Applications and Beliefs of Second Language Teachers' Linguistic Knowledge and Awareness

by

Karen Foltz

A Dissertation Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy

Approved June 2018 by the Graduate Supervisory Committee:

Aya Matusda, Co-Chair
Claire Renaud, Co-Chair
Mark James

ARIZONA STATE UNIVERSITY
August 2018
ABSTRACT

For this dissertation, teacher linguistic awareness (TLingA) involves teacher linguistic knowledge, teacher language awareness (TLA), and teacher cognition for second language (L2) teachers. Teacher linguistic knowledge is an understanding of how language functions and is compiled within the different areas of linguistics. And TLA is the knowledge that educators possess of the structural and fundamental system of language. Both help L2 teachers with different aspects of teaching. Additionally, teacher cognition involves what teachers know, their beliefs, and thought processes. Lastly, TLingA includes the conscious application of teacher linguistic knowledge.

In order to understand how strong of a role linguistics plays in language instruction, I evaluate how language teachers use their linguistic knowledge, and what factors affect the application of that knowledge. This paper aims to fill this gap in understanding how much and what factors affect L2 teachers’ application of linguistic knowledge by interviewing L2 teachers at an intensive English program at a university in the Southwestern United States. To do so, the study uses interviews with open-ended questions involving hypothetical teaching scenarios that probe different areas of linguistics: phonology, grammar, pragmatics, and sociolinguistics.

The general findings suggest that teachers use their linguistic knowledge and awareness in their teaching: such as, with sociolinguistics, in how they control the classroom and interact with students; with phonology, in how they teach pronunciation; with grammar, in how they edit students’ writing and meet with students about their writing; and with pragmatics, in how they teach vocabulary usage and formal requests. Additionally, the results suggest that years of experience appear to be the largest factor in
the application of linguistic knowledge and that contextual factors, like time and curriculum goals, also play a role. Moreover, in relation to teacher cognition, how a L2 teacher conceptualizes or defines linguistic terms also seemed to affect their awareness of the application of linguistic knowledge. In conclusion, it appears that L2 teachers’ linguistic knowledge and TLingA help them to evaluate their students’ needs and influence their lesson planning.
ACKNOWLEDGMENTS

There are a myriad of people and institutions I should thank for helping me to finish this dissertation or even motivate me to get my PhD. I want to thank NYU Steinhardt’s TESOL program for getting me interested in linguistics and the University of Delaware’s linguistics department for fueling my interest beyond a MA degree. Additionally, I would like to thank the ASU English department for the Summer Completion Fellowship that helped me to have the time to finish the final edits on my dissertation, so I could move on with my professional career.

I would specifically like to thank the members of my committee for putting up with my multiple edits and many grammar mistakes. Thank you Dr. Aya Matsuda for your patience in guiding me with your global questions and comments that got me thinking about the different themes of my dissertation. Moreover, I really enjoyed your Introduction to Applied Linguistics course which help me to come up with the beginning research for this dissertation. Thank you to Dr. Mark James for your insightful questions during the proposal stages of this dissertation. Thanks to Dr. Claire Renaud for being the best editor I have ever had and helping me to make connections in my research I did not know were there. Additionally, thanks for guiding me through the other stages of getting my PhD. Thank you!

I would like to thank the participants in my study, for without them there would be no study. Thanks to all of my friends and family for supporting me through this long process. Finally, thanks to David for being patient with me while I grunted and groaned through each paper and stage.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>LIST OF TABLES</th>
<th>vii</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF FIGURES</td>
<td>viii</td>
</tr>
</tbody>
</table>

## CHAPTER

1. INTRODUCTION ................................................................. 1

2. THEORETICAL FRAMEWORK: DEFINING CONCEPTS ................... 6
   - Overview of Teacher Linguistic Awareness ...................... 6
   - Teacher Knowledge ..................................................... 8
   - Teacher Linguistic Knowledge ..................................... 11
   - TLA ........................................................................... 16
   - Teacher Cognition ..................................................... 20
   - TLingA ...................................................................... 25

3. LITERATURE REVIEW .......................................................... 28
   - Teacher Knowledge—PCK ............................................. 28
   - TLA ........................................................................... 31
   - Teacher Cognition and Teacher Beliefs ......................... 36
   - Teacher Training ....................................................... 48
   - Application of Linguistic Knowledge ............................. 57

