011). An example is the section on grammar terms where, in

the productive tasks at sentence level, participants were asked to produce the grammar term for the underlined item in each of the sentences. Here the items were created to be either *easy/straight-forward* (i.e. more typical instances of their categories) or to require *more understanding* and have a higher *predicted difficulty*. For instance:

Q2a:

Ann put her <u>books</u> on the desk.
 I have <u>some</u> in the cupboard.

The item 'books' in the first example is classified as an easy/straight-forward item, whereas the item 'some' is classified as being difficult as it could be a 'pronoun', 'adverb' or 'determiner' depending on its function in the sentence.

In the productive tasks – at sentence level and at text level - the terms that the participants were asked to produce represented either terms of *predicated prior knowledge* or grammar terms likely to be *new*. For example, they were asked to produce terms of 'indirect object' and 'noun phrase', which were classified as predicated prior knowledge. They were also asked to produce the terms of 'minor sentence', 'object complement', 'adverbial' classified as new, which the researcher knew had not been taught. With this, the researcher aimed to find out if the participants had knowledge beyond what had been taught on the university programme. In the case of ETs, this might indicate if they had learned on the job, and for STs, whether they pursued independent self-development.

In the receptive tasks, regarding the section of knowledge of grammar terms; the respondents were asked to select the item that exemplified the grammar term requested. This section also consisted of some *easy/straight-forward* items and some with *predicted difficulty*. For instance:

Q5: 1. I met *your sister* last week. (**noun phrase**)

6. Police are now *satisfied* that her death was an accident. (adjective)

In the first example, 'your sister' is classified to be an easy item that exemplifying the grammar term 'noun phrase' In the second example, the item 'satisfied', intended to

exemplify 'adjective', is classified as difficult, as an 'ed-forms' can be either a *past* participle verb or an adjective.

As above, the grammar terms requested in these tasks represented *predicated prior knowledge* and some as *new* grammar terms. For instance, the requested terms '*preposition*', '*subject*' were classified as *predicated prior knowledge* ones whereas, the requested term '*reciprocal pronoun*' was classified as *new*.

In the receptive tasks in which the participants were asked to select the item that exemplified the grammatical term requested, the terms were a mixture of *main* and *sub-categories* of the tested grammar features. For example

Q5:

5. My friend wrote a poem last night. (object) → main category
8. It will take more than a morning to finish the decorating. (indefinite article) → sub-category

Some of the requested terms included only *a main-category* (e.g. adjective, object), to measure the participants' basic receptive knowledge of terms. Others included *a sub-category* (e.g. comparative adjective, indirect object), to measure more advanced receptive knowledge.

To uncover their ability to produce terms of sub-categories, in the productive tasks the participants were asked to provide a full description of underlined items. The instructions, explained that *'each item will be classified using two words'* and an example given. For example, the item 'books' should be classified as a *'countable noun'*.

There was an attempt to avoid the same grammar terms or rules being tested in both the receptive and productive tasks. If target features had been repeated, having their attention drawn to a particular term/rule in one item might affect their performance on a subsequent item. The researcher also wanted to obtain a more holistic pictures of their MLK. The drawback was that there was only one item per term/rule. Parallel items were, however, made as similar as possible, for example one *countable noun* in a productive task and one *un-countable noun* in a receptive task both testing the notion of *countability*.

Finally, in the productive task items, the participants' ability to produce terms for clauses, phrases and sentences was tested. They were given choices and told that '*each item is either clause, phrase, sentence*'. These choices were given to avoid confusion. To clarify, if they were asked to produce a term for the following item '*the fast*' (Q 3 A), they might say something like a *determiner* and a *noun* when the expected answer was 'noun phrase'.

3.7.1.7 Piloting the test

The main objectives when piloting the test were to determine whether the items in the questions were clearly understood by the participants, and to establish the validity and reliability of the test. After designing the test, it was piloted in two stages. Firstly, a small group of test-takers (4 ETs and 4 STs), who were not part of the overall study, were asked to give their feedback on the test with respect to the types of questions asked, their format, the complexity of the test items, ambiguities in wording, clarity of items, instructions, layout, and the time taken to complete the test. All this feedback assisted the researcher in perfecting the test design and its implementation. The test was piloted a second time on a larger group of test-takers (5 ETs and 5 STs - not included in the final sample) who were asked for feedback, to enable the researcher to ensure that the instrument was suitable for gathering sufficiently large-scale data for analysis and to check the efficiency and clarity of the test items and also of the marking scheme.

After the second stage of piloting the test, modifications were made to the instructions found on the first page of the test. The pilot participants mentioned that the word 'test' annoyed them and made them feel uncomfortable when answering the questions. Therefore, the researcher changed the word 'test' to 'questions about English grammar knowledge' and the instructions were made simpler. When piloting the test, a limited time frame was allowed. After piloting the test, the researcher determined there should be no time limit placed on completion of the test to avoid unnecessary stress.

Through piloting and marking the test and analysing the results the researcher attained some understanding of the participants' levels of knowledge. As a consequence, the order of the tasks changed. As production requires more work and attention than reception, productive rules were placed at the beginning, followed by productive questions concerning terms. The receptive questions, for both terms and rules were positioned at the end of the test. There was also some rewording of the instructions to make them more understandable and some test items were deleted to make the test shorter. In addition, the layout was redesigned to reduce the number of pages.

Finally, the ambiguity of instructions, terms, questions, was minimised to limit any threat to validity (Cohen et al., 2011). In addition, the researcher took into consideration the time of day, the respondents' alertness, motivation and capability, in order to increase the reliability (Cohen et al., 2011). The administration of the test in all cases (but one group of STs) was in the morning. It was also checked that the STs had no exams in the week of the test, and that the ETs had no lessons.

3.7.2 Questionnaires

A questionnaire was administered to both groups. There were two questionnaires; one for the ETs and the second for the STs (Appendix G and Appendix H). Each was slightly different, although the themes were similar. The themes, which were their evaluation of their level of knowledge and their satisfaction with it, their views about the need to develop, awareness of their limitations, and their opinions regarding the importance of having grammar knowledge, were an attempt to find answers to the third research question investigating the perceptions of ETs and STs towards their own MLK.

A questionnaire is a widely used tool for collecting data from a large number of people, and it provides numerical information (Wilson and McLean, 1994). It consists of a number of questions/items on paper, which respondents have to complete by themselves. It is used to collect facts, attitudes, and opinions. (Thomas, 2013). It can be a time saving option (Burns, 2000) and remove the embarrassment or fear which may result from face-to-face interviewing (Burns, 2000). In addition, if it is anonymous it encourages participants to be honest and accurate (Cohen et al., 2011). It typically has two types of questions; open-ended and close-ended. With open-ended questions, the respondents are allowed to express their opinions however they wish. With close-ended questions, the respondents are limited to the set of alternatives offered to them (Bryman, 2012).

In this study, closed-ended item formats were chosen. The advantages of this lie in "achieving greater uniformity of measurement and therefore greater reliability; of making the respondents answer in a manner fitting the response category; and of being more easily coded" (Burns, 2000:572). The chosen format for responses was either dichotomous, for example "yes" or a "no", or multiple choice in which the respondents had several options to choose from, and rating scale questions in which the participants responded by indicating level of agreement on a five-point scale.

The questionnaire was written in English with a translation in Arabic (their first language), to ensure ease of response and to avoid any misunderstandings (Cohen et al., 2011). Two English language translators checked the items and the translation. Another lecturer from the Arabic language department checked the Arabic formulation. On the first page, there was an explanation of how some terms were used. The questionnaires were administered by the researcher to the two groups, allowing for clarification and to encourage a high response rate. The questionnaires were distributed to the STs during their regular lectures, and to the ETs on the day of the administration of the test (see 3.5), and collected before administering the test

The total number of items in ETs' questionnaire was 51. It began with items about personal information, regarding their educational background and their experience as teachers. In the STs' questionnaire, the total number of questions/items was 41. The researcher began by asking the respondents about their educational background and their expected future teaching. The aim of these introductory questions/ items were to describe the sample. In other words, it was to get some indication of what the population looked like (see 3.6.1.1 and 3.6.1.2).

Both the ETs' and STs' questionnaires items were divided into the following topics: opinions regarding the importance of having MLK, self-evaluated level of MLK, satisfaction regarding their current level of MLK, need for further development and an awareness of their own limitations. These items were designed to meet the objectives of the third research question, which aimed to investigate the respondents' perceptions of their own MLK. In addition, the ETs' questionnaire sought to discover the participants' opinions about their level of knowledge upon graduation, whether they had the

knowledge they needed to meet the demands of their present professional contexts, and if they felt their grammar had improved through teaching it.

The questionnaires applied in this study were piloted to increase their reliability, validity and practicability (Cohen et al., 2011). Firstly, the first draft questionnaires were sent to a colleague for comments. Secondly, the questionnaires were piloted on a small sample of people from the target groups (5 ETs and 5 STs) who were not included again in the final sample. Each group was asked to complete the relevant questionnaire. When they had completed the questionnaires, the pilot participants were asked to tell the researcher what they thought about when reading and answering the questions. The researcher took notes on this and then reviewed them to try to improve the questionnaires.

The purpose of the piloting was to gain feedback on the validity of the questionnaire items, to check that the design of the questionnaire works in practice, and to identify and resolve problematic questions and refine the items. The researcher aimed to check the clarity of the items, ambiguities with wording, instructions, layout, the time taken to complete the questionnaires, and itemisation of the questionnaires. After piloting the questionnaires, there were some alterations made; some items were deleted, some were reworded, and others were reordered.

3.8 Qualitative data collection

The qualitative methods employed in this study were as follows:

- STs only role-plays;
- ETs only semi-structured observations; and
- ETs and STs semi-structured interviews.

3.8.1 Interviews

Flexibility is the most important aspect of an interview, and this makes it different from other research methods (Burns, 2000; Cohen et al., 2011). Questions can be asked about a topic in more depth and any misunderstanding can be cleared up. Questions can be repeated, or their meanings explained, when respondents do not understand them (Burns, 2000). It can enable participants to express exactly how they regard a situation, from their

own point of view (Burns, 2000; Cohen et al., 2011). A further advantage is that face-toface interaction helps to create a higher level of motivation among respondents than a questionnaire as participants can express their perspectives using language that is natural to them (Burns, 2000). Therefore, interviews differ from questionnaires, where there is a possibility that a response may be incomplete or that there may be no response at all. An interview can thus gain a greater depth of understanding than expected from the questionnaire and obtain rich and useful data (Drever, 1995).

The above mentioned advantages of the interviews motivated the researcher to conduct interviews with the participants. The interview questions for the STs and ETs were asked to meet the objectives of the third research question, which aimed to investigate the respondents' perceptions of their own MLK; i.e. the motivation was to explore additional realities relating to the areas of investigation associated with the third research question. Besides conducting questionnaires for STs and ETs, the researcher conducted interviews with both groups, in order to gather more in-depth information about the STs' and ETs' perceptions of their MLK. The research also aimed to obtain additional information about their views concerning the characteristics of their MLK, their evaluations of their level of MLK in general, and their evaluation of all the components of their MLK, their awareness of their limitations and their satisfaction with their current level. Thus, the interviews were conducted to validate the data obtained from the questionnaire, and to explore in greater depth the issues raised by the completed questionnaires. It was hoped that feedback from the interviews would also help to produce additional insights into the ETs' and STs' perceptions of their MLK in the study.

The interviews (for both the ETs and STs) were conducted by the researcher first; prior to administering the questionnaire and the test (as mentioned in Section 3.5). The rationale behind this was, as mentioned earlier, that had the participants taken the test first, their perception of their own knowledge might have influenced and this would have affected their replies during the interviews.

From the entire year group of 122, only 15 STs were available and willing to participate in the interviews. These 15 STs were selected randomly. The researcher had a numbered list of the names of all the STs. Each number was placed in a bowl and mixed thoroughly. The blind-folded researcher then picked numbered tags from the bowl. All the individuals bearing the numbers picked by the researcher were the participants in the interviews. The interviews were conducted with the STs in a private, quiet office at the University.

In the case of the ETs, the participants were interviewed subsequently (as mentioned in Section 3.5). The researcher visited the schools of those teachers who had expressed a willingness to be involved, and collected qualitative data (observations and interviews) from those participants and conducted interviews with 14 teachers: 3 teaching at the primary stage, 8 at the middle stage, and 3 from the secondary stage (as mentioned before in Section 3.5). The interviews were conducted with the ETs in a private, quiet room in their schools.

The semi-structured interview format (for both STs and ETs) was selected. This type of interview,

Sets up a general structure by deciding in advance what ground is to be covered and what main questions are to be asked. This leaves the detailed structure to be worked out during the interview. (Drever, 1995: 1)

A semi-structured interview was conducted in this study, combining a pre-determined set of open questions with the opportunity for the interviewer to further explore particular topics or responses. It could also allow respondents to discuss and raise issues that they might not have considered in reference to the questionnaire items. The researcher developed and used an 'interview schedule' for use in this study (see below). The schedule included a list of questions and topics to be covered during the conversation, specifying a particular order. The researcher followed the schedule, but followed topical trajectories in the conversation that deviated somewhat stray from the schedule, when she felt this was appropriate. Similar questions were asked of each interviewee, although supplementary questions can be asked where appropriate.

3.8.1.1 Interview schedules

An interview schedule was used in this study "to guide the interview and to remind the interviewee of the formal nature of the discussion" (Drever, 1995:18). The schedule exists to help the interviewer complete the interviews "without drying up, missing out questions, going off at a tangent, leading or confusing the respondent" (Drever, 1995:18). Following Cohen et al.'s (2011) and Drever's (1995) interview schedule guidance, the ETs' and

STs' interview schedule (Appendix I and Appendix J) included questions, prompts, and probes to elicit further explanation. The questions were ordered to help to elicit responses in a gradual, comfortable manner and formed a logical sequence to ensure the interviews flowed naturally (Drever, 1995). During the interview, the questions were partially and occasionally reworded, reformatted or amended, according to the interviewe's responses. The schedules were also piloted to see how well they worked and to ensure their clarity and wording.

There were some introductory questions, at the beginning of the interviews, asking for general information about the participants' educational background. The topics which ETs' and STs' interview schedules then covered included the characteristics of their MLK, evaluations of their level of MLK in general, and an evaluation of all the components of their MLK, their awareness of their limitations and their satisfaction with their current level.

Both the interview schedules for the ETs and STs, consisted of the same questions, and examined their opinions regarding the characteristics of their knowledge and their satisfaction. For the ETs, there were questions asking whether they had the required knowledge to suit their present context. Additional questions asked investigated the ETs' and STs' awareness of the strengths and/or weaknesses of their MLK, by asking if they had attempted to develop their knowledge and/or had a desire to do so in the future. Additional questions concerned their evaluation of their MLK in general and evaluated all the components of MLK in more detail. They were also asked about their confidence levels.

The interviews for the STs and ETs began with the researcher introducing herself, and offering a brief explanation of the aim of the interview and the purposes of the questions. The interviewees signed a consent form to allow the researcher to conduct the interviews. In order to increase the motivation of the interviewees to speak, the interviewer began by establishing a friendly atmosphere. The interviews were conducted in Arabic, the participants' mother tongue, in order to avoid any misunderstanding caused by using the English language. The interview responses were tape-recorded. All the recorded interviews were then completely transcribed in Arabic, including the interviewer's questions, prompts, probes, and the participants' responses.

The interview instrument was piloted with 5 participants from each group. This was expected to help determine any weaknesses, limitations, mistakes within their design, and to assist the researcher to refine the interview questions (Kvale, 2007). Piloting also helped to determine if any of the questions made the respondents feel uncomfortable, to check the time that it would take to go through the questions, and identify any need for clarification. After piloting the interviews, the sequence of some the questions was changes. In addition, modifications were made to some of the questions. There was also some rewording of some questions to make them more understandable and some were deleted to make the interview shorter. Coding of the data was also piloted to establish whether collecting data on a small scale in this way would actually investigate what it was intended to.

3.8.2 Observations

The observation protocol used in this study was chosen based on 'fitness for purpose' (Cohen et al., 2011:475), emphasising the research purpose and questions (Creswell, 2013). The ETs' observations were intended to help meet the objectives of the second research question concerning the nature of ETs' MLK. The observations were employed as an additional method alongside the test, to illuminate the nature of ETs' MLK. By observing the grammar explanations teachers offer to their students it is possible to gain additional insight into their ability to apply knowledge and explanations, which is a component of MLK. As discussed in Section 3.2, observing the teachers' explanations and/or their reflections on a particular student's response/question brought the researcher closer to understanding how far the grammatical explanations given indicated knowledge. Their explanations will also reflect any understanding or confusion regarding grammar rules and grammar terminology. Moreover, their explanations could help reveal areas of strengths and weakness in their knowledge, to acquire a richer understanding of the nature of their MLK. For example, what they include or do not include, clarity, simplicity, which aspect of the three aspects of language (form, meaning, and use) will be considered by teachers when teaching pedagogic grammar, how far grammatical terminology will be used during a lesson, and so on. Thus, observations could assist the researcher in gathering complementary data to develop a fuller understanding of the nature of the participants'

MLK. Moreover, the observations were employed as an additional method beside interviews, questionnaires and tests, to "provide triangulation and corroboration to ensure reliable inferences are derived from reliable data" (Cohen et al., 2011:474). Observation alone would not have been sufficient as there would have been no means of checking for bias and subjectivity (Cohen et al., 2011). The observation method on its own would lack trustworthiness also because the researcher was the sole observer. Combined with other methods of data collection, however, observations can help to make data collection comprehensive and to "increase the expressiveness of the data gathered" (Flick, 2014:311). For this reason, the researcher triangulated the results of the observations with other methods (tests, questionnaires, and interviews), to produce an in-depth and rounded picture of the MLK of ETs and enhance the credibility of the findings in the overall study.

Detailed planning, careful observation, thoughtful recording, reflexive reviewing, and appropriate analysis are all required to obtain credible data (O'Leary, 2009). The observation steps followed in this study were Creswell' steps (2013). First, there was a determination of who/what would be observed. Then, the following step was to acquire the permissions needed to gain access to the classes. There were also dealings with the General Administration for Education in Noor city, to coordinate with schools; arrange appointments with teachers to meet them in their schools and to obtain their consent to participate in the study by allowing the researcher to observe a grammar lesson. Before the observation, the researcher met the participants and spoke with them in a friendly manner, introducing herself. Because the English teachers are expected to teach grammar rules in separate lessons on particular days each week, the researcher was forced to choose the day on which a grammar rule would be explained, and then inform the teachers when she would attend. Thus, the teachers were shown a statement about the general objective of the study, stating that the researcher wished to observe a grammar lesson and determine what was happening during grammar lessons. The participants were not informed of the main target of the observations or the precise reason for the researcher's presence, which was to observe the grammar explanations they offered to students and their ability to apply knowledge and explanations as a component of 'the nature' of their MLK. The researcher tried to avoid conveying any information regarding the focus of the observations, in order to avoid the problem of reactivity. Thus, the fact that the participants were not aware of the focus of the observations meant that there was no danger of them having made an extra effort to be prepared or even to revise grammar rules before class.

The teachers were told that the researcher did not want them to do anything special, just to teach a normal lesson. Furthermore, the participants were reassured that the researcher was not taking the role of a supervisor, and was not there to test or evaluate them. The researcher took these steps to improve the validity of the study (Cohen, el at., 2011). To overcome the ethical issues raised, the researcher ensured that there would be no potential risk of harm to the participants and took measures to safeguard the anonymity of research participants (Bryman, 2012).

Grammar lesson observations of the ETs were the primary steps in the data collection process conducted during the study. They were conducted prior to the interviews (see Section 3.5). This arrangement was preferred because (as mentioned in section 3.5), the researcher wanted to avoid the participants altering their behaviour during the lessons based on knowledge of the other research instruments.

The grammar lesson observations included a review of 8 teachers, 6 middle class teachers (3 first year middle class teachers, 2 second year middle class teachers, and 1 third year middle class teacher), and 2 secondary class teachers (1 first year secondary class teacher, and 1 second year secondary class teacher). As children at primary stage are not taught grammar, the researcher observed only middle and secondary classes. The primary teachers are required to explain only simple concepts such as 'pronouns', so there would be no data for the researcher to analyse.

The observations of the ETs were conducted as non-participant grammar lesson observations. This involved the researcher observing participants without actively engaging with the activities being observed. The researcher sat at the back or side of the classroom, focused on audio-recording, watching and taking notes from the whiteboard, and copying down the appearance of the board during lessons. In addition, the observations were semi-structured and did not involve a checklist /observational schedule. However, the aim of the observation was to note down the teachers' explanations (see above) without being limited to the categories listed on a given schedule. Audio recording afforded the researcher the opportunity to later transcribe the

teachers' explanations of the grammar rules, and to observe what occurs in a setting and replay it to assist the analysis process.

An observational protocol was designed to record the date, place, stage, name of the teacher/pseudonym, school and time of observation and the look of the white board, as it was difficult to take videos or even photographs because laws applying to Saudi girls schools do not allow video-recording or photography, for religious and cultural reasons.

After conducting the observations, the audio data was transcribed. As the researcher had previous experience of conducting observations, there was no piloting of the observations.

3.8.3 Role-playing

The Study Plan for the Department of English Language at Noor University no longer offers STs' teaching practice as part of the course plan (information from 'The Study Plan' for the Department of English Language) from when the STs are in the third year. For this reason, the research with the STs involved role-playing instead of observations. Thus, the data obtained from the role plays was collected to address the second research question concerning the nature of STs' MLK. Alongside the test data, the role-play findings will help the researcher develop a more comprehensive understanding of the STs' MLK (see below).

Role-playing is a spontaneous, dramatic, creative technique in which participants are asked to act out a role in a specific situation (Tran, 2004; O'Sullivan, 2011). It is an "expressive technique that works particularly well in situations where participants cannot describe their actions or behaviours in an abstract way but can demonstrate them" (Krueger, 1999 cited in Morrison et al., 2012:101). Using role-playing allows the researcher to explore all aspects of human behaviour in close to real life settings (O'Sullivan, 2011). It has the advantage of providing spoken data that approaches real-life performance. Moreover, it enables the researcher to obtain visual data, thereby adding immediacy and authenticity to the research (O'Sullivan, 2011). This technique can be used either in individual interviews or in-group situations (Morrison et al., 2012). Role-

plays can be either closed or open. The former involve one conductor of the role-play and an informant. In the latter type, participants take turns speaking to produce focused data (Tran, 2004). There is no specific method or standardised approach for role-playing (O'Sullivan, 2011).

All the above-mentioned features associated with this technique motivated the researcher to apply role-playing in this study. The role-plays enabled an insight into the explanations the STs would offer for grammar rules, which formed a component of their MLK. Although role-plays are not be a reliable predictor of future classroom performance, they can provide insight into the nature of their MLK, providing explanations during role-playing, for example to determine whether or not to include clarity, simplicity, and determine how far grammatical terminology will be used during lessons and so on. Moreover, as discussed in section (3.2), STs' explanations of grammar rules could reflect their understanding or confusion regarding grammar rules and also grammar terms, and this could help in disclosing areas of strengths and weaknesses, to gain a more in depth detailed and richer understanding of the nature of their MLK. Thus, role-play appears to be a promising alternative to observations for shedding light on the nature of STs MLK.

The role-plays were conducted as the first data collection step in this study. Each participant was asked to perform a role-play in an individual interview. The total number of participants was fifteen STs; each of whom participated in a closed role-play during their individual interview. The timing of the role-play was early on in the interview; after some background questions, as a starting point for the rest of the discussion, in order to make the interviewees feel that the researcher was genuinely interested in the insights they could give her, and to avoid giving the impression of being an 'inspector'. Finishing with the role-play had the potential to make it feel like a 'test'. In addition, if a participant did not feel they had provided a good explanation, they would leave the interview feeling very uneasy, perhaps even humiliated. Only the researcher was present.

The interviewees were asked to play the role of the teacher and explain an English grammar rule. As mentioned above (see Section 1.6.2) the textbooks, which are used to teach students in the middle and secondary stages, cover approximately six units in each semester with each unit being divided into six or seven lessons. A grammar lesson typically focuses on introducing and explaining grammar rules to students over a number

of lessons. Two approaches to form-focused instruction (FFI) are applied: deductive and inductive instruction. Grammar is not taught 'in context' in Saudi schools. Teaching grammar involves only introducing and explaining a grammar rule followed by drilling and practice exercises. There is no use of authentic and longer texts to teach grammar rules. Thus, the instructions drawn up for the role-playing task followed the spirit and structure of the typical grammar lesson given in a Saudi school and the participants were asked to introduce and explain new grammar rules.

The instructions of the task were as follows. Participants were asked to imagine themselves as teachers in their classrooms. They have a grammar lesson to deliver where they have to introduce and explain an English grammar rule to their students. The participants were given the freedom to choose any grammatical rule that they knew and were offered suggestions if they found it difficult to choose one. The aim of letting them choose what to teach was to observe how they might explain a grammar rule that they were confident with. Had they been asked to explain a specific rule determined by the researcher, they might have failed due to lack of subject content knowledge. If the stimulus led them to say very little or nothing, there would be minimal data to analyse, and so the role-play would not provide useful information. The data was to be analysed to determine the extent, use and accuracy of their grammar terms, and whether their explanations were clear and accurate. The participants were given the freedom to choose any approach they wished to teaching the grammar rule.

When designing the role-play, the researcher followed O'Sullivan's general guidelines (2011). It had three sequential stages: briefing, acting and debriefing; all of which actively involved the STs. The researcher was concerned to set up and structure the role-play accurately, in order to increase the reliability and validity of the data collected (O'Sullivan, 2011). Following a well-structured process can build a mutual relationship which may eventually impact upon the quality of the resulting data (O'Sullivan, 2011). The researcher introduced the task and outlined what was going to happen. Then the dramatic frame was described; the participant was familiarised with the context. She was told that the researcher's aim was to see how she would explain a grammar rule, and encouraged to enjoy the experience. She was told that the task was not an assessment, and that this was only being done to fulfil the research objectives. At the second stage, the interviewee was given a role-card (Appendix K) and given ten minutes to prepare before

acting out the role. She was asked to try to explain, without worrying about the outcome. The instructions were described in Arabic to avoid any misunderstanding. There was no prescription regarding which language they must use. All this was done in order to induct the participants comfortably, carefully and responsibly into role with the aim of eliciting more reliable and ethical findings (O'Sullivan, 2011). Only the researcher was present in the classroom with the participant. The interviewer took the role of a student who was following a grammar lesson and answered the teacher's questions in order to reflect a real class situation. The audience level was however specified; the teacher was told that the students were not lower level learners or younger learners in order to avoid simplification of the explanations because of audience consideration. This was because the aim of the role-plays was to gain an insight into the explanations offered by the participants relating to the grammar rules, which explanations formed a component of their MLK, as mentioned earlier. The activity was a verbal response and there was a board to use while giving the explanations. The task typically took about 5 minutes and was recorded. The researcher photographed the boards.

At the debriefing stage, the interviewee was asked about the difficulties/problems that she encountered while doing this role-play; especially concerning their MLK. She was asked to speak about possible issues she might face in the future. The aim of the debriefing was to increase reflection and provide richer data (O'Sullivan, 2011).

One of the limitations of a role-play is that the situations can be unrealistic for participants and data collected in this way has been criticised for not being natural enough (Tran, 2004). However, these disadvantages were to some extent remedied through the following. A quiet suitable room of good size and including a white board was chosen. The interviewees were given sufficient time to warm-up, running the actual role-play and debriefing. The researcher provided assistance to help run the task (Cohen et al., 2007). In order to facilitate transparency, ensure greater clarity and depth in the activity, before engaging in the role-play, the purpose of the task, the status and the attitude of the role according to the themes being investigated were determined, and these points detailed in brief for the participant. Thus, it was hoped that the reliability of the data could be improved "by more closely reflecting the real-life situation and reducing any tendency to superficiality" (O'Sullivan, 2011: 520). The role-play was piloted. The aim was to have the opportunity to modify and improve it. Before designing the task applied in the role-play, a previous task designed for both ETs and STs was piloted. In that task, the participants were asked to identify the parts of an extract which had a grammar error in it and then to give an explanation. The researcher found that this piloted task did not produce good data. Therefore, there was a need to change it to a task which was guaranteed to elicit an explanation. In other words, the stimulus for the role-play needed to be such that the researcher is confident that it would stimulate the interviewees to give an extended explanation. Because of the futility of the earlier task, and the difficulty that most participants faced in choosing a grammar error and then explaining it, the researcher decided to change the task, and also to apply the role-play only with the STs. For the ETs, observations were a substitute for role-play. In addition, as a result of piloting, the original timing of the role-play, at the end of the interview, was altered.

3.9 Quantitative data analysis

3.9.1 Test data analysis

There were two methods used to analyse the data collected from the test. The first method involved scoring and analysing the data to answer the research questions about the participants' level of MLK. The second included analysing the data to answer the second question, highlighting the nature of their MLK. After the data had been collected, the data was scored. The procedures were as follows.

3.9.1.1 Scoring procedure

The test was examiner-marked using a marking scheme (Appendix L). For each item in the section regarding terms, it was possible to score a maximum of two marks, or one mark for a partially correct answer. For example: in the productive task at sentence level (Q2)- where participants were required to provide a full description for the *books* in the sentence 'Ann put her <u>books on the desk</u>', the response *plural noun* earned two marks, while *plural* alone/ or *noun* alone earned only one mark. Another example: in the

receptive task at sentence level (Q5), where participants were asked to select the item that exemplified the requested term *subject* in the sentence '*The people in the bus escaped through the emergency exit*', the response *The people in the bus* earned two marks, while *the people* alone earned only one mark. In some items there was more than one right answer. For example: in the productive task at sentence level (Q2)- where participants were required to provide a full description for *family* in the sentence '*Roger is the last surviving member of his family*', the responses *collective noun* or *countable noun* or *singular noun* were all accepted as correct.

In the section on rules; in the receptive question (Q6), each correct answer was awarded 1 point. For the productive question (Q1), a scoring scale was applied. The scales employed in Han and Ellis (1998) and Gutiérrez (2013) were used as a starting point. However, as the participants' responses were analysed, the scale underwent a series of modifications, in order to reflect better the different types of answers provided. Modifications made resulted in a three point scale for giving explanation of the rule in English, and a three point scale for explanations of the rule in Arabic, as presented in Table 3-7 below.

Score	Descriptions (for explanation in English)
(-)	The participant provides no answer
0	The participant provides completely incorrect answer/ gives instructions (e.g. use 'the' instead of 'a')/ correcting the error
1	The participant verbalises the rule correctly but does not use any technical terms The participant verbalises the rule partially correctly with or without using technical terms/provides key words.
2	The participant verbalises the rule correctly using technical terms
Score	Descriptions (for explanation in Arabic)
(-)	The participant does not provide an answer
0	The participant provides an incorrect rule
.5	The participant verbalises the rule partially correctly/ provides key words.
1	The participant verbalises the correct rule

Table 3-7: The scoring scale for the first question

The scoring system for the first question is as follows (Table 3-7). There were four categories providing the rule in English. The first meant that when a participant did not provide an answer, she was allocated a blank (as this would be meaningful when

analysing the data). Each participant was awarded a 0 score when providing a completely incorrect answer or when giving instructions (e.g. use 'the' instead of 'a'), or she just corrected the error. A participant was awarded a 1 score when she verbalised the rule correctly but did not use any technical terms, or if she verbalised the rule partially correctly with or without using technical terms, or if she provided only key words. A participant was awarded a 2 score which is the full two marks for explanation of the rules in English, when she verbalised the rule correctly using technical terms. For instance. In item 1 (Q1) when providing an explanation of the rule that had been broken in the sentence 'Sarah <u>has taken</u> a taxi to the airport yesterday', a response such as *Simple past tense is used to talk about an action that began and ended in the past* gained the full two marks for explanation of rules in English. In contrast, a response of *It must be 'took'* was given no mark.

There were four categories on the scale for providing the rule in Arabic. The first was that when a participant did not provide an answer, she was allocated a blank. A participant was awarded a 0 score when providing an incorrect rule. A participant was awarded a .5 score when verbalising the rule correctly or when providing only key words. A participant was awarded a 1 score, which is the full two marks for the explanation of rules in Arabic, when she verbalised the rule correctly. A response such as:

"زمن الماضي البسيط يستخدم للدلالة على فعل حدث بالماضي وانتهي" "Simple past tense is used to talk about an action that began and ended in the past"

gained the full one mark for explanation of the rule in Arabic.

When giving the instructions for the first question, in order to be sure that the participants understood the requirements of the question, the participants were told that they had to write the rules once in Arabic and again in English. In addition, the participants were provided with an example, showing how to produce the full response (which included formulation rules using technical terms) to meet the requirements to receive 2 marks. When given the instructions, the participants were not directed to use technical terminology as the researcher wanted to see whether they would do so spontaneously. Moreover, in the example provided, the participants were told that they have to formulate

a rule and 'not correct the error'. After collecting the data, the researcher realised that it might have been useful to have actually instructed the participants to use technical terminology to judge whether they were able to do it.

The participants' responses to the productive question received a score of two for providing a rule in English and a score of one for providing a rule in Arabic. Therefore, on each item, it was possible to score a maximum of three marks; a maximum of two marks for explanation in English and a maximum of one mark for explanation in Arabic. The researcher differentiated the scores because, for an English teacher, having the knowledge but being able to express it only in Arabic, is a lower 'quality' of MLK than both having the knowledge and being able to express it in English (i.e. having the required terminology in English). This is because verbalisation of a grammar rule in the English language (their foreign language) places greater cognitive demands on the subjects, requiring them to make explicit rules that have been broken, employing the appropriate metalinguistic terms in order to explain why this was the case (Andrews, 1999c; Andrews and McNeill, 2005; Tsang, 2011). Sometimes the language could have a negative effect on the expression of knowledge; in addition, a shortage of vocabulary adversely affected their ability to express and display knowledge; i.e. language might be a barrier to them. On the other hand, this was not the case when giving explanation in their mother tongue, as they might provide more information in Arabic. Moreover, although the use of the first language has several advantages and benefits in the foreign language classroom, particularly if learners have limited language proficiency, writers such as Ellis (1984), Swain and Lapkin (2000), Cook (2001), and Harmer (2009) warn teachers of the excessive use of first language, claiming that excessive use of first language can reduce learners' exposure to the target language (more details see 2.2).

One of the test strengths was that the researcher could calculate scores both for 'Arabic explanations and English explanations' and could also calculate scores for 'only English explanations'. This was important to determine the level of initial knowledge to start, and therefore the participants' ability to express knowledge in some way. Being able to express a rule in Arabic is helpful for teachers who wish to use their native language for grammar explanation, which may be appropriate in some situations. The more options the teacher has available to them, the better. Scores for 'only English explanations' shed light only on their ability to express that knowledge in English.