4. METHODOLOGY ................................................................. 64
   - Research Questions ..................................................... 64
   - Methodology .............................................................. 64
   - Pilot Study ............................................................... 70
<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants</td>
<td>73</td>
</tr>
<tr>
<td>Data Collection</td>
<td>76</td>
</tr>
<tr>
<td>Analytic Procedure</td>
<td>77</td>
</tr>
<tr>
<td>5 FINDINGS</td>
<td>81</td>
</tr>
<tr>
<td>Teacher Knowledge, Subject Knowledge, and Content Knowledge</td>
<td>81</td>
</tr>
<tr>
<td>Definition and Influence of Linguistic Awareness</td>
<td>83</td>
</tr>
<tr>
<td>Factors that Affect Teacher Knowledge and Awareness</td>
<td>87</td>
</tr>
<tr>
<td>Personal Perceptions and Conceptualizations of Teacher Training</td>
<td>92</td>
</tr>
<tr>
<td>Categories of TLingA</td>
<td>95</td>
</tr>
<tr>
<td>Factors that Did Not Seem to Play a Role</td>
<td>111</td>
</tr>
<tr>
<td>6 GENERAL DISCUSSION</td>
<td>113</td>
</tr>
<tr>
<td>Answer to Research Question 1</td>
<td>113</td>
</tr>
<tr>
<td>Answer to Research Question 2</td>
<td>115</td>
</tr>
<tr>
<td>Answer to Research Question 3</td>
<td>128</td>
</tr>
<tr>
<td>Answer to Research Question 4</td>
<td>130</td>
</tr>
<tr>
<td>7 CONCLUSION</td>
<td>137</td>
</tr>
<tr>
<td>Summary of Findings</td>
<td>137</td>
</tr>
<tr>
<td>Limitations</td>
<td>138</td>
</tr>
<tr>
<td>Implications</td>
<td>139</td>
</tr>
<tr>
<td>Future Studies</td>
<td>141</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>143</td>
</tr>
</tbody>
</table>
### APPENDIX

<table>
<thead>
<tr>
<th></th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>PILOT STUDY INTERVIEW QUESTIONS</td>
</tr>
<tr>
<td>B</td>
<td>INTERVIEW QUESTIONS</td>
</tr>
</tbody>
</table>
### LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Demographic Description of Participants</td>
<td>74</td>
</tr>
<tr>
<td>2.</td>
<td>Categorization of Interview Questions Based on Research Questions</td>
<td>79</td>
</tr>
<tr>
<td>3.</td>
<td>Summary of Answers of What Future L2 Teachers Need to Know</td>
<td>93</td>
</tr>
<tr>
<td>4.</td>
<td>Summary of Answers to Distinguishing Between Two Similar Sounds</td>
<td>97</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>How Teacher Cognition, Knowledge, and Awareness Interact to form TlingA..</td>
<td>7</td>
</tr>
<tr>
<td>2.</td>
<td>Overlapping Concepts of TLA, Language Proficiency and PCK .....................</td>
<td>18</td>
</tr>
<tr>
<td>3.</td>
<td>Teacher Cognition in Language Teaching .............................................</td>
<td>21</td>
</tr>
<tr>
<td>4.</td>
<td>Four Hypothetical Teaching Scenario Questions .....................................</td>
<td>76</td>
</tr>
<tr>
<td>5.</td>
<td>Four Matched Linguistic Questions ................................................................</td>
<td>77</td>
</tr>
</tbody>
</table>
CHAPTER 1
INTRODUCTION

This dissertation is about the application of linguistic knowledge for second language (L2) teachers of English and their awareness of the application of that knowledge. The problem at hand is that only two studies have looked at the connection between linguistic training in a Master’s in Arts in teaching English to speakers of other languages (MATESOL) programs and the application of linguistic knowledge. First, Grabe, Stoller, and Tardy (2000) found, in a case study of a MATESOL graduate, that she applied her knowledge of morphology, phonology, discourse analysis, and sociolinguistics, but it was very difficult to tease apart her methodology training from her linguistics training. Second, LaFond and Dogancay-Aktuna (2009) conducted a survey study of MATESOL graduates from novice to experienced teachers. They found that their linguistic training helped them with language awareness, professional development and lesson planning, but it was difficult to find specific examples of how they applied their linguistic knowledge. A few teachers in their study discussed the application of syntax, phonology, morphology, semantics, and sociolinguistics. However, there was no chance for follow-up questions to describe in detail how they applied that knowledge. Therefore, in order to understand how teachers apply linguistic knowledge in their teaching, it is important to see what areas influence and make up linguistic knowledge and if teachers are aware that they are applying that knowledge. In other words, this dissertation describes and explores teacher linguistic awareness (TLingA).

For this dissertation, TLingA is defined as being composed of teacher linguistic knowledge, teacher language awareness (TLA), and teacher cognition for L2 teachers.
Teacher linguistic knowledge itself is understanding (a) the different areas of linguistics, such as phonology, pragmatics, syntax, sociolinguistics and so on, (b) how languages function, and (c) the underlying structure of language. This linguistic knowledge can assist L2 teachers with lesson planning and other aspects of teaching, and my definition of linguistic knowledge draws from the Summer Institute of Linguistics’ website (2015), Grabe, Stoller, and Tardy (2000), LaFond and Dogancay-Aktuna (2009), and Thornbury (1997).

More broadly, Johnston and Goettsch (2000) and Freeman and Johnson (1998) describe teacher knowledge as something that develops from a teacher’s own experiences overtime in and out of the classroom, from professional coursework, to professional development. Teacher cognition is defined as what teachers know, their beliefs and their thought processes, which can affect lesson planning and beyond (Borg, 2003a, 2006). It is something that is unobservable. Borg (2003a, 2006) also defines teacher cognition as the connection between beliefs and practices. In some cases, as Phipps and Borg (2009) explain, there can be a slight disconnect between beliefs and practices, such as in the area of what teachers say they do and what is observed in the classroom. There are four areas of influence that Borg (2003a, 2006) describes: schooling, professional coursework, contextual factors, and classroom practice. Teacher language awareness (TLA), according to Thornbury (1997), can be defined as knowledge that educators possess of the structural and fundamental system of language and that assists them with teaching. And according to Andrews (2003, 2007), it can be defined as more than just having the knowledge, it is about having the ability to know how and when to use that knowledge. Moreover, Andrews (2003, 2007) describes TLA as a conscious awareness having to do
with grammar knowledge and application, which can affect preparation of lessons, interactions in the classroom, evaluation of student needs, and the language that teachers use in the classroom. Lastly, I propose that TLingA involves the conscious application of teacher linguistic knowledge with the influence of TLA and teacher cognition. In other words for TLingA, teacher cognition is the connection between beliefs and practices in relation to linguistic knowledge with the awareness of applying that linguistic knowledge in teaching.

While existing studies have clearly established the need for linguistic training in MATESOL programs (Govardhan, Nayar, & Sheorey, 1999; Vásquez & Sharpless, 2009; Murphy, 1997) and evaluated TLA in English as a Foreign Language (EFL) teachers in relation to grammar awareness (Andrews, 2006), these studies have not focused on measuring L2 teachers’ awareness of the application of linguistic knowledge and the connection to teacher cognition. This study aims to do that by using interviews that involve hypothetical teaching scenarios with different areas of linguistic knowledge. The interview questions ask about different factors that may affect the application of that knowledge, such as language learning experience, years of experience, educational background. Each hypothetical teaching scenario question is paired with a question asking teachers how that area of linguistics may influence their teaching. These linguistic areas include phonology, pragmatics, grammar, and sociolinguistics. The participants in the study consist of 12 teachers, six with over ten years of experience, three with six to ten years of experience, and three with five or fewer years of experience who worked at an intensive English program (IEP) in the Southwest United States. The participants in
The study were finishing up or had graduated with an MA in TESOL, Applied Linguistics, or a related field.

The results of this study suggest that years of experience seem to be the largest factor in the application of linguistic knowledge and that contextual factors, like time and curriculum goals, also play a role. Additionally, how a L2 teacher conceptualizes linguistic terms can affect their awareness in the use of linguistic knowledge. Conceptualization of linguistic terms means how one teacher defines or interprets how a linguistic term is defined. This is connected to teacher cognition, meaning what a teacher believes is the meaning of a linguistic term. Therefore, it is assumed that if a teacher believes a linguistic term has a certain meaning, they may connect that meaning to their practices in the classroom. This may be connected to their professional coursework or their years of experience in the classroom (Borg 2003a, 2006). Overall, it was found that if L2 teachers conceptualize linguistic terms like phonology and pragmatics a certain way, they might be unaware that they are applying that type of linguistic knowledge in their teaching. In other words, the results suggest a connection between beliefs and practices in the L2 classroom in relation to the conceptualization of linguistic terms. It is important to understand this connection in order to see how teacher training in different types of teacher knowledge is applied in the classroom and what influences that application.

This dissertation is organized in the following way: Chapter 2 defines the theoretical framework in relation to defining the terms that make up TLingA. Chapter 3 reviews the empirical studies in the literature review in order understand what research has already been conducted in this area. Chapter 4 describes the methodology behind the
study in order to understand the research questions, data collection and analysis of this study. Chapter 5 presents the general findings. Chapter 6 discusses the importance of the findings in relation to research. Finally, Chapter 7 concludes the dissertation by describing a summary of the findings, the limitations, the implications, and the areas for future research.
CHAPTER 2
THEORETICAL FRAMEWORK: DEFINING CONCEPTS

Introduction

This study is about teacher linguistic awareness (TLingA). In this chapter, I will define what TLingA is and the terms associated with it. I will define teacher knowledge, awareness, teacher language awareness, teacher cognition, and teacher linguistic knowledge, which will lead to a definition of TLingA.

Overview of Teacher Linguistic Awareness

For this paper, I will define TLingA as involving teacher knowledge, awareness, and cognition for second language (L2) teachers. More specifically TLingA is made up of teacher linguistic knowledge, teacher language awareness (TLA), and teacher cognition. Teacher linguistic knowledge will be defined as an understanding of how language functions. It is compiled within the different areas of linguistics, which helps with language teaching in different aspects and beyond. This definition of teacher linguistic knowledge will draw from the Summer Institute of Linguistics’ website (2015), Grabe, Stoller, and Tardy (2000), LaFond and Dogancay-Aktuna (2009). I will describe TLA as a combination of Thornbury’s (1997) definition of TLA—knowledge that educators possess of the structural and fundamental system of language and that assists them with teaching—and Andrews’s (2003, 2007) definition of TLA—the interaction of different areas of knowledge. Additionally, I will present Borg’s (2003a, 2006) definition of teacher cognition involving what teachers know, their beliefs, and thought processes. Lastly, I will describe that TLingA involves the conscious application of teacher linguistic knowledge with the influence of TLA and teacher cognition.
Figure 1 below shows my interpretation of the interaction between teacher knowledge, teacher cognition, and teacher awareness and how that interaction influences TLingA. Each area influences the other and where that influence stops is very difficult to identify. This is why there is overlap between the three areas flowing and encompassing into TLingA such that teacher cognition involves what teachers know, but this type of knowledge is more of an understanding of that knowledge than the knowledge itself. To put it simply, the more experience a teacher has, the more knowledge they acquire, and the more thought processes they have about that knowledge with more of an understanding of how to apply it, while developing the awareness of how and when to apply it. Each part of TLingA plays on each other with teachers constantly developing each part as they teach in different classes in different contexts.