After scoring, the Excel programme was used to calculate the scores, the percentages, and the means for each of the two groups. For each group, the scores/percentages for each participant were presented in a separate table (Appendix M).

The researcher calculated absolute scores and percentages for each level, for each part and for each section (see 3.7.1.1). To clarify, the researcher calculated the participants' scores/percentages according to each one of the 11 following components:

- MLK (the overall scores of the all the main and sub components of MLK)
- Knowledge of grammar *terms*
 - *Productive* knowledge of terms
 - Productive Knowledge of terms at sentence level
 - Productive Knowledge of terms *at text level*
 - *Receptive* knowledge of terms
 - Receptive Knowledge of terms *at sentence level*
 - Receptive Knowledge of terms *at text level*
- Knowledge of grammar *rules*
 - *Productive* knowledge of rules
 - *Receptive* knowledge of rules

The participants' scores/percentages were calculated sequentially, starting by calculating the scores for each question separately, the scores of each level separately, scores for each part separately, scores of each section separately, and finally the overall test scores (See Table 3-6 above). This enabled the researcher to calculate scores/percentages and means for each level, each part and each section.

After this, the scores/percentages (of the MLK and its sections, parts and levels) for all the participants within a group were calculated. The reason for calculating both absolute scores and percentages was that each component of MLK was represented by a different number of items, so the percentage would be more useful for comparative purposes.

The data were entered into SPSS (Statistical Package for Social Sciences, version 20) to verify the validity of the results obtained from the Excel programme. Using SPSS also made it possible to produce more descriptive and inferential statistics. The findings and results were presented using descriptive analysis, as well as inferential analysis (discussed

in details in Chapter 4). The key aspects of the statistical output, for both groups were the mean, minimum, maximum and standard deviation (SD). Independent samples t-test, paired-samples t-test and Cohen's d (effect size), were conducted and the results interpreted. The independent samples t-test was run to check whether the means for the two groups were significantly different from one another. The paired-samples t-test was used to examine the differences between the same groups on two variables (e.g. terms and rules).

In addition, following the statistical guidelines and procedures proposed by Becher (2000), Cohen's d measure of effect size was applied to provide a standardised measure of the differences between ETs and STs, and between the two variables within a group. Effect size, which is simply a way of quantifying the difference between two groups, was included to give an indication of the strength of the findings (Mackey and Gass, 2005).

For the section regarding knowledge of rules, tables were also used to analyse the nature of the participant's knowledge. The participants' responses had been broken down into these categories (correct answers, partly correct responses, incorrect responses, no response, correcting the error, giving instructions) and presented in tables, to provide a more detailed account of their responses. In addition, there were tables presenting the key characteristics of their partly correct responses and other tables that presented noticeable features within unclearly formulated responses. These tables are presented in Section 4.3.1.2.

3.9.2 Questionnaire data analysis

To analyse the data collected from the questionnaires, SPSS was used to calculate the percentages for each of the two groups. These percentages are presented in separate tables to reveal the participants' perceptions of their own MLK (as discussed in detail in Chapter 6). The data were coded numerically, and the frequencies were calculated as percentages using SPSS software. The 5-point scale was collapsed into a 3-point scale, in order to facilitate comparison between the groups: "strongly agree" and "agree" were collapsed into "disagree", " very poor" and "poor" into "poor", and "good" and "excellent" into "good".

In addition, a correlation analysis (Pearson's correlation) was conducted to test the relationship between the variables. To investigate the STs' and ETs' awareness of their strengths and limitations, their responses to items 11.1 to 12.2 (see 4.4.1.5) regarding the need for MLK development, were linked to their actual performance in these areas on the test. The new variables namely ET's performance and ET's opinion regarding the need for development in different areas were created by averaging the eight performance and seven opinion questions and the analysis was conducted on these new variables.

3.9.3 Qualitative data analysis

3.9.3.1 Interview data analysis

Various methods can be used to analyse qualitative data (Cohen et al., 2011; Punch, 2009), and there is no standard approach to analysis (Punch, 2009). The general procedures for qualitative data analysis comprise three stages. The first stage involves preparing and organising the data for analysis. The second, reducing the data into themes through a process of coding and condensing codes, and finally representing the data (Creswell, 2012).

In this study, thematic analysis was used. The purpose of the study, the research question, and the approach taken guided the definition of the frame for analysis (Cohen et al., 2011). Thematic analysis is a method for "identifying, analysing and reporting patterns (themes) within data" (Braun and Clarke's, 2006:79), and can be used as a way of getting close to the data and developing a deeper appreciation for its content (Braun and Clarke's, 2006). It is a widely used method (Bryman, 2012) and suitable for questions related to people's views and perceptions (Namey et al., 2008).

Following Braun and Clarke's (2006) guide to conducting thematic analysis, the interview data was analysed according to a process involving six phases, covering the second and third stages above, to identify patterns of meaning across a dataset that provided an answer to the third research question being addressed. These phases were suitable for generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing a final report (Braun and Clarke, 2006; Creswell, 2012).

The qualitative data was first made available in textual form by transcribing the tapes recorded during the interviews. Initially the coding was done in Arabic as the researcher felt that coding using the original language data would be most accurate. Translating the transcripts before coding might have eroded the meaning of the interviewees' words. Certain responses in the interviews did not provide any relevant information and so they were excluded from the analysis. Once the codes had been determined, after analysing the full transcripts, the extracts used in the thesis were translated into English.

In more detail, the analysis proceeded as follows. The first phase was familiarisation, to get a sense of all the data involved in reading and re-reading the transcripts, to become familiar with their content. The second phase involved the production of codes from the data to identify important features that might be relevant to answering the research question. After that, the data relevant to each code was collated. The third phase involved searching for themes among the codes. This aimed to collect all the interview codes under themes and to examine the ideas comprising the themes. The fourth phase was to review the themes and check their correlation with the coded extracts and the entire data set, generating a thematic map for analysis. The fifth stage involved developing a detailed analysis of each theme, working out the scope and focus of each theme, and determining the overall story the analysis was telling. It also involved generating names for each theme. The last stage was writing up.

3.9.3.2 Observation and role-playing data analysis

The first step in the analysis of the observation and role-playing data was organisation and preparation. After that, the data was the transcribed and arranged. Only the parts of the observed lessons in which the teacher was explaining a rule or answering grammar questions were transcribed. In the case of the data obtained from the role-play, there was a transcription of all the data. The analysis of the observations and role-playing data proceeded as follows. The first phase was familiarisation, in which the researcher acquired a sense of all the data involved by reading and re-reading the transcripts, to become familiar with their content. In the second phase the researcher was looking for patterns and features that highlighted the nature of the learners' MLK. Specifically, the researcher was looking at the emergent patterns and features of their knowledge. The codes were produced from the data to identify patterns/features that might be relevant when answering the research question concerning the nature of their knowledge. After this stage, the data relevant to each code was collated. After the data had been coded, the researcher was able to sort and examine the data using the codes to look for patterns. The third phase involved searching for key patterns among the codes. The fourth phase was to review the patterns and check their correlation with the coded extracts and the entire data set. This generated a number of patterns, supported by quotations, which represented the major findings of the observations and role-plays (Cohen et al., 2011). The last stage was writing up.

3.10 Validity and reliability in the quantitative study

Validity and reliability are two important criteria for assessing the quality of a piece of research (Punch, 2009). Validity "is concerned with the integrity of the conclusions that are generated from a piece of research" (Bryman, 2012:47), and thus the credibility of the findings. It refers to the extent to which an instrument measures what it is intended to measure (Thomas, 2013), and is a requirement for both quantitative and qualitative research (Cohen, 2011). In qualitative data, validity might be addressed through the honesty, depth, richness and scope of the data achieved, the participants approached, the extent of triangulation and the disinterestedness or objectivity of the researcher (Winter, 2000). In quantitative data, validity might be improved "through careful sampling, appropriate instrumentation and appropriate statistical treatments of data" (Cohen et al., 2011:179). There are several different kinds of validity, such as content validity, face validity, concurrent validity, construct validity, and criterion-related validity. Reliability, in contrast, is "the extent to which a test or procedure produces similar results under constant conditions on all occasions" (Bell, 2010:119). More details about reliability are mentioned in the following sections.

3.10.1 Validity

Several forms of validity were evaluated: content validity, face validity, construct validity, cultural validity and consequential validity.

In order to demonstrate content validity, the researcher ensured the test provided representative coverage of the content, and that the objectives the test was originally designed to measure were met, (Brown, 2000; Cohen et al., 2011). Two colleagues in the department were also asked to provide their feedback on the test's content validity. The test was designed to measure a wide range of MLK (see 3.7.1.1); and each question was designed to measure one particular. The grammar features tested covered a broad range of elements of the English language pedagogic grammar that teachers need to employ in the classroom in order to test the limits of their knowledge of terms and rules. The intention was that each element would be adequately represented in the items.

To check the face validity of the test, an expert in language awareness testing was asked to reflect on the concepts concerned and check the appropriateness of the test's content (Bryman, 2012). She examined the items on the test, to test their validity and suitability at all the design stages. In addition, the test was examined by an English language teacher with 10 years' teaching experience. Furthermore, piloting the test in two phases (see 3.7.1.7), and editing it in response to feedback, helped enhance its face validity further (Bell, 2010).

The construction of test was developed using a wide literature search, in agreement with other tests designed to assess the same underlying issues (such as Andrews' 1999), Alderson et al.,1997 and Bloor's, 1986). Thus, the construct validity of the test instrument was achieved by rooting the construct in my study (MLK) in "a wider literature search which teases out the meaning of a particular construct and its constituent elements" (Cohen et al., 2011:186). Moreover, the use of multiple methods (triangulation), provided further evidence to support the construct validity of the test (Sekaran and Roger, 2013; Cohen et al., 2011).

In addition, the data collection processes were fair and ethical (see 3.5 and 3.12) and the data was only collected for the purpose of the test to achieve consequential validity (Cohen et al., 2011). Furthermore, the researcher provided a translation of words in the test that may be unknown to the participants in order to ensure equivalence of meaning and cultural validity (Cohen et al., 2011). Likewise, the researcher provided translations of the questions in the test that were expected to be problematic. To assist in the translation, the researcher employed two translators to ensure greater validity and

reliability of the translation (Cohen et al., 2011). Moving to the second quantitative method used, the questionnaires; these were designed to uncover the perceptions of ETs and STs towards their own MLK. To check content validity, each item was developed to have a logical link to the established objectives. In addition, the items on the questionnaires covered a broad range of dimensions of perceptions, and each item was given an adequate representation in the items (see 3.7.2). Piloting of the questionnaires and refinement of their content and wording (see 3.7.2) helped to increase their effectiveness, and to enhance face validity (Bell, 2010).

Construct validity was achieved using multiple methods; triangulation of the questionnaires with the interview instrument to answer the research question relating to the participants' perceptions of their MLK, as well as with test, observation, and role-playing to investigate their MLK (Cohen et al., 2011). The consequential validity was addressed through fair and ethical use of the data and by using it only for the purpose for which it was constructed (Cohen et al., 2011). In addition, the researcher provided a translation of the items on the questionnaires. Two translators were involved, to ensure greater validity and reliability (Cohen et al., 2011).

3.10.2 Reliability

Reliability implies 'consistency', and "there are two main aspects to this consistency; consistency over time (or stability) and internal consistency" (Punch, 2009:244). To test the reliability of the three survey instruments: the test instrument and the two questionnaires instruments, Cronbach's alpha, frequently referred to as the alpha coefficient of reliability, was used to provide a coefficient of inter-item correlations. This measured the test's internal reliability. Using SPSS the test instrument returned a Cronbach's alpha coefficient of 0.91 with 61 ETs and of 0.91 with the 122 STs, suggesting that the items have relatively high internal consistency (indicating acceptable reliability).

Cronbach's alpha was also used to check the reliability of the questionnaires., in the ETs questionnaire, with a sample of 61, the Cronbach's alpha coefficient for all the 24 itemsall items related to the dimensions of participants' perceptions was 0.79. In the STs questionnaire, for the 122 participants, the Cronbach's alpha coefficient for all 22 items related to perception was 0.69. Thus, the reliability results and the value of the Cronbach's alpha was close to 0.7 or greater than 0.7, suggesting that the reliability level of the questionnaires was acceptable.

The interrater reliability of the test was assessed by asking an English second language teacher, with more than ten years' experience, to mark the test papers for all groups. Although test scores typically "are objective and there is little judgment involved" (Mackey and Grass, 2005), the researcher needed to make some judgments about the data. The researcher semi-randomly selected a portion of the data, 25% from the different parts of the main dataset, and this was then marked by the second marker. The marking done by the researcher and the second marker were compared. Interrater reliability was calculated as a simple percentage, appropriate for continuous data (Mackey and Gass, 2005). As there was complete agreement on the 25% of data checked, the process yielded an interrater reliability percentage of 100% for both groups. In addition, the researcher times, by remarking all of the test papers for both groups 3 months later to ensure that the marking of the test would be the same at different times (Mackey and Gass, 2005) and it was the same.

3.11 Validity and reliability in the qualitative study

The meaning of the two concepts, validity and reliability is slightly different in qualitative research, due to its nature (Bryman, 2012). 'Trustworthiness' and 'authenticity' are the two criteria proposed as an alternative to reliability and validity (Lincoln and Guba, 1985). Trustworthiness involves establishing credibility, transferability, dependability and conformability (Lincoln and Guba, 1985).

Trustworthiness was established in this study by using triangulation of multiple sources of information (Creswell, 2012), as discussed above. Transferability was achieved through the provision of rich, thick detailed descriptions of the participants, the setting, and the themes to enable the reader "to transfer information to other settings and to determine whether the findings can be transferred because of the shared characteristics" (Creswell, 2012:252). Credibility of the findings and interpretations was also achieved through member checking, by giving some of the printed transcripts of the interviews

observations/ role-plays to the participants to read and check to verify the accuracy and credibility of the account.

Peer debriefing was also used to enhance the trustworthiness of the qualitative research. A colleague participated in peer debriefing; he reviewed and assessed transcripts, the categories emerging from the transcripts, and the final report. The researcher made available full details of the data on which the interpretations are based to enhance the conformability of the applied qualitative methods. The trustworthiness of the interviews was enhanced by having an interview schedule for each group, with the same format and sequence of words and questions for each respondent. In addition, reducing interview bias was achieved through piloting the interview schedules, training procedures, and probability random sampling of STs respondents, as described above. All the interviews were carried out in similar conditions, taking into account elements such as place, lighting and timing.

One of the concerns raised in the observation, was that the performance of the participants might be affected by being observed. Therefore, the researcher did not inform the teachers of the precise focus of the observation, and aimed to be as inconspicuous as possible in the classroom (see Section 3.8.2). The reliability of the role-play was improved by determining the purpose of the role and the participants' motivations. The participants were then briefed on these points, and the context introduced. By doing this, there was close reflection on the real life situation, encouraging active participation in role-play situations, thereby ensuring clarity and depth in the activity itself as well as facilitating transparency (Cohen et al., 2011).

3.12 Ethical Issues

Ethical problems are likely to occur in social science research because human subjects are taking part; therefore, researchers must identify and address ethical considerations (Burns, 2000; Cohen et al., 2011). The research participants were not to be harmed in any way and nothing was done to them without their agreement. Before conducting the interviews, observations, role-play, and administering the questionnaires and the test, the extent of the participants' involvement in the research, and what was expected of them

was discussed. Developing an 'informal consent form' for the participants to sign before conducting the test, questionnaire, interviews and observations ensured that their rights were protected. Each participant was given an information sheet that provided information on the nature and purpose of the study, who was conducting it, how it was to be carried out, the confidentiality and anonymity of the data, and the researcher's contact information (for an example of informal consent form see Appendix N). The participants were assured that they had the opportunity to withdraw at any stage. They were assured that they would not be harmed by this study or its results. To ensure anonymity, the participants were encouraged to write and use pseudonyms.

The researcher did not wholly disclose the purpose of the study before conducting observations as it was necessary to avoid the problem of reactivity (see 3.8.2); as there would be a possibility that the participants would change their natural behaviour if they knew what the researcher was going to observe.

3.13 Limitations

The design and conduct of the current study revealed a number of limitations, which should be considered in any attempt to interpret and generalise its findings; these should be addressed as a means for improvement and a focus for further study. Some of the limitations are as follows.

This study was confined to female STs and ETs, because coeducation, for cultural reasons, is not a component of the Saudi educational system. Furthermore, social customs and religious beliefs in the geographical area in which the study was conducted restricted the access of the female researcher to schools with male ETs, or to the male university with male STs. Communication with male school teachers and male STs revealed that these teachers were intolerant towards the idea of a female researcher conducting a study in their schools or at their university.

The present study, as mentioned before, focused on investigating the MLK of female Saudi ETs who had graduated, and fourth year STs who would graduate from Noor University in Saudi Arabia. Furthermore, the study is limited to the data collected from a single university (Noor University). Therefore, the findings of the current study, in terms of generalisation are limited to STs from that specific university, and the ETs that graduated from that university (see 3.6). However, it is possible that similar courses are implemented with similar STs, elsewhere in the Arab world; or even in other parts of the world. Thus, the researcher can assume that the findings could be partly applicable to STs at other universities (e.g. in the Middle East) where the educational contexts and courses taught are similar. This is also the case with the findings related to the ETs. Thus, the researcher anticipates that the MLK in this population might be similar to that of ETs elsewhere with a similar educational background and in similar teaching contexts as the sample respondents.

The limitations of this study also arise from its data collection methods. First, observations may lack dependability when the researcher is the only one available to observe the teacher. Likewise, role-plays may lack dependability, as the researcher was the only person observing the STs. The researcher may be biased, or see only the things he/she is looking for. To counteract this problem, the observations and role-play data was triangulated with information obtained from the participants' responses to the test, and their responses during the semi-structured interviews and those from the questionnaires. Similar to the observations and role-plays, the questionnaire responses were found to have limitations. The participants may have held other opinions, or might have been able to present more details about their MLK if they had been given more time. Furthermore, the participants' responses to the questionnaires may not have revealed the whole truth. Therefore, the questionnaire data was triangulated with the information obtained from the students' responses to the semi-structured interviews.

The study data may have been restricted by the participants' possible fear of losing face. As a product of a collective culture, and a non-democratic political system, Saudi STs and ETs may be afraid of declaring their level and their opinions of their own MLK, believing that this could affect their jobs or learning. The researcher attempted to overcome this by reassuring the participants that their responses would remain anonymous, and be used for research purposes only. In addition, interviewing the participants on an individual basis was a strategy employed by the researcher to deal with these issues. The participants were informed, when carrying out the test, questionnaires, observations, role-plays and interviews that their answers, whether positive or negative, were of great value as they would enlighten researchers about the possible solutions to the problems they might encounter during their studies/teaching.

The study was restricted by the fact that the questionnaire and test were conducted with the STs separately in each class during their regular lectures; these took 5 days to complete (5 classes). Because of the STs' lecture timetables, and to guarantee that all the participants attended, it was not possible to allocate one day for the test and the questionnaire. The researcher did not leave the test papers with the participants after conducting the test. Thus, there was no danger of the participants sharing information about the test with other STs before some of them took the test. In addition, they were asked when answering the test not to refer back to previous questions, as this might reduce the possibility of remembering the test items or questions, thereby reducing the possibility that STs from different classes might speak to each other between the tests about the questions and the items.

Another limitation of the study was the small ET sample size; therefore, the findings should be treated with caution. As mentioned in section (3.5), only 61 ETs agreed to participate in this study. In the first stage of the study, only 20 responded to the questionnaires and the test at their school. Attaining enough responses was a time consuming process, and required much effort from the researcher, who needed to visit more schools. In addition, only 41 ETs, completed the test and filled in the questionnaires at the meetings. The participation of the ETs was inhibited because of many factors, such as difficulties leaving the school and class environment, and because they might not have felt there was sufficient reason to motivate them to attend the meetings.

Another limitation was that the relatively small sample of ETs might have resulted in a non-representative sample. As mentioned in section (3.5), the researcher sought a stratified sample, and chose not to set out any criteria for selecting the sample from each of the sub groups in the first phase of the study. The English language supervisors at the General Administration in Noor city contacted different schools, responsible for teaching different stages, and asked teachers if they would be willing to participate in the study. However, a stratified sample (see 3.6.1.2) was used to obtain access to a section of the population at the beginning of the sampling process, which sought to strengthen the

generalisability of the findings from the participants to an entire population (Newby, 2010), improving the population's representativeness and reducing sampling error.

Because of Saudi society and Saudi culture, the investigator was not allowed to make a video tape recording while observing the female Saudi school, or while role-playing at the university.

By considering the shortcomings associated with this methodology, the study could serve as a basis for further research on investigations into MLK, and the factors that influence their selection and use. Certainly, any educational investigation, using a mixed method approach and multi-type data resources and sample categories within this context would encounter some difficulties, as discussed above. However, prior awareness of these and additional future research to provide balance is recommended to redress these limitations.

3.14 Summary

This chapter has focused on the methodology employed in the study. The study uses a mixed method design to investigate the MLK of ETs and STs. The chapter has also described the research design and participants, and discussed the data collection methods used in the study. In the quantitative portion of the study, a test and questionnaires were used, and semi-structured interviews, semi-structured observations and role-playing were used in the qualitative parts. The chapter also described the data analysis procedures for both the quantitative and qualitative data. It also explained the way the quality of the study was enhanced, and how ethical considerations were taken into account. The next chapter analyses the data collected to answer the research questions.

CHAPTER 4: FINDINGS

4.1 Introduction

This chapter presents the findings regarding three aspects: level of STs' and ETs' MLK, nature of the participants' MLK, and their perceptions of their own MLK. The quantitative and qualitative data presentation, and related findings concerning the research questions are addressed under these three headings.

4.2 The level of STs' and ETs' MLK

This section begins by presenting the STs' and ETs' overall performance on the test instrument. The results for STs and ETs are presented independently, followed by a comparison between the two groups. The results for the individual components of the MLK test, with their sub-divisions, are then presented for the two groups and a comparison drawn between them.

4.2.1 STs' and ETs' overall performance on the test

Table 4-1 below presents the STs' and ETs' overall results on the test.

G	Ν	Mean	Mean	Min	Max	SD	SD	Effect size	t-test
U	11	(S)	%	%	%	(S)	%	(Cohen's d)	P value
STs	122	35.9	23.6	5.3	52	16	10.5		
								1.4	.000
ETs	61	58.8	38.7	12.2	58.5	15.7	10.4		

Table 4-1: STs' and ETs' overall performance on the test.

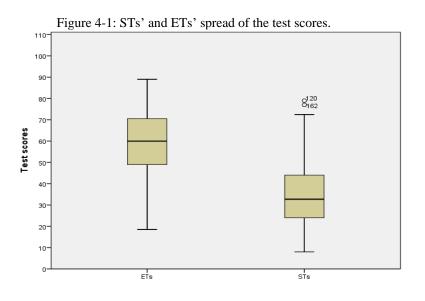
S = actual scores / % = the percentage scores of correct answer

The STs did not perform well on the test, reflecting a very low level of MLK. The mean percentage of correct answers for the STs was 23.6% with a standard deviation (SD) of 10.5. The mean score was 35.9 with a SD of 16. The maximum percentage was 52%, and the minimum 5.3%. The STs answered less than a quarter of the items and only 1.6% of the sample scored above 50%.

The ETs' performance on the test reflected a level of MLK only slightly higher than the STs. Their mean percentage of correct answers was 38.7% with a SD of 10.4. The mean score was 58.8 with a SD of 15.7. The maximum percentage was 58.2%, and the minimum was 12.2%. Scores varied from approximately 10% to 60%, and 14.7% of the sample scored above 50%. This performance can at best be termed 'moderate'; neither very high nor very low.

4.2.2 Comparison between the overall performance of STs and ETs

Figure 4-1 below shows the spread of the data for the two groups (STs and ETs). The maximum score on the test was 152, and the minimum score was zero.



The spread of data for the two groups was quite different. The difference in mean scores for ETs (M = 58.8, SD = 15.7) and STs (M = 35.9, SD = 16) was statistically significant (p < 0.001). In addition, the effect size was 'large' (Cohen's d = 1.4). Therefore, the data clearly indicate that the ET group significantly outscored the ST group on the test, demonstrating a higher level of MLK and revealing that the ETs were more knowledgeable in this area than the STs.

4.2.3 The results of the individual components of STs' and ETs' MLK

This section looks in detail at the results of the individual components of the MLK test and compares the scores for each group. Firstly, it presents the results of the sections designed to measure the two main components of MLK: terms and rules. Secondly, it displays the results of the sections designed to measure the subdivisions of MLK: productive and receptive knowledge of terms, and productive and receptive knowledge of rules. Figure 4-2 below presents the STs' mean percentages on the individual components of MLK while Figure 4-3 presents the ETs' mean percentages on the individual components of MLK. More details are provided in the following sections.

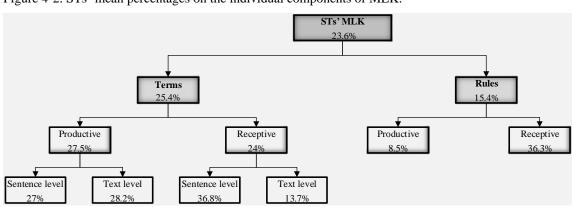
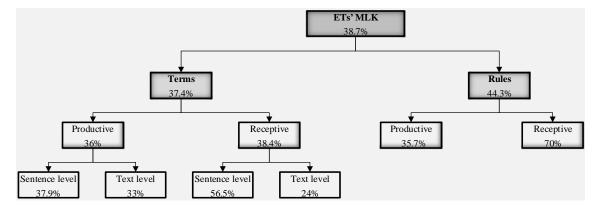


Figure 4-2: STs' mean percentages on the individual components of MLK.

Figure 4-3: ETs' mean percentages on the individual components of MLK.



In the two figures above, a text example (text level) is longer than a typical example sentence (sentence level) and can provide contextualised examples of less typical instances of grammatical categories (for more detail see Section 3.7.1.3)

4.2.3.1 The main components of MLK: Terms and rules

Nine questions (see Table 4-2) measured the participants' knowledge of terms and rules:

Questions				
Terms	Q.2 (A, B, C)			
	Q.3 (A, B)			
	Q.4			
	Q.5			
Rules	Q.1			
	Q.6			

Table 4-2: Questions to measure knowledge of terms and rules.

The participants' knowledge of terms was measured, by asking them to describe underlined items in a number of sentences and texts, and to select items that exemplified given grammar terms. Their knowledge of rules was measured by two questions, which asked them to provide or choose the rule that had been broken in each instance. The results are displayed in Table 4-3 below.

Table 4-3: STs' and ETs' knowledge of terms and rules.

		STs		ETs	Effect size Cohen's d	t-test p value
Terms	25.4%	SD = 11.1	37.4%	SD = 9.1	1.2	0.000
Rules	15.4%	SD = 12.1	44.3%	SD = 20.5	1.8	0.000

The results indicate that the STs knew terms better than rules. On the other hand, the reverse was true of the ETs, who knew rules better than terms. The mean percentage of the STs' knowledge was 25.4% (SD = 11.1) for terms and 15.4% (SD = 12.1) for rules. The findings demonstrate that most of the items in the rules task were left unanswered by the ST respondents. The difference in the STs' mean scores between the terms portion (M = 31.5, SD = 13.7) and the rules portion (M = 4.3, SD = 3.4) was statistically significant (p < 0.001). In addition, the effect size was 'large' (Cohen's d = 2.7). The ETs' scored higher on rules (44.3%; SD = 20.5) than on terms (37.4%; SD = 9.1). The difference in the ETs' mean scores on the terms portion (M = 46.4, SD = 11.3) compared with the rules portion (M = 12.4, SD = 5.8) was also statistically significant (p < 0.001), and the effect size was 'large' (Cohen's d = 3.8).

The difference in mean scores of ETs' and STs' knowledge of terms was statistically significant (p < 0.001). In addition, the effect size was 'large' (d = 1.2). This pattern was repeated in the difference in mean scores between the ETs' and STs' knowledge of rules, which was also statistically significant (p < 0.001), and the effect size was 'large' (d = 1.8). These results indicate that the ET group significantly outscored the ST group on the test, demonstrating better knowledge of both terms and rules.

4.2.3.2 The subdivisions: Productive and receptive knowledge

The participants' knowledge of terms and rules was examined in more detail by looking at the sub-divisions of these areas: productive and receptive knowledge. On the test, the first sub-section (Q2) and the second sub-section (Q3) were designed to measure the participants' productive knowledge of terms, and q. 4-5 measured their receptive knowledge of terms. Q.1 was designed to measure their productive knowledge of rules, and q.6 measured their receptive knowledge (see Table 4-4 below).

		Questions
Terms	Productive	Q.2 (A, B, C)
	Froductive	Q.3 (A, B)
	Decenting	Q.4
	Receptive	Q.5
Rules	Productive	Q.1
	Receptive	Q.6

Table 4-4: Questions to measure productive and receptive knowledge.

Moreover, the examination of productive and receptive knowledge of terms was conducted at both the sentence and the text level. Table 4-5 shows which questions measured productive or receptive knowledge at which level.

Table 4-5: Questions to measure knowledge of terms at sentence and text level.

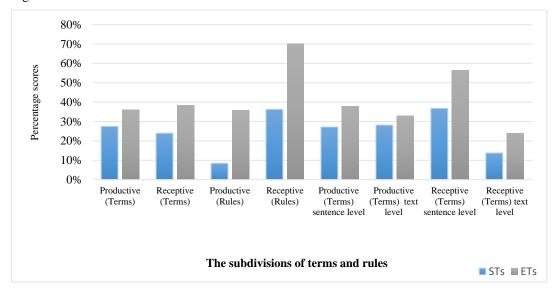
	Productive	Receptive
Sentence level	Q.2 (A, B, C)	Q.5
Text level	Q.3 (A, B)	Q.4

Table 4-6 and Figure 4-4 below present the results for the STs and ETs on productive and receptive MLK.

Sub	divisions		STs		ETs	Effect size Cohen's d	t-test p value
Productive ((Terms)	27.5%	SD = 10.6	36%	SD = 10.5	0.8	0.000
Receptive (7	[erms]	24%	SD = 13.2	38.4%	SD = 10.4	2.1	0.000
Productive ((Rules)	8.5%	SD = 11.8	35.7%	SD = 22.5	1.6	0.000
Receptive (H	Rules)	36.3%	SD = 22.9	70%	SD = 32.4	1.4	0.000
Productive	Sentence level	27%	SD = 11.5	37.9%	SD = 12.9	0.9	0.000
(Terms)	Text level	28.2%	SD = 15.1	33%	SD = 12.3	0.3	0.03
Receptive	Sentence level	36.8%	SD = 18.1	56.5%	SD = 15.1	1.2	0.000
(Terms)	Text level	13.7%	SD = 12.6	24%	SD = 13.3	0.8	0.000

Table 4-6: STs' and ETs' results on productive and receptive MLK.

Figure 4-4: STs' and ETs' results on subdivisions of terms and rules.



It is interesting that for both ETs and STs, the two biggest differences were between productive and receptive knowledge of rules and between sentence and text-level receptive knowledge of terms (see Table 4-6 and Figure 4-4).

Receptive vs. Productive Knowledge of Rules

Both groups' receptive knowledge of rules was better than their productive knowledge of rules. The productive task asked them to provide explanations of rules while the receptive task asked them to choose from multiple options offering explanations of the target rules. The mean percentage of STs' productive knowledge was only 8.5% (SD = 11.8) while the mean percentage of their receptive knowledge was 36.3% (SD of 22.9). The difference in their mean scores for productive knowledge (M = 1.8, SD = 2.5) and receptive knowledge (M = 2.5, SD = 1.6) was statistically significant (p < 0.001). In addition, the effect size was 'moderate' (Cohen's d = 0.4). Similarly, the mean percentage of their receptive knowledge was only 35.7% (SD = 22.5) while the mean percentage of their receptive knowledge (M = 4.9, SD = 1.6) was statistically significant (p < 0.001). In addition, the effect size was 'large' (Cohen's d = 0.4). The difference in their mean scores for productive knowledge (M = 4.9, SD = 1.6) was statistically significant (p < 0.001). In addition, the effect size was 'large' (Cohen's d = 0.8).

The difference in mean score between ETs' and STs' productive knowledge of rules was statistically significant (p < 0.001) and the effect size was 'large' (d = 1.6). This pattern was repeated in the difference between the ETs' and STs' mean scores for receptive knowledge of rules, which was also statistically significant (p < 0.001), and the effect size was 'large' (d = 1.4). Therefore, this result clearly indicates that the ET group significantly outscored the ST group on the sections designed to measure productive and receptive knowledge of rules, revealing that the ETs had better productive and receptive knowledge of rules than the STs.

Sentence vs. Text-level Receptive Knowledge of Terms

The second major difference between the two groups was seen in sentence and text-level receptive knowledge of terms. At sentence level, the STs scored 36.8% with a SD of 18.1, and at text level, they scored only 13.7% with a SD of 12.6. The difference in the STs' mean scores at sentence level (M = 11.8, SD = 5.8) and at text level (M = 5.5, SD = 5.1) was statistically significant (p < 0.001). In addition, the effect size was 'large' (Cohen's d = 1.1). Likewise, the ETs scored 56.5% with a SD of 15.1 at sentence level but 24% with a SD of 13.3 at text level. The difference in the ETs' mean scores at sentence level

(M = 18.1, SD = 4.9) and at text level (M = 9.6, SD = 5.3) was statistically significant (p < 0.001). In addition, the effect size was 'large' (Cohen's d = 1.6). Both the ETs and STs performed better at sentence level than at text level; they found it easier to identify given grammar features in short sentences than in longer texts.

Nevertheless, the ET group significantly outscored the ST group on receptive knowledge of terms, demonstrating higher ability to recognise terms at both sentence and text level. The difference in mean scores at sentence level between the groups was statistically significant (p < 0.001) and the effect size was 'large' (d = 1.2). This pattern was repeated with regard to their mean scores at text level (p < 0.001; d = 0.8).

Receptive vs. Productive Knowledge of Terms

Table 4-6 shows the difference in mean scores for ETs' productive knowledge of terms and STs' was statistically significant (p < 0.001) and the effect size was 'large' (d = 0.8). Likewise, the difference in mean scores for ETs' receptive knowledge of terms and STs' was statistically significant (p < 0.001) and the effect size was 'large' (d = 2.1). Therefore, the data indicate that the ETs group significantly outscored the STs group on the test, demonstrating higher ability both in producing and in recognising terms.