Figure 1. How Teacher Cognition, Teacher Knowledge, and Awareness interact to form TLingA
The point of this figure is a visual representation of the three major parts of TLingA and how they interact with one another. This leads into defining the first term of the diagram: teacher knowledge.

**Teacher Knowledge**

The idea of teacher knowledge has changed and evolved over time. Traditionally, teacher knowledge was believed to be a set of skills, tasks, routines, and procedures to be learned and transferred from one teacher to the next, in any context. It was not considered a complex set of different types of knowledge (Johnson & Golobek, 2002). However, nowadays, it is believed that teacher knowledge comes from a wide variety of areas and is made up of different types of knowledge. Johnston and Goetsch (2000) and Freeman and Johnson (1998) argue that it is a type of social construct that develops over time. It comes from each teacher’s own experiences in each classroom, professional development and training, and from different teaching communities. Teachers reflect upon each new experience, which may slightly change their classroom practices, and sometimes this occurs with each new group of students (Johnston & Goetsch, 2000). As a teacher’s level of knowledge increases, so does their ability to organize their different types of knowledge in their heads where they can retrieve different aspects quickly and easily or know where to go to get answers (Tsui, 2005). Additionally, teacher knowledge helps teachers to identify the needs and/or problems of their students, which affects their pedagogical choices.

Teacher knowledge can be broken down into 7 different categories of knowledge. These categories include knowledge of the content or subject itself, knowledge of general pedagogy, knowledge of curriculum, knowledge about students, knowledge about the
different contexts of teaching, knowledge about the goals of education, and pedagogical content knowledge (PCK) (Shulman, 1987). First, content knowledge is knowledge about the particular topic itself, such as knowledge of math for a math teacher. Next, knowledge of general pedagogy means understanding teaching in general, like classroom management and how to write and present lessons. In addition, knowledge of curriculum corresponds to understanding what information needs to be presented and when and what materials are the best to do that. Also, knowledge of students is understanding what students need, how best to help them, and their characteristics. Moreover, knowledge about the different contexts of teaching means understanding different educational settings and systems and how that affects the classroom. Furthermore, knowledge about the goals of education is understanding the purpose and the final objectives for each course and classroom. Finally, PCK can be described as a mixing of pedagogy with content to give teachers a special professional understanding that can help them to assist their students. In other words, PCK is a mixture of ‘knowledge’, ‘skill’, ‘understanding’, and, from my interpretation of what Shulman (1987) explains, it includes awareness, which assists teachers with developing tasks to help students in all areas of need and knowledge development. Additionally, Bartels (2005) explains how the idea of transferring content knowledge directly into instructors’ teaching can be problematic if the teacher lacks other types of teacher knowledge like PCK, knowledge about their students and their needs, and knowledge about the different contexts of teaching and the educational system. Teacher training needs to have concrete activities where the teachers can see its direct application in the classroom, not just abstract concepts. Additionally, the training needs to happen over a significant period of time, not just a short one-day
workshop in order to develop these different types of teacher knowledge. Institutional and time constraints can limit the transfer of content knowledge into the classroom for many pre-service and in-service teachers because institutional requirements may restrict teachers’ time in the classroom to apply and develop content knowledge, or teachers may have to follow a strict curriculum with no chances of applying their knowledge. Thus, there is a variety of types of teacher knowledge that teachers draw upon, with each context affecting the application of that knowledge differently, even with L2 teacher knowledge.

For L2 teachers, knowledge of content consists of two parts: knowledge about language (KAL) and knowledge of language. KAL is lexical, phonological, grammatical, and pragmatic, and consists of social features. This type of knowledge can be learned, applied, and consciously used, which is easily accessible to teachers (Ellis, 2004). KAL is more about understanding how the language works itself, not just the ability to use it. Knowledge of language is about language proficiency and how well someone can use the language (Andrews, 2003). In other words, if I have the knowledge of language, I can write with it, speak, listen to and use the language rather proficiently in a variety of settings. That does not mean I understand why something is grammatically correct or could explain why. In short, knowledge of content is knowledge of the target language, which covers both knowledge of and about language.

For this paper, I will follow (a) Johnston and Goettsch (2000) and Freeman and Johnson’s (1998) definition of teacher knowledge as a type of social construct that comes from each teacher’s own experiences in which teacher knowledge develops and changes in each context and in each classroom, (b) Shulman’s (1987) definition of PCK as mixing
pedagogy with content to give teachers a special professional understanding that can help them to assist their students and different classifications of teacher knowledge, and (c) Ellis’s (2004) definition of KAL as lexical, phonological, grammatical, and pragmatic knowledge, which also consists of understanding social features. To put it simply, all three types of teacher knowledge play a role together in the type of knowledge that L2 teachers have and develop and influence them in the classroom and beyond.

**Teacher Linguistic Knowledge**

Combining the ideas of Andrews (2003, 2007) and Thornbury (1997) about TLA, it seems that teacher linguistic knowledge goes beyond just the knowledge of grammar and KAL. It includes an understanding of how language functions and is compiled within the different areas of linguistics. It helps language teachers with developing lessons and curriculum design to assist students with their needs and to understand that language goes farther than just words and sentences. These areas may include phonetics, phonology, morphology, syntax, discourse analysis, semantics, pragmatics, historical linguistics, sociolinguistics, descriptive grammar, and psycholinguistics (Summer Institute of Linguistics’ website, 2015; Grabe, Stoller, and Tardy, 2000; LaFond and Dogancay-Aktuna, 2009).

Sociolinguistic knowledge is one area of teacher linguistic knowledge that is important for foreign language teachers, L2 teachers, and teachers in general. Newmeyer (1973) describes the possible negative effects of incomplete knowledge in this area with his own experience of his French teacher in school belittling of other dialects of French outside of Paris as being inferior. He goes on to explain how strong and lasting that negative viewpoint was in his memory of learning French as compared to remembering
certain French grammar points. In general, this negative influence of different dialects as being inferior is even present in the US with regional dialects. Newmeyer infers that teachers in general should have some sociolinguistic knowledge about the influences of the prestige of different dialects and long-term effects of people’s perspectives. Additionally, Riegelhaupt and Carrasco (2005) discuss the importance of sociolinguistic knowledge for teachers in understanding their students’ different dialects of English and different registers, so teachers understand how to grade and assist students with language development rather than hinder that development. Haddix (2008) advises that all teachers take in-depth critical sociolinguistics courses in order to help teachers challenge the dominant misconceptions of standard language ideologies in the US for the benefit of their students. Having cultural and sociolinguistic knowledge assists language teachers with helping students in being aware of different aspects of language, and in developing their overall knowledge to improve the classroom experience for students.

Teacher linguistic knowledge is not just important for L2 teachers, but also primary school teachers and teachers in general. By having knowledge of phonology, phonetics, morphology, vocabulary, syntax, and general knowledge about language, primary school teachers can help students to improve their reading, speaking, listening, and even writing. Some primary school teachers are also L2 teachers, for their students come from a diverse background. Having general linguistic knowledge can help these teachers assist their L2 learners. Additionally, it may help them to understand any speaking, language and communication consultants or assistants who may be assigned to work one on one with students who have different types of communication problems and help to determine if the students are having difficulty due to communication or learning
problems or trouble learning the language (McCartney & Ellis, 2013). By having this type of knowledge, teachers become aware of their own and their students’ cultural, linguistic and heritage backgrounds and how that affects the classroom. Barnitz (1997) clarifies why teachers need to have the knowledge of linguistic diversity when teaching literacy: This can help teachers to instruct students about the differences in registers and types of discourse. It helps teachers with diagnosing students with reading problems or what is a natural influence of their first language or dialect. Teacher linguistic knowledge helps all types of teachers.

There is a case for applied linguistic knowledge training for all pre-service teachers in general to help with the increasing cultural and linguistically diverse student population, according to Reagan (1997). He lays out eight different areas to be covered in this training: (a) understanding the nature of human language in order for teachers to better support student creativity with language; (b) understanding the different aspects of language like morphology, pragmatics, syntax, semantics, phonology and the difference between pragmatic and descriptive linguistics; (c) understanding how closely related language and culture are to identity even with different dialects; (d) understanding first language and L2 acquisition; (e) understanding linguistics and literacy; (f) understanding the different types of TESOL methodologies; (g) understanding basic speech pathology to know when students need additional help and/or testing; and (h) understanding how language policy and planning affects the classroom and curriculum. It would seem that different types of teachers should be exposed to different areas of applied linguistics, which would be relevant to their teaching. There is a limited amount of time and classes that pre-service teachers receive in their training. Reagan seems to explain a well-
rounded approach to increasing linguistic knowledge for teachers. With a variety of areas of knowledge, teachers can be better prepared to create lessons, curriculum and tasks to fit the needs of students from a variety of backgrounds. Also with this knowledge, teachers would be able to assist students in class with different types of problems.

More specific areas of teacher linguistic knowledge, like knowledge about phonology, syntax or sociolinguistics, can help L2 teachers to improve other areas of teacher knowledge like PCK and knowledge of lesson planning. For example, Armstrong (2004) argues for a conscious knowledge of the semantic system of the different types of phrasal verbs for L2 teachers of English. Having this knowledge can help teachers to assist students with identifying more quickly in which contexts to use different phrasal verb and their meanings. Additionally, teachers can use this knowledge to develop lesson plans and activities to help students to become more autonomous learners. This helps to increase teachers’ knowledge base for helping students and their linguistic knowledge, going beyond just the basic meaning of words. In another example, Coffin (2013) explains the importance of the understanding of systemic functional linguistics, where language is defined by social context and choice, in order to teach patterns of argumentation using a multimodal analysis. This gives teachers the knowledge to help students increase their reading comprehension ability and argumentative writing skills in different contexts. Also, this knowledge helps teachers to show students multiple applications of knowledge in different contexts, where knowledge of reading can help with development of writing. Having this type of knowledge goes beyond just understanding language, it helps teachers and students understand the interconnectedness of language to other things. Additionally, Mendelsohn (2011) describes the need of
linguistics knowledge for English as a second language (ESL) teachers, so teachers can be well-versed and assist students with their needs in the classroom. He describes the specific need for knowledge about phonetics and phonology to help instructors teach pronunciation in such areas as syllable reduction and assimilation. With this knowledge, teachers can find activities and tasks to assist students with the development of their skills and assist when problems may arise with specific sounds. For example, Mendelsohn (2011) illustrates that teachers need to understand the importance of sentence level stress to help students understand the different meanings one sentence can have when you stress different words. Additionally, understanding word level stress can help decrease chances for miscommunication like the difference between nouns and verbs: produce (noun) versus produce (verb) with one being a vegetable and one being the act of making something. Teachers can demonstrate common problem areas that L2 learners have by developing this knowledge and show students how complicated language is. Having linguistic knowledge and demonstrating the complex layers of language to students can help them see beyond the basic sounds of languages. Additionally, Mendelsohn (2011) explains the importance of linguistic knowledge when teaching listening. In order to increase the speed of listening comprehension, it is important to teach students stressed content words, so that they do not listen to every single word individually. With all of this knowledge in different areas of phonetics and phonology, ESL and English as a foreign language (EFL) teachers can better assist and instruct their students in different areas of language.