Sentence vs. Text-level Productive Knowledge of Terms

ETs' ability to produce terms was superior to that of STs' at both sentence and text level. The difference in mean scores of ETs' and STs' productive knowledge of terms at sentence level was statistically significant (p < 0.001) and the effect size was 'large' (d = 0.9). At text level, it was 28.2% with a SD of 15.1 for STs' and 33% with a SD of 12.3 for ETs. Similarly, the difference in mean scores between ETs' and STs' productive knowledge at text level was statistically significant (p < 0.05/p = 0.03) and the effect size was 'medium' (d = 0.3).

Productive Knowledge of Rules in Arabic vs. English

As mentioned above in Section 3.7.1.1, the participants were asked to provide rules in both Arabic and in English. The researcher calculated scores for both 'Arabic explanations and English explanations' (see above Table 4-6) and also calculated scores for 'English explanations only' (see below Table 4-7).

Overall, the STs scored 8.5%, and the ETs scored 35.7% on this task (including for both Arabic explanations and English explanations). Table 4-7 below presents the results from the section asking the participants to formulate rules in English only. The STs achieved 6.2% and the ETs achieved 28.5%. This reveals that both groups had a relatively poor ability to formulate rules in English.

Table 4-7: Productive (Rules): The ability to formulate rules in English only.

		STs	ETs	Effect size Cohen's d	t-test p value
Formulation of rules in	6.2%	SD – 91	28.5% SD = 21.4	15	0.000
English only	0.270	50 - 7.1	20.570 50 - 21.1	1.5	0.000

These results suggest that even ETs might experience difficulty formulating rules in English and that this could be due to lack of language proficiency. When given the chance to express the knowledge in Arabic, their mean percentage was higher than when they were tasked with giving explanations only in English. The fact that they provided more information in Arabic shows that the ETs' inability to formulate rules in English was not due to a lack of grammatical knowledge. Their mean percentage (35.7% including both Arabic and English explanations) was higher than for English explanations only (28.5%). This reveals that they do have the prerequisite knowledge but struggle to express that knowledge using the English language. Thus, language may be acting as a barrier to them. In contrast, for the STs, it appears that the problem was lack of knowledge of rules as there was no noticeable difference between the mean scores for this group in either language.

The ETs' ability to formulate rules in English was superior to that of the STs. The difference between the ETs' and STs' mean scores was statistically significant (p < 0.001) and the effect size was 'large' (d = 1.5).

4.3 The nature of STs' and ETs' MLK

This section presents the findings related to the second aspect in this study, 'the nature of the STs' and ETs' MLK', and aims to answer the second research question. Data were collected from the test, a role-play, and observations. Findings from each are presented independently. The section begins with the test results for both groups. Secondly, the ST role-play data are presented, followed by the ET observation data. Finally, the main findings are summarised.

4.3.1 The STs' and ETs' test results

This section looks in detail at the nature of the STs' and ETs' MLK as revealed by the test. It first presents the nature of their knowledge of terms followed by the nature of their knowledge of rules.

4.3.1.1 Knowledge of terms

This section highlights the nature of the STs' and ETs' productive and receptive knowledge of terms by displaying the mean percentages for the tested grammatical features and the response patterns in the productive and receptive tasks for both groups.

Mean Percentages on Productive tasks

After looking at the overall picture of MLK level (aspect1), each task will be discussed in greater detail, beginning with the production tasks where the participants were required to apply their knowledge of grammar terms (e.g. nouns, adjectives, phrases, etc.).

Sentence level: The mean percentages for the tested grammatical features at sentence level are displayed below in Table 4-8.

on the productive tasks at sentence level.	STs	ETs
Grammatical roles	36%	41%
(Q2C: 5 items)	50%	4170
Word classes	23%	35%
(Q2A: 7 items)	2370	5570
Clauses/phrases/sentences	22%	38 %
(Q2B: 4 items)	2270	55 /0

Table 4-8: The mean percentages for word classes, clauses/phrases/sentences, and grammatical roles on the productive tasks at sentence level.

For both groups, the mean for grammatical roles was slightly higher compared with the other tested grammar features. The STs obtained 36% for grammatical roles, 23% for word classes, and 22% for clauses, phrases, and sentences. Similarly, the ETs obtained 41% for grammatical roles, 35% for word classes, and 38% for clauses, phrases, and sentences. This indicates that both groups' productive knowledge of terms for grammatical roles was slightly better than for other grammatical features, such as word classes, clauses, phrases, and sentences. In other words, their ability to name each grammatical role in a given sentence was slightly better than their ability to name word classes, clauses, phrases, and sentences.

Text level: Regarding the productive tasks at text level, Table 4-9 below displays the mean percentages for the tested grammatical features.

STsETsGrammatical roles
(Q3B: 5 items)30%37%Clauses/phrases/sentences
(Q3A: 5 items)26%28%

Table 4-9: The mean percentages for clauses/phrases/sentences and grammatical roles on the productive tasks at text level.

Similar to the sentence-level results, the text-level results showed that for both groups, the means for naming grammatical roles were slightly higher than those for clauses, phrases, and sentences. The STs obtained 30% for grammatical roles and 26% for clauses, phrases, and sentences. The ETs obtained 37% for grammatical roles and 28% for clauses, phrases, and sentences.

Receptive tasks

Table 4-10 displays the results of the mean percentages for the tested grammatical features at sentence level.

Table 4-10: The mean percentages for word classes, clauses/phrases, and grammatical roles on the receptive task at sentence level (Q5).

	STs	ETs
Grammatical roles (5 items)	69%	88%
Word classes	39%	64%
(8 items)	39%	04%

Clauses/phrases	27%	39%
(3 items)	21/0	5770

Sentence level: Examples of grammatical roles were easier to identify at sentence level for both groups than word classes or clauses and phrases. The STs obtained 69% for grammatical roles, 39% for word classes, and only 27% for clauses and phrases. This pattern was repeated by the ETs, who obtained 88% for grammatical roles, 64% for word classes, and only 39% for clauses and phrases. For both groups, the mean for grammatical roles was the highest.

Text level: At text level, the mean for grammatical roles was again slightly higher than for clauses and phrases for both groups. The STs obtained 20% for grammatical roles and only 16% for clauses and phrases, and the ETs obtained 36% for grammatical roles and only 26% for clauses and phrases (see Table 4-11 below).

Table 4-11: The mean percentages for clauses/phrases and grammatical roles on the receptive task at text level (Q4).

	STs	ETs
Grammatical roles	20%	36%
(12 items)	2070	3070
Clauses/phrases	16%	26%
(8 items)	1070	2070

It is clear that for both the STs and ETs that at text level, examples of grammatical roles were slightly easier to identify than those of clauses and phrases.

The mean percentages for the grammatical features tested on the productive and receptive tasks, displayed above, helped to highlight the nature of the STs' and ETs' productive and receptive knowledge of each grammatical feature. Firstly, both groups' receptive knowledge of these grammatical features was slightly better than their productive knowledge. They were slightly better at identifying named word classes (matching word-class terms with examples) (STs scored 39%, ETs 64%) than at producing appropriate terms for word-classes (STs 23%, ETs 35%). In addition, both groups' ability to identify examples of grammatical roles at sentence level (STs 69%, ETs 88%) was superior to their ability to produce appropriate terms for grammatical roles (STs 36%, ETs 41%).

Secondly, there was a close match between gaps in the STs' and ETs' receptive and productive knowledge related to clauses and phrases (see Table 4-8 Table 4-11). The

results showed that both groups were poor at understanding what a clause and phrase are as well as in their ability to produce terms for clauses and phrases.

Response patterns on the productive tasks

After examination of the mean percentage for each category, the participants' ability to produce terms will be discussed in greater detail by looking at their response patterns. Table 4-12 below presents the response patterns on the production tasks at sentence level.

	STs Total number of possible responses = 1586	ETs Total number of possible responses = 793
Complete answers	5% (79)	13% (106)
Incomplete answers	34% (543)	42% (334)
Wrong answers	22% (353)	16% (123)
Not answered	39% (611)	29% (230)

Table 4-12: Response patterns on the production tasks at sentence level (Q2: A-B-C/13 items).

As shown in Table 4-12, only 5% of the 13 items were given complete responses (e.g. "plural noun") by the STs, while considerably more items (34%) were given incomplete answers (e.g. "noun") in terms of naming either the main or the sub-category of the requested term. 22% were answered incorrectly, and 39% were not answered at all.

The ETs' responses demonstrated a similar pattern. Only 13% of ET responses were complete, while more items (42%) received incomplete answers. 16% were answered incorrectly, and 29% were not answered.

Table 4-13 below presents a breakdown of the two groups' patterns of incomplete answers.

	STs	ETs
Incomplete answers	Total number of possible responses = 543	Total number of possible responses = 334
Providing only the main-category	97% (524)	89% (298)
Providing only the sub-category	3% (19)	11% (36)

Table 4-13: Features of responses characterised as incomplete answers on the production tasks at sentence level

97% of the STs' incomplete answers provided only the main category of the requested term (e.g. "noun"), and 3% provided only the sub-category (e.g. "plural"). The ETs'

responses showed a similar pattern, with 89% providing only the main category and 11% providing only the sub-category.

Both groups provided slightly more partial or general answers (e.g. "noun") than complete ones (e.g. "plural noun") for the given items. This result suggests a general or partial productive knowledge of the English grammar terms at sentence level and little knowledge of the sub-categories of the grammatical features.

Text level: The two groups' response patterns on the productive tasks at text level are presented below in Table 4-14.

	STs Total number of possible	ETs Total number of possible
	Total number of possible responses = 732	Total number of possible responses = 366
Complete answers	8% (59)	5% (17)
Incomplete answers	31% (227)	40% (148)
Wrong answers	15% (108)	10% (35)
Not answered	46% (338)	45% (166)

Table 4-14: Response patterns on the production tasks at text level (Q3: A-B/6 items).

As shown in Table 4-14, of the STs' mean percentages, only 8% of six items were given complete responses, while considerably more items (31%) received incomplete answers which were characterised by providing only the main categories or only the sub-category of the requested terms. 15% were answered incorrectly, and 46% were not answered at all. Likewise, the ETs gave only 5% complete responses, while considerably more items (40%) received incomplete answers. 10% were answered incorrectly, and 45% were not answered at answered at all.

Table 4-15 below presents a breakdown of the patterns of incomplete answers.

Table 4-15: Features of responses characterised as incomplete answers on the production tasks at text level.

	STs	ETs
Incomplete answers	Total number of possible responses =	Total number of possible responses =
	227	148
Providing only main-category	99% (224)	100% (148)
Providing only the sub-category	1% (3)	0% (0)

99% of the incomplete answers involved providing only the main category of the requested term. 1% provided only the sub-category. The ETs' responses showed a similar pattern, with 100% providing only the main category. This pattern corresponds to the sentence-level results, suggesting that both groups had only a partial productive knowledge of English grammar terms and little knowledge of the sub-categories of the grammatical features.

Response patterns on the receptive tasks

This section provides greater detail regarding the two groups' ability to identify examples of the requested grammar term at both sentence and text level.

Sentence level: Table 4-16 below presents the STs' and ETs' response patterns on the receptive task at sentence level.

	STs Total number of possible responses = 854	ETs Total number of possible responses = 427
Completed identification	17% (145)	36% (152)
Partial identification	29% (251)	26% (111)
Not answered	4% (36)	4% (16)
Incorrectly answered	49% (422)	35% (148)

Table 4-16: Response patterns on the receptive task at sentence level (Q5: 7 items).

As shown in Table 4-16, the STs completely identified only 17% of 7 items (e.g. "The people in the bus"), while slightly more items (29%) were partially identified (e.g. "The people"). On the other hand, the ETs completely identified 36% of the items and partially identified 26%. These results suggest that both groups found this to be quite a difficult task. The STs found it more difficult to identify features such as phrases and clauses, which typically include more than one word, in short sentences. More of the ETs were able to identify these features, but most of them still found the task difficult.

Text level: The two groups' response patterns on the receptive tasks at text level are presented in Table 4-17 below.

	STs Total number of possible responses = 976	ETs Total number of possible responses = 488
Completed identification	3% (33)	3% (15)
partial identification	7% (71)	12% (58)
Not answered	69% (678)	72% (350)
Incorrectly answered	20% (194)	13% (65)

Table 4-17: Response patterns on the receptive task at text level (Q4: 8 items).

As shown in Table 4-17, the STs only managed to completely identify 3% of 8 items (e.g. "the most useful words in the language"), while slightly more items (7%) were partially identified (e.g. "the most useful words"). More than the half of the items (69%) were not answered, and 20% were answered incorrectly. The STs' responses displayed the same patterns the ETs'; only 3% were completely identified, and 12% were partially identified. The majority of the items (72%) were not answered, and 13% were answered incorrectly. These results reveal that like the ETs, the STs found it more difficult to identify features such as phrases and clauses in a text, which typically included more than one word and was sometimes quite complex.

The identification of noun phrases (NPs) at text level is examined in more detail in Table 4-18 below, which displays the two groups' response patterns when asked to pick out examples of NPs from a text.

	STs Total number of possible responses* = 732	ETs Total number of possible responses* = 366
Complete identification	3% (23)	2% (6)
Partial identification	9% (67)	9% (34)
Not answered	80% (584)	83% (302)
Incorrectly answered	8% (58)	7% (24)

Table 4-18: Response patterns on the receptive task at text level for the requested term 'noun phrase' (Q4: 6 items).

* Total number of correct answers.

When giving the instruction for the fourth question, in order to be sure that the participants understood the requirements of the question (as mentioned in Section 3.9.1.1), the participants were asked to select ALL the items that exemplify the grammar terms requested and were provided with an example showing how to carry out the task required to receive full marks (see the test Appendix F).

The majority of the items (80%) were left unanswered by both groups, indicating a large gap in their receptive knowledge. For the STs, the mean percentage of completed identifications was only 3% of 6 items, with 9% of the items partially identified. The STs achieved 2% complete identification and 9% partial identification. These findings demonstrate that most of the items were left unanswered by the respondents. Both groups of participants tended to select only part of the NP, usually including the head. They were typically able to identify the head and perhaps the determiner and adjective, but not the rest. For example, they selected "language experience" instead of the full phrase "language experience which offers exposure to the most useful patterns of the language", or "the most useful words" instead of the full phrase "the most useful words in the language", showing that they had not yet fully grasped the concept and had only a partial understanding of the noun phrase.

4.3.1.2 Knowledge of rules

This section looks in detail at the nature of the two groups' knowledge of English grammar rules, including the subcategories of productive and receptive knowledge. Examining the participants' answers regarding productive knowledge revealed their ability to formulate English grammar rules, whereas items on receptive knowledge merely examined their understanding of them. The following paragraphs present the common features of the participants' responses.

Nature of the STs' formulation of rules in English

As discussed in Chapter 4, the STs scored 6.2% on the part that asked them to formulate rules in English only. The categories reported in Table 4-19 below provide a more detailed account of the STs' responses.

Response categories	STs Total number of possible responses = 854
Correct responses	1% (6)
Partly correct responses	11% (97)
Incorrect responses	54% (458)
No responses	26% (226)

Table 4-19: Breakdown of the STs' responses to q1: Formulating rules in English.

Correcting the error	2% (22)
Giving instructions	
(meaning giving instructions rather than stating the rule. <i>e.g. Use 'the' instead of 'a'</i>)	5% (45)

When giving instructions for the first question, in order to be sure that the participants understood the requirements of the task (as mentioned in Section 3.9.1.1), the participants were told that they had to formulate a rule and 'not correct the error'. Moreover, the participants were provided with an example showing how to produce the full response (which included formulating a rule using technical terms) to receive full marks (for more detail about using technical terminology while formulating rules see Section 2.6).

The total number of possible responses was 854. Table 4-19 shows that 458 responses (54%) contained incorrect rule formulations, and in 226 cases (26%), the participants provided no answer, revealing a lack of understanding of grammar rules. 22 responses (2%) contained a correction of the error but no rule. 45 responses (5%) were formatted as instructions rather than stating a rule, for instance:

- 1. Not write A but write the (ST31, Item 3).
- 2. Should be change 'which' to 'who' (ST35, Item 2).

On the other hand, only six responses (1%) were categorised as correct and closely resembled published pedagogical rules with respect to their explanatory scope and the use of formal metalanguage, as shown by the following instances:

- 1. In the superlative, a final (est) is added to the adjective (ST4, Item 2).
- 2. When the sentence is superlative we add est (s) (ST73, Item 4).
- 3. When we are talking about facts, we should use the simple present tense (ST101, Item 6).

Moreover, only 97 responses (11%) were categorised as partly correct. Although this was a relatively small amount of data, some common features emerged. Table 4-20 below reveals that the partially correct responses included three features:

Features	STs Total number of possible responses = 97
Correct formulation without formal metalanguage	35% (34)
Unclear formulation	54% (52)
Keywords only	11% (11)

Table 4-20: Features of STs' responses characterised as partly correct.

34 of the partly correct responses (35%) had formulated a rule without any formal metalanguage:

- 1. When we talk about particular person we use (the) (ST63, Item 3).
- 2. If the comparison between more than two people, we add to the word (est) (ST80, Item 4).
- 'Which' is used for things, we should use 'who' for people' (ST58, Item 2).

Another common feature was that STs' responses lacked clarity and comprehensiveness (54%). Sometimes these responses included metalanguage and sometimes not:

- 1. You should contrast with two things and write (er) but more than take (est) (ST31, Item 3).
- 2. We cannot use pronoun in this sentence because we produce it before (ST56, Item 7).

11 responses (11%) had the feature of providing only keywords with no explanation:

- 1. The simple past (ST89, Item 1).
- 2. We use simple past for this sentence (ST80, Item 1).

The nature of ETs' formulation of rules in English

As mentioned Chapter 4, the ETs scored 28.5% on the part that asked them to formulate rules in English only. Table 4-21 below presents a more detailed account of the ETs' responses to the questions which asked them to formulate rules in English.

Responses categories	ETs Total number of possible responses = 427
Correct responses	11% (48)
Partly correct responses	36% (154)
Incorrect responses	25% (108)
No response	17% (73)
Correcting the error	6% (25)
Giving instructions	5% (19)

Table 4-21: Breakdown of ET responses to q1: Formulating rules in English.

The total number of possible ET responses was 427. Table 4-21 shows different categories of responses. In 73 cases (17%), the participants failed to provide any answer. 108 responses (25%) contained incorrect rule formulation, revealing a lack of understanding of grammar rules. 25 responses (6%) contained only a correction of the error but no statement of the corresponding rule, and 19 responses (5%) were formatted as giving instructions rather than stating a rule, for instance:

- 1. Use 'the' instead of 'a' (ET6, Item 3).
- In this sentence the wrong student write A, the correct answer This man (ET41, Item 3).
- 3. Without using him (ET2, Item 7).

Table 4-21 shows that 48 responses (11%) were categorised as correct. These closely resembled pedagogical rules with respect to their explanatory scope and the appropriate use of formal metalanguage:

1. We use the (superlative) form (tallest) to the adjective when we compare between a person and a group (ET15, Item 4).

- 2. Sentence that refers to truth must be in present simple (ET21, Item 6).
- 3. After modals the verb should be infinitive (no endings) (ET25, Item 5).

The most frequent category was partly correct responses (36%). Table 4-22 below presents a breakdown of this category.

Table 4-22: Features of partly correct ET responses.

Features	ETs Total number of possible responses = 154
Correct formulation without using formal metalanguage	32% (50)
Unclear formulation	49% (75)
Providing keywords	19% (29)

32% of the partly correct responses formulated a rule without using formal metalanguage:

- We have to use 'the' instead of 'a' to indicate a certain person (ET15, Item 3).
- 2. When we use 'whom' we cannot use 'him' because it replace it in fact (ET27, Item 7).
- When the person or the thing is known we use 'the' not 'a' (ET51, Item 3).

Many of the responses lacking metalanguage, nevertheless showed a good understanding of grammar.

Another common feature of ET responses was a lack of clarity and comprehensiveness. 49% of the partly correct responses provided either imprecise or incomplete formulations, sometimes using metalanguage and sometimes not:

- 1. When the compares more than one must change taller than tallest (ET4, Item 4).
- 2. When the sentence in past tense will write past verb (ET1, Item 1).

- We should not use him in this sentence because of (whom) (ET39, Item 7).
- 4. When we use (should) in a sentence we have to write the infinitive without (to) (ET15, Item 5).

Two features were noticed within their unclearly formulated responses: they tended to formulate rules of thumb and use symbols or draw arrows (see Table 4-23 below).

Table 4-23: Features of unclearly formulated ET responses.

Features	ETs Total number of possible responses = 75
Rules of thumb	15% (11)
Using symbols or drawing arrows	10% (7)

Table 4-23 shows that 15% of the ETs' unclear responses consisted of rules of thumb. A 'rule of thumb' in this example refers to a way of linking the simple past tense with the word 'yesterday' in order to create an overly simplified explanation, as in the following examples:

- The verb must be in the past 'took' because there is 'yesterday' (ET51, Item 6).
- 2. Because of the word 'yesterday', we use the past simple, the second form of the verb (ET54, Item 1).
- If I have 'yesterday' (adv.- time) sentence (verb) must be in the past (ET21, Item 1).

In addition, seven responses used abbreviations when they stated the rules:

- 1. inf. V. after should (ET20, Item 5).
- 2. Using v (inf.) after should should + v (inv.) (ET22, Item 5).
- 3. Took/ yesterday → past. (ET38, item 1)
- 4. Person \rightarrow who. (ET55, item 2)

29 of the partly correct responses provided only keywords without additional explanation. The following are instances from various participants:

- 1. Article (ET13, Item 3).
- 2. Superlatives with short adjectives (the tallest) (ET43, Item 4).
- 3. Simple past (ET20, Item 1).
- 4. Present simple (fact) (ET43, Item 6).

The nature of STs' and ETs' receptive knowledge of rules

The sixth question was designed to test the receptive knowledge of rules. It was made up of 7 items (see Section 3.7.1.1) with each item consisting of a sentence with an underlined item which had an error and four multiple-choice options offering explanations (accurate and inaccurate) regarding the target grammar rules. One of these four multiple-choice options was the option *"I do not know the rule"*.

As mentioned earlier, the STs scored 36.3% on the receptive task, which asked them to choose the rule that had been broken in each sentence. It was revealed that between 20% and 30% of STs misunderstood some rules, such as the uses of "present continuous and simple present", "past simple, present perfect, and past continuous", and the use of "many".

Table 4-24 below presents the percentage of STs who selected the option "I do not know the rule" on question 6.

Question 6:	The percentage of the STs who selected the option "I do not know the rule".	
Item number:		
1	10%	
2	19%	
3	17%	
4	21%	

Table 4-24: The percentage of STs who selected the option "I do not know the rule" on q.6.

5	12%
6	23%
7	15%

The participants indicated that they did not have adequate knowledge by selecting the option "I do not know the rule" for some of the items (see Table 4-24 above).

The ETs scored considerably higher (70%) on receptive knowledge of rules, and there seemed to be no particular patterns in their incorrect answers.

4.3.2 The STs' role-play results

This section looks in detail at the nature of the STs' MLK as displayed in the role-play data. The STs were asked to play the role of a teacher and explain an English grammar rule (for more detail see Section 3.8.3). They were given the freedom to choose any grammar rule that they knew how to explain. As mentioned above, the participant was asked to imagine herself in a classroom and explain a grammar rule. The participant was told that the audience was not made up of lower level learners or younger learners (for more details see Section 3.8.3).

A number of patterns revealed by the analysis of the STs' role-play will be presented and discussed below.

The analysis showed that all the participants used very short, simple sentence examples in their explanations. In addition, all of them displayed a lack of clarity and comprehensiveness in their verbalisation of the rules. A common pattern was that when they verbalised rules, they were unclear and imprecise, as illustrated in the following examples. In the extracts provided below, the translation has been written in italics. Words that were cited as examples by the participants are underlined in the transcript.

Mona's (ST11) explanation of the verb 'to be':

I can use I with \underline{am} ... is use in the singular, she pronoun she with he and it... they plural with are and we. Pronoun he she it use is in the sentence. And when we see they we plural use are. When we ask

question *you change the* sentence. *We begin with* <u>is</u> the first choose, for example <u>she happy</u>, this is sentence what we use in this gap I see pronoun <u>she</u> singular I can use with it <u>is</u>. The same with the plural should be can.

Joud's (ST4) explanation of the present simple tense:

Today we talk about present simple. <u>Is</u> when we use <u>he</u> or <u>she</u> or <u>it</u>, with pronoun <u>is</u>. And <u>I</u> with pronoun <u>am</u>. <u>We</u>, <u>they you</u> with pronoun <u>are</u> in plural... with single we add s, with single verb we add s to it. Plural no added. We have example; <u>she reads a book</u>. We add <u>s</u> to the verb because she is single. Another example, we do not add s because <u>they</u> plural.

These examples of their explanations demonstrate their low level of proficiency. It may be that it was not lack of understanding that prevented them from being able to verbalise understandable rules, but rather their language proficiency. Their grammar explanations in English are accurate in terms of content, but their use of grammar was often incorrect (e.g. "plural no added", "because they plural"). Such shortcomings in their own use of grammar would make this explanation difficult to understand for their students. If these participants had been asked to explain the same rules in Arabic, they probably would have been able to do so. Thus, it seems the problem is not with their understanding of the rule itself. In addition to Joud's difficulty in expressing herself (i.e. the limitations of her language proficiency), there was a problem here with her use of metalanguage; 'single' for 'singular' could cause misunderstanding (e.g. "single verb").

Six of the participants seemed to know the rule in the sense that they had memorised it, as in Mona's (ST11) verbalisation when she said, "<u>he she it</u> use <u>is</u> in the sentence and when we see <u>they we</u> plural use <u>are</u>" and when Joud (ST4) said "<u>is</u> when we use <u>he</u> or <u>she</u> or <u>it</u>". Another example was provided by Hanan (ST10) when she explained how to use 'the first conditional'; it was clear that she had memorised the rule:

The rule of if. If comes at the beginning of the sentence. When you are putting the conditional statement first, you should put the comma at the

end of it. You don't need a comma if the conditional statement comes afterwards.

Although these explanations are not perfect, they seem clear and would probably be understood by their students in a classroom context.

Eight of the participants used Arabic in addition to English while providing their explanation, as seen in Mona's response (the translation from Arabic is in italics). Hanan, in contrast, was the only one who did not use English at all. Four of the participants used Arabic in all their explanations while using English grammar terms at the same time. These participants seemed to face a language problem. Their own language output was poor, and this might be the reason for their use of Arabic.

Their use of the grammar metalanguage terms revealed an interesting pattern. Ten of the participants showed their ability to use grammar metalanguage terms, while five participants verbalised the rule in English without using any grammar metalanguage terms.

Another interesting pattern found in their explanations was the focus on form rather than meaning. Nine of the STs were able to construct the form but made no attempt to talk about when and how to use it. This pattern was noticed especially when the STs explained verb tenses, for example:

Anfal (ST3): The simple past tense is formed as follows. First, begin with the noun, then the verb, adding -ed.

Razan (ST18): *For* the present continuous, we use <u>is</u>, <u>are</u> and we *must add* -ing *to the verb*. *But for* the past tense, *we just add* -ed to *the verb* without <u>is</u>, *which comes with the singular*, or <u>are</u>, *which comes with the plural*.

Rules of thumb were found in two of the STs' explanations. Anfal linked the simple past with the '-ed' ending. Likewise, Razan linked the present continuous with the '-ing' ending (without any mention of the auxiliary) and 'past simple' with '-ed':

Anfal (ST3): *How do we know* the past simple? *With* the past tense, -ed *is added to the verb*.

Razan (ST18): *With* the past tense, *we add* -ed *to the verb*. *With* the present continuous *we add* -ing *to the verb*.

This strategy could help students to learn the rules easily and to remember them. Nevertheless, it would not be completely accurate or reliable for every situation, such as linking the present continuous with the suffix –ing and the past simple with the suffix – ed.

Four STs conducted a comparison between the rule in Arabic and in English, for example:

Zahra (ST16): In Arabic, the sentence begins with the verb, followed by the noun. But in English, the sentence starts with the noun, followed by the verb, and then the object.

Zahra's explanation of the rule seems clear and useful. She mixes levels of analysis (noun – object rather than subject – object, or noun – noun) but she gets across the SVO order fairly clearly.

Like Zahra, Anfal also mixes levels of analysis:

Anfal (ST3): <u>Ali visited Ahmad yesterday</u>. We have here <u>Ali</u> is the noun. <u>visited</u> *is* the verb, <u>Ahmad</u> *is* the object.

In addition, three STs demonstrated the ability to recognise grammatical role terms (subject, verb, and object). When they began explaining the rule, they started by identifying the subject, the verb, and the object (if there was an object) in the chosen example sentence. This indicated that they had receptive knowledge of the grammatical role terms.

For example,

Zahra (ST16): <u>Mohammad eaten apple</u>. <u>Mohammad</u> *is* the subject, <u>eaten</u> *is* the verb, <u>apple</u> *is* the object).

4.3.3 The ETs' observation results

This section looks in detail at the nature of the ETs' MLK as displayed in the observation data. As mentioned in Section 1.6.2, approximately six units are taught to students in the middle and secondary stages in each semester and each unit is divided into six or seven lessons. The lessons have one of the following aims: listening practice, reading, writing, speaking, grammar rules and revision of the whole unit. The lessons observed for this study were grammar lessons that introduced and explained grammar rules to the students.

In the grammar lessons which were observed, the participants applied one or the other of the two approaches to form-focused instruction (FFI): the deductive and inductive approach. Deductive FFI, in which a rule is presented first then examples given, was the method most applied by these participants. They used only textbooks when explaining the grammar rules; there was no use of any other materials including adapted materials or specifically designed materials. There were no authentic texts/materials used. During their explanations, these teachers were observed using the white board to write short example sentences. All the participants used short example sentences and the tasks that they used were textbook tasks. In addition, they often wrote a summary of the structure of the new rule on the board. When they finished explaining the new rule, the majority of these teachers read out of the textbook, particularly when doing the exercises given after explaining the new rule. Others asked their students to look at particular textbook pages to carry out the exercises. At the end of the lesson, they asked their students to write down what was written on the board.

The analysis of the ETs' observations revealed a number of key patterns that highlighted the nature of their MLK. These patterns are presented and discussed below. While explaining the rules, all the ETs used short example sentences. No one used longer text examples. Seven ETs used formal metalanguage in their verbalisations. In addition, all of them used both English and Arabic in giving explanations, as illustrated by the following examples.

Ghena's (ET1) explanation of 'prepositions of time':

In general, we use <u>at</u> for a specific thing, before hours, such as <u>8</u> <u>o'clock</u>, <u>7 o'clock</u>. Also, we use it before <u>night</u> and also before

<u>midnight</u>. We use the preposition <u>on</u> before the days of the week, such as Saturday Sunday Monday Tuesday.

Ahlam's (ET1) explanation of 'some and any':

This is about <u>some</u> ok... <u>any</u>. Here we use <u>some</u> with yes. <u>Any</u> with use with no and questions. Ok. We use <u>some</u> with affirmative sentence ok. *We use <u>some</u> in affirmative sentences* and *with both countable and uncountable nouns*. We use <u>any</u> with negative and question. *We use <u>some</u> in questions when we expect the answer to be 'yes'*. <u>Any</u> is used in negative sentences and is also used in questions.

Using Arabic when explaining a rule was a common pattern among the ETs in their grammar lessons. As seen in the examples above, Ghena, like the other two observed teachers, verbalised some parts of the rule in Arabic and other parts in English. On the other hand, Ahlam verbalised the rule in English first and then translated it into Arabic. The two remaining observed teachers used Arabic to explain the entire rule along with grammar metalanguage terms in English.

Both strategies suggest that they intended to help their students understand the rule. Moreover, four of the ETs translated the English grammar terms into equivalent Arabic terms. In addition, Arabic was not limited to explanations of grammar rules, but all of the teachers also translated English words and sentences into Arabic during the lessons. They appeared to adjust their teaching language to what they believed to be the students' needs, probably because of the low proficiency of their students. In addition, like the majority of the other teachers (which will be demonstrated below) Ahlam's explanation in English showed that her own English proficiency was low. Low English proficiency could be another factor that motivates ETs to use Arabic.

Making form-meaning connections was another pattern found in their explanations. Four of the ETs focussed both on the 'form' and also on the meaning (i.e. when and how to use that rule), as in the following example.

Nawal's (ET1) explanation of 'future tense':

The future simple have one rule ok, and simple rule. We start with a subject, then we put <u>will</u>, then we put the verb, then the sentence, the complete sentence ok. We use <u>will</u> with an argument between two girl or two men or two groups, ok we use it. *We use it with* my opinion, *for example, when I talk about my personal opinion*.

On the other hand, four of the teachers did not make that connection but focussed only on the 'form'. They were able to construct the form of the rule, but they did not talk about the meaning. For example, when Hana (ET14) reviewed the past tense and the present continuous she said, "For the present continuous after <u>am is are</u> we should added –ing to the verb. Past continuous <u>was were plus verb added –ing</u>". Likewise, Amal focussed on the form of the rule rather than the meaning. She explained how to form the comparative of long adjectives but did not talk about when to use it:

Amal (ET2): Comparative forms of long adjectives <u>more than</u> adjectives, then <u>than</u> and complete the sentence ok. Or <u>less</u> and adjective, then <u>than</u>, then complete the sentence, for example <u>King</u> <u>Khalid airport is more than modern sorry modern than Abdul-Aziz</u> <u>airport.</u> Ok <u>more</u> adjectives and <u>than</u>. So <u>King Khalid airport are</u> ... Yes <u>is more</u>... then adjective <u>modern</u> and put <u>than</u>... <u>more modern</u> than and complete <u>Abdulaziz airport</u>. Ok. Do you understand? Ok...Give me examples? <u>More</u> then adjective <u>than</u> then complete.

Using rules of thumb was another pattern found in two of the ETs' explanations. For example, they used the strategy of linking the simple past with 'yesterday' and the continuous aspect with '-ing':

Hana (ET14): This is the past something happened in the past in the <u>yesterday</u> in the <u>past year ago</u> ok in the <u>last year 10 years ago</u> or <u>5 years</u> <u>ago</u>. When I see these <u>yesterday</u> ...<u>last</u>... <u>ago</u>... remember please remember these words <u>yesterday last ago</u> expressed about past tenses do you understand?.

Nawal (ET15): With the past we use <u>ago</u> word <u>ago</u> ok? And with the present we use word <u>now</u>. Future tense and in the future simple ok and in the future here simple we have use what? The <u>will</u> and <u>going to</u> ok... we have word refer to this tense *there are words that refer to this tense, these are* these words like what? Word <u>tomorrow</u>, word <u>tomorrow</u>, what is the meaning of word <u>tomorrow</u>? Word like <u>next</u>? What is the meaning of word <u>next</u>? I will give you example <u>next week</u>.