In an additional area of teacher linguistic knowledge, Gießler (2012) discusses the need for lexical knowledge for L2 teachers. This helps L2 teachers to understand the
importance of semantic meaning for prepositions and phrasal verbs because there are different meanings of prepositions when they are attached to phrasal verbs, which helps teachers use their lexical knowledge to assist students. This can help with L2 teacher application of this lexical knowledge with the teaching of spatial prepositions and their connection to figurative meanings, systematic categorization of prepositions to understand meaning, and the linking of the two for students to better understand phrasal verbs. Increasing lexical knowledge also helps L2 teachers increase their morphological knowledge. All of these different types of linguistic knowledge help teachers to develop activities to assist students with their language problems, which in turn facilitates teachers to develop more informed lesson plans as explained by Armstrong (2004), Coffin (2013), Mendelsohn (2011), and Gießler (2012).

In summary, teacher linguistic knowledge goes beyond grammar and includes understanding how language functions, including the different areas of linguistics like sociolinguistics and semantics. This knowledge assists teachers with helping to diagnose language problems in students, create tasks to facilitate learning, better support students to develop their own language identity, be aware of the importance in understanding different dialects of language, create well-informed and well-rounded lesson plans, and increase their overall teacher knowledge. In summary, teacher linguistic knowledge influences many of the decisions language teachers make in the classroom.

TLA

Awareness can be categorized in terms of metacognitive, phenomenal, self, conscious, situational, language and so on (Leow, Johnson, & Zárate-Sández, 2011). Awareness has been associated with terms like, “Perception, detection, and noticing”
acquisition (SLA) and L2 learning. By linking these terms in relation to language
learning or acquisition, one is connecting the idea that one understands or is conscious of
using language knowledge, gaining more language knowledge or processing language
knowledge in some form. According to the Oxford English Dictionary website (2017),
awareness is having the knowledge or perceiving that something exits. In other words,
awareness is the understanding that something is there that someone is aware, can
perceive, can detect, or can notice the existence of it.

One of the more common arguments about awareness comes from Krashen’s
(1981) Monitor Model, where he talks about consciousness in relation to SLA. He makes
the distinction between learning something, which involves awareness that results in
explicit knowledge, and acquiring something, which does not involve consciousness that
results in implicit knowledge. In other words, Krashen is making the distinction between
overtly knowing that one is acquiring knowledge directly (or monitoring) and that one is
passively learning something through exposure, which is one of the main arguments
between awareness and noticing in SLA research. Another idea about awareness
involves Schmidt’s (1990) Noticing Hypothesis, which talks about the issue of
consciousness or the importance of attention, which controls our awareness. Schmidt
defines this in terms of noticing or paying attention, which helps to activate awareness.
This noticing helps the learner’s input to be acquired into knowledge. However, in
general, awareness is not solely defined as being conscious or unconscious. It can also be
defined as a spectrum or continuum, where one may not be completely conscious or
aware they are acquiring knowledge (Leow, 2000). Krashen’s and Schmidt’s ideas talk
about learning or acquiring knowledge, not as much about being aware of using that knowledge. This brings up the idea of being conscious when applying language knowledge. Three common measures or tests for conscious or unconscious awareness are retrospective think aloud protocols, subjective tests, and direct and indirect tests (Rebuschat, 2013). Within the study of SLA and awareness, there are different types of variables involve which are learning, learning conditions, and awareness. In some form, we will turn to each type in the next few sections.

One particular type of awareness for L2 teachers is TLA. Thornbury (1997) defines TLA as knowledge that educators possess of the structural and fundamental system of language and that assists them with teaching. Additionally, TLA is one of the several subcategories of knowledge for teachers under PCK’s umbrella of knowledge base (Andrews, 2007). In Figure 2, Andrews (2003) shows how the different knowledge bases of teaching intertwine and influence each other in relation to language proficiency, TLA, and PCK.
Figure 2. Overlapping concepts of TLA, language proficiency and PCK (Andrews, 2003, p. 91)