The teachers seemed to use this strategy to help their students learn the rules easily and to remember them. As part of this strategy, they provided keywords to look for, and they used a lot of repetition, presumably to help the students remember. As mentioned above, this type of strategy may be easily learned and applied for recalling knowledge or to make some kind of determination. Nevertheless, it would not be accurate or reliable for every situation.

Another pattern noticed in their explanations was that four of the ETs began the lesson by identifying the subject, verb, and object (if there was one) in the given example sentence before explaining the new rule. This indicated that they have some understanding of the concepts and that they know the terms.

For example,

Nawal (ST3): Where is the subject here? Yes, the subject \underline{I} here.

Zahra (ET15): <u>Mohammad</u> *is* the subject', <u>eaten</u> *is* the verb, <u>apple</u> *is* the object.

Analysing the ETs' explanations reveals that their patterns were to some extent similar to those of the STs. Focussing on form rather than meaning, using the Arabic language, identifying grammatical roles, and using short sentence examples were all patterns that were found when analysing the ETs' observations as well as in the STs' role-plays. The ETs' lessons were thus quite similar to what the STs did. The approach of the ETs and STs is similar and this could mean that this lesson model is part of their culture of learning. Therefore, the ETs were probably taught in this way and they now teach in this

way and the STs have also been taught in this way and would perhaps teach in this way in the future (see Section 5.3).

4.4 The perceptions of the STs and ETs of their own MLK

This section presents the findings related to the third aspect in this study: the STs' and ETs' perceptions of their own MLK. It aims to answer the third research question: *What is the nature of the MLK of these female Saudi STs and ETs?* The data collected from the questionnaires and the interviews will be presented independently. The section begins by presenting the questionnaire findings for both groups. Secondly, the interview data are presented in two sections, the first related to the STs and the second to the ETs. Finally, the main points are summarised.

4.4.1 The STs' and ETs' questionnaire results

The aim of the questionnaire, as mentioned before, was to investigate the STs' and ETs' perceptions of their own MLK. The items were divided into the following topics: importance of having knowledge, evaluation, having the knowledge, satisfaction, need for development, and awareness of limitations. The researcher conducted the questionnaires for both the ETs and STs in the second step of the data collection process which involved collecting quantitative data through the questionnaire and the test after conducting the observations and role plays (for more detail see Section 3.5).

The results are presented and summarised below.

4.4.1.1 The importance of grammar knowledge

Two questions elicited the ETs' and STs' views of the importance of MLK for English teachers. Table 4-25 below presents the results to these items.

1. Importance of having grammar knowledge	Disa %	gree ⁄₀	Neither A %		Ag م	ree ⁄o
Groups	STs	ETs	STs	ETs	STs	ETs
1.1. As an English teacher, I need to have knowledge of grammar terms.			2% (2)	5% (3)	99% (120)	95% (58)
1.2. As an English teacher, I need to have knowledge of grammar rules.		2% (1)	1% (1)	5% (3)	99% (121)	93% (57)

Table 4-25: The importance of having grammar knowledge.

The majority of both STs and ETs (above 90%) agreed that as English teachers, they need to have knowledge of grammar terms and rules.

4.4.1.2 Evaluation (overall level of MLK)

Table 4-26 presents the STs' and ETs' evaluation of their own overall level of MLK.

2. How would you	rate yourself in each of the	Po	or	Neithe	r P nor G	(Good
following?		9/	é o		%		%
Groups		STs	ETs	STs	ETs	STs	ETs
2.1. The level of	f my knowledge of English	11%		43%	11%	47%	88%
grammar no	DW.	(13)		(52)	(7)	(57)	(54)
2.2. The level of	f my knowledge of English		5%		21%		74%
grammar af	ter graduation.		(3)		(13)		(45)

Table 4-26: Questionnaire findings: Evaluation of overall level of MLK.

Item 2.1 shows that less than the half of STs rated their present level of MLK highly while the other half was neutral. The large number of neutral ST replies indicates that they lack confidence in their MLK. On the other hand, the ETs' responses to Item 2.2 show that nearly all of them had positive views of their knowledge after graduation; over 70% rated their level highly.

The ETs' estimate of their own MLK at graduation was higher than the STs' more hesitant estimate. The STs might have been influenced by a fear of future teaching requirements. The ETs, on the other hand, may have judged their level after graduation with the benefit of hindsight, measuring it against the actual requirements of their teaching context which, as will be shown below, were not perceived to be very challenging.

The ETs' responses on Items 2.1 and 2.2 indicated that nine of the ETs felt that they improved after graduation; there was an increase in the number of ETs providing a positive evaluation of their current level. This was consistent with their responses on the topic of 'improvement after graduation', which was added to the ETs' questionnaire with Items 3.1 and 3.2, shown below in Table 4-27.

3.	Improvement in MLK after graduation	No %	Yes %
	3.1. After graduation, I developed my knowledge of grammar terms.	15% (9)	84% (51)
	3.2. After graduation, I developed my knowledge of grammar rules.	8% (5)	90% (55)

Table 4-27: Improvement in MLK after graduation (ETs).

Items 3.1 and 3.2 show that nearly all the ETs felt that their MLK, including knowledge of terms and rules, improved after graduation. Thus, teaching experience seems to have had a positive effect on the MLK of these teachers. Moreover, the ETs' responses to these items were compared to their responses on Items 4-6 below. The ETs pointed out that teaching experience was one of the essential sources of their MLK, besides their own university and school education. In particular, half of them noted teaching experience as one of the sources of learning grammar terms, and more than half referred to it as one of the sources of learning grammar rules. Moreover, their responses to Item 6 (see Table 4-30 below) show that the majority of the ETs felt that they were currently learning from their textbooks.

4	ETs' sources of learning terms	% of respondents	
	Lis sources of feating terms	N = 61	
a.	At University	27% (42)	
b.	Middle/secondary school	25% (40)	
c.	From self-study (e.g. reading books, references, using the	22% (34)	
	internet)	2270 (34)	
d.	My teaching experience	18% (29)	
e.	From private lessons	3% (2)	
f.	In-service training	2% (4)	
g.	Primary school	1% (2)	
h.	Colleagues	1% (1)	

5. ETs' sources of learning rules	% of respondents N = 61
a. Middle/secondary school	25% (39)
b. At University	23% (36)
c. My teaching experience	23% (35)
d. From self-study (e.g. reading books, references, using the internet)	19% (29)
e. From private lessons	4% (6)
f. Colleagues	3% (4)
g. In-service training	2% (3)
h. Primary school	1% (2)

Table 4-30: Learning grammar now (ETs).

6. Now I am learning grammar	% of respondents N = 61
a. From textbooks that I use	26% (39)
b. By studying grammar on my own	17% (25)

c. By reading in English and noticing how grammar is used	16% (24)
d. By listening to English and noticing how grammar is used	15% (22)
e. By using the grammar when I write in English	13% (19)
f. By using the grammar when I speak in English	11% (16)
g. I am not learning English grammar now	2% (3)

4.4.1.3 Evaluation (Individual components of MLK)

The questionnaire also sought evaluations from the STs' and ETs' regarding the individual components of MLK. Items 7.1 to 7.6 (see

Table 4-31) assessed the STs' and ETs' evaluation of their own level regarding individual MLK components.

7.	How would you rate yourself in each of the following?	Poor %		Neither P nor G %		Good %	
Gro	oups	STs	ETs	STs	ETs	STs	ETs
	7.1. My ability to classify English words	6%		25%	7%	70%	93%
	into, for example, nouns, verbs, adjectives, etc.	(7)		(30)	(4)	(85)	(57)
	7.2. My ability to provide a full description of grammar terms (e.g.	15%	2%	21%	7%	64%	92%
	plural noun, possessive pronoun, etc.).	(18)	(1)	(26)	(4)	(78)	(56)
	7.3. My understanding of the concepts of	13%		34%	20%	53%	80%
	grammar terms.	(16)		(41)	(12)	(65)	(49)
		9%		36%	7%	55%	92%
	7.4. Knowledge of grammar rules.	(11)		(44)	(4)	(67)	(57)
	7.5. My ability to formulate grammar	15%	2%	36%	15%	49%	84%
	rules in English.	(18)	(1)	(44)	(9)	(60)	(51)
	7.6. My ability to use grammar terms in	18%	2%	34%	16%	48%	80%
	formulating grammar rules in English.	(22)	(1)	(41)	(10)	(59)	(49)

Table 4-31: Questionnaire findings: Evaluation of individual components of MLK.

The ETs' responses to Items 7.1 to 7.6 show that over 80% rated their level on all the components of MLK highly, including productive and receptive knowledge of terms and productive and receptive knowledge of rules. This indicates confidence in their level on all the individual components of MLK.

Regarding the STs, there is an interesting difference between the STs' evaluation of their productive knowledge of terms and the other components of MLK. Nearly 70% of the STs rated their productive knowledge of terms slightly higher while so many of them were neutral in their evaluation regarding the other components.

Table 4-31 above shows that over 50% of the STs rated their knowledge of rules highly whereas approximately 30% were neutral. Similarly, nearly 50% rated their ability to formulate grammar rules in English and their ability to use English grammar terms in formulating grammar rules highly, and about a third were neutral (for more details about using English grammar terms to formulate grammar rules see Section 2.6). Likewise, about half rated their receptive knowledge of terms highly while more than a third were neutral. The large number of neutral ST replies indicates that they lacked confidence in these areas. The STs were reasonably confident in their ability to produce appropriate grammar terms. Not surprisingly, the ETs were considerably more confident in their ability regarding all of the individual components of MLK than the STs.

Items 8.1 and 8.2 presented in Table 4-32 below display the STs' and ETs' evaluation of their ability to teach grammar at sentence and text level.

8. How would you rate yourself in each of the following?	Poor %		Neither P nor G %		Good %	
Groups	STs	ETs	STs	ETs	STs	ETs
8.1. My ability to teach English grammar	6%		16 %	7 %	77%	93%
using short sentence examples.	(8)		(20)	(4)	(94)	(57)
8.2. My ability to teach English grammar	20%	6%	38%	16%	41%	77%
using text examples.	(25)	(4)	(47)	(10)	(50)	(47)

Table 4-32: Questionnaire findings: Evaluation of grammar teaching ability at sentence and text level.

The difference between the STs' evaluation of their ability to teach grammar using short sentence examples and texts was interesting. Nearly 80% rated their ability to teach using short sentence examples highly compared to only 41% for teaching with text examples (for more detail about the difference between text examples and short sentence examples see Section 3.7.1.3).

The ETs also evaluated their ability teach English grammar through text examples as lower (77%) than teaching with short sentences (93%). Not surprisingly, the ETs were considerably more confident in their overall teaching ability than the STs.

4.4.1.4 Having and being satisfied with knowledge

Table 4-33 displays the STs' and ETs' degree of satisfaction with their MLK.

9. Having knowledge	Disagree %		Neither A nor D %		Agree %	
Groups	STs	ETs	STs	ETs	STs	ETs
9.1. I feel that there are some gaps in my	17%	23%	7%	15%	76%	62%
knowledge of English grammar.	(21)	(14)	(8)	(9)	(93)	(38)
9.2. I have the knowledge of English		2%		5%		93%
grammar that I need in my present context.		(1)		(3)		(57)

Table 4-33: Questionnaire findings: Knowledge satisfaction.

Item 9.1 of Table 4-33 shows that the majority (nearly 80% of STs and over 60% of ETs) felt that they had gaps in their knowledge. Item 9.2 ('knowledge in their present context') was added to the ET questionnaire only. Nearly all the participants (more than 90%) agreed that they had the knowledge that they needed in their present context. This could be a reason for their positive subjective evaluation on Items 2.1 and 2.2 above. It is interesting that despite feeling that they had the knowledge they currently need, they still recognised that there were gaps.

Table 4-34 displays the STs' and ETs' satisfaction related to their MLK.

10. Satisfaction	Disagree %		Neither A nor D %		0	ree ⁄₀
Groups	STs	ETs	STs	ETs	STs	ETs
10.1. I am satisfied with my level of	43%	21%	11%	16%	46%	61%
knowledge of grammar terms.	(52)	(13)	(14)	(10)	(56)	(37)
10.2. I am satisfied with my level of	43%	21%	11%	15%	46%	64%
knowledge of grammar rules.	(53)	(13)	(13)	(9)	(56)	(39)

Table 4-34: Questionnaire findings: Satisfaction.

The STs' responses to Items 10.1 and 10.2 show that nearly half were satisfied with their level of MLK, including their knowledge of terms and of rules, while the other half were

dissatisfied. On the other hand, over 60% of the ETs expressed their satisfaction with their MLK.

The findings suggest that the STs lacked confidence in their MLK. They seemed to feel they had a lack of knowledge, with a large number of STs giving a neutral evaluation. Such a feeling could be the reason for their unclear subjective evaluations. On the other hand, this was not the case with the majority of the ETs, who felt that while they had gaps in their MLK, their knowledge was sufficient for the requirements of their present context. Thus, on the basis of measuring their level against the requirements of their teaching context, they expressed positive subjective evaluations and satisfaction with their level.

The two groups' responses to the items on 'having knowledge' and 'satisfaction' differed considerably.

Table 4-35 below compares the two groups in terms of those who acknowledged gaps in their knowledge and those who were dissatisfied with their level of knowledge.

	Terms and Rules			
	STs	ETs		
Acknowledge gaps	76%	62%		
Not satisfied	43%	21%		

Table 4-35: Questionnaire findings: Acknowledgement of gaps and dissatisfaction.

It can be seen that there was a discrepancy in both groups between those who acknowledged gaps in their knowledge and those who were dissatisfied with it. Only 43% of the STs and 21% of the ETs, respectively, were not satisfied, although 76% of the STs and 62% of the ETs acknowledged gaps. In other words, the fact that they were aware of gaps in their knowledge does not necessarily mean that they were dissatisfied with it.

4.4.1.5 Need for further development

Table 4-36 below presents the results to Items 11.1-11.6, which assessed the STs' and ETs' views of their personal strengths and limitations regarding the individual components of MLK.

11. I need to develop my ability in	Disagree %		Neither A nor D %		Agree %	
Groups	STs	ETs	STs	ETs	STs	ETs
11.1. Classifying English words, for	31%	34%	14%	21%	55%	43%
example into nouns, verbs, adjectives, etc.	(38)	(21)	(17)	(13)	(67)	(26)
11.2. Providing a full description of	23%	39%	14%	16%	63%	43%
grammar terms, e.g. plural noun, possessive pronoun, etc.	(28)	(24)	(17)	(10)	(77)	(26)
11.3. Understanding the concepts of	17%	18%	16%	25%	67%	56%
grammar terms.	(21)	(11)	(19)	(15)	(82)	(34)
11.4. Formulating grammar rules in	11%	23%	12%	10%	76%	67%
English.	(14)	(14)	(15)	(6)	(93)	(41)
11.5. Using grammar terms in formulating	13%	28%	18%	10%	69%	61%
grammar rules in English.	(16)	(17)	(22)	(6)	(84)	(37)
	13%	23%	13.1%	13%	73%	64%
11.6. Knowing the grammar rules.	(16)	(14)	(16)	(8)	(89)	(39)

Table 4-36: Questionnaire findings: Need for further development.

Another interesting finding was that there was also a discrepancy in both groups between those who felt the need for further MLK development and those who claimed to be dissatisfied with their level. The majority of the STs (over 70%) were aware of the need to develop their knowledge of grammar rules productively and receptively (Table 4-36), but only 43% of the STs expressed dissatisfaction with their level of knowledge. However, the results regarding their need for further development agree roughly with the results of their evaluations on knowledge of the components of MLK (Table 4-29 above), where a large number of STs were neutral in their evaluation of their own knowledge. On the other hand, more than 30% felt that their productive knowledge of terms did not need to be improved, while more than half (55%) felt the need to improve. This roughly mirrored the results presented above in Table 4-29, where more than 60% rated their level in this area highly.

Regarding the ETs, there was also a discrepancy between those who recognised the need for further development and those who were dissatisfied with their MLK. The majority of ETs (between 60% and 70%) were aware of the need to develop their knowledge, but only 21% were dissatisfied with their current level.

Table 4-36 shows comparatively high agreement across items; between 60% and 70% of the ETs recognised the need to develop their productive and receptive knowledge of rules and their receptive knowledge of terms. In contrast, the majority expressed confidence in their productive knowledge of terms, with nearly 40% claiming they did not need to develop their knowledge in this area.

Table 4-37 below displays the STs and ETs responses to Items 12.1 and 12.2 on their views of their own ability to teach grammar at two levels.

12. I need to develop my ability in		gree %	Neither A nor D %		Agree %	
Groups		ETs	STs	ETs	STs	ETs
12.1. Teaching English grammar through	27%	36%	20%	21%	53%	41%
using short sentence examples.	(33)	(22)	(24)	(13)	(65)	(25)
12.2. Teaching English grammar through	16%	18%	18%	21%	66%	59%
using examples in texts.	(19)	(11)	(22)	(13)	(81)	(36)

Table 4-37: Questionnaire findings: Need to develop teaching at sentence and at text level.

The results indicate that the STs were more confidence in teaching short sentence examples than examples in texts. Nearly 30% of the STs felt confident about their ability to teach English grammar using short sentence examples, while over 50% felt the opposite. Nearly 70% recognised the need to improve teaching through text.

The ETs responses revealed that nearly 60% recognised the need to improve their ability to teach grammar through using examples in text. On the other hand, there were more disparate opinions about the need to improve teaching using short sentence examples; 41% agreed, and 36% did not agree. Not surprisingly, the STs recognised a greater need for development in the individual components of MLK than the ETs.

Both groups demonstrated a certain ambivalence and complacency; they knew that there was scope for them to improve, but they considered their current level of knowledge sufficient. The fact that they were aware of gaps in their knowledge and of the need to develop their knowledge further did not necessarily mean that they were dissatisfied with their level of knowledge, only 43% of the STs and 21% of ETs expressed such dissatisfaction. This is interesting because, presumably, those who were not satisfied

would be more susceptible to further training. In other words, most of the participants appeared not to have a strong desire to continue developing their knowledge.

4.4.1.6 Awareness of limitations

The questionnaire and test results were compared to see how accurate the two groups' participants were in their estimations of their existing MLK. A correlation analysis was conducted to test the relationship between the ST's and ETs' overall score on the test and their opinion of their current level of MLK. The results for the Pearson's correlation shows that there is a statistically significant correlation between STs' overall score and their opinion of their level (r=0.31, n= 122, p<0.001). The value of positive coefficient of the correlation matrix shows that there is a positive relationship between the two variables, which means that the higher the value of the ST's opinion of their level of knowledge of grammar now, the higher the value for ST's overall score. In other words, this study reveals a significantly positive relationship between the STs' performance on the test and their self-estimate of knowledge. The higher performing STs in my study rightly felt they had good knowledge and gave accurate self-reports. The STs' perception that they lack knowledge might be the reason behind some STs lack of confidence in themselves i.e. the STs' lack of knowledge negatively affects their confidence.

Turning now to the ETs', there was no significant correlation found between ETs' overall score and their opinion of their level (r= 0.2, n= 61, p>0.05). The results show no significant positive correlation between the ETs' performance on the test and their self-estimate of knowledge. The ETs compared their own MLK to the requirements of their teaching context, which were not perceived to be very challenging, and evaluated their knowledge positively as mentioned earlier. Thus, the ETs were considerably more confident than the STs.

To investigate the STs' and ETs' awareness of their strengths and limitations, their responses to items 11.1 to 12.2 regarding the need for MLK development, were linked to their actual performance in these areas on the test. The new variables namely ET's performance and ET's opinion regarding the need for development in different areas were created by averaging the eight performance and seven opinion questions and a correlation analysis was conducted to test the relationship between the variables. The results for the

Pearson's correlation shows that there is a statistically significant correlation between STs' performance on the test and their self-awareness (r=-0.18, n= 122, p<0.001). The value of negative coefficient of the correlation matrix shows that there is a negative relationship between the two variables, which means that the higher the value of the ST's opinion (self-awareness), the lower the value for ST's performance on the test. In other words, this study reveals a significantly negative relationship between the STs' performance on the test and their self-awareness of their strengths and limitations. The STs in my study who did not feel the need for development in particular areas of their MLK were also likely to perform at lower levels on these areas in this test. Turning now to the ETs', there was no significant correlation found between ETs' performance on the test and their self-awareness (r=-0.042, n= 61, p>0.05). For both groups, there is a gap between their awareness of limitations and their actual knowledge. They are aware that there are gaps in their knowledge, but they are not aware of what they are precisely.

4.4.2 The interview results

The results of the interviews will be discussed below, including the presentation and discussion of the themes found in the interviews. Each group's results are presented and discussed independently.

Reading through the interviews thoroughly revealed a number of common themes (Table 4-38). These will be presented and analysed as follows: (1) themes that were salient in the ETs' interviews and (2) themes that were prevalent in the STs' interviews.

ST interview themes	ET interview themes
Effect of lack of knowledge on confidence	Comparing knowledge to syllabus requirements at
Great expectations	specific levels
• The challenge of classification	• Level of knowledge determined by teaching level
• Lack of confidence in ability to formulate rules	Building knowledge by teaching
in English	Disclosure of areas of weakness
• Familiarity with 'tenses' but not with the	Language barrier
'aspects'	• Negative effect of low student level
• Failure to make form-meaning connections	Grammatical structures more visible in short sentences
Conflict between 'adjective' and 'adverb'	than in text
Need for development	• The knowledge demands of the new syllabus
	Need for further development

4.4.2.1 Analysis of the STs' interviews

The following key themes which emerged from the STs' interviews provide a picture of the STs' perceptions of their MLK. Each theme is analysed in detail below.

Effect of lack of knowledge on confidence

A common theme among the interviewees' responses was a negative view of their own MLK. They seemed to feel they lacked such knowledge. When they were asked, at the end of the interview, "On a scale from 1 to 10, how would you rate your knowledge?", six of the interviewees rated their knowledge between 2 and 5. Moreover, when they were asked, "How would you characterise your knowledge?", most of them gave short, negative answers. For example, Ghada (ST19A) and Anfal (ST3A) simply said "not

good" and Khulud (ST5A) and Zahra (ST16A) said "incomplete". The majority of the STs indicated that they did not have a comprehensive understanding of grammar rules and had not mastered some of them. Hanan (STs10, B), for example, referred to this when she said, "I have knowledge of the basic things, but the things which are inside, NO". Likewise, Razan (ST18, A) agreed when she said, "I lack a deep knowledge; I have knowledge only of the basic rules". Besides the feeling of having only basic knowledge, the majority of the interviewees characterised their knowledge as low, limited, and suffering weaknesses:

Joud (ST4A): I feel it is low.

Dana (ST17A): If I test what I have, I will fail.

Abrar (ST9B): I do not have enough information on grammar.

The majority of the interviewees stated that they felt confusion, fear, tension, and even embarrassment regarding their knowledge. Feelings of inferiority and awareness of weaknesses in their knowledge and familiarity with only basic rules (as mentioned before) might be why some STs had lost confidence in themselves, as indicated in the responses below:

Hanan (ST10C): I get nervous and scared about my level, I mean that I'm afraid that I won't be able to answer when asked about something.

Zahra (ST16C): I will be anxious, maybe, that I won't know the answer. It is embarrassing if I can't answer my students' questions.

Dana (ST17C): At this present level, sure, I will be nervous.

All of the interviewees had the intention to teach grammar using short sentence examples in the future. For example, Reem (ST2B) said, "Sure, I will use short sentence examples". Similarly, Joud (ST4B) said, "I certainly intend to use short sentence examples". What motivated them in this was their belief that a text is difficult to understand and requires more effort by the teacher. They seemed to have the feeling that their level would not meet the requirements of teaching grammar using examples in texts. For example, Mona (ST11B) said, "I feel that it is easier to teach with short sentence examples. Texts are so complicated". Likewise, Jenny (ST7B) said, "For me texts would be difficult. I feel that I would get confused as there could be [for example] two verbs in the text". Basma (ST8B) pointed out that texts "need to be divided into parts to understand the meaning as they contain difficult vocabulary. So, I feel that I would be confused". Reem (ST2B), regarding the types of exercises where the teacher has to identify the errors in the text, said, "It is difficult to identify the grammar errors in the text".

Using short sentences can thus be seen, from this point of view, as time-saving, helping to deliver information quickly and easily, and providing the teacher with time to be creative during explanation with minimal effort.

Great expectations

Another common theme in the interviewees' responses was that their present level was below their own expectations as English language graduates. The STs were ambitious and strongly motivated. They expected rapid progress in their knowledge, and the majority expected to have a higher level. Zahra (ST16A), for example, said, "I feel that I'm not qualified as an English graduate". This suggests that their higher expectations were a potential cause of dissatisfaction. The majority expressed a belief that the knowledge they had was insufficient and that they suffered from shortages and weaknesses. Jenny (ST7A), for example, said, "I don't have that feeling which tells others that I'm an English graduate". Likewise, Mona (ST11A) said that she felt "embarrassed because of my sister; although she is only in the first year of the middle grade and I'm a graduate, she knows more rules than me".

When the interviewees expressed their regret at this low level, all of them indicated that it was due to their university education. They felt that there was a shortage of courses that would develop their knowledge and complained about the quantity and quality of input. The majority had a sense of not developing adequate knowledge. For example, Jenny (ST7G) said, "I feel that I haven't received much. We had two levels, but as for grammar, I feel it was not enough". Moreover, they felt that their studies were superficial, focussing only on the basics and lacking depth, as indicated by Mona (ST11A): "I have studied things which are not deep. It was superficial". In addition, they seemed to be dissatisfied with the teaching methods at the university, as the following extracts illustrate:

Dima (ST15E): The courses and the teaching methods applied in the university should be changed, I mean, to be improved.

Dana (ST17D): Some teachers gave their lectures only to perform their duty; they did not give us a chance to understand or even to talk.

Joud (ST4A): Our teachers don't exert any effort.

The challenge of classification

The interviewees talked about the strategy that they used to classify words, which involved looking at the suffix to provide clues, e.g. the suffix 'ed' means verb, and 'ly' means adverb, as indicated below.

Basma (ST8B): I know that <u>ly</u> is an adverb, so when I find any word ending <u>ly</u>, I'm sure it's an adverb. In classifying, I depend on the end of the word.

Abrar (ST9B): I thought that <u>pen</u> is inanimate. I ask myself, what is <u>pen</u>? I know it is a single noun, but if I see <u>s</u>, at once I say it is plural.

Zahra (ST16B): For myself, I don't know how to classify words as verbs. There are things that help me to say it is a verb, such as <u>ing</u> or <u>ed</u>, I know these things. For adverbs, I feel that I don't know enough, only that if I add <u>ly</u>, it becomes an adverb. I know also that the plural form ends with <u>s</u>.

This strategy reveals that their knowledge of terms was limited; they lacked understanding of the concepts behind the grammar terms. Depending on –ly to refer to an 'adverb' shows that they did not have a full understanding of this concept, as there are other words that end with –ly but are not adverbs, while there are other words that do not end with –ly but are adverbs. The same applies to –s, which could signal the plural form

of a noun or the third person singular of a present tense verb. Therefore, this strategy can result in incorrect classification. This indicates that they consider only the form and neglect other criteria, such as meaning and function.

Moreover, the limit of their ability to classify words appeared to cover only the basic categories of parts of speech, such as noun, verb, and adjective. Three of the STs referred to this limitation. For example, Aseel (STs6B) said, "I can classify <u>nouns</u>, <u>verbs</u>, <u>adjectives</u>, no problem".

In addition, half of the interviewees said that their ability to classify words required them to be familiar with that word, and they encountered difficulty in classifying new words, for example,

Basma (ST8B): If words are familiar to me, it is okay.

Reem (ST2B): I find I have difficulty with new words. If I know a word, I can classify it.

These responses indicate that they had some confidence in their strategies and their knowledge, which was slightly misplaced. When they said, for example, "If I know a word, I can classify it", they seemed to be thinking that word class is fixed, which is not necessarily true, and word classes are much more flexible than that. There are, for example, words that can be either a noun or a verb, depending on how they are used.

Lack of confidence in their ability to formulate rules in English

The majority of the interviewees were doubtful about their ability to formulate rules in the English language. Khulud (STs5B) for example, said, "I don't know if I could". Moreover, the majority felt that before they could formulate a rule, they would need to review in order to understand the rule. This suggests that their receptive knowledge of rules (i.e. their understanding of the rule) was a potential cause for self-doubt:

Joud (ST4B): It depends on which rule it is. If I understand the rule, I would be able to express it in English and use the terms, but I should prepare first.

Ghada (ST19B): I need to review and understand rules to be able to formulate them.

Razan (ST18B): I cannot formulate a rule without returning to a book and understanding the rule. It is necessary to review.

Dana (ST17B): With preparation in advance, I feel that I would not have any trouble.

They emphasised that an understanding of a rule was necessary for them to be able to explain it. They might know the rule in the sense that they had memorised it, but that would not necessarily help them when they are in the classroom, because they do not have a complete understanding. In other words, even if they memorise a rule, they might not be able to verbalise it explicitly without first understanding it.

Familiarity with 'tenses' but not with 'aspects'

Another common theme among the interviewees' responses was their familiarity with verb tenses but not with verb 'aspects'. The majority felt that they had good knowledge of the two main tenses (past and present). For example, Zahra (STs16, B) said, "I know the basic things, the <u>present</u>, and the <u>past</u>, only these, but I feel that I don't understand others". Moreover, five of the interviewees admitted that they had knowledge of only the simple aspect and lacked familiarity with the other aspects (perfect and progressive). For example, Ghada (STs19A) said, "I know the basics, such as the <u>simple past</u> and <u>simple present</u>, but I have difficulty with the <u>progressive</u>". Likewise, Mona (STs11B) expressed her misunderstanding of the perfect and progressive aspects: "I get confused between the <u>past</u> or <u>present simple</u> and the <u>progressive</u>".

Failure to make form-meaning connections

The majority of the interviewees' stressed that they had knowledge about the forms of tenses but not about the meaning. In other words, they felt that they knew the structures and had the ability to construct the forms, but they did not know when to use them. A majority of the STs referred to this issue. For example, Basma (STs8B) said, "I know that

there are two tenses, but I don't know which tense to use. I know the <u>perfect</u> comprises <u>have/has</u> plus the verb in the past participle, but I don't know when to use it".

Conflict between 'adjective' and 'adverb'

A number of the interviewees mentioned the difficulty they face when classifying a word as an adjective or adverb, suggesting that they were aware of a limitation in this regard. Abrar (ST9B), for example, stated, "I don't have problems with <u>noun</u> and <u>verb</u>, but I have problems with <u>adverb</u> and <u>adjective</u>". A lack of understanding the concepts underlying these terms was the reason that they were unable to classify them. Eight of the interviewees expressed problems with adjectives and adverbs, as indicated below:

Hanan (ST10B): As for <u>adverbs</u>, I have a little misunderstanding of the concept. I can't differentiate between it and the adjective.

Zahra (ST16B): I get confused with <u>adverb</u> and <u>adjective</u>. I can't differentiate between them.

Need for development

All the ST interviewees expressed dissatisfaction with their present level and mentioned a strong desire to improve, learn more, and become more familiar with English grammar rules. They stressed the intention to compensate for this shortage by developing themselves when they were asked the question, 'Are you planning to develop?':

Joud (STs4B): I'm going to develop myself and become more familiar with grammar rules.

Khulud (STs5F): I want to improve myself because I am going to teach students. I want my students to understand, to learn effectively. Honestly, to avoid what happened to us.

Hanan (STs10F): I want to develop my knowledge to avoid embarrassment in cases where I do not fully understand and cannot explain.

4.4.2.2 Analysis of the ETs' interviews

The analysis of the ETs' interviews revealed a number of key themes (see Table 4-38). The key themes identified provide a picture of the ETs' perceptions of their MLK. Each theme is analysed in detail below.

Comparing knowledge to syllabus requirements at specific levels

When the interviewees were asked, "How would you characterise your knowledge?" most of them gave very short, positive answers. Amal (ET2A), Noor (ET12A), and Bushra (ET13A), for example simply said "good". In addition, when they were asked at the end of the interview, "On a scale from 1 to 10, how would you rate your knowledge?", the majority of the ETs rated it from 5 to 7. These responses suggest high satisfaction with their knowledge, even though they all agreed that their level was neither high/excellent nor low; they considered it somewhere in between. Examples of these responses include:

Maha (ET8A): Fairly well, but I am not excellent.

Rasha (ET9A): I feel my level is not bad and not too high.

Amal (ET2A): I give myself a 'good'; I would not give myself 'top'.

Ghena (ET1A): We have knowledge, but I feel it is incomplete.

Rana (ET7B): If I said I know all the grammar rules, I wouldn't be speaking the truth. I feel that I do not know about a quarter of the rules.

Although the ETs felt that they had gaps in their MLK, they all evaluated their knowledge positively. It appears that they compared it to the requirements of their present context, and on the basis of this, they expressed satisfaction with their level. They all reported that their knowledge was adequate for the requirements of their present context as teachers at the primary, middle, or secondary stages, for example:

Ghena (ET1A): It's good in relation to our lessons.

Alla (ET5A): I feel it's proper—I mean, it is not too high or too low, the knowledge that I have enables me to teach.

Rana (ET7C): It's good and meets the requirements of the stage that I teach.

Maha (ET8C): I feel my knowledge is good and sufficient to the primary stage that I teach.

A number of the ETs supported their self-evaluations by saying that they do not face problems when explaining lessons. In addition, they said preparing for their lessons did not require them to further develop the knowledge they have, as indicated below:

Amal (ET2C): I don't need to look back at anything; what I have is sufficient.

Bushra (ET13C): It is good, I spent many years teaching, and I don't remember that I had any troubles.

Alla (ET5A): I feel it's proper, I don't need to review anything.

Level of knowledge is determined by teaching level

Another common theme among the interviewees' answers was that their level of knowledge was determined by the level at which they taught. The ETs responses offer insight into the significant impact teaching can have on their knowledge. From their point of view, their knowledge did not generally go beyond the school syllabus template and the nature of the pedagogic rules taught at schools. A number of the teachers implied that their knowledge was, to some extent, restricted to the contents of the syllabus, including simple, basic rules and rules used daily. For example,

Hana (ET14A): I know basic rules, such as tenses, pronouns, and prepositions, as these are what you need to teach at the intermediate stage.