Generally, TLA as described by Andrews (2006) is awareness rather than knowledge, for it is more than just having knowledge, it is about having the ability to know how and when to use that knowledge, a conscious awareness. Andrews defines language knowledge and awareness in terms of grammar knowledge and application, not as much linguistic knowledge and awareness as the term seems to suggest. In other words, Andrews is explaining it in terms of general language knowledge and understanding, not as much as understanding the phonology or sounds of the language, the sociolinguistic aspects of the language or others areas of linguistics. The core of TLA has evolved from “explicit knowledge of grammar” for metalinguistic awareness (Andrews, 1999, p. 164) to a “knowledge of subject matter (knowledge about language)” (Andrews, 2003, p. 83), which mixes with language proficiency. As Andrews started to develop his theory, he seemed to discover how complex TLA is and how interconnected it is with other types of knowledge. TLA influences the selection of materials and tasks, the preparation of the lesson, the interactions in the classroom, the evaluation of the needs of the students, the language that teachers generate and use in the classroom, and the reflections after the lesson about the effectiveness of the lesson (Andrews, 1999, 2001, 2003). TLA does not impact every L2 teacher in the same way, for there are other factors that also play a role.

Some factors that may affect TLA are personality, attitude, cognition and context (Andrews, 1999, 2006, 2007). It is important to understand these factors for they may influence many of the choices teachers make in the classroom and beyond. A teacher with a more rigid personality may prefer more structured lessons, while a teacher with a
relaxed personality may prefer open-ended activities like role playing to practice a grammar point. Attitude is how they feel towards a particular topic of a lesson or style of lesson. An example of attitude toward grammar teaching may include the influence of the teachers’ previous language learning experience such as fear of grammar, which may include incomplete explanations and may influence task choice like highly structured exercises from the textbook. Cognition is how teachers feel, their beliefs, and their understanding of that particular topic. Context can include the type of institution, the age of the students, the background of the students, and many other things, for the context is the class setting of that particular course. Some of these factors may have stronger influences than others depending on the teacher, for this may affect teachers’ pedagogical choices in and out of the classroom and the connection between beliefs and practices.

For this paper, TLA will be defined following Andrews’s (2006) definition as being more about understanding how and when to use teacher knowledge, a conscious awareness, not as much about having the knowledge itself.

**Teacher Cognition**

Teacher cognition has a very strong influence on what a teacher does and says in the classroom. According to Borg (2003a, 2006), it involves what teachers know, their beliefs, and thought processes. It influences teachers’ lesson planning, task choice, and decisions made before and during teaching. Teacher cognition can be described as involving teachers’ mental processes for teaching, which include the unobservable aspect of teaching. It encompasses what thought processes they go through when making decisions (Borg, 2009). Borg (2003a) describes teacher cognition as having to do with the “psychological context of teaching” (p. 83).
Teacher cognition involves multiple areas and is influenced by multiple factors. Borg (2003a, 2006) developed a conceptual framework of teacher cognitions with the different areas of cognition and areas of influence, which include schooling, professional coursework, contextual factors, classroom practice as seen in Figure 3.

Figure 3. Teacher cognition in language teaching (Borg, 2003a, p. 82)

The figure also shows the relationship between teacher education, teacher cognition, and what happens in the classroom, and how each area influences one another.
with contextual factors playing a role in those relationships and influences. Borg (2003a) describes the figure as illustrating how important teacher cognition is for teachers. It shows about what teachers have cognitions, how those cognitions progress, how they interact with teacher education, and how they influence what happens in the classroom. Following Borg, I believe that all of these factors play a role in L2 teacher cognition in and out of the classroom.

For many language teachers, their initial conceptualization about language learning and where they begin to establish their cognitions about it comes from their own experiences as language learners, whether good or bad. This influence may be present throughout their professional development (Borg, 2003a). This can influence the uptake of knowledge and how they learn during teacher training. It can act as a filter for new knowledge. For some teachers, it may be stronger in affecting what teachers do in the classroom than teacher training. Some teachers may be very resistant to change due to their own experiences in learning a language. This influence cannot always be seen in the classroom for understanding how someone thinks is not always observable. This impact can go both ways, for beliefs can influence practices and vice versa (Borg, 2009; Phipps & Borg 2007). Each teacher is affected by teacher training in a different way, which means each teacher’s cognition about teaching is slightly different. Professional development may change a teacher’s cognition about something, but it may not necessarily change their behavior.

Most studies about teacher cognition and language teaching have to do with grammar and literacy according to Borg (2003a). Researchers can measure teacher knowledge about a particular topic through testing. However, to measure what a teacher
is actually thinking as they are making decisions is quite difficult and the evidence to prove it varies from study to study (Borg, 2003a). Beliefs are difficult to observe, but one can observe behavior and describe what teachers are doing. The only way to understand teacher cognition is by getting teachers to talk about their beliefs or the motivation behind why they choose certain tasks or types of feedback (Birello, 2012). In order to study teacher cognition, there needs to be the use of some sort of stimulus in order to activate teachers’ thoughts, beliefs or knowledge about a particular topic, like grammar or literacy. In addition, there is the dichotomy between cognitions about abstract ideas and practical contextual ideas. Teachers’ beliefs may not always show up in their teaching, for contextual factors like time and institutional restraints may have a stronger influence than cognitions about the ideal classroom. Additionally, cognitive change is different from behavioral change and measuring that cognitive change is very difficult. For example, sometimes teachers’ views towards lesson planning may change over time and their thoughts and beliefs about what should happen in the classroom may change, but finding a way to evaluate and measure those thought processes and changes is problematical.