Bushra (ET13A): I don't know the rules that I don't use daily—I mean, I know the most commonly-used ones. They all agreed that their knowledge had become linked with, and limited to, the syllabus they taught. They mentioned that they lacked familiarity with other rules and did not have an understanding of certain difficult rules not required on the syllabus. They knew all the rules that they taught and had forgotten others which they did not teach, as indicated below:

Rana (ETs7A): I have forgotten the rules which don't exist in the syllabus I teach now. As a teacher your knowledge is restricted to the syllabus.

Rayah (ETs3A): When I was teaching the advanced syllabus, I felt that I had more knowledge, but now I am teaching a basic one, and I feel that I've forgotten everything.

Maha (ET8B): I know all the rules that are included on the syllabus and have forgotten the others which are not included.

Ghena (ETs1F): I feel our knowledge is limited to the syllabus that we teach.

A number of teachers' responses suggests that adherence to the syllabus had resulted in certain knowledge gaps. For example, Nawal (ETs15B) said, "I feel that I am not good at classifying words into <u>adverbs</u> and <u>adjectives</u>. We do not use them a lot; the syllabus neglects teaching them". Rayah (ETs3A) also referred to this, saying, "I have problems with some complex rules, such as the present perfect continuous, because my syllabus does not require me to explain these rules". Likewise, Salma (ETs4B) indicated the reason for her poor ability in providing full descriptions of grammatical features when she said, "The syllabus did not benefit me in this regard".

Consequently, they felt that their knowledge developed or weakened depending on the syllabus they taught. It declined when they taught lower levels and improved when they taught more challenging classes. Teaching the primary stage had a negative effect on their knowledge and led them to forget rules:

Nawal (ETs15A): For me, I have taught grammar at the primary stage for four years. I feel that I have forgotten grammar.

Rasha (ETs9A): Teaching for middle and secondary grades makes me remember my knowledge. But teaching for the primary stage wipes out all the information I had.

Ghena (ETs1F): The more levels I teach, the more I know.

Rana (ETs7E): When I was teaching for the primary stage, I felt that my knowledge had been buried, faded away, I felt that I forgot everything, especially because the six-stage syllabus doesn't encourage developing your knowledge. The syllabus either develops your abilities or it lowers your level.

Rayah (ETs3A): Frankly, it increases and decreases according to the syllabus I teach.

Thus, if these teachers are teaching at a particular level, then their MLK is tied to the syllabus they teach. However, it is important to note that some grammar features, such as the active and the passive, countable and uncountable nouns, reporting questions and times clauses are on the secondary level grammar syllabus and do not appear at the middle level (see Section 1.6.2). So, teachers teaching at the middle level would need to be familiar with these features (the active and the passive, countable and uncountable nouns, reporting questions and times clauses). It is not only when teachers are teaching at secondary level that they need to be familiar with these features.

Building knowledge by teaching

Several respondents referred to the belief that their knowledge was the result of their teaching activity. In other words, it came neither from their university education nor from school; they had learnt on the job. From their point of view, teaching rules leads to knowing them. In addition, teaching at several stages has a positive effect on knowing

and being familiar with grammar rules. These examples show the positive impact of teaching on MLK:

Ghena (ETs1F): I learnt from teaching more than what I learnt from university.

Ahlam (ETs16A): Really, I didn't know grammar until I taught it. I feel that our study at school or even at university did not benefit us in this area. I didn't get benefits until after teaching. I taught in schools and got experience; I learned the difference between the <u>past</u>, the <u>present</u>, and the <u>future</u>, every part of it, through teaching, not through study.

Maha (ETs8D): After teaching and practicing, I feel that I'm better, but during university, I don't think that I benefitted from it ... during study, I wasn't fully aware to such a degree.

All the interviewees expressed the belief that their knowledge improved after gaining some teaching experience. Frequent practice and explanation to students led them to develop their MLK, increase their mastery of it, and to understand the problems their students have and anticipate their questions, which caused them to become more self-confident. All the ETs explicitly referred to the effect of teaching experience on their confidence as positive:

Maha (ETs8E): Now that I have some experience, I feel that experience has a role, I feel that I know the grammar lessons. There is no need to have a look at the lesson, I don't need to prepare beforehand. Today, I know them, many have passed in front of me. I feel more comfortable, and I have experience. Besides I know the problems facing the girls.

Ghena (ETs1E): I feel now that I have become more able to answer the students' questions through my practice of the rule, more able and more confident. With more practise at rule explanation, I can answer their questions, be more confident, know the quickest way to explain, the easiest one. Now that I have experience, I get to the point at once.

Salma (ETs4E): I feel that I'm fully aware, more than before, especially when expecting the reaction of the students. I mean, I know what they are going to ask, I have experience with the students' questions, and I know what questions to expect from them.

It is clear that teaching experience makes the teachers more aware of their grammar lessons and able to anticipate the problems that their students might face, the questions they might ask, and effective ways to teach grammar. Thus, all these positive aspects which come with teaching experience help to increase their confidence in their knowledge.

Disclosure of areas of weakness

The majority of interviewees pointed to areas with which they struggle, suggesting that they were aware of their limitations. For example, Rayah (ETs3A) revealed that her problem was with verb tenses. She said, "I have problems with <u>tenses</u>, some have complex rules, such as the present perfect continuous. But with <u>simple tenses</u>, it is ok". Several of the ETs referred to issues with rules. Salma (ETs4B) expressed her problem with knowing complex rules: "My knowledge of the basic rules is impeccable, but I have problems and difficulties with the complex rules". Amal (ETs2B) indicated that her weakness was in the productive knowledge of rules: "My difficulty is in verbalising rules". Rana (ETs7B) struggled with adverbs, and Noor's (ETs12B) weakness, in contrast, was the productive knowledge of terms: "I cannot be more precise in classifying words. I cannot provide the full description".

Language barrier

Another common theme among the interviewees' responses was the language barrier. Sometimes the difficulty in speaking fluently and a shortage of vocabulary adversely affected their ability to express and display knowledge. Ahlam (ETs16A) revealed the negative effect of the language barrier on the expression of her knowledge. She said, "Conversation is my problem, despite being fully aware of vocabulary and grammar. Formulating and verbalising that knowledge is my problem". Similarly, Maha (ETs8A) stated that her limited vocabulary affected her ability to formulate rules in English. She said, "The language outcome is not very good. Sometimes I don't know a word, so I have difficulty verbalising a rule". In addition, seven of the interviewees revealed that they sometimes have difficulty classifying words with which they were not familiar:

Maha (ET8B): Sometimes, I have trouble classifying words whose meaning I don't know, but I feel the shortage in my vocabulary, the low level of my language is the reason for that.

Nawal (ETs15B): There are some words that I feel that I will not be able to classify because I do not know their meaning. I feel my problem is in knowing the meaning of words.

Negative effects of low student level

The low proficiency level of the students was another common theme among the interviewees' responses. The ETs seemed to adjust their teaching to what they believe are the students' needs. Hence, it is not only the teachers' MLK which determines whether or how they talk about grammar; the immediate classroom context also seems to have a decisive influence, as these examples show:

Hana (ETs14C): In the middle grades, the more you simplify, the more the students will understand. But if you complicate the rule, the students will also be confused and hate the subject.

Salam (ETs4B): I try to use few terms when I verbalise rules; it is enough using basic terms, such as present. The level of my students requires simple formulation without much use of terminology, as they will not understand the meaning of the grammar terms.

The idea that they take into consideration the level of their students and provide them with what they believe is consistent with it was repeated by a number of teachers. Amal (ETs2B) felt that in order to avoid confusion, she should not be overly precise in classifying words or providing full descriptions to her students. She justified this with the

phrase "to avoid any confusion for my students". Likewise, Ahlam's (ETs16B) response was, "Our level must go down to correspond with the level of the students".

Moreover, the majority of the ETs said that they used the Arabic language to help the students understand. For example, Rana (ETs7B) said, "I explain grammar rules in Arabic first to help my students to understand, then explain them in English". Similarly, Ghena (ETs1B) justified her use of Arabic thus: "If I formulate the rule in English, my students will not be able to understand, so I have to explain it in Arabic".

Grammatical structures are more visible in short sentences than in text

The majority of the interviewees felt that there was no difference in their ability to teach grammar using examples of simple sentences or texts. However, they all admitted that they used mostly short sentences. They had different reasons for choosing short sentence examples over longer texts. The former was seen as a time-saver, helping to deliver the information more quickly and easily and giving the teacher time to be creative during explanation. In contrast, using text was believed to require more effort and to be time-consuming and tiring. In addition, they noted that course books tend to use short sentence examples.

Hana (ET14B): I use short sentences because I do not have time; using a text requires me to search for it and then modify it because texts are not included in the books.

Reef (ET11B): Using text examples requires more effort.

Rasha (ET9B): Short sentences are easier, save time, and do not require more effort.

On the other hand, their comments also revealed that they try to avoid using text as they feel it causes confusion and misunderstanding and could require extra effort from the students to be able to understand a grammar rule, as indicated below:

Noor (ETs12B): I use sentences, but I feel that these sentences are easier for students and clearer. I've never used text, except for using it to teach \underline{a} , \underline{an} , and \underline{the} , as articles need to be explained using a text.

Rayah (ETs3B): One must use short, simple sentences to make the students understand. This is easy for students. If I used long sentences, they would get confused.

Reef (ET11B): I feel that my students understand easily from short sentences.

Rasha (ET9B): The students understand the rule more quickly.

Ghena (ET1B): I feel it is easier for the students if I use short sentences to help them to understand more quickly.

What motivated the teachers to use mostly short sentences seemed to be the fact that grammatical structures tend to be more visible in short sentences than in texts. The ETs' priority was clearly form, not meaning. They wanted to make the form visible to their students. In addition, their students' proficiency level seemed to contribute to their strong focus on form.

The knowledge demands of the new syllabus

ETs' concerns about the syllabuses which are currently being developed, and will be implemented in the near future, was another common theme. Four teachers mentioned this, revealing their awareness of the limitations of their current knowledge and the possibility that it will not meet the requirements of these future syllabuses:

Ghena (ETs1C): I heard that there will be a development of the syllabuses later. I am thinking about them, so I have asked my supervisor to bring the new books. I need to have a look at them and see what new rules they include.

Nawal (ETs5B): I looked at the books for the new syllabus. I felt that my knowledge is old. They include new things; honestly, I do not know them.

Need for further improvement

Another interesting finding was that despite their generally positive view of their own knowledge, the teachers seemed motivated to develop it further. Noor (ETs12G) said, "I want to improve myself. I want to be familiar with all the rules". Ghena (ETs1G) was concerned about both depth and breadth of knowledge, saying, "I feel we lack deep knowledge, and what we have about grammar is not exhaustive". Similarly, Rayah (ETs3G) justified her desire to improve by saying, "Everyone aspires to be the best". In addition, some of the teachers had the desire to be ready for the demands of the new syllabuses that will be implemented in the near future. For example:

Amal (ETs2C): I, as a teacher, need to have more and more [knowledge]. I need more, because new syllabuses might be developed.

Alaa (ETs5G): I need to improve my knowledge, especially after hearing about the possibility of the development of new syllabuses.

4.5 Summary of the findings

4.5.1 Summary of STs' and ETs' level of MLK

The STs' and ETs' performance on the test yielded the following conclusions:

- 1. The STs' level of MLK was low, but the ETs' level was moderate.
- 2. The ETs outperformed the STs on all components of MLK.
- 3. The STs' knowledge of terms was better than their knowledge of rules.
- 4. The ETs' knowledge of rules was better than their knowledge of terms.
- 5. Both groups' productive knowledge of rules was weaker than their receptive knowledge.
- 6. The STs' productive knowledge of rules was very low.
- 7. The ETs' receptive knowledge of rules was very high.
- 8. Both groups' receptive knowledge of terms was better at sentence level than at text level.

4.5.2 Summary of the nature of ETs' and STs' MLK

A. The main findings (from the test) regarding the nature of the STs' and ETs' MLK:

- There were no notable differences in terms of the nature of the STs' and ETs' MLK.
- 2. At both sentence and text level, both groups had slightly better productive and receptive knowledge of terms and concepts for grammatical roles than for other grammatical features, such as word classes, clauses, phrases, and sentences.
- 3. At sentence level, both groups' receptive knowledge of word-classes and grammatical roles was slightly better than their productive knowledge.

- 4. There was a close match between the gaps in the STs' and ETs' receptive and productive knowledge related to clauses and phrases. Both types of knowledge were poor for both groups.
- 5. The two groups had a general or partial productive knowledge of grammar terms and little knowledge of the sub-categories of grammatical features.
- 6. In a text and in a short sentence, identification of features such as phrases and clauses which typically include more than one word caused difficulty for both groups.
- 7. Both groups had only a partial understanding of a noun phrase.
- 8. Regarding the nature of the STs' and ETs' formulation of rules in English:
 - The ability of both groups to formulate a grammar rule in English lacked clarity and comprehensiveness.
 - Both groups tended to formulate rules without using formal metalanguage.
- B. The main findings (from role-playing and observation) regarding the nature of the STs' and ETs' MLK:
 - 1. Both groups used both English and Arabic during the verbalisation of grammar rules.
 - 2. The STs' low language proficiency may be a factor preventing them from being able to verbalise rules in a way which is easily understood, that is in a way which is clear and simple, has predictive value and is terminologically and conceptually clear and comprehensible.
 - 3. Both groups focused on the form rather than the meaning when explaining a grammar rule.

- 4. The ETs used rules of thumb in rule explanations.
- 5. Both the STs and the ETs had the ability to identify terms for grammatical roles in the example sentences.
- 6. Both groups used short sentence examples.

4.5.3 Summary of the perceptions of the STs and ETs of their own MLK

4.5.3.1 Summary of the questionnaire findings

The main findings regarding the STs' and ETs' perceptions of their own MLK:

- The STs lacked confidence in their overall level of MLK as well as in their knowledge of all individual MLK components, except their productive knowledge of terms. On the other hand, the ETs had greater confidence in both their overall level of MLK and in their knowledge of all its individual components.
- 2. The STs were more confident in their ability to teach grammar using short sentence examples than using examples in texts.
- 3. Teaching experience had a positive effect on improving MLK.
- Although both the STs and ETs were aware of gaps in their knowledge and the need to develop further, many STs and ETs expressed satisfaction with their current knowledge.
- 5. Even the ETs who felt that they had gaps in their MLK stated that their existing knowledge was sufficient for the requirements of their present context. Thus, when comparing their own MLK to the requirements of their teaching context, they expressed positive subjective evaluations and satisfaction with their level.
- 6. For both groups, there was a gap between their awareness of limitations and their actual knowledge. They were aware that there were gaps in their knowledge, but not precisely what they were.

4.5.3.2 Summary of interview findings

The study has generated extensive interview data about the STs' and ETs' perceptions of their MLK. A range of themes emerges from the data presented here. The STs have a negative view of their MLK and a feeling of inferiority and weaknesses in their knowledge, which were the reasons causing them to lose confidence in their knowledge. They acknowledged the limitations of their knowledge, including difficulty formulating rules in English, lack of understanding of the concepts behind grammar terms, and failure to make form-meaning connections. The ST data showed that their level of knowledge was below their own expectations and that being an English language teacher results in strong desire to improve.

The data from the ETs demonstrated that their knowledge is built up by teaching and that gaining teaching experience has a positive impact on MLK. In addition, their level of knowledge was often determined by the level at which they taught. However, they felt that there were gaps in their knowledge which demonstrate a need to improve. They acknowledged the limitations of their knowledge, and another factor which might make them less effective in the classroom is that even if they have the knowledge, they do not necessarily have the language to express it. Despite awareness of their own limitations, they expressed positive views and satisfaction with their level, claiming that it was neither high/excellent nor low. However, they mentioned the possibility that this level will not meet the requirements of new syllabuses. Their positive views result from comparing their level to the requirements of their present context, which they do not perceive to be very challenging.

CHAPTER 5: ANALYSIS, SYNTHESIS AND DISCUSSION

5.1 Introduction

This chapter is organised according to the three aspects addressed in this study: level of STs' and ETs' MLK, the nature of their MLK, and their perceptions of their own MLK.

5.2 The level of STs' and ETs' MLK

The major findings relating to the first aspect, the level of STs' and ETs' MLK, as reported in the previous section, are discussed here in terms of: (i) the comparative overall performance of each group, and (ii) the comparative performance of the two groups with regard to each individual component of MLK.

5.2.1 The STs' and ETs' overall level of MLK

The first research question sought to assess the level of the STs' and ETs' MLK, comparing the STs' MLK and ETs: *What is the present level of MLK of female Saudi ETs who have graduated, and fourth year STs who will graduate from Noor University in Saudi Arabia? To what extent is ETs' MLK different from STs' MLK?*

As the STs had recently studied English, with an explicit focus on its formal features, and had recently taken an additional course in linguistics, their performance on the test was poor. Their mean percentage of correct answers was just 23.6; meaning they identified fewer than a quarter of the items. These results correspond with findings reported in previous research indicating MLK deficiencies among STs in a variety of contexts; e.g. in China (Andrews, 1999c), in Malaysia (Erlam et al., 2009), and in Poland (Wach, 2014).

At the same time, the results for the ETs' MLK revealed a moderate performance only; neither very high nor very low. Their mean percentage for correct answers was 38.7%. These findings were consistent with findings reported in previous research in different contexts; e.g. in China (Andrews, 1999a, 1999c; Andrews and McNeill, 2005), in Malaysia (Shuib, 2009), in the UK (Tsang, 2011) and in Poland (Wach, 2014). All the previous studies found ETs' overall level of MLK was moderate, and observed severe limitations in terms of their explicit knowledge of rules and terms (see Section 2.10.1.2).

These findings show that the same pattern emerges, regardless of whether the ETs are teaching at secondary, middle school, or primary level. ETs typically have considerable gaps in their MLK. Moreover, it is important to note that the teachers in this study are required to explain grammar rules (see Section 1.6.2) and that the interview responses also revealed all the teachers teach grammar explicitly, either deductively or inductively. It could be suggested, therefore, that there is a crisis of competence within the profession; however, here emphasis is simply placed on the reality that teachers need to have a well-developed MLK.

There is considerable agreement among researchers about this (McNamara, 1991; Williamson and Hardman, 1995; Andrews and McNeill, 2005; Edge, 1988; Andrews, 2008 and Myhill et al., 2013). McNamara (1991), Williamson and Hardman, (1995) and Andrews and McNeill, (2005) argue that teachers should aim to have a well-developed MLK, in order to enhance learners' understanding of the language and to convey to their learners, accurate and appropriate information concerning language form, enabling them to develop explicit knowledge. This requires well-developed knowledge of both terminology and grammar rules, not only to improve their teaching, but also to assist with lesson planning, assessing the quality of teaching materials and learning aids (e.g. textbooks), and accurately diagnosing and assessing their pupils' learning (McNamara 1991). Thus, when teachers have a good understanding of the language they teach and are able to analyse it, this could make a significant contribution to their teaching effectiveness (Edge, 1988; Andrews, 2008). Limited grammatical knowledge, in contrast, can create problems for teachers when handling students' questions, and opportunities to clarify misconceptions might not be realised. This can prevent teachers from identifying learners' language development needs. Teachers with low MLK, might also experience difficulty rendering grammar analysis explicit, possibly even causing learners to formulate misconceptions (Myhill et al., 2013). They might not be able to plan for and respond to their learners' language needs effectively.

One outcome of this study was that the ETs significantly outperformed the STs on MLK overall, and on all the individual components of MLK. These findings contrast with those obtained by Wach (2014), who reported that STs demonstrated a higher level of MLK than ETs. However, Andrews's (1999c) findings were similar to ours, in that the MLK of ETs was superior to that of STs.

More significantly, however, this study highlights the effect of teaching on the development of ETs' MLK. The ETs in this study confirmed they recognised such an effect, explaining that their knowledge was built on through teaching and that gaining teaching experience had a positive impact on their MLK. They further claimed that when they taught higher level students they also learned themselves. As mentioned earlier (see Section 2.11), no study has previously considered STs and ETs with a shared educational background. Thus, one of the author's interests when designing this study was to pinpoint significant differences between the two groups sharing similar educational background, thereby enabling the researcher to observe how MLK might change as a result of teaching.

Despite the lack of a study of this nature, the previous literature does suggest teaching experience, involving for example, course books, students' questions, and students' errors, does contribute to the development of the MLK of practicing English teachers (Andrew, 1999c; 1994b and Johnston and Goettsch, 2000), as confirmed here. The fact that the STs and ETs in this study have the same educational background it is fair to assume that when the ETs were STs, their MLK was at a similar level to that of the ST participants.

The question that then arises, is what aspects of teaching can explain the ETs' development of MLK since their time as STs. One option suggested is that teaching forces the ETs to engage with grammar more frequently and in more depth than the STs are required to. They are motivated to do this by their desire to give a good lesson (in their own estimation) and to avoid losing face. Their MLK development is scaffolded by the teaching materials they use, and any other resources they seek out (e.g. grammar books) and perhaps also by their students' questions. Classroom situations are likely to sometimes cause ETs to reflect on their own knowledge, or gaps in knowledge, and might thereby trigger further development.

These findings concerning overall MLK in isolation are not sufficient in themselves to benefit teacher education and training or/and the Ministry of Education. To provide useful data, it was necessary to explore in-depth where areas of weakness lay, as will be set out in the following sections.

5.2.2 The level of the individual components of the STs' and ETs' MLK

The research to date (Andrews, 1999a, 1999c; Andrews and McNeill, 2005; Shuib, 2009; Tsang, 2011; Wach, 2014) has largely focused on specific individual components of MLK: productive knowledge and/or receptive knowledge of terms, and/or productive knowledge of rules (see Section 2.11). No study has yet considered receptive knowledge of the rules of ETs and STs. The author investigated two components of MLK: knowledge of terms and knowledge of rules; with their relevant sub-divisions: productive and receptive knowledge.

The results of this study supported the findings of a number of earlier studies, as reviewed in Chapter 2 (Andrews, 1999a, 1999c, Andrews and McNeill, 2005; Erlam et al., 2009, Shuib, 2009 and Wach, 2014), which suggest distinct limitations in ETs' and STs explicit knowledge of rules. They showed that the weakest component of the STs' MLK was their productive knowledge of rules. They displayed a disturbing lack of such knowledge, as the test and role-playing task showed. It is perhaps unsurprising that the STs' knowledge of rules in particular was less developed, as they had no teaching experience, but it is surprising that the ETs' results were similar. Although the ETs' knowledge of rules was superior to their knowledge of terms, their productive knowledge of rules was poor. However, the test and observation showed that in many cases the teachers have the knowledge, as they could express it successfully in Arabic (see Section 4.2.3.2). On the other hand, they seemed to struggle to convey it in English. This correlates with the ETs' opinion that difficulties speaking fluently and a shortage of vocabulary adversely affect their ability to express and display knowledge. Thus, language might considered a barrier to them (more details below).

This study also shows that both groups' receptive knowledge of rules was better than their productive knowledge. This variation can be interpreted in terms of cognitive load, as argued by Andrews, (1999c), Andrews and McNeill, (2005) and Tsang (2011). The task of explaining rules places greater cognitive demands on subjects, requiring them to explicate the rule that has been broken and employ appropriate metalinguistic terminology to explain why (Andrews, 1999c; Andrews and McNeill, 2005; Tsang, 2011), whereas the receptive task required the participants to merely select those rules

that best explained each error from among the four options provided for each sentence (enabling some guesswork when providing the answer).

Where teachers' ability to formulate rules was limited, this generated consequent difficulties in managing the students learning effectively. Formulation of rules has been seen as the most important task of pedagogic grammar (Westney, 1994). Teachers need to acquire an understanding of grammar rules, to be able to verbalise understandable rules to enhance their students' understanding of the language structure (Swan, 2012 and Thornbury, 2006). It is important to note that teachers with a limited comprehension themselves, may not be capable of providing understandable /good rules to learners, as such rules should be characterised by clarity and simplicity, with predictive value and terminological and conceptual clarity and comprehensibility (Swan, 1994 and Chalker, 1994), making them easy to understand, remember, and apply (Krol-Markefka 2012). Moreover, as claimed by Borg (2003) and Andrews (2007), teachers need additional pedagogical skills to use their knowledge to enhance learning. This issue is salient, particularly in Saudi Arabia, where the curriculum emphasises the importance of providing explicit explanations of grammar rules, as mentioned earlier.

In addition, STs showed a disturbing lack of productive knowledge of rules, as mentioned above. Indeed, in many cases, the test and role-playing revealed a limited command of the formal metalanguage required to explain them. Moreover, considering that not all teachers teach grammar terms during their lessons (e.g. those teachers who teach low-level students), their performance on the test suggested the ETs tended to formulate rules without any formal metalanguage. Interestingly, the results of the observations did not correspond with the test data findings in this regard. Inside the classroom under observation conditions, the ETs used formal metalanguage to formulate rules. This might have been a consequence of their desire to produce a model grammar lesson for the researcher; explanations without the use of formal metalanguage can sometimes be more appropriate in the classroom, as long as the content is accurate (more details discussing the importance of teachers having a well-developed knowledge of terms appear in the following section).

5.3 The nature of the STs' and ETs' MLK

Previous studies (Andrews, 1999a 1999c; Andrews and McNeill, 2005; Elder, et al., 2007; Berry, 2009; Shuib, 2009; Tsang, 2011; Wach, 2014) have focused on the performance of the participants in terms of the production, recognition and explanation phases of tasks and on comparisons between tasks (see 2.10). This study goes beyond this, highlighting specific aspects of MLK, as discussed below. The second research question in this study sought to highlight the nature of the STs' and ETs' MLK: *What is the nature of the MLK of these female Saudi STs and ETs?* Interestingly the data revealed a notable similarity between the nature of the STs' and ETs' knowledge, as we shall see below.

Both groups (ETs and STs) appeared to have mastered only partial productive knowledge of grammar terms, and limited knowledge of the sub-categories of key grammatical features. This corresponds with Tsang's (2011) findings, and correlates with the ETs' and STs' own awareness of their knowledge. Thus, the responses from the interviews supported this element of the quantitative findings. Members of both groups admitted to a poor ability to provide complete descriptions of grammatical features. They stated that it would be difficult for them to explain these in great depth, and that a full description was difficult. Thus, if we accept their knowledge is limited, then their tendency to formulate rules without using a formal metalanguage is unsurprising (see above).

There is considerable agreement among researchers about the importance of teachers having a well-developed knowledge of terms (Shuib, 2009; Tsang, 2011). Thornbury (1997) cautions that if an L2 teacher lacks a basic knowledge of terminology, they might lose the confidence of their learners. It is considered imperative that teachers become familiar with English grammar terms and use them to demonstrate their linguistic proficiency to their students (Shuib, 2009). As argued by Tsang (2011) teachers should employ formal grammar terminology in their explanations and even in their feedback to students, as this approach then increases the students' own familiarity with such terms. The use of terminology as suggested by Borg (1999) facilitates communication about the language between learners and their teachers, and also provides a shorthand way of referring to grammatical elements (Halliwell, 1993), representing an economical and precise way of discussing functions (Cater, 1990b, cited in Berry, 1997). Thus,

terminology can make it easier for teachers to understand, talk, and write about grammar (Ellis, 2004). Although this may not be true in all contexts, teachers who have explicit knowledge of terminology have an advantage in that they can choose when and how to use such terms.

This study revealed that both groups had slightly better productive and receptive knowledge of grammatical roles than of other grammatical features, such as word classes, clauses, phrases and sentences. For each group, the task of naming and identifying was found to be slightly easier than the tasks concerning other features. This contrasts with Tsang's (2011) finding that examples of grammatical roles were the most difficult ones for her participants to identify. A possible explanation for the finding in this study is that the majority of the tasks involving grammatical roles required productive or receptive knowledge of single terms (e.g. verb, subject), while most other tasks required knowledge of main and sub-categories (e.g. countable noun). This reduced the overall score for items unrelated to grammatical roles.

More significantly, however, this study showed, through the test results, that at sentence level and text level, both groups had poor understanding regarding of what a clause and phrase are, and were also lacking in their ability to produce corresponding terms. Furthermore, both groups only had a partial understanding of noun phrases, and tended to select only part of the noun phrase, usually including the head, showing they had not yet grasped the concept of phrase fully. Moreover, in the interviews they acknowledged they experienced difficulties classifying words. This corresponds with Orsini-Jones' findings (2008), where he identified classification to be a threshold concepts for language students when learning how to break down their native and target language into grammatical categories. He observed that his participants found phrases and clauses problematic.

A relationship between pedagogical exposure to English grammar, and knowledge of grammar terms is expected. Thus, the most plausible explanation for the ET's good knowledge of grammatical roles might be that those terms and concepts are commonly covered in the textbooks used by teachers and students. Teachers commonly utilise terms like 'subject' or 'verb' in their daily teaching, as shown in the observed lessons, where they begin by identifying them. Hence, teachers' intensive exposure to, and use of these

terms, might contribute to the pattern revealed. Conversely, terms related to clauses can be seen as advanced, and tend to appear later in the pedagogical sequence, as teachers seldom make use of them in their daily teaching (see 'the English grammar syllabuses taught in Saudi schools syllabus' in Section 1.6.2). Likewise, the 'phrase' concept is not commonly taught in schools (see Section 1.6.2) and might not even be taught at all on university courses. I can speculate that the grammatical features taught in the early stages of learning are likely to be consolidated at a later stage, resulting in a fuller understanding of them. Thus, it is not surprising that the STs and ETs had distinct limitations in terms of their declarative knowledge of the 'clause' and 'phrase' terms.

This aspect of their MLK is crucial, and should be taken into consideration. For example, the 'phrase', according to Meyer and Land (2003:1) is 'a threshold concept', and can be considered "akin to a portal, opening up a new and previously inaccessible way of thinking about something". Understanding the concept of a 'phrase' informs comprehension of the hierarchical nature of language; i.e. how smaller parts contribute to bigger parts, so words make up phrases, phrases make up clauses, clauses make up sentences. It is difficult for teachers to understand how sentences are composed, without understanding the concept of a phrase. It should be emphasised here that I am arguing in favour of teaching language terms and forms, to provide analytical tools for interpreting language in the form of a metalanguage to scaffold the discussion of texts. The perceived lack in teachers' understanding, might lead them to avoid teaching their students about phrases and clauses, resulting in the delivery of less useful input to their students.

Another significant finding is that for both groups, a good level of MLK at the sentence level could not guarantee application of it to more complex grammatical items. As mentioned earlier (see Section 2.10.3), previous researchers have confined themselves to measuring MLK at the sentence level, providing example sentences in sample texts. No study has investigated the application of MLK in an extended text. Although, Wach (2014) used a short text in one task to test word classes only, there was no comparison conducted between MLK performance at the sentence level and at the text level. This study aimed to provide more in depth insights into MLK, by focusing on knowledge not only at the sentence level but also at the text level. Thus, the results of this study showed the participants had very limited ability to deal with grammar in texts, i.e. examples were

longer than a fairly simple sentence. The question requiring the test subjects to select ALL instances of a grammatical feature caused difficulty. This could have been anticipated, although some instances were atypical. As previously discussed, the ETs never used text level examples and the STs intended to teach grammar using short sentence examples in the future, as they lacked confidence in their ability to teach grammar using text based examples. This was unsurprising as they had not been taught grammar using text level examples or how to analyse text grammatically, either at school or at university. This could have a negative effect, as they were insufficiently prepared with the knowledge and skills necessary for the classroom. Teachers need to be prepared to teach grammar using textual examples, especially as in the current context they were expected to be able to teach all levels, and be willing to change levels.

This study highlights the issue of STs' and ETs' low language proficiency and how it might negatively affect their ability to express their knowledge, as rule led explanations on the test, observations and role-plays showed. Some STs lacked an appropriate level of linguistic proficiency; although their explanations in English were accurate in terms of content, their use of grammar was often incorrect. This affected their ability to formulate understandable rules, thereby limiting their ability to assist their students to acquire a strong grasp of the English language. The same situation emerged among the ETs, although not to the same extend as with the STs'. Sometimes, as discussed above, difficulty speaking fluently, and a shortage of vocabulary adversely affected the ETs' ability to express themselves, and to display their knowledge of rules in English. This might also explain why many of the teachers used Arabic rather than English, and, in some cases, alongside English, as they might simply be unable to conduct a class entirely in the target language.

It is imperative that teachers provide sufficient input and opportunity for their students to listen to the language and use it productively through emulation. Teachers with a high level of linguistic proficiency provide rich and well-formed input to learners (Elder, Erlam and Philp 2007), this exposes students to the correct use of the forms and functions of English (Shuib, 2008) thereby increasing the chance of a positive learning outcome (Shuib, 2008). Moreover, Andrews (2001:78) argues that a teacher of the language, like any educated user, "needs levels of implicit and explicit knowledge of grammar which will facilitate effective communication". The teacher's proficiency might also have a

strong influence over their students' commitment to the class, motivating them to become proficient in English. In this way, highly proficient teachers can stimulate their students' interest in the language, guaranteeing they achieve their full potential. In contrast, the prevalence of teachers with low language proficiency could adversely affect students' learning of and enthusiasm for the language. Students might be confused by their exposure to a language that has been used inconsistently by their teachers, and this might make it difficult for them to learn and adhere to grammatical rules.

Interestingly, it is not only the teachers' MLK that determines if or how they talk about grammar; the immediate classroom context is also a decisive influence. Teachers adjust their teaching to what they think their students' require. As Johnson (2006: 236) points out, "the contexts within which they work are extremely influential in shaping how and why teachers do what they do". Data from both the observational and interview stages suggests the low level of students influences the ETs' behaviour inside the classroom. Some ETs claimed that they used Arabic to help students to understand rules. In addition, the ETs felt that grammatical structures were more visible in short sentences than when integrated into a text. Thus, they preferred short sentences to make the form visible to their students. Moreover, the ETs used rules of thumb to enable their students learn rules easily, and remember them. As part of this strategy, they provided key words to search for, and used repetition to help their students remember details. As mentioned previously, such strategies can be learned easily and applied to recall information and make decisions. Nevertheless, they do not provide a strictly accurate basis for decision-making, as they are not reliable in every situation.

Finally, interestingly, the test revealed similarities between the STs and ETs, as the ETs' lessons were quite similar to the STs' role-plays. Table 5-1 below summarises the common grammar teaching strategies; one showing 'observed' grammar teaching strategies and the other 'not observed' grammar teaching strategies. Observed grammar teaching strategies included those noted in classroom observations and when observing the role plays.

Common grammar teaching strategies	
Observed	Not observed
Short sentence examples	Text level examples
Identification of grammar roles	Identification of phrases and clauses
Focus on form	Focus on meaning
Using Arabic	

It might have been expected that teaching experience would assist in the development of different knowledge, rather than simply emphasising existing knowledge. However, it was found that the ETs' and STs' explanations of grammar rules, were similar to some extent, especially in terms of using the Arabic language, identifying grammatical roles, and using short sentences as examples, focusing on form rather than meaning (see Table 5-1). Although, in the classroom, teachers should strive to balance form, meaning, and use when teaching grammar (Larsen-Freeman, 2003), the observational and role-playing data revealed that in their verbalisation of rules, both groups tended to focus on form rather than meaning. In addition, the interview' data revealed the STs felt that they knew about the structures and had the ability to construct forms, but did not know when to use them. In contrast, there were no text level examples observed, identification of phrases and clauses, or focus on meaning. This suggests that the ETs and STs model lessons are drawn directly from their learning culture (Liston and Zeichner, 2013). It therefore appears that the ETs had probably been taught this way, and had consequently chosen to teach that way themselves, and it then follows that the STs who were also taught that way would perhaps teach that way in the future.

5.4 The perceptions of STs and ETs of their own MLK

The studies that touched on teachers' opinions about their MLK (Andrews, 1999b; Andrews and McNeill, 2005; Shuib, 2009; Pahissa and Tragant, 2009; Tsang, 2011; Sangster et al., 2013) only focused on eliciting their views regarding their performance in the MLK test (see Section 2.10.3). The third research question of this study sought to investigate the perceptions of the STs and ETs regarding their own MLK: *What are the*

STs' and ETs' perceptions of their own MLK? How accurate are the STs and ETs estimates of their existing MLK? The study findings raised a number of issues relevant to this investigative thread.

The STs in this study lacked confidence in their overall level of MLK, and its individual components, with the exception of their productive knowledge of terms. The data showed their present level was below their own expectations as English language graduates. Moreover, the data indicated that they lacked confidence in their ability to teach grammar by using examples from texts. They felt that their level was not sufficient to meet the requirements of teaching grammar using texts, and that they lacked knowledge. Consequently they suffered from feelings of anxiety, embarrassment, tension, and confusion in relation to their knowledge. Moreover, the STs' awareness of their lack of knowledge, and their fear of future teaching requirements might explain their loss of confidence in themselves. This contrasts with the findings reported by Sangster et al.'s (2013) study, which reported that STs had a high level of confidence and a positive perception regarding their knowledge, although this was in contrast to their poor performance on the test administered during the study.

Conversely, the ET respondents generally displayed high levels of confidence in their overall level of MLK and all the associated individual components. Their confidence was substantially higher than could be justified by their actual performance on the test instrument. This contrasts with Andrews' (1999b) findings that the ETs' confidence in this regard was low.

More significantly, however, this study revealed that the ETs' confidence was partially justifiable. The ET's confidence in their MLK was found to derive directly from the belief that they had mastered the knowledge required in their present context. This factor had not been previously investigated or discussed in previous studies (see Section 2.10.3). The ETs in this study measured their level against the requirements of their teaching context, which, from their perspective, was not perceived as very challenging. Thus, unsurprisingly, the ETs were considerably more confident than the STs.

Research has shown teachers' confidence was an important factor, even when unjustified. As reported by Borg (2001), teachers' self-belief regarding their grammatical knowledge has a considerable impact on their work. It shapes their teaching practice, impacting instructional grammar teaching decisions (Borg, 2001 and Sanchez, 2014). It also influences different aspects, such as the extent to which teachers teach grammar, the manner in which they respond to their learners' questions, and the nature of the grammatical information provided to their students (Borg, 2001). Borg (2001) claims that teachers who are confident in their knowledge teach more grammar, and encourage their students to ask questions. On the other hand, teachers who lack confidence tend to minimise formal instruction in their lessons, and strive to avoid spontaneous grammar work and explanations (Sanchez, 2014). In addition, they fear their students' questions, adhering closely to textbooks to avoid them. Therefore, confidence is crucial for informing how teachers teach.

Significantly, this study highlights the discrepancy in both groups between the recognition of gaps in their knowledge and satisfaction with the level of that knowledge. Although both the STs and ETs were aware of the gaps in their knowledge and the need to develop further, they expressed a surprising level of satisfaction with their current knowledge. The data showed that while 76% of the STs and 62% of the ETs acknowledged gaps, only 43% and 21% respectively, were dissatisfied (see Section 4.4.1.4). In other words, the fact that they were aware of gaps in their knowledge did not necessarily mean that they were dissatisfied with it. This indicates a certain ambivalence and complacency is present in both groups. Thus, it is questionable whether the participants would be sufficiently motivated to enhance their knowledge beyond the minimum requirement for their current teaching needs (i.e. existing context), e.g. by undertaking further training.

However, the ETs said that their level of knowledge was often determined by the level at which they taught and they mentioned the possibility that this level might not meet the requirements of newly issued syllabuses. Moreover, these teachers in their current context, as mentioned earlier, were expected to be able to teach all levels, and to be willing to change levels. Thus, these factors might motivate them to develop their MLK beyond their minimum needs. Nevertheless, the fact that the teachers displayed levels of confidence in their knowledge of varying aspects of language that were substantially higher than their actual performance on the test instrument, and expressed their satisfaction with their current knowledge, as mentioned above, can be viewed as a potential barrier to improving their knowledge.

According to Neves de Jesus and Lens (2005), teacher motivation has a significant influence on student motivation, teachers' implementation of educational policies, and on the emotional and job-satisfaction of teachers, which can trigger demotivation. Sustaining the motivation of students in class is a challenge common to all teachers, and this is heightened if the teachers themselves are not motivated. In addition, teacher motivation is an important consideration for their superiors, i.e. educational leaders and managers. Ensuring teacher motivation is crucial when seeking to advance and implement educational reforms, as motivated teachers will be more able to work willingly to implement progressive curricula and reforms. Moreover, the absence of academic motivation can lead to feelings of frustration and disappointment, and impede productivity and well-being. Thus, it is important for teachers to be aware of the extent of their own MLK, and their desire for self-improvement (Andrews and McNeill, 2005), and such desire is not automatic, but rather dependent on awareness and motivation.

More significantly, however, this study revealed a shortfall in both groups in terms of their awareness of the limitations of their knowledge. Although they were aware that there were gaps in their knowledge, they overestimated their knowledge, and, more interestingly, did not know where the gaps were. Since their level of knowledge was not high, it is unsurprising that they did not know where their weaknesses lay. However, this lack of awareness could impede further development of MLK. Although the data showed the ETs' MLK had improved since graduation, and that teaching experience had a positive effect on improving MLK, if they are not aware of precisely what their weaknesses are, then they are unlikely to be able to effectively work to improve these areas, as they progress along their teaching journey. Certainly, it is important for teachers to be aware of the extent of their own MLK, so they can identify their weaker areas, acknowledge difficulties, and actively pursue continuous self-improvement (Borg, 2001; Andrews and McNeill, 2005).

CHAPTER 6: CONCLUSION AND IMPLICATIONS

6.1 Introduction

This chapter revisits the main objectives of the study summarising the findings that emerged and introducing the key issues raised by the data analysis. The chapter will also outline the implications and indicate possible directions for future related research.

The study set out to investigate the MLK of female Saudi ETs and STs, and determine the range and depth of such knowledge by measuring a number of components of their MLK, and identifying areas of weaknesses and strengths. In addition, this study aimed to highlight the nature of their MLK, pinpoint any significant differences between ETs and STs in relation to their MLK and to investigate STs' and ETs' perceptions of their MLK. The study sought to answer the three research questions posed: First, "What is the present level of MLK of female Saudi ETs who have graduated, and fourth year STs who will graduate from Noor University in Saudi Arabia? To what extent is ETs' MLK different from STs' MLK?" Second, "What is the nature of the MLK of these female Saudi STs and ETs?" Third, "What are the STs' and ETs' perceptions of their own MLK? How accurate are the STs and ETs estimates of their existing MLK?" The answers to these questions, as discussed earlier, revealed potentially useful information for teacher educators; both those in initial teacher education, and those in CPD (continued professional development) in Saudi Arabia. I will return to these issues later in this chapter.

6.2 Summary of the findings and their pedagogical implications

This study investigated three aspects of the MLK of female Saudi STs and ETs: level, nature and perceptions. The mixed methods study implemented a range of quantitative and qualitative techniques: a test, questionnaires, semi-structured interviews, observations and role-plays. The findings are summarised and implications discussed below.

6.2.1 STs' and ETs' level and nature of MLK

This study confirmed earlier work by Andrews (1999c), Erlam et al. (2009), and Wach (2014), which found that the overall level of STs' MLK was low, and that there were MLK deficiencies among STs. In addition, the findings were consistent with those obtained by Andrews (1999a, 1999c), Andrews and McNeill (2005), Shuib (2009), Tsang (2011) and Wach (2014); all of whom found that their ETs' overall level of MLK was not high, and that there were limitations in their explicit knowledge of rules and terms (see 5.2.2 and 5.3). However, the general findings from this study highlight where ETs' and STs' weaknesses lie, as discussed below.

Despite the considerable gaps in the ETs' MLK, this study suggested that teaching might have a positive affect on the development of ETs' MLK. The quantity and the quality of a teacher's teaching experience might have a significant impact on the development of their MLK. The ETs demonstrated a higher level of MLK than the STs, and had clearly become more knowledgeable about all the components of MLK through practice. Teachers in the context of this study generally began their professional careers with significant gaps in their MLK. Shulman (1987) observed that teachers who have not received adequate preparation in grammar instruction, experience apprehension when teaching grammar topics, and are hesitant about teaching grammar subjects. Moreover, there is a notable decline in the quality of teaching, when teachers present a subject area in which their knowledge is weak. This provides a strong argument for action by schools, local authorities, and policy makers at the national level, to begin to implement preservice and in-service provision to help teachers develop their knowledge further. STs' programmes also need to be strengthened, by incorporating knowledge about language courses into their programmes, so that once trained, teachers will be able to transfer their content knowledge and pedagogical approaches into their own classroom practices. This should in turn have a positive impact on classroom practices.

The results of this study supported the findings of a number of earlier studies as reviewed in Chapter 2 (Andrews, 1999a, 1999c, Andrews and McNeill, 2005; Erlam et al., 2009, Shuib, 2009 and Wach, 2014) that there are distinct limitations in the ETs' and STs explicit knowledge of rules. More significantly, this study showed both groups' receptive knowledge of rules was better than their productive knowledge. For the STs, this may be understandable, and is perhaps expected, as they may not need to draw on explicit knowledge from their mental store as often as the ETs. However, the performance of the ETs should be a cause for concern. They displayed a good understanding of rules but had problems formulating rules. Moreover, many of the ETs in the study tended to formulate rules without using formal terminology. Likewise, the STs displayed a limited command of formal terminology when formulating rules. This may have serious effects on their teaching, in view of the point made above, that they claimed to provide rule based explanations to their students, and because the curriculum requires them to teach grammar. Teachers should be able to formulate grammar rules in the classroom, with and without formal terminology (see Section 2.6). Only then, would they be free to make an appropriate choice about how, when and whether to teach rules. They require additional professional development to improve their ability to formulate rules so they can respond appropriately to their learners' needs (Celce-Murcia and Larsen-Freeman, 1999 and Elder, et al., 2007, Hadjioannou and Hutchinson, 2010) and then to meet the requirements of the curriculum, they are teaching.

However, when considering the ETs' and STs' educational background it is unsurprising that both groups' productive knowledge of grammar rules is low (see Sections 1.6.21, 6.3 dna 3.6). Both groups have been taught grammar as it is normally taught to EFL learners at university, i.e. to improve proficiency. They have not been taught English for Occupational Purposes (EOP), but have been taught EFL and Linguistics instead, which does not provide them with the knowledge and skills they need for the classroom. Thus, it is arguable that STs would benefit from EOP. EOP includes instruction *about* English grammar, including the opportunity to practice explaining it, and being taught how to analyse text grammatically. It would also include tasks similar to those teachers encounter, such as identifying errors in learners' writing, and explaining the errors by providing feedback to the learners.

However, the difficultly that the ETs faced when formulating rules in English, as revealed in this study, appeared to result from their low language proficiency. In the case of the STs, it appeared that the main problem they encountered was a lack of knowledge about rules. Moreover, while some of the STs understood grammar rules, some lacked an appropriate level of linguistic proficiency, which probably limits their ability to formulate understandable rules. The majority of STs had a low proficiency in English, despite being provided with proficiency classes when studying at university; this was demonstrated when they performed very poorly when giving an explanation of the rules as mentioned above.

The problem with a lack of language proficiency is that teachers might compound their learners' language problems, instead of relieving them. Their learners would probably struggle to understand that rule in English. Teachers must be equipped with the knowledge to use grammar correctly in their own language output. Teachers modelling the language provide much of their learners' English language input. Edge (1988) identifies three major roles that teachers need to take on: language user, language analyst, and language teacher; thus, language proficiency is a crucial form of language knowledge, which an L2 teacher must have in order to achieve professionalism (Andrews, 2005). The findings of the present study suggest more effort needs to be made when preparing teachers; whether in the initial teacher education setting, or in CPD (continued professional development), to promote language proficiency among STs and some ETs. It is important to improve ETs' linguistic competence in this context, and to place greater emphasis on grammar exposure in teacher training institutions, as well as promoting language learning strategies and language teaching strategies for practising teachers. These will help to improve both teachers' and learner's grammatical proficiency. After which, to address the fundamental problems informing these weaknesses, the STs' knowledge of rules needs to be improved upon, and the ETs' and STs' language proficiency increased.

Those teachers (both groups) with limited knowledge of rules were also had limited knowledge of grammar terms, even more significantly, this study revealed that the teachers (both groups) lacked understanding of phrases and clauses, and were weak in terms of their ability to produce corresponding terms. Moreover, they faced difficulties identifying complete phrases and clauses in the text, as opposed to in sentences. These teachers appear to be somewhat ill equipped to help their learners to progress to higher levels of proficiency. It is important for learners to be aware of phrases and clauses, as this could help them to improve their writing, especially at higher levels of proficiency. It might enable them to progress from very simple to more complex styles of writing.

Because of this lack in the teachers' understanding, there is a possibility that they might avoid teaching their students about phrases and clauses; thereby, delivering input to their learners that is less useful. Possible ways to remedy their lack of understanding would be to devise additional systematic metalinguistic input of these features at the sentence and text level for teachers, and to increase regular or systematic use of these features, at least in the discussion of students' work among teachers at school. Teachers would be more likely to be motivated to do this if understanding of phrases and clauses was added on the curriculum. Teachers also need the opportunity to carry out analyses on texts, so that they can apply their new knowledge, and feel confident in their own abilities. University grammar courses should also offer intensive focus on these features.

This study suggested that a good level of MLK at sentence level does not guarantee an ability to apply it to more complex grammatical items in the text. Both groups were better able to demonstrate an understanding of terms at the sentence level than at the text level. If we accept this as a true indication of the current situation regarding the majority of STs' and ETs' MLK, then it would be advisable to take appropriate measures to institute improvements, because this gap may have serious consequences for their teaching; especially as all of them claimed to be teaching grammar to their students. The teachers in the study were found to be less likely to experiment with using examples from a text when teaching grammar, because of their lack of confidence, which led them to prefer short sentences as examples and familiar teaching approaches. Thus, those teachers who encounter difficulties applying their MLK to more complex items in the text are likely to avoid using texts for examples, preferring short sentence examples, which limit their learners' progress to higher levels. In teacher education courses, addressing teachers' difficulties with applying their basic MLK (at sentence level) to more complex items in the text provides more systematic metalinguistic input in terms of grammatical functions and patterns of grammatical features at the text level for teachers.

Finally, by focusing our attention upon these considerable gaps in teachers' MLK, it could be suggested that there is a crisis of competence within the profession. However, I wish to draw attention to the contention that a well-developed MLK is essential, especially in the context of this study, where the curriculum emphasises providing explicit explanations of grammar rules (see Section 1.6.2). The current situation regarding the majority of STs' and ETs' MLK is likely to have serious consequences for their teaching and their students' outcomes; especially as all of them claimed to be teaching grammar to their students. Teachers should seek to acquire this knowledge. Moreover, they require instruction to formulate a well-developed MLK to enable them to explain the grammar rules, such as the assessments in this study required.

Teachers' MLK is of significant importance, enabling them to function effectively and appropriately in their professional environment. It plays a key role in their ability to develop their learners' understanding of the language (McNamara, 1991) and in shaping their professional capacity to plan for and respond to their learners' language needs (Myhill et al., 2013). When they have a well-developed foundation of knowledge, teachers can give their learners accurate and appropriate information concerning language form, enabling the learners to develop explicit knowledge (Williamson and Hardman, 1995; Andrews and McNeill, 2005); this is especially necessarily in the Saudi educational context, where grammatical accuracy is crucial for students' to achieve high grades in important exams. Moreover, having well-developed knowledge facilitates teachers' performance, and helps them to identify and reflect upon errors and answer any questions that learners have about a grammar rule or term, and also to respond to their learners by giving feedback on and/or explanation of identified errors (Elder, 2001; Andrews and McNeill, 2005).

Teachers with a well-developed MLK may find this has a significant impact on their efficiency, as they will potentially be able to give quicker and better quality feedback on written work and oral work in the classroom. Furthermore, Andrews (2005) argues that a teacher with a rich knowledge of grammatical constructs will be in a better position to help and support developing young writers. In contrast, teachers with limited grammatical knowledge, may experience difficulty making an analysis explicit, and this can create problems for teachers when managing grammatical discussions about students' questions (Myhill et al., 2013) and could even lead learners to develop misconceptions (Myhill et al., 2013). Moreover, it can prevent teachers from appropriate identification of language development, as they would be unable to see language development in the writing and speaking of their own students (Gorden, 2005:61). Thus, as claimed by Edge (1988) and Andrews (2008), when teachers have an understanding of the language they teach and are

able to analyse it, this can make a significant contribution to their teaching effectiveness. In addition, such knowledge, as suggested by McNamara (1991), is not only essential for teaching itself but also for assessing the quality of any teaching materials and learning aids (e.g. textbooks), and for engaging in the diagnostic assessment of pupils' learning.

Thus, these issues have salience, not only in Saudi Arabia, where the curriculum emphasises giving explicit explanations of grammar rules, but also in other countries where new curriculum mandates are re-emphasising grammar, as outlined earlier, because the requirement of putting things into context and the responsive character of this approach, places higher demands on teachers' grammar knowledge (Svalberg, 2012).

6.2.2 The STs' and ETs' perceptions of their own MLK

The ETs generally displayed substantially higher levels of confidence in their overall level of MLK and all its individual components, than their actual performance on the test instrument would justify. Conversely, the STs generally lacked confidence in their overall level of MLK, and all the related individual components. The STs, based on their lack of confidence, may be said to be somewhat ill-equipped to deal with the requirement to teach grammar in lessons after graduation. Thus, initial teacher education needs to offer supplementary training in this respect. This would not only improve teachers' MLK, but would also enhance their confidence. Well-developed MLK can improve teacher confidence, enabling teachers to feel sufficiently secure to encourage students to notice, ask questions, and discover how grammar works (see 5.4). A teacher with well-developed MLK is likely to have greater teacher autonomy, through reduced dependency on the textbook or other teaching materials. Teachers with well-developed MLK are more likely to be able to devise their own tasks and activities, and utilise real-life texts for teaching. Students develop their knowledge about language most effectively when they are focused, affectively engaged, and socially interactive (Svalberg, 2009). Thus, there is a need for a more interactive, student-centred approach to grammar teaching and learning.

The perceptible gap between the participants' (ETs and STs) awareness of their limitations, and their actual knowledge, raises particular issues for consideration. If they are not aware of what these are precisely, or if they do not view such matters as problematic, then they are unlikely to work to improve them, particularly in the face of

the frequent new developments and initiatives with which they have to contend. Teachers need to acknowledge when there is a problem, and be able to identify their strengths and areas, which will help them to improve their MLK. Thus, the author concurs with Borg (2001: 28), that 'work aimed at developing teachers' KAL [knowledge about language] should incorporate opportunities for them to develop and sustain a realistic awareness of that knowledge and an understanding of how that awareness affects their work'.

This study suggested teachers were not motivated to enhance their knowledge beyond their current level. Although the members of both groups acknowledged having gaps in their knowledge, they expressed satisfaction with their existing knowledge. Teachers seem to be content to learn as much as they need to teach a specific level in the 'traditional' manner, relying mainly on the course book. This raises a particular issue for consideration. It should be highlight that the absence of academic motivation can lead to feelings of frustration and disappointment, and can impede productivity and well-being (see Section 5.4). In this research context, these teachers were expected to be able to teach across all levels, and to be willing to change levels, so this could be a factor motivating them to develop their MLK beyond their minimum needs. One suggestion is that preservice teacher training programs, and in-service teacher development programs need to highlight the relevance of such knowledge for teaching purposes, paying special attention to a variety of grammar teaching approaches and techniques, including those that focus on explicit teaching. Nevertheless, it is difficult to imagine approaches changing, unless teachers are given additional training to improve their own subject content knowledge.

6.3 Recommendations for future research

The study investigated the three aspects of the MLK of female Saudi STs and ETs; their level, nature and perceptions. It cannot, however, be considered as the end of the research journey. The following, therefore, provides some directions and recommendations for future studies.

Since the ET sample is relatively small and not necessarily representative of the population, it is recommended that future research replicate this study in a similar context to determine if another researcher would achieve similar results and to increase the generalisability of findings.

Another suggestion is to design a new 'knowledge about language' grammar course (probably in-service) based on these research findings, and teach it. A follow-up study could then evaluate the effect this has on the participants' MLK, and on their teaching.

Since this study includes observations regarding how teachers actually use their MLK in the classroom, it is recommended that future research investigates how teachers actually use their MLK in the classroom further, and explain how that affects learning.

Moreover, it is recommended that future research also investigate how to motivate teachers to develop their MLK beyond the minimum amount they need to practice.

The current study was conducted with female Saudi STs and ETs. It would be advisable to replicate it to include male participants, as gender may be found to affect level, nature and perceptions of MLK. In addition, it would be interesting to examine in a future study whether ETs' and also STs' knowledge exceeds or does not exceed the requirements of the syllabus taught at elementary, intermediate and secondary schools by linking their knowledge to the syllabus. This might confirm or disprove the conclusion reached in this study that teachers are operating at the limits of their subject knowledge; that is that they know enough to teach what is required, but little else.

Similar studies from other universities in all the Saudi provinces are suggested to investigate STs' and ETs MLK further, to provide a clearer picture regarding the generalisability of the findings in the higher education context. Preferably, such research should be a large scale study, with males and females, in order to develop more contextualised nationally relevant understandings of MLK. Such a study/studies might also provide opportunities to compare and contrast the findings among and between the public, private, small, and large universities, to identify any differences, as previously no study has been carried out in any Saudi province at university level using a similar theoretical investigation framework.

Furthermore, another extension would be to replicate the study in other contexts (e.g. in other Arabian Gulf countries) to assess the validity of generalising these study results, or to offer a comparison. A sample for such research could combine the actual participants

of this study, and participants from different universities, to provide a broader investigation into teachers' MLK.

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APPENDICES

Appendix A: Bloor's MLK test (1986)

Part1: Identify the parts of speech.

From the sentence below give ONE example of each of the grammatical items requested and write it in the space provided. NB You may select the same word (s} more than once if appropriate.

Materials are delivered to the factory by a supplier, who usually has no technical knowledge, but who happens to have the right contacts.

verb	
noun	
countable noun	
passive verb	
adjective	
adverb	
definite article	
indefinite article	
preposition	
relative pronoun	
auxiliary verb	
past participle	
conjunction	
finite verb	
infinitive	

Part2: Identify grammatical functions

In the following sentences, underline the item requested in brackets.

- 1. Poor little Joe stood out in the snow. (subject)
- 2. Joe had nowhere to shelter. (predicate)
- 3. The policeman chased Joe down the street. (direct object)
- 4. The woman gave him some money. (indirect object)

Appendix B: Andrews's language awareness test (1999a- 1999c)

SECTION 1: GRAMMATICAL TERMS

1. From the sentence below select one example of the grammatical item requested and write it in the space provided. *NOTE: You may select the same word(s) more than once if appropriate*:

Materials are delivered to the factory by a supplier, who usually has no technical knowledge, but who happens to have the right contacts.

(a) verb	
(b) noun	
(c) countable noun	
(d) passive verb	
(e) adjective	
(f) adverb	
(g) indefinite article	
(h) preposition	
(i) relative pronoun	
(j) auxiliary verb	
(k) past participle	
(l) conjunction	
(m) finite verb	
(n) infinitive verb	

2. In the following sentences, underline the item requested in brackets:

- (a) Poor little Joe stood out in the snow. (SUBJECT)
- (b) Joe has nowhere to shelter. (PREDICATE)
- (c) The policeman chased Joe down the street. (DIRECT OBJECT)
- (d) The woman gave him some money. (INDIRECT OBJECT)

3. Look at the twelve sentences below. What grammatical terms would you use to describe the item underlined in each of the sentences? *NOTE: For each item provide a full description*.

Examples:

- 1. It was the <u>most exciting</u> film she had ever seen. <u>superlative adjective</u>
- 2. I <u>saw</u> Jenny last Saturday. <u>verb in past simple tense</u>

SENTENCES

- 1. It's a lovely day, <u>isn't it</u>?
- 2. Tim <u>often</u> comes to class late.

- 3. Alice fell asleep <u>during</u> the lecture.
- 4. Whose book is that? It's <u>mine</u>.
- 5. You play tennis very well.
- 6. I look forward to <u>receiving</u> a reply to my letter.
- 7. You <u>should</u> have paid your tax bill last week.
- 8. After several hours of questioning, the police let the prisoner go.
- 9. Mrs Wong <u>has been living</u> in that flat for years.
- 10. There are still a lot of things to be done.
- 11. I'm not feeling very <u>well</u> today: I have a terrible headache.
- 12. Mary did her homework <u>faster</u> than I did.

SECTION 2. GRAMMATICAL ERROR IDENTIFICATION

This section consists of fifteen English sentences, each of which contains a grammar mistake.

For each sentence:

- 1. Rewrite the faulty part of the sentence correctly. (There is only one part that is wrong.) *Do NOT rewrite the whole sentence*.
- 2. Underneath each sentence explain the error. *Be as precise as possible*.

Example:

I often goes to the cinema.

Correct version: go *Explanation*: The verb must agree with the subject [**Do NOT write : Change 'goes' to 'go'**]

1. I walk to work very quick.

	Correct version:
	Explanation:
2.	When her said that, Jack hit her.
	Correct version:
	Explanation:
3.	Every day I am making good resolutions.
	Correct version:
	Explanation:
4.	She's the taller of the four sisters.
	Correct version:
	Explanation:
5.	I live in a flat at a top of an old house.
	Correct version:
	Explanation:
6.	Do you know anyone having lost a cat?
	Correct version:
	Explanation:
7.	The children put on their coat.
	Correct version:
	Explanation:
8.	He tried and ate something but he couldn't.
	Correct version:
	Explanation:
9.	I don't like people which are always apologising.
	Correct version:
	Explanation:

10. I opened the door, but I couldn't see nobody.

	Correct version:		
	Explanation:		
11.	When I was a small	baby, I have colic.	
	Correct version:		
	Explanation:		
	-		
12.	I'll tell you as soon a	as I'll know.	
	Correct version:		
	Explanation:		
	I		
13.	I heard him went do	wnstairs.	
	Correct version:		
	Explanation:		
	2		
14.	Give the spanner to	Ι.	
	Correct version:		
	Explanation:		
	Explanation.		
15.	She has phoned a fe	w minutes ago.	
	Correct version:		
	Explanation:		
	•		

Appendix C: Elder's test (2009)

Metalinguistic Knowledge Test

(Part 1)

In this part of the test there are 17 sentences. All of them are ungrammatical. The part of the sentence containing the error is underlined. For each sentence choose which statement best explains the error. Circle a, b, c or d to indicate your choice.

Example Sentence One

Keiko said, 'I have lost mine ring'.

- a. Replace the word 'mine' with 'my'.
- b. Mine cannot be used as a possessive word.

- c. Should be 'her ring' because Keiko is the subject.
- d. Before a noun use the possessive adjective, not the pronoun.

Example Sentence Two

He saw a elephant.

- a. The word 'elephant' refers to the normal verb.
- b. We must use 'elephant' instead of 'a elephant'.
- c. You should use 'an' not 'a' because elephant starts with a vowel sound.
- d. The wrong form of the indefinite article has been used.

Now start.

1. You must to wash your hands before eating.

- a. 'Must to' is the wrong form of the imperative.
- b. Change to 'must have to wash' to express obligation.
- c. Modal verbs should never be followed by a preposition.
- d. After 'must' use the base form of the verb not the infinitive.

2. Hiroshi wants visiting the United States this year.

- a. 'Visiting' should be written in the base form.
- b. The verb following 'want' must be an infinitive.
- c. We cannot have two verbs together in a sentence.
- d. It should be 'visit' because the event is in the future.

3. Martin work in a car factory.

- a. Work is a noun so it cannot have the subject 'Martin'.
- b. We must use the present simple tense after a pronoun.
- c. We need 's' after the verb to indicate third person plural.
- d. In the third person singular the present tense verb takes 's'.

4. If Jane had asked me, I would give her some money.

- a. 'would' is conditional so it should appear in the 'if' clause not the main clause.
- b. The first clause tells us that this is an impossible condition, so use the subjunctive.
- c. We must use 'would have given' to indicate that the event has already happened.
- d. When 'if' clause is in the past perfect tense, main clause verb is in the past conditional.

5. Learning a language is more easier when you are young.

- a. 'More' is an adjective so we must use 'easily' not 'easier'.
- b. The comparative ending of a two-syllable adjective is 'er'.

- c. The 'er' ending indicates comparison, so 'more' is not needed.
- d. You cannot have two adjectives together in the same sentence.

6. Keiko grew some rose in her garden.

- a. The noun is countable, so after 'some' use the plural form.
- b. The wrong adjective has been used before 'rose'.
- c. A noun must always have 'a' or 'the' before it.
- d. Use 'a few' not 'some' with countable nouns.

7. His school grades were improved last year.

- a. The verb 'improve' can never be used in the passive form.
- b. We should insert 'by him' after the verb to indicate the agent.
- c. Use 'improved' as the sentence refers to a specific event last year.
- d. 'Improve' should take the active form even though the subject is not the agent.

8. Martin lost his friend book.

- a. We need possessive 's' to show that the friend owns the book.
- b. You cannot have two nouns next to one another in a sentence.
- c. The verb refers to a personal object, so must have an apostrophe.
- d. Insert 'of' before book to show that it belongs to the friend.

9. Keum happen to meet an old friend yesterday.

- a. It took place yesterday, so use a past tense verb ending.
- b. Third person singular verbs always have an 's' ending.
- c. We don't use a preposition after the verb 'happen'.
- d. 'Happen' never follows the subject of a sentence.

10. Because he was late, he called taxi.

- a. Insert 'a' before taxi because it is not a specific one.
- b. Use 'some taxis' because taxi cannot be singular.
- c. We must always use 'the' before countable nouns.
- d. Use the indefinite article because the taxi is unique.

11. They were interested in what was I doing.

- a. In embedded questions the word order is the same as that in statements.
- b. Change the word order, because 'what' is always followed by a pronoun.
- c. The subject should always come in front of the verb after question words.
- d. The clause 'What was I doing' should be followed by a question mark.

12. Does Liao has a Chinese wife?

- a. With questions, always use the auxiliary 'have'.
- b. We must use the base form after 'do/does'.

- c. Use 'have' not 'has' because 'does' is in the past tense.
- d. The word order changes when we use the question form.

13. Jenny likes very much her new job.

- a. Adverbial phrases should occur after nouns not verbs.
- b. An adverb should not come between a verb and its object.
- c. The phrase 'very much' always occurs at the end of a sentence.
- d. The adverbial phrase must always precede the verb.

14. They have already finished, isn't it?

- a. We cannot use 'it' because the main verb 'finish' does not have an object.
- b. 'have' should be used instead of 'is' in all question tags referring to past time.
- c. The tag question should be positive because the main verb is in the affirmative.
- d. The form of the question tag must relate to the subject and verb in the main clause.

15. He has been saving money since 10 years.

- a. The wrong conjunction has been used in the time clause.
- b. We cannot use 'since' because the exact date is specified.
- c. Use 'for' following any verb in the past perfect continuous tense.
- d. Use 'for' not 'since' for a noun phrase referring to a period of time.

16. I explained my friend the rules of the game.

- a. The indirect object must never precede the direct object of a verb.
- b. 'Explain' (unlike the verbs 'tell' and 'give') can only have one object.
- c. After 'explain' we must insert a preposition before the indirect object.
- d. The preposition 'to' is always used for the dative form of a noun or pronoun.

17. The cake that you baked it tastes very nice.

- a. Omit 'that' when the relative pronoun is subject of the clause.
- b. We should use 'which' instead of 'that' when referring to things.
- c. Omit 'it' in the relative clause because it refers to same thing as 'that.
- d. Omit 'that' when using 'it' in the relative clause to avoid having two pronouns.

(Part 2) Adapted from Alderson et al. (1997)

1. Read the passage below. Find ONE example in the passage for each of the grammatical features listed in the table. Write the examples in the table in the spaces provided. The first one is done for you. Note: it may be possible to choose the same example to illustrate more than one grammatical feature. The materials are delivered to the factory by a supplier, who usually has no technical knowledge, but who happens to have the right contacts. We would normally expect the materials to arrive within three days, but this time it has taken longer.

Grammatical feature	Example
definite article	<u>_the</u>
verb	
noun	
preposition	
passive verb	
conditional verb	
adjective	
adverb	
countable noun	· · · · · · · · · · · · · · · · · · ·
indefinite article	
relative pronoun	
auxiliary verb	
modal verb	
past participle	
conjunction	
finite verb	
infinitive verb	
agent	
comparative form	
pronoun	

STs' educ	cational background	Frequency	Participants %
Studying all the four year	rs at Noor University	122	100%
	Primary school	5	3%
Their sources of	Middle/secondary school	84	48%
learning grammar	University	53	30%
terms	Private lessons	12	7%
	Self-study (e.g. reading books,	17	10%
	references, using internet)		
	Friends	3	2%
	Primary school	1	.6%
	Middle/secondary school	71	42%
	University	66	39%
Their sources of	Private lessons	11	6%
learning grammar rules	Self-study (e.g. reading books,	18	11%
	references, using internet)		
	Friends	1	.6%
	Student-Teacher Training in Schools	1	.6%
	By attending university lectures	47	26%
	By studying grammar on my own	25	14%
	By reading in English and noticing	27	15%
	how grammar is used		
Now I am learning	By listening to English and noticing	22	12%
grammar	how grammar is used		
grammar	By using the grammar when I write in English	28	16%
	By using the grammar when I speak in English	22	12%
	I am not learning English grammar	8	4%
	now		
During my period of	No	13	11%
study at university, I	yes	109	89%
have developed my			
knowledge of grammar			
terms			
	No	12	100/
During my period of		12	10% 90%
study at university, I	yes	110	90%
have developed my			
knowledge of grammar			
rules.			
When I was a student at	rarely	32	26%
school, my teacher	sometimes	55	45%
taught us grammar	often	23	19%
terms.	always	12	10%
When I was a student at	never	8	7%
	rarely	20	16%

Appendix D: STs' background information	obtained from the questionnaires
---	----------------------------------

school, my teacher	sometimes	49	40%
•	often	23	19%
taught us grammar		23	19%
rules in English.	always		
	never	3	2%
When my teacher gave	rarely	15	12%
a grammar rule, she	sometimes	43	35%
used Arabic.	often	30	25%
	always	31	25%
When my teacher gave	never	3	2%
a grammar rule in	rarely	23	19%
English, she used	sometimes	52	43%
grammar terms.	often	32	26%
	always	12	10%
When I was at school,	No	14	11%
my teacher was using	Yes	108	88%
short sentences			
When I was at school,	No	94	77%
my teacher using texts to		28	23%
explain English	yes		
	yes		
grammar.	Star and the dimension	4	20/
I will teach English	Strongly disagree	4 9	3%
0	Disagree	-	7%
grammar by using	Neither agree nor disagree	20	16%
short sentences	Agree	62	51%
	Strongly agree	27	22%
	Strongly disagree	4	3%
I will teach English	Disagree	30	25%
grammar by using texts	Neither agree nor disagree	30	25%
	Agree Strongly ograd	41	34%
	Strongly agree	2	14%
	Strongly disagree	6	2%
I will teach grammar	Disagree Neither agree nor disagree	17	5% 14%
terms			
	Agree	55	45%
	Strongly agree	42	34%
	Strongly disagree	2 7	2%
I will teach grammar	Disagree		<u>6%</u>
rules	Neither agree nor disagree	12	10%
	Agree	44	36%
	Strongly agree	57	47%

ETs' general information	on and educational background	Frequency	Participants %
Studying all the four years	at Noor University	61	100%
Qualification: BA in Englis	sh	61	100%
	4-6	14	23%
Years of teaching	7-9	23	38%
C	+10	24	39%
	Kindergarten	1	1%
The stage that they	Primary	30	33%
teach	Middle	33	37%
	Secondary	26	29%
	1-5	2	3%
Number of the students	6-14	3	5%
in their class	15-24	25	39%
-	+25	34	53%
	Beginner	21	28 %
	Pre-intermediate	22	29%
Their students' level	Intermediate	29	39%
	Advanced	3	4%
	Primary school	2	1%
	Middle/secondary school	40	25%
Their sources of learning grammar	At University	42	27%
	From private lessons	5	3 %
	From self-study (e.g. reading		2 70
terms	books, references, using	34	22%
	internet)	51	2270
	Colleagues	1	.6%
	My teaching experience	29	18%
	In-service training	4	2%
	Primary school	2	1%
	Middle/secondary school	39	25%
	At University	36	23%
Their sources of	Private lessons	6	4%
learning grammar	Self-study (e.g. reading	0	170
rules	books, references, using	29	19%
	internet)	_>	1970
	Colleagues	4	3%
	My teaching experience	35	23%
	In-service training	3	2%
	From textbooks that I use	39	26%
Now I am learning	By studying grammar on my		
grammar	own	25	17%
grunnin	By reading in English and noticing how grammar is used	24	16%

Appendix E: ETs' background information obtained from the questionnaires

	By listening to English and	16	11%
	noticing how grammar is used		/0
	By using the grammar when I write in English	22	15%
	By using the grammar when I speak in English	19	13%
	I am not learning English grammar now	3	2%
After graduation, I	No	9	15%
developed my knowledge of grammar terms	yes	51	84%
After graduation, I	No	5	8%
developed my knowledge of grammar rules.	yes	55	90%
When I was a student	never	3	5%
at school, my teacher	rarely	10	16%
taught us grammar	sometimes	15	25%
terms.	often	25	41%
terms.	always	8	13%
	never	2	3%
When I was a student	rarely	2	3%
at school, my teacher	sometimes	23	38%
taught us grammar	often	21	34%
rules in English.	always	13	21%
	never	3	5%
When my teacher gave	rarely	8	13%
a grammar rule, she	sometimes	26	43%
used Arabic.	often	15	25%
	always	9	15%
When my teacher gave	rarely	10	16%
a grammar rule in	sometimes	25	41%
English, she used	often	17	28%
grammar terms.	always	9	15%
When I was at school,	No	9	15%
my teacher used short sentences	Yes	51	84%
When I was at school,	No	42	69%
my teacher used texts to			5270
explain English grammar.	yes	19	31%
When I teach	No	1	2%
grammar, I use short	yes	60	98%
sentences examples.		27	4.4.07
When I teach	No	27	44%

grammar, I use examples in texts.	yes	34	56%
In my teaching	rarely	1	2%
approach, I teach my	sometimes	21	34%
students grammar	often	19	31%
terms	always	20	33%
In my teaching	rarely	1	2%
approach, I teach my	sometimes	20	33%
students grammar	often	23	38%
rules in English	always	17	28%
When I size a	rarely	12	20%
When I give a	sometimes	33	54%
grammar rule, I use Arabic.	often	10	16%
	always	6	10%
Which one requires	The students' needs	49	50%
Which one requires teaching terms	The curriculum	48	49%
	The administration	1	1 %
Which one requires	The students' needs	47	46%
Which one requires	The curriculum	55	53%
teaching rules	The administration	1	1%

Appendix F: The Test

QUESTIONS OF ENGLISH GRAMMAR KNOWLEDGE

Introduction:

This booklet includes questions that are designed to help us estimate English grammar knowledge. Please provide the information requested below. This information is for research purposes only. Your name/ pseudonym will not be mentioned in any papers or presentations about this research. It will take approximately an hour to answer these questions. The results will be treated as confidential.

مقدمة:

هذا الكتيب يحتوي على اسئلة صممت لكي تساعدنا على تقدير مدى الألمام بقواعد اللغة الإنجليزية. الرجاء تقديم المعلومات المطلوبة أدناه. هذه المعلومات لأغراض البحث فقط. أسمك/الاسم المستعار لن يستخدم في أي شيء يكتب او يقدم بخصوص هذا البحث. يستغرق حل هذا الأسئلة حوالي ساعة. سيتم التعامل مع النتائج بسرية تامة.

Name /pseudonym:		
<u>Note</u> :		
If you want to use a pseudonym use the same one used before in the		
research.		
يمكن ان تستخدمين اسمك او اسم مستعار . إذا كنت تر غبين في استخدام اسم مستعار استخدامي نفس الاسم الذي استخدمتيه من قبل في هذا البحث.		
1. I am: 🗆 a student teacher طالبة بقسم اللغة الانجليزية a practising teacher مدرسة		
• If you are a practising teacher, how many years have you been	teaching	English
language?		
اذا انتي مدرسة. كم عدد سنوات خبرتك في تدريس اللغة الانجليزية؟		

INSTRUCTIONS

إرشادات

Answer ALL questions in the order they are given.
 DO NOT refer back to previous questions.
 عند الانتهاء من حل السؤال الرجاء حل السؤال التالي و عدم العودة للأسئلة المحلولة سابقاً.
 You can submit the booklet when you are finished.

Question (1):

Read the following sentences, each of which contains an underlined grammar mistake. For each sentence, what is *the rule* that has been broken?

<u>Note:</u> Write the rules in Arabic and again in English. اقرأي الجمل التالية، كل منها يحتوي على خطأ نحوي تحته خط. ماهي القاعدة التي لم يتم الألتزام بها في كل جملة؟ اكتبى القاعدات مرة باللغة العربية ومرة اخرى باللغة الانجليزية.

Example:

My father work at the bank.
 Rule in Arabic : عندما يكون الفاعل اسم مفرد, تضاف (-s/-es) الي الفعل المضارع البسيط
 Rule in English: When the subject is a singular noun, a final (-s/-es) is added to a present tense verb.
 Note: [Do NOT write : Change 'work' to 'works']

1. Sarah has taken a taxi to the airport yesterday.

The rule in Arabic:-----

2. I know a man <u>which</u> we can help.

The rule in Arabic:
The rule in English:

3. $\underline{\mathbf{A}}$ man with white hair is my father.

The rule in Arabic:-----

The rule in English:-----

He should <u>to see</u> the new James Bond movie.
 The rule in Arabic:---- The rule in English:-----

6. Water **is boiling** at 100 degrees Celsius.

The rule in Arabic:-----

7. That's the man whom you saw <u>him</u> yesterday.

The rule in Arabic:	
The rule in English:	-

Question (2):

A: What grammar term would you use to describe the <u>part of speech</u> of the item underlined in each of the sentences?

ماهو مصطلح النحو المناسب لوصف نوع (the part of speech) للعنصر الذي تحته خط في كلا من الجمل التالية؟

Note:

1- For each item *provide a full description*. اعطي وصف كامل لكل عنصر

2- Each item will be classified *using two words* (e.g. possessive pronoun) کل عنصر سوف یصنف باستخدام کلمتین one word + one word = two words

Example: • This umbrella is <u>mine</u>. <u>Possessive</u> pronoun

1. Ann put her **books** on the desk.

2. Once the glue is dry you should place the photograph in the correct position.

3. Try to eat less **and** get more exercise.

4. I knew it was <u>him</u> as soon as I heard his voice.

5. Roger is the last surviving member of his **family.**

6. Boeing's new plane is **faster** and more luxurious than anything else they have ever produced.

7. I have <u>some</u> in the cupboard.

B-What grammar term would you use to describe the item underlined in each of the sentences?

ماهومصطلح النحو المناسب لوصف العنصر الذي تحته خط في كلا من الجمل التالية؟

کل عنصر هو اما: <u>clause</u> أو <u>phrase</u> أو <u>sentence</u>

اعطى وصف كامل لكل عنصر

Note:

Each item is a kind of: <u>clause</u>, or <u>phrase</u>, or <u>sentence</u>
For each item provide a full description.

Example:

• He went to bed **because he was sleepy**. *adverb clause*

- 1. I thanked the girl **who helped me**.
 - _____
- 2. They are testing some new equipment.
 - -----
- 3. A. Tom, stop doing that!
 - B. Sorry.

4. Billy did not listen to what Mary said.

C- What grammar term would you use to describe the <u>grammatical role</u> of the underlined item in each of the sentences?

ماهو مصطلح النحو المناسب لوصف نوع (the grammatical role) للعنصر الذي تحته خط في كلا من الجمل التالية؟ Note:

• For each item provide a full description. اعطى وصف كامل لكل عنصر

Example: • <u>Ellen</u> has been working all day. <u>subject</u>

1. The doctor sent the patient a birthday card.

2. The smart kids get good grades and go off to college.

3. Many of us consider her <u>the best candidate</u>.

4. I <u>would like to apologize</u> for my behaviour yesterday.

5. <u>To forget to wear shoes</u> is embarrassing.

Question 3:

The text:

My father rarely left the house before nightfall, as the people of Granada were short-tempered during the daytime. Quarrels were frequent, and a sombre bearing was regarded as a sign of piety; only a man who was not keeping the fast could smile under the fiery heat of the sun.

(From Maalouf, A. (1994) Leo the African. London: Abacus)

short-tempered: سريعين الغضب Quarrels: المشاجرات sombre bearing: تحمل المشقة sign of piety: علامة على التقوى

A: What grammar terms would you use to describe the following items in the text? ماهى مصطلحات النحو المناسبة لوصف العناصر التالية في النص؟

Note:

- Each item is a kind of: <u>clause</u>, or <u>phrase</u>, or <u>sentence</u> <u>sentence</u> أو <u>phrase</u> أو <u>clause</u> مكل عنصر هو اما:
- For each item provide a *full description*.

اعطى وصف كامل لكل عنصر

Example:

• My father rarely left the house before nightfall, *independent clause*

- 1. who was not keeping the fast ------
- 2. the fast -----
- 3. Quarrels were frequent ------
- 4. My father rarely left the house before nightfall, as the people of Granada were shorttempered during the daytime. -----
- 5. the fiery heat of the sun -----

B-What grammar terms would you use to describe the <u>grammatical role</u> of the following items in the text?

ماهي مصطلحات النحو المناسبة لوصف نوع (the grammatical role) للعناصر التالية في النص؟

Note:

• For each item provide a full description. اعطي وصف كامل لكل عنصر

	Example: • Quarrels subject
1.	a sign of piety
2.	my father
3.	before nightfall
4.	the people of Granada
5.	could smile

<u>Question 4:</u> Read the following text and then answer the question. أقري النص التالي ثم اجيبي على السؤال

The text:

If we are to provide learners with language experience which offers exposure to the most useful patterns of the language, we might as well begin by researching the most useful words in the language.

(From Willis, D. 1990 The Lexical Syllabus. London: Harper Collins, p. 38)

أنماط :patterns تعرض :exposure

From the above text, select <u>ALL</u> the items that exemplify the grammar term requested. من النص أعلاه اختاري كل العناصر التي تمثل مصطلح النحو المطلوب.

<u>Example:</u> Adverbials	 with language experience which offers exposure to the most useful patterns of the language. to the most useful patterns of the language. as well by researching the most useful words in the language in the language
subjects	
verbs	
objects	
adjective(relative) clauses	
noun phrases	

Question 5: Select the item/items that exemplifies the grammar term requested.

ciect	اختاري العنصر /العناصر الي تمثل مصطلح النحو المطلوب.
	Example: This umbrella is mine. (possessive pronoun) <u>mine</u>
1.	We have received information that Ali may have left the country. (countable noun)
2.	We will go swimming tomorrow. (subject)
3.	They have had new windows put in. (auxiliary verb)
4.	We enjoyed the party at your house. (preposition)
5.	My friend wrote a poem last night. (object)
6.	Police are now satisfied that her death was an accident. (adjective)
7.	I do not feel very well. (adverb)
8.	It will take more than a morning to finish the decorating. (indefinite article)
9.	He went to bed because he was sleepy. (conjunction)
10.	The people in the bus escaped through the emergency exit. (subject)
11.	Run towards the finish line. (verb)
12.	No one will ever know who is responsible. (direct object)

13. After he took lessons, George could swim well. (adverb clause)

14. She knew where Mary lived. (independent /main clause)

15. I met your sister last week. (noun phrase)

16. My mother and I give each other a hard time. (reciprocal pronoun)

Question (6):

Read the following sentences, each of which contains an underlined grammar mistake.	
For each sentence, choose the correct rule that has been broken.	

اقرأي الجمل التالية، كل منها يحتوي على خطأ نحوي تحته خط اختاري القاعدة الصحيحة التي لم يتم الألتز أم بها في كل جملة.

- 1. Please be quiet. The children <u>slept</u>.
- When the action of the verb is happening at the moment of speaking, the verb must be in the simple present.
- When the action of the verb is happening at the moment of speaking, the verb must be in in the present continuous.
- When the action of the verb is happening at the moment of speaking, the verb must be in in the present perfect.
- \circ I do not know the rule.
- 2. I drank <u>many</u> coffee.
- \circ 'many' is used only with countable nouns.
- \circ 'many' is used only with uncountable nouns.
- 'many' is used only in negative sentences.
- I do not know the rule.
- 3. You haven't finished the work, haven't you?
- If the main part of the sentence is in the present perfect, the question tag is the future perfect.
- If the main part of the sentence is negative, the question tag is positive.
- If the main part of the sentence has an auxiliary verb, the question tag is made with no auxiliary verb.
- \circ I do not know the rule.

- 4. My sister can <u>did</u> it.
- Modals are followed by a present participle.
- \circ Modals are followed by the present simple form of the verb.
- Modals are followed by an infinitive.
- \circ I do not know the rule.
- 5. I finish typing the report two hours ago.
- When the action began and ended at a particular time in the past, the verb must be in the past continuous.
- When the action began and ended at a particular time in the past, the verb must be in the present perfect.
- When the action began and ended at a particular time in the past, the verb must be in the past simple.
- I do not know the rule.
- 6. The only excuse that he gave for his actions were that he was tired.
- The verb must be in the passive form.
- The verb must agree with the subject.
- The verb must be in the infinitive.
- \circ I do not know the rule.
- 7. I hope seeing you again soon.
- \circ 'hope' is a verb that is followed immediately by an infinitive.
- \circ 'hope' is a verb that is followed immediately by a passive verb.
- o 'hope' is a verb that is followed immediately by the present simple form of a verb.
- \circ I do not know the rule.

Appendix G: ETs' questionnaire

Name:

You can use your name or pseudonym يمكن ان تستخدمين اسمك او اسم مستعار

Questionnaire

My name is Raniyah Almarshedi, a lecturer in the English Language Department at Noor University. The purpose of this questionnaire is to find out about English Language teachers' views about their **English** grammar knowledge.

The results obtained from this questionnaire will be very helpful and useful for the English Language Department at Noor University in its role of preparing student teachers for their future careers in terms of making them more effective English language teachers. In addition, the results will also be very helpful and useful for those who are involved in the educational supervision of teachers in schools in order to help teachers (in general, not specifically) to be more effective.

Instructions:

This questionnaire contains some questions about your educational background and your English grammar knowledge. It is made up of a series of questions which will be quick and easy to answer using tick boxes. I want to emphasize that there are no right or wrong answers.

It will take approximately 15-20 minutes to complete. You need to write your name or pseudonym. Your name/ pseudonym will not be used in anything I write or present. The questionnaire data will be kept secure and treated confidentially.

Your answers will be very valuable for the research. Please read the questions carefully and answer as accurately as possible.

I very much hope that you will feel able to complete this questionnaire. May I thank you, in advance, for your co-operation.

الاسم: رانية المرشدي محاضرة في قسم اللغة الإنجليزية بجامعة نور.

الغرض من هذا الاستبيان هو اكتشاف آراء معلمات اللغة الإنجليزية حول **معرفتهن لقواعد اللغة الإنجليزية**. إن النتائج التي سوف يتم الحصول عليها من هذا الاستبيان ستكون مساعدة ونافعة للغاية لقسم اللغة الإنجليزية في جامعة نور من حيث دور ها في إعداد الطالبات لشغل وظائف في المستقبل وجعلهن معلمات لغة إنجليزية أكثر فاعلية. وبالإضافة إلى ذلك، فإن النتائج ستكون أيضا مساعدة ونافعة للغاية لأولئك الاتي يشاركن في الإشراف على المعلمات في المدارس لمساعدة المعلمات (بصفة عامة، وليس على وجه التحديد) ليكن أكثر فاعلية.

تعليمات:

يحتوي هذا الاستبيان على بعض الأسئلة حول خلفيتك التعليمية ومعرفتك بقواعد اللغة الإنجليزية. وهو مكون من مجموعة من الأسئلة التي سوف تكون سريعة وسهلة الإجابة مستخدمة علامات في المربعات. وأريد التأكد على عدم وجود إجابات صحيحة أو خاطئة. سوف يستغرق استكمال هذا الاستبيان حوالي 15-20 دقيقة. الرجاء كتابة اسمك اواسم مستعار. أسمك/الاسم المستعار لن يستخدم في أي شيء أكتبه أو أقدمه. سيتم الاحتفاظ ببيانات الاستبيان بشكل آمن وسوف يتعامل معها بسرية تامة. إجاباتك ستكون داعم كبير لنجاح وتحقيق أهدافنا. يرجى قراءة الأسئلة والإجابة عليها في أكبر قدر ممكن من الدقة. شاكرة أكن حسن تعاونكن مقدماً. Below is an explanation of how some terms are used in this questionnaire:

مما يلي أسفل هو تعريف بالمصطلحات المستخدمة في هذا الاستبيان

المصطلحات النحوية:

باللغة الإنجليزية تعني Grammar terms على سبيل المثال .Verb, noun, adjective, pronoun, clause, etc

القواعد النحوية:

باللغة الإنجليزية تعني Grammar rules على سبيل المثال . The simple present rules, if-condition rules, the passive rules, etc

قواعد اللغة الانجليزية:

باللغة الانجليزية تعني English grammar وتشتمل على كلا من المصطلحات والقواعد النحوية

النصوص:

باللغة الإنجليزية تعني Texts

This first section seeks general information about you. Please select the option that represents your response to the statement. الجزء الأول من الاستبيان يستفسر عن معلومات عامه عنك. اختاري الخيار الذي يتناسب معك

1. Did you study all the four years at Noor University? هل درست طوال الأربع سنوات في جامعة نور (كلية التربية سابقاً)؟

🗌 Yes/ نعم 🗌 No/ צ

2. What qualification(s) do you have?

(You can tick more than one)

ما هى المؤهلات التي حصلت عليها؟ (بالإمكان اختيار أكثر من خيار) دبلوم لغَّة إنجليزية □ English Diploma بكالوريوس لغة إنجليزية □ BA in English درجة الماجستير □ MA. درجة الدكتوراه □ PhD. Others أخرى

3. How many years have you been a teacher?

كم عدد السنوات التي عملتي فيها كمدرسة؟
من سنه إلى ثلاث سنوات
من أربع إلى ست سنوات
من سبع إلى تسع سنوات
عشر سنوات فأكثر

4. Which stage do you teach?

(You can tick more than one)

ماهي المرحلة الدر اسية التي تدريسها؟ (بالإمكان اختيار أكثر من خيار) روضة

ابتدائي

متوسط

ثانوي

- □ Kindergarten □ Primary
- □ Middle
- □ Secondary

5. I	How man	y students are there in your class? (You can tick more than one)
		كم عدد الطالبات في الفصل الذي تدرسينه؟ (بالإمكان اختيار أكثر من خيار)
	1-5.	من واحد إلى خمس طالبات
	6-14.	من ست إلى أربعة عشر طالبة
	15-24.	من خمسة عشر إلى أربعة و عشرون طالبة
	25+.	خمسة و عشرون طالبة فأكثر

6. What is the English level of the students you teach? (You can tick more than one)			
_	ما هو مستوى اللغة الإنجليزية للطالبات اللاتي تدرسينهن؟ (بالإمكان اختيار اكثر من خيار)		
□ Beginner	مبتدئ		
□ Pre-intermediate.	دون المتوسط		
□ Intermediate.	متوسط		
\Box Advanced.	متقدم		

The next section asks about your educational background. Please select the option that represents your response to the statement.

الجزء التالي من الاستبيان يستفسر عن خلفيتك التعليمية اختاري الخيار الذي يتناسب معك

7. I learned grammar terms: (You may tick more than one)

- □ At primary school.
- \Box At middle/secondary school.
- \Box At University.
- □ From graduate study (e.g. MA- PhD).
- □ From private lessons.
- □ From self-study (e.g. reading books, references, using internet).
- \Box From colleagues.

□ At primary school.

 \Box From private lessons.

 \Box From colleagues.

□ At University.

- \Box From my teaching experience.
- \Box From in-service training.

□ At middle/secondary school.

□ From graduate study (e.g. MA- PhD).

 \Box From self-study (e.g. reading books,

Others

references, using internet).

 \Box From my teaching experience.

 \Box From in-service training.

- Others
- تعلمت مصطلحات النحو (بالإمكان اختيار اكثر من خيار) في المدرسة الابتدائية في المدرسة المتوسطة/المدرسة الثانوية في الجامعة من الدراسة بعد التخرج (ماجستير /دكتوراه) من دروس خصوصية من دراسة ذاتية (على سبيل المثال، قراءة كتب من دراسة ذاتية (على سبيل المثال، قراءة كتب من دراسة ليتي في التدريس من الدورات المقدمة من جهة العمل أخرى

8. I learned grammar <u>rules</u>: (You may tick more than one)

تعلمت قواعد النحو (بالإمكان اختيار اكثر من خيار) في المدرسة الابتدائية في المدرسة المتوسطة/المدرسة الثانوية في الجامعة من الدراسة بعد التخرج (ماجستير /دكتوراه) من دروس خصوصية من دروس خصوصية من دراسة ذاتية (على سبيل المثال، قراءة كتب القواعد، مراجع، استخدام الانترنت) من الزميلات من خبرتي في التدريس من الدورات المقدمة من جهة العمل أخرى

9. Now I am learning English grammar (You can tick more than one)

الأن أنا أتعلم قواعد اللغة الإنجليزية (بالإمكان اختيار أكثر من خيار)

□ From textbooks that I use.	من الكتب الدر اسية الي استخدمها
□ By studying grammar on my own.	بدراسة القواعد بنفسي
 By reading in English and noticing how grammar is used. 	بالقراءة باللغة الانجليزية وملاحظة كيف يتم استخدام القواعد
□ By listening to English and noticing how grammar is used.	بالاستماع إلى اللغة الانجليزية وملاحظة كيف يتم استخدام القواعد
□ By using the grammar when I write in English.	باستخدام القواعد عندما أكتب باللغة الانجليزية
□ By using the grammar when I speak in English.	باستخدام القواعد عندما أتحدث باللغة الانجليزية
 I am not learning English grammar now. Others 	أنا لا أتعلم قواعد اللغة الانجليزية الأن أخرى

10. When I was at school, my teacher used <u>short sentences</u> to explain English grammar.

	عندما كنت في المدرسة، كانت معلمتي تستخدم الجمل القصيرة لشرح قواعد اللغة الانجليزية
🗆 Yes/ نعم	\square No/ Y

11. When I was at school, my teacher used t <u>exts</u> to explain English grammar. عندما كنت في المدرسة، كانت معلمتي تستخدم النصوص لشرح قواعد اللغة الانجليزية									
نعم /Yes									
12. When I was a student at se	chool, my teacher taught us grammar <u>terms</u> . عندما كنت في المدرسة، كانت معلمتي تدرسنا مصطلحات النحو								
نادرا /rarely 🗆 أبدا /never	دائما/always 🗆 غالبا /often احيانا /sometimes								
13. When I was a student at so	chool, my teacher taught us grammar <u>rules</u> in English. عندما كنت في المدرسة، كانت معلمتي تدرسنا قواعد النحو باللغة الانجليزية								
نادرا /rarely 🗆 أبدا /never	دائما/always 🗆 غالبا /often 🗆 أحيانا /sometimes								
14. When my teacher gave a g	grammar rule, she used Arabic. عندما تشرح معلمتي قاعدة نحوية فإنها كانت تستخدم اللغة العربية								
نادرا /rarely 🗆 أبدا /never	دائما/always 🗆 غالبا /often 🗆 أحيانا /sometimes								
15. When my teacher gave a g	grammar rule in English, she used grammar terms. عندما تشرح معلمتي قاعدة نحوية باللغة الانجليزية، فإنها كانت تستخدم مصطلحات نحوية								
نادرا /rarely 🗆 أبدا /never	دائما/always 🗆 غالبا /often 🗆 أحيانا /sometimes								
16. After graduation, I develo	ped my knowledge of grammar <u>terms</u> . لقد طورت معرفتي بمصطلحات النحو بعد التخرج								
نعم ∕Yes نعم /	□ No/ Y								
17. After graduation, I develo	ped my knowledge of grammar <u>rules</u> . لقد طورت معرفتي بقواعد النحو بعد النخرج								
نعم /Yes	□ No/ ¥								

Please select the option that represents your response to the statement. الجزء التالي عن تطبيقاتك الواقعية اختارى الخيار الذى يتناسب معك 18. When I teach grammar, I use short sentences examples. عندما أدرس القواعد، أستخدم أمثلة من الجمل القصير ة نعم /Yes نعم \square No/ \checkmark 19. When I teach grammar, I use examples in texts. عندما أدرس القواعد، أستخدم أمثلة من النصوص نعم /Yes نعم □ No/ ۷ 20. In my teaching approach, I teach my students grammar terms. من اتجاهاتي التدريسية، أن ادرس الطالبات مصطلحات النحو أبدا /never نادر ا rarely أحيانا /sometimes غالبا /often دانما/always 21. In my teaching approach, I teach my students grammar rules in English. من اتجاهاتي التدريسية، أن ادرس الطالبات قواعد النحو باللغة الانجليزية دائما/always 🗆 غالبا /often ا أحيانا /sometimes نادرا /rarely ا أبدا /often ا

22. When I give a grammar rule, I use Arabic.

The next section is about your actual practice.

عندما أعطى قاعدة نحوية، أستخدم اللغة العربية

- دائما/always ت غالبا /often أحيانا /sometimes ت نادر ا /often ا أبدا /always
- 23. Which one of the following requires that you teach grammar terms? (You may tick more than one)

	أي من التالي يتطلب أن تدرسي مصطلحات النحو؟ (بالإمكان اختيار أكثر من خيار)
\Box The students' needs	احتباج الطالبات
□ The curriculum	المنهج
□ The administration	الإدارة
\Box The supervisors	المشرفات
\Box None of the above	لا ش <i>يء</i> مما سبق
Others	أخرى

24. Which one of the following requires that you teach grammar rules? (You may tick more than one)

	أي من التالي يتطلب أن تدرسي قواعد النحو؟ (بالإمكان اختيار أكثر من خيار)
\Box The students' needs	احتياج الطالبات
□ The curriculum	المنهج
□ The administration	الإدارة
□ The supervisors	المشرفات
\Box None of the above	لا شيء مما سبق
Others	أخرى

The next section is about your views about English grammar knowledge.

الجزء التالي يستفسر عن أرانك بخصوص المعرفة بقواعد اللغة الإنجليزية

For each item, please select the option that represents your response to the statement. الرجاء اختيار الخانة التي تتناسب مع رأيك لكل فكرة	Strongl y disagre e ارفض	Disagre e لا أوافق	Neither agree nor disagre e د لست مع أو ضد	Agree أوافق	Strongl y agree أوافق بشدة
25. The best way to learn a second language is by communication. أفضل طريقة لتعلم لغة ثانية هي التواصل مع الأخرين					
26. In order to learn English as a second language, students need to be explicitly taught English grammar. لكي يتعلم الطلاب اللغة الانجليزية كلغة ثانية لابد أن يتعلموا قواعد اللغة الانجليزية بشكل واضح					
27. I enjoy teaching English grammar. أنا أستمتع بتدريس قواعد اللغة الإنجليزية					
28. As an English teacher, I need to have knowledge of grammar <u>terms</u> . كمعلمة لغة إنجليزية، أحتاج أن يكون لدي معرفة بمصطلحات النحو					
29. As an English teacher, I need to have knowledge of grammar <u>rules</u> . كمعلمة لغة إنجليزية، أحتاج أن يكون لدي معرفة بقواعد النحو					
30. I am satisfied with my level of knowledge of grammar <u>terms</u> . أنا راضية بمستوى معرفتي لمصطلحات النحو					
31. I am satisfied with my level of knowledge of grammar <u>rules</u> . أنا راضية بمستوى معرفتي لقواعد النحو					
32. I feel that there are some gaps in my knowledge of English grammar. أشعر بأن هناك بعض النقص في معرفتي لقواعد اللغة الإنجليزية					
33. I have the knowledge of English grammar that I need in my present context. لدي معرفة بقواعد اللغة الإنجليزية الكافية لحاجة المرحلة الدراسية الي أدرسها					

How would you rate yourself in each of the following: كيف تقيمين نفسك في كل نقطة من النقاط التالية	Very poor ضعیف جدا	Poor ضعيف	Neither poor nor good وسط	Good جيد	Excelle nt ممتاز
34. The level of my knowledge of English grammar <u>after graduation</u> . مستوى معرفتي بقواعد اللغة الإنجليزية بعد التخرج					
35. The level of my knowledge of English grammar <u>now</u> . مستوى معرفتي بقواعد اللغة الإنجليزية الأن					
36. My ability to classify English words into <i>for</i> <i>example, nouns, verbs, adjectives, etc.</i> قدرتي على تصنيف الكلمات الانجليزية إلى أسماء، أفعال، صفات على سبيل المثال					
37. My ability to provide a full description of grammar terms. (e.g.: plural noun, possessive pronoun, etc.). قدرتي على إعطاء وصف كامل لمصطلحات النحو (على سبيل المثال، الاسم الجمع، ضمائر الملكية إلخ)					
38. My understanding of the concepts of grammar <u>terms</u> . فهمي لمفاهيم مصطلحات النحو					
39. My ability to teach English grammar through using <u>short sentence</u> examples. قدرتي على تدريس قواعد اللغة الانجليزية مستخدمة أمثلة من الجمل القصيرة					
40. My ability to teach English grammar through using <u>text</u> examples. قدرتي على تدريس قواعد اللغة الانجليزية مستخدمة أمثلة من النصوص					
41. Knowing the grammar <u>rules</u> . معرفتي بقواعد النحو					
42. My ability to formulate grammar rules in English. قدرتي على صياغة قواعد النحو باللغة الانجليزية					
43. My ability to use grammar terms in formulating grammar rules in English. قدرتي على استخدام مصطلحات النحو عند صياغة القواعد النحوية باللغة الانجليزية					

I need to develop my ability in: أحتاج أن أطور قدرتي في	Strongly disagree أرفض بشدة	Disagree لا أوافق	Neither agree nor disagree لست مع أو ضد	Agree أوافق	Strongly agree أوافق بشدة
44. Classifying English words for example into: <i>nouns</i> , <i>verbs</i> , <i>adjectives</i> , <i>etc</i> . تصنيف الكلمات الانجليزية على سبيل المثال إلى: أسماء، أفعال، صفات الخ					
45. Providing a full description of grammar terms. e.g. <i>plural noun, possessive pronoun etc.</i> إعطاء وصف كامل لمصطلحات النحو، على سبيل المثال، <i>الاسم الجمع</i> ، ضمير <i>الملكية</i> الخ					
46. Understanding the concepts of grammar <u>terms</u> . فهم مفاهيم مصطلحات النحو					
47. Teaching English grammar through using <u>short</u> sentence examples. تدريس قواعد اللغة الانجليزية مستخدمة أمثلة من الجمل القصيرة					
48. Teaching English grammar through using <u>text</u> <u>examples</u> . تدريس قواعد اللغة الانجليزية مستخدمة أمثلة من النصوص					
49. Formulating grammar rules in English. صياغة قواعد النحو باللغة الإنجليزية					
50. Using grammar terms in formulating rules in English. استخدام مصطلحات النحو عند صياغة القواعد النحوية باللغة الانجليزية					
51. Knowing the grammar <u>rules</u> . معرفة قواعد النحو					

Thank you so much for filling in this questionnaire. Please feel free to contact me for further clarification or details. I propose to conduct follow-up interviews. If you are willing to take part in such interviews, please provide your contact number or contact me. If you are willing to take part in such interviews, please provide your contact number or contact me.

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بريدي الإلكتروني :My email address <u>ra9@me.com</u>

Appendix H: STs' questionnaire

Name: You can use your name or pseudonym یمکن ان تستخدمین اسمك او اسم مستعار

Questionnaire

My name is Raniyah Almarshedi, a PhD student at Leicester University in the United Kingdom. I am a lecturer in the English Language Department at Noor University.

The purpose of this questionnaire is to find out about English Language student teachers' views about their *English grammar knowledge*.

The results obtained from this questionnaire will be very helpful and useful for the English Language Department at Noor University in its role of preparing student teachers for their future careers in terms of making them more effective English language teachers.

Instructions:

This questionnaire contains some questions about your educational background and your English grammar knowledge. It is made up of a series of questions which will be quick and easy to answer using tick boxes. I want to emphasize that there are no right or wrong answers.

It will take approximately 10-20 minutes to complete. You need to write your name or pseudonym. Your name/ pseudonym will not be used in anything I write or present. The questionnaire data will be kept secure and treated confidentially.

Your answers will be very valuable for the research. Please read the questions carefully and answer as accurately as possible.

I very much hope that you will feel able to complete this questionnaire. May I thank you, in advance, for your co-operation.

الاسم :رانية المرشدي طالبة دكتوراه في جامعة ليستر في المملكة المتحدة (محاضرة في قسم اللغة الإنجليزية بجامعة نور).

الغرض من هذا الاستبيان هو اكتشاف آراء الطالبات الدارسات فى قسم اللغة الإنجليزية حول *معرفتهن لقواعد اللغة الإنجليزية* . إن النتائج التي سوف يتم الحصول عليها من هذا الاستبيان ستكون مساعدة ونافعة للغاية لقسم اللغة الإنجليزية في جامعة نورمن حيث دور ها في إعداد الطالبات لشغل وظائف في المستقبل و جعلهن معلمات لغة أنجليزية أكثر فاعلية.

تعليمات:

يحتوي هذا الاستبيان على بعض الأسئلة حول خلفيتك التعليمية ومعرفتك بقواعد اللغة الإنجليزية. وهو مكون من مجموعة من الأسئلة التي سوف تكون سريعة وسهلة الإجابة مستخدمة علامات فى المربعات. وأريد التأكد على عدم وجود إجابات صحيحة أو خاطئة. سوف يستغرق استكمال هذا الاستبيان حوالي من 10 إلى 20 دقيقة . الرجاء كتابة اسمك او اسم مستعار . أسمك/الاسم المستعار لن يستخدم في أي شيء أكتبه أو أقدمه. سيتم الاحتفاظ ببيانات الاستبيان بشكل آمن وسوف يتعامل معها بسرية تامة. وأتمنى استكمال هذا الاستبقال الاستبيان . شاكرة لكن حسن تعاونكن مقدماً. Below is an explanation of how some terms are used in this questionnaire:

مما يلى أسفل هو تعريف بالمصطلحات المستخدمة في هذا الاستبيان

مصطلحات النحو:

باللغة الانجليزية تعني Grammar terms على سبيل المثال Verb, noun, adjective, pronoun, clause, etc.

قواعد النحو:

بالغة الانجليزية تعني Grammar rules على سبيل المثال.The simple present rules, if-condition rules, the passive rules, etc

قواعد اللغة الانجليزية:

باللغة الانجليزية تعني English grammar وتشتمل على كلا من المصطلحات والقواعد النحوية

النصوص:

باللغة النجليزية تعني Texts

The first section asks about your educational background.

Please select the option that represents your response to the statement. *(you can tick more than one)*

الجزء الأول من الأستبيان يستفسر عن خلفيتك التعليمية

أختاري الخيار الذى يتناسب معك (بالإمكان أختيار أكثر من خيار)

1) I I	earned grammar <u>terms</u>	تعلمت مصطلحات النحو
	At primary school.	في المدر سة الإبتدائية
	At middle/secondary school.	في المدر سة المتوسطة/المدر سة الثانوية
	At University.	في الجامعة
	From private lessons.	من دروس خصوصية
	From self-study (e.g. reading grammar books, references, using the internet).	من دراسة ذاتية (على سبيل المثال, قراءة كتب القواعد, مراجع, أستخدام الإنترنت)
	From friends.	من الأصدقاء
	From student-teacher training in schools.	من التدريب العملي في المدارس
Othe	rs	أخرى

2) II	learned grammar <u>rules</u>	تعلمت قواعد النحو
	At primary school.	في المدرسة الإبتدائية
	At middle/secondary school.	فى المدرسة المتوسطة/المدرسة الثانوية
	At University.	فى الجامعة
	From private lessons.	من دروس خصوصية
	From self-study (e.g. reading grammar books, references, using the internet)	من در اسة ذاتية (على سبيل المثال, قراءة كتب القواعد, مراجع, أستخدام الانترنت)
	From friends.	من الأصدقاء
	From student-teacher training at schools.	من التدريب العملي في المدارس
Othe	rs	أخرى

الآن أنا أتعلم قواعد اللغة الأنجليزية 3) Now I am learning English grammar By attending university lectures designed to بحضور المحاضرات الجامعية المعدة لتطوير develop my knowledge of English grammar. معرفتي بقواعد اللغة الإنجليزية بدر اسة القواعد بنفسي □ By studying grammar on my own. بالقراءة باللغة الانجليزية وملاحظة كيف يتم By reading in English and noticing how استخدام القواعد grammar is used. بالاستماع إلى اللغة الانجليزية وملاحظة كيف By listening to English and noticing how يتم استخدام القواعد grammar is used. باستخدام القواعد عندما أكتب باللغة By using the grammar when I write in English. الإنجليزية باستخدام القواعد عندما أتحدث باللغة By using the grammar when I speak in English. الانجليزية أنا لا أتعلم قواعد اللغة الانجليزية الأن I am not learning English grammar now. Others أخرى

 I have studied all the four years of my undergraduate degree at Noor University.

□ Yes/ نعم /No ك

لقد درست طوال الأربع سنوات من دراستي الجامعية في جامعة نور

5) During my period of study at university, I have developed my knowledge of grammar <u>terms</u>.

```
□ Yes/ نعم /No ⊔ No
```

لقد طورت معرفتي بمصطلحات النحو خلال فترة در استي بالجامعة

6) During my period of study at university, I have developed my knowledge of grammar <u>rules</u>.

□ Yes/ نعم /No لا No

لقد طورت معرفتي بقواعد النحو خلال فترة دراستي بالجامعة

7) When I was at school, my teacher used <u>short sentences</u> to explain English grammar.

عندما كنت في المدرسة ،كانت معلمتي تستخدم الجمل القصيرة لشرح قواعد اللغة الانجليزية لعم /Yes لعم /No لا No لا ا

8) When I was at school, my teacher used <u>texts</u> to explain English grammar.

عندما كنت في المدرسة، كانت معلمتي تستخدم النصوص لشرح قواعد اللغة الانجليزية لعم /Yes لعم No لا No ا

9) When I was a student at school, my teacher taught us grammar terms.

عندما كنت في المدرسة، كانت معلمتي تدرسنا مصطلحات النحو دائما/always المار always الجيانا /sometimes المار ا / المار ا معالبا / never ا

10) When I was a student at school, my teacher taught us grammar <u>rules</u> in English.

عندما كنت في المدرسة، كانت معلمتي تشرح لنا قواعد النحو باللغة الانجليزية دائما/always الماليا /often المحيانا /sometimes المادر / rarely الماديا /

11) When my teacher gave a grammar rule, she used Arabic.

```
عندما تشرح معلمتي قاعدة نحوية فإنها كانت تستخدم اللغة العربية
دائما/always 
ا غالبا /often 
ا أحيانا /sometimes 
ا نادر / always 
ا
```

12) When my teacher gave a grammar rule in English, she used grammar terms.

The second section is about your views about English grammar knowledge.

الجزء الثاني يستفسر عن أرائك بخصوص المعرفة بقواعد اللغة الانجليزية

For each item, please select the option that represents your response to the statement. الرجاء اختيار الخانة التي تتناسب مع رأيك لكل فكرة	Strongly disagree أرفض بشدة	Disagree لا أوافق	Neither agree nor disagree لاست مع أو ضد	Agree أوافق	Strongly agree أوافق بشدة
13) The best way to learn a second language is by communication. أفضل طريقة لتعلم لغة ثانية هي التواصل مع الأخرين					
14) In order to learn English as a second language, students need to be explicitly taught English grammar. لكى يتعلم الطلاب اللغة الانجليزية كلغة ثانية لابد أن يتعلموا قواعد اللغة الانجليزية بشكل واضح					
15) I will enjoy teaching English grammar. سوف أستمتع بتدريس قواعد اللغة الأنجليزية					
16) As an English teacher, I need to have knowledge of grammar <u>terms</u> . كمعلمة لغة أنجليزية أحتاج أن يكون لدي معرفة بمصطلحات النحو					
17) As an English teacher, I need to have knowledge of grammar <u>rules</u> . كمعلمة لغة أنجليزية أحتاج أن يكون لدي معرفة بقواعد النحو					
18) I will teach English grammar by using <u>short</u> <u>sentences</u> . سوف أقوم بشرح قواعد اللغة الأنجليزية مستخدمة الجمل القصيرة					
19) I will teach English grammar by using <u>texts</u> . سوف أقوم بشرح قواعد اللغة الانجليزية مستخدمة النصوص					
20) I will teach grammar <u>terms</u> . سوف أقوم بتدريس مصطلحات النحو					
21) I will teach grammar <u>rules</u> . سوف أقوم بتدريس قواعد النحو					
22) I am satisfied with my level of knowledge of grammar <u>terms</u> . أنا راضية بمستوى معرفتي لمصطلحات النحو					
23) I am satisfied with my level of knowledge of grammar rules. أنا راضية بمستوى معرفتي لقواعد النحو					
24) I feel that there are some gaps in my knowledge of English grammar. أشعر بأن هذاك بعض النقص في معرفتي لقواعد اللغة الأنجليزية					

How would you rate yourself in each of the following: كيف تقيمين نفسك في كل نقطة من النقاط التالية	Very poor ضعیف جدا	Poor ضعيف	Neither poor nor good وسط	Good جيد	Excellent ممتاز
25) The level of my knowledge of English grammar now. مستوى معرفتي بقواعد اللغة الإنجليزية الأن					
26) My ability to classify English words into for example, nouns, verbs, adjectives, etc. قدرتي على تصنيف الكلمات الانجليزية إلى أسماء ،أفعال ،صفاتعلى سبيل المثال					
27) My ability to provide a full description of grammar terms. (e.g.: plural noun, possessive pronoun, etc.). قدرتى على إعطاء وصف كامل لمصطلحات النحو (على سبيل المثال ،الأسم الجمع،ضمائر الملكيةإلخ)					
28) My understanding of the concepts of grammar <u>terms</u> . فهمي لمفاهيم مصطلحات النحو					
29) My ability to teach English grammar through using <u>short sentence examples.</u> قدرتي على تدريس قواعد اللغة الإنجليزية مستخدمة أمثلة من الجمل القصيرة					
30) My ability to teach English grammar through using <u>text examples</u> . قدرتي على تدريس قواعد اللغة الانجليزية مستخدمة أمثلة من النصوص					
31) Knowing the grammar <u>rules</u> . معرفتي بقواعد النحو					
32) My ability to formulate grammar rules in English. قدرتي على صياغة قواعد النحو باللغة الانجليزية					
33) My ability to use grammar terms in formulating grammar rules in English. قدرتي على استخدام مصطلحات النحو عند صياغة القواعد النحوية باللغة الانجليزية					

I need to develop my ability in: أحتاج أن أطور قدرتي في	Strongly disagree أرفض بشدة	Disagree لا أوافق	Neither agree nor disagree لاست مع أو ضد	Agree أوافق	Strongly agree أوافق بشدة
34) Classifying English words for example into: nouns, verbs, adjectives, etc. تصنيف الكلمات الانجليزية على سبيل المثال إلى: أسماء ،أفعال ،صفاتألخ					
35) Providing a full description of grammar terms. e.g. plural noun, possessive pronoun etc. رعطاء وصف كامل لمصطلحات النحو على سبيل المثال، الأسم الجمع، ضمير الملكيةألخ	,				
36) Understanding the concepts of grammar <u>terms</u> .					
37) Teaching English grammar through using <u>short</u> sentence examples. تدريس قواعد اللغة الانجليزية مستخدمة أمثلة من الجمل القصيرة					
38) Teaching English grammar through using <u>text</u> <u>examples</u> . تدريس قواعد اللغة الانجليزية مستخدمة أمثلة من النصوص					
39) Formulating grammar rules in English. صياغة قواعد النحو باللغة الأنجليزية					
40) Using grammar terms in formulating grammar rules in English. استخدام مصطلحات النحو عند صياغة القواعد النحوية باللغة الانجليزية					
41) Knowing the grammar <u>rules</u> . معرفة قواعد النحو					

Thank you so much for filling in this questionnaire. Please feel free to contact me for further clarification or details. I propose to conduct follow-up interviews. If you are willing to take part in such interviews, please provide your contact number or contact me. If you are willing to take part in such interviews, please provide your contact number or contact me.

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	بريدى الألكترونى :My email address
	ra9@me.com
1	

Appendix I: Interview Schedule for (ETs)

Questions for ETs
• How would you characterise your grammar knowledge (MLK)?
• Do you think that you have the knowledge that you need in your present context?
• When you became a teacher after graduation, did you think that your level of knowledge was enough?
• Have you developed your knowledge since then?
If the answer is 'yes':
• Tell me about the reasons that motivated you to develop your knowledge?
• What are the areas that you developed?
If the answer is 'no':
• Why did you not feel any need to continue developing your knowledge'?
• Are you planning to develop?
If the answer is 'yes':
• Tell me about the reasons that will motivate you to develop?
• What are the areas that you will develop?
If the answer is 'no':
• Why do you not feel any need to develop?
• Do you have any problems associated with teaching grammar? Tell me about any
problems you have.
• How do you feel about your ability to classify English words such as nouns, verbs, adjectives, etc.' and 'provide the full description of grammar terms (e.g. plural noun,
possessive pronoun, etc.)?
• How do you feel about your ability in understanding of the concepts of the grammar terms?
• How do you feel about your knowing of the rules of English grammar?
• How do you feel about your ability in describing the rules to your students?
• How do you feel about your ability in formulating grammar rules in English and using terms?
• Do you teach grammar through the use of texts or just sentence examples? Why?
• Are there any problems that you find in teaching through the use of texts /using sentence examples?
• When you became a teacher how did you feel about having to answer your students'
grammar questions in class?
• NOW how do you feel?
• On a scale from 1 to 10, where 10 is the best, how would you rate your grammar knowledge?

Appendix J: Interview Schee	dule for (STs)
-----------------------------	----------------

Questions for STs
• How would you characterise your grammar knowledge (MLK)?
• You are going to graduate soon, do you think that the grammar knowledge you have now is sufficient?
Have you developed your knowledge?
If the answer is 'yes':
• Tell me about the reasons that motivated you to develop your knowledge?
• What are the areas that you developed?
If the answer is ' no ':
. Why did you not feel any need to continue developing your knowledge'?
• Are you planning to develop?
If the answer is 'yes':
• Tell me about the reasons that will motivate you to develop?
• What are the areas that you will develop?
If the answer is 'no':
• Why do you not feel any need to develop?
• Do you think you might have problems associated with teaching grammar? What might those problems be?
• How do you feel about your ability to classify English words such as nouns, verbs, adjectives, etc.' and 'provide the full description of grammar terms (e.g. plural noun, possessive pronoun, etc.)?
• How do you feel about your ability in understanding of the concepts of the grammar terms?
• How do you feel about your knowing of the rules of English grammar?
• How do you feel about your ability in describing the rules to your students?
• How do you feel about your ability in formulating grammar rules in English and using terms?
• How do you think you will teach grammar - by using sentence examples or by using texts? Why?
• How do you feel about your future students asking you grammar questions in class?
• On a scale from 1 to 10, where 10 is the best, how would you rate your grammar knowledge?

Role – playing card

The role:

Imagine that you are a teacher in your class and you are going to explain an English grammar rule to your students.

Please choose any grammatical rule that you know and explain it to your students.

Take 10 minutes for preparations.

Begin the action.

Here are some grammar rules if you want to choose:

- How to use **the present simple**.
- How to use **the past simple**.
- How to use **singular and plural nouns.**
- How to use **article**.
- Using the **passive**.

Appendix L: The test answer keys

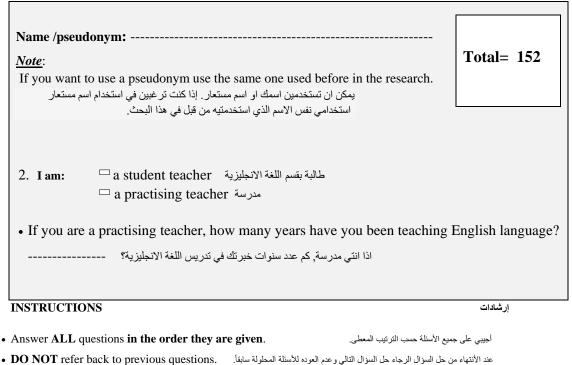
QUESTIONS OF ENGLISH GRAMMAR KNOWLEDGE

Introduction:

This booklet includes questions that are designed to help us estimate the English grammar knowledge. Please provide the information requested below. This information is for research purposes only. Your name/ pseudonym will not be mentioned in any papers or presentations about this research. It will take approximately an hour to answer these questions. The results will be treated as confidential.

مقدمة

هذا الكتيب يحتوى على اسئلة صممت لكي تساعدنا على تقدير مدى الألمام بقواعد اللغة الإنجليزية. الرجاء تقديم المعلومات المطلوبة أدناه. هذه المعلومات لأغراض البحث فقط. أسمك/الاسم المستعار لن يستخدم في أي شيء يكتب او يقدم بخصوص هذا البحث . يستغرق حل هذا الأسئلة حوالي ساعة. سيتم التعامل مع النتائج بسرية تامة.



- يمكنك تسليم الكتيب عند الانتهاء.
- You can submit the booklet when you are finished.

Question (1):

Read the following sentences, each of which contains an underlined grammar mistake. For each sentence, what is *the rule* that has been broken?

```
Note: Write the rules in Arabic and again in English.
                        اقرأي الجمل التالية، كل منها يحتوي على خطأ نحوي تحته خط. ماهي القاعدة التي لم يتم الألتزام بها في كل جملة؟
اكتبي القاعدات مرة باللغة العربية ومرة اخرى باللغة الانجليزية.
      Example:
          • My father work at the bank.
                              عندما يكون الفاعل اسم مفرد. تضاف (-s/-es-) الى الفعل المضارع البسيط
          Rule in Arabic :
          Rule in English: When the subject is a singular noun, a final (-s/-es) is added to a present tense verb.
                Note: [Do NOT write : Change 'work' to 'works']
                                                         Total (Arabic + English)= 21
                                                                Total (only English)=14
                                                          See table 3-7: The scoring scale
                                                           3
 1. Sarah has taken a taxi to the airport yesterday.
       1
           The rule in Arabic:
                                           زمن الماضى البسيط يستخدم للحديث عن فعل بدأ وانتهى في الماضي
           The rule in English: The simple past is used to talk about an action that began and ended in
    the past (completed action). I.e. The present perfect is not used with finished time.
                                            3
2. I know a man which we can help.
            which ضمير الوصل يستخدم/ يشير الى الأشياء. "The rule in Arabic:
                              who ضمير الوصل يستخدم/ يشير الى الأشخاص
       2
            The rule in English: The relative pronoun 'which' is used for things. The relative pronoun
     'who' is used for people. I.e. 'which' refers to things, 'who' refers to people ..
```

3 3. $\underline{\mathbf{A}}$ man with white hair is my father. The rule in Arabic: أداة التعريف the تستخدم للإشارة الى اسم/ أسماء محدودة/التي نتكلم عنه 2 The rule in English: The definite article 'the' is used to indicate the specific noun/nouns that we are talking about. 3 4. Ali is the **taller** of the five brothers. 1 The rule in Arabic: صيغة التفضيل من الصفة تستخدم للمقارنة بين اكثر من شخصين 2 The rule in English: The superlative form of adjective is used for comparing more than two people/things 3 5. He should to see the new James Bond movie. الأفعال الناقصة تتبع مباشرة بالمصدر :The rule in Arabic 1 2 The rule in English : Modals are followed immediately by an infinitive/ the basic form of a

verb/ the bare infinitive. I.e. After a model verb, we use an infinitive.

6. Water <u>is boiling</u> at 100 degrees Celsius.



<u>to which it refers.</u>

Question (2):

A: What grammar term would you use to describe the <u>part of speech</u> of the item underlined in each of the sentences?

ماهو مصطلح النحو المناسب لوصف نوع (the part of speech) للعنصر الذي تحته خط في كلا من الجمل التالية؟

Note:

3- For each item *provide a full description*. اعطي وصف كامل لكل عنصر

4- Each item will be classified *using two words* (e.g. possessive pronoun) کل عنصر سوف یصنف باستخدام کلمتین one word + one word = two words

	Example: • This umbrella is <u>mine</u> . <u>Possessive</u> pronoun	Т	otal =14
		Fully correct= 2	Wrong= 0
		Partly correct= 1	Not answered= Blank
1.	Ann put her <u>books</u> on the desk. 2 Plural 1 noun 1 Countable 1 noun 1		
2.	Once the glue is dry you <u>should</u> place the p	hotograph in the co	prrect position. 2

modal 1 auxiliary 1

	<u>modal 1 verb 1</u> auxiliary 1 verb 1 modals 1 (ONLY GET 1)
3.	Try to eat less and get more exercise. 2
	coordinating 1 conjunction 1 clause 1 linker 1 coordinator 1 (ONLY GET 1)
4.	I knew it was <u>him</u> as soon as I heard his voice. 2
	object 1 pronoun 1 personal 1 pronoun 1 third-person 1 pronoun 1
5.	Roger is the last surviving member of his family. 2
	collective 1noun 1singular 1noun 1countable 1noun 1
	Boeing's new plane is faster and more luxurious than anythin

6. Boeing's new plane is <u>faster</u> and more luxurious than anything else they have ever produced.

comparative 1adjective 1predicative 1adjective 1

7. I have <u>some</u> in the cupboard.

indefinite 1 pronoun 1

B-What grammar term would you use to describe the item underlined in each of the sentences?

ماهومصطلح النحو المناسب لوصف العنصر الذي تحته خط في كلا من الجمل التالية؟ Note: کل عنصر ہو اما: <u>clause</u> اُو <u>phrase</u> اُو • Each item is a kind of: <u>clause</u>, or <u>phrase</u>, or sentence <u>sentence</u> اعطي وصف كامل لكل عنصر • For each item provide a full description. Example: • He went to bed **because he was sleepy**. adverb clause Total = 82 1. I thanked the girl **who helped me**. Wrong=0 Fully correct= 2 Partly correct= 1 Not answered= Blank Adjective/relative 1 clause 1 dependent 1 clause 1 subordinate 1 clause 1 defining adjective/relative 1 clause 1 2 2. They are testing some new equipment. noun 1 phrase 1 2 3. A. Tom, stop doing that! B. Sorry. minor 1 sentence 1 adjective 1 phrase 1 2 4. Billy did not listen to what Mary said. noun 1 clause 1 dependent 1 clause 1 subordinate 1 clause 1

C- What grammar term would you use to describe the <u>grammatical role</u> of the underlined item in each of the sentences?

• For each item provide a full description	اعطي وصف حامل لحل عنصر . 11	Total = 10
	Fully correct= 2	Wrong= 0
	Partly correct= 1	Not answered= Blank
Example:		
• <u>Ellen</u> has been working all day. <u>su</u>	<u>bject</u>	
. The doctor sent the patient a birthe	lay card. 2	
• •• , 4 •• , 4		
indirect 1 object 1		
. The smart kids get good grades and	go off to college. 2	
<u>Verbs 2</u>		
. Many of us consider her the best ca	andidate 2	
. Many of us consider her <u>the best cr</u>	<u>anuluate</u>	
object 1 complement 1		
. I would like to apologize for my be	ehaviour vesterday	
. I would like to applogize for my be		
Verbs 2		
<u>VCLUS 2</u>		
	2	
. To forget to wear shoes is embarra	assing. 2	
subjects 2		

Question 3:

Read the following text and then answer the questions.

اقرأي النص التالي ثم اجيبي على الأسئلة

The text:

My father rarely left the house before nightfall, as the people of Granada were short-tempered during the daytime. Quarrels were frequent, and a sombre bearing was regarded as a sign of piety; only a man who was not keeping the fast could smile under the fiery heat of the sun.

(From Maalouf, A. (1994) Leo the African. London: Abacus)

short-tempered: سريعين الغضب Quarrels: المشاجرات تحمل المشقة:sombre bearing علامة على التقوى :sign of piety

A: What grammar terms would you use to describe the following items in the text?

Note:

ماهي مصطلحات النحو المناسبة لوصف العناصر التالية في النص؟

- Each item is a kind of: <u>clause</u>, or <u>phrase</u>, or <u>sentence</u>
- For each item provide a *full description*.

كل عنصر هو اما: <u>clause</u> أو <u>phrase</u> أو <u>sentence</u> اعطي وصف كامل لكل عنصر

<i>Example:</i> • My father rarely left the house before nightfall,	independent clause	Total = 10
Γ	Fully correct= 2	Wrong= 0
	Partly correct= 1	Not answered= Blank

1. who was not keeping the fast ------ 2

Adjective/relative 1 clause 1 dependent 1 clause 1 subordinate clause 1 defining adjective/relative 1 clause 1

2. the fast _____ 2

noun 1 phrase 1

3. Quarrels were frequent _____ 2 main/independent 1 _____ clause 1

4.	My father rarely left the house before nightfall, as the people of Granada were short-
	tempered during the daytime 2 complex 1 sentence 1
5.	the fiery heat of the sun 2
	noun 1 phrase 1

B-What grammar terms would you use to describe the <u>grammatical role</u> of the following items in the text?

ماهي مصطلحات النحو المناسبة لوصف نوع (the grammatical role) للعناصر التالية في النص؟

Note: • For each item provide a full description. اعطي وصف كامل لكل عنصر ا

Total = 10

Example	:	
•	Quarrels	subjec

Fully correct= 2	Wrong= 0	
Partly correct= 1	Not answered= Blank	

- 1. a sign of piety <u>direct 1 object 1</u> 2
- 2. my father **subject** 2
- 3. before nightfall **adverbial** 2
- 4. the people of Granada subject 2
- 5. could smile verb 2

<u>Question 4:</u> Read the following text and then answer the question.

أقري النص التالي ثم اجيبي على السؤال

The text:

If we are to provide learners with language experience which offers exposure to the most useful patterns of the language, we might as well begin by researching the most useful words in the language.

تعرض :exposure	(From Willis, D. 1990 <i>The Lexica</i> أنماط :patterns	<i>d Syllabus</i> . London: Harper Collins, p. 38) Total = 40
	Fully correct= 2	Wrong= 0
	Partly correct= 1	Not answered= Blank

From the above text, select <u>ALL</u> the items that exemplify the grammar term requested.

من النص أعلاه اختاري **كل** العناصر التي تمثل مصطلح النحو المطلوب.

<u>Example:</u> Adverbials	 with language experience which offers exposure to the most useful patterns of the language. to the most useful patterns of the language. as well by researching the most useful words in the language in the language
subjects	 we (line1) 2 which (line2) 2 we (line2) 2
verbs objects	 are 2 provide 2 offers 2 might 2 begin 2 researching 2 learners 2 exposure 2 the most useful words in the language 2
adjective(relative) clauses	• which offers exposure to the most useful patterns of the language 2
noun phrases	 learners 2 language experience which offers exposure to the most useful patterns of the language 2 exposure to the most useful patterns of the language 2 the most useful patterns of the language 2 the language 2 the most useful words in the language 2 the language 2 the language 2 the language 2

Question 5: Select the item/items that exemplifies the grammar term requested. اختاري العنصر/العناصر الي تمثل مصطلح النحو المطلوب.

	احداري العلصار /العناصر الي لملل مصطلح اللحو المطلوب.
	Example: This umbrella is mine. (possessive pronoun)
	Total = 32
	Fully correct= 2 Wrong= 0
	Partly correct= 1 Not answered= Blank
1.	We have received information that Ali may have left the country. (countable noun)
	Country 2
2.	We will go swimming tomorrow. (subject)
	<u>we_2</u>
3.	They have had new windows put in. (auxiliary verb)
	have 2
4.	We enjoyed the party at your house. (preposition)
	<u>at 2</u>
5.	My friend wrote a poem last night. (object)
	a poem_2
6.	Police are now satisfied that her death was an accident. (adjective)
	satisfied 2
7.	I do not feel very well. (adverb)
	very_2
8.	It will take more than a morning to finish the decorating. (indefinite article)
	<u>a 2</u>
9.	He went to bed because he was sleepy. (conjunction)

because 2

10. The people in the bus escaped through the emergency exit. (subject)

The people in the bus 2

11. Run towards the finish line. (verb)

<u>run 2</u>

12. No one will ever know who is responsible. (direct object)

Who is responsible 2

13. After he took lessons, George could swim well. (adverb clause)

After he took lessons 2

14. She knew where Mary lived. (independent /main clause)

She knew 2

15. I met your sister last week. (noun phrase)

your sister 2

16. My mother and I give each other a hard time. (reciprocal pronoun)

each other 2

Question (6):

Read the following sentences, each of which contains an underlined grammar mistake. For each sentence, choose the correct rule that has been broken.

اقرأي الجمل التالية، كل منها يحتوي على خطأ نحوي تحته خط. اختاري القاعدة الصحيحة التي لم يتم الألتزام بها في كل جملة.

		Tot	al = 7
Wrong= 0	Not answered= B	lank	

1. Please be quiet. The children slept.

correct=1

- When the action of the verb is happening at the moment of speaking, the verb must be in the simple present.
- When the action of the verb is happening at the moment of speaking, the verb must be in in the present continuous. *1*

- When the action of the verb is happening at the moment of speaking, the verb must be in in the present perfect.
- \circ I do not know the rule.
- 2. I drank **many** coffee.
- o 'many' is used only with countable nouns. 1
- 'many' is used only with uncountable nouns.
- o 'many' is used only in negative sentences.
- \circ I do not know the rule.
- 3. You haven't finished the work, haven't you?
- If the main part of the sentence is in the present perfect, the question tag is the future perfect.
- If the main part of the sentence is negative, the question tag is positive. 1
- If the main part of the sentence has an auxiliary verb, the question tag is made with no auxiliary verb.
- \circ I do not know the rule.
- 4. My sister can <u>did</u> it.
- Modals are followed by a present participle.
- \circ Modals are followed by the present simple form of the verb.
- \circ Modals are followed by an infinitive. 1
- \circ I do not know the rule.
- 5. I <u>finish</u> typing the report two hours ago.
- When the action began and ended at a particular time in the past, the verb must be in the past continuous.
- When the action began and ended at a particular time in the past, the verb must be in the present perfect.
- When the action began and ended at a particular time in the past, the verb must be in the past simple. 1
- \circ I do not know the rule.
- 6. The only excuse that he gave for his actions <u>were</u> that he was tired.
- The verb must be in the passive form.

• The verb must agree with the subject. 1

- The verb must be in the infinitive.
- \circ I do not know the rule.
- 7. I hope seeing you again soon.
- \circ hope' is a verb that is followed immediately by an infinitive. 1
- \circ 'hope' is a verb that is followed immediately by a passive verb.
- o 'hope' is a verb that is followed immediately by the present simple form of a verb.
- \circ I do not know the rule.

Thank you

Appendix M: A sample of a data set analysis.

ETs	No	Section	Section Full marks	Part Full marks	Section Marks		Part	Part Total Mark		Questions		Exam Full Marks for each	Marks According to Levels			Full Marks										
								Q2A:Productive Knowledge of terms 2.0		14																
	1									Q2B:Productive Knowledge of terms at sentence level		8	Productive Knowledge of terms at sentence level	s 8.0	25.00%	32										
				52			Part 1:Productive Knowledge of	15.0	28.85%	28.85%	28.85%	28.85%	28.85% (Gr Q34	28.85%	28.85%	28.85%	28.85%	28.85%	Q2C:Productive Knowledge of terms (Grammar Roles) at sentence level	3.0	10					
		Section 1: Grammar Terms	124		46.0		terms																			
		Terms			40.0	37.10%			Q3B:Productive Knowledge of terms (Grammar Roles) at text level		5.0	10	at text level	7.0	33.0070	20										
				72.			Part 2:Receptive	21.0	10.0 (0)		Q5:Receptive Knowledge of terms at sentence level	20.0	32	Receptive Knowledge of terms	20.0	62.50%	32									
				12			Knowledge of Terms	31.0		3.06% Q4 :Receptive Knowledge of terms at text level		40	Receptive Knowledge of terms	11.0	27.50%	40										
		Section 2:		21			Part 1:Productive Knowledge of rules	4.5	21.43%	Q1	4.5	21														
		Grammar Rules	28	28	28	28	7	7.5 26		Part 2:Receptive Knowledge of Rules	3.0	42.86%	Q6	3.0	7											
		Sections	total M	ark	53.5	35.20%	Parts total Mark	53.5		Questions total Mark	53.5	152														

Fotal Number of Teachers	Sections			Parts				Marks According to Levels	Total Marks	% total
6		Total Marks	% total		Total Marks	% total		Productive knowledge of terms at sentence level	739.00	37.9%
	Grammar Terms	2829.00	37.4%	Productive knowledge of terms	1141.00	36.0%		Productive knowledge of terms at text level	402.00	33.0%
	Grammar Rules	756.00	44.3%	Receptive knowledge of terms	1688.00	38.4%		Receptive knowledge of terms at sentence level	1102.00	56.5%
	Total marks in the test	3585.00	38.7%	Productive knowledge of rules	457.00	35.7%		Receptive knowledge of terms at text level	586.00	24.0%
				Receptive knowledge of rules	299.00	70.0%				
				Mean	58.77					

Appendix N: An example of consent form.

CONSENT FORM

The researcher

My name is Raniyah Almarshedi. I am a PhD student at Leicester University in the United Kingdom, and also a lecturer in the English Language Department at Noor University.

Your participation in this research would include:

- Being interviewed.
- Filling in a questionnaire.
- Answering questions designed to establish English grammar knowledge.

The purpose of this research is to help us estimate the extent of English grammar knowledge, and to determine English Language student teachers' views about their English grammar knowledge.

This information is for research purposes only, and the results will be treated as confidential. Your name/ pseudonym will not be used in any papers or presentations about this research. Additionally, you are entitled to withdraw your consent at any time.

If you have any questions or concerns, please feel free to contact me at: rmaa1@le.ac.uk.

Participant's signature	Date

Researcher's Signature

Date