Studies about teacher cognition, according to Borg’s (2003a) literature review, rely on such instruments as questionnaires, interviews, observations, stimulated recalls of observations and lessons, retrospective comments about instructional design, and discussions. These studies reviewed by Borg (2003a) look at why teachers make certain decisions, why they depart from lesson plans, how teaching contexts and institutions can influence their cognitions, how their cognitions change with experience, how personal practical knowledge may influence cognitions, what pedagogical principles influence
their cognitions, and other areas (Borg, 2003a). Understanding language teacher
cognition can help affect professional training and development, so teacher trainers can
better understand how strong a role those different factors and influences play.
Understanding teacher cognition helps researchers and teacher trainers comprehend why
teachers reach certain decisions when developing lessons, in the classroom, trying to
meet the needs of students and beyond. It can also be seen how teacher cognition
changes in each context and how different institutional restrictions, like standardized
testing or standardized curriculum, may influence teachers’ thoughts and beliefs and how
that affects the classroom. Additionally, the curriculum of teacher education can be
changed and adapted to help better assist future teachers (Birello, 2012). By researching
teacher cognition, teacher education programs can understand more about how teachers
process and understand knowledge. This can help teacher trainers to develop curriculum
to match teachers’ needs and help them to develop skills to make smart choices in the
classroom.

The application of those beliefs in the classroom depends on context. Factors
within these different types of contexts include time, curriculum restraints, goals of a
course, and even the interaction of different types of beliefs themselves may play a role
(Phipps & Borg, 2007). Teacher cognition has been found to influence grammar and
literacy education (Borg, 2003a, 2006) and different types of task choice or feedback like
oral error feedback, the use of group work for oral practice, and grammar practice
(Phipps & Borg 2007). Understanding teacher cognition helps to show how and why
teachers make decisions in the classroom and what things influence those choices, even
going as far as understanding how much certain things influence their choices.
Some teacher beliefs may be at odds with one another. Core beliefs may be stronger than peripheral beliefs, and the stronger beliefs may outweigh the weaker beliefs (Phipps & Borg, 2009). This means that core beliefs about teaching in general may outweigh outlying beliefs about specific areas of teaching like pronunciation. Additionally, teacher beliefs are not always consistent and do not influence us the same way all the time. The long range of contextual factors that affect cognition happens on different levels and is not linear but consists in layers. For example, for some teachers, beliefs about assessment and learning in general may be stronger core beliefs than those about language learning and group work (Birello, 2012). Each context of teaching may influence each teacher in a different way, where contextual factors may have a stronger sway than a teacher’s own core beliefs. Generally, teacher beliefs are very complex and influence each teacher in a different way. Beliefs are just one part of a teacher’s overall cognition.

For this paper, I will focus on the definition of teacher cognition as being the knowledge, beliefs, and thought processes that language teachers have because all three play an important role in what influences L2 teachers (Borg, 2003a, 2006).

TLingA

For this study, TLingA is understood as the combination between different areas of teacher knowledge derived from the combining of Andrews’s (2003, 2007) and Thornbury’s (1997) definitions of TLA. The combination of the two consists of teacher linguistic knowledge in connection to PCK and teacher cognition with the comprehension of how and when to use that knowledge in instructing and in terms of the conscious application of teacher linguistic knowledge. This awareness includes influences on
lesson planning, grading, task choice, interacting with students, what happens in the classroom, professional development and beyond.

It is important to understand what roles TLA, teacher linguistic knowledge, and teacher cognition play in influencing and assisting language teachers in order to see what institutional factors help or restrict teachers in different teaching contexts and to develop teacher training programs to better equip teachers to deal with the classroom setting.

TLA, teacher linguistic knowledge and teacher cognition influence language teachers at different times, but usually in combination with one another. It is very difficult to pull apart how exactly each plays a role in language teaching, but understanding them holistically creates a more well-rounded thick description of what affects language teachers and what factors play a role in that influence. This is important to study in order to better understand how complex language teaching and language teacher knowledge is to help better train and support L2 teachers.

Conclusion

In conclusion, this chapter covered how teacher knowledge, teacher cognition, and teacher awareness interact in defining TLingA. Altogether, it reviewed (a) how the definition of teacher knowledge has changed and is currently defined in relation to PCK and KAL, (b) what makes up TLingA, (c) how TLA is a combination of Thornbury’s (1997) and Andrews’s (2003, 2007) definitions, and (d) what the definitions and factors are that affect teacher cognition. The next chapter will review empirical studies about teacher knowledge, TLA, teacher cognition and teacher beliefs, and teacher training in relation to TLA, linguistic training, and MATESOL programs. The next chapter also
reviews empirical studies involving the application of linguistic knowledge by language teachers.
CHAPTER 3
LITERATURE REVIEW

Introduction

In the previous chapter, I defined key terms associated with TLingA—namely, teacher knowledge, TLA, teacher cognition, and teacher linguistic knowledge. This chapter will discuss empirical studies that research those key terms in relation to the classroom and beyond.

Teacher Knowledge—PCK

As defined in Chapter 2, teacher knowledge comes from a teacher’s own experiences from the classroom, professional development, and the different teaching communities teachers are a part of during their careers. It is a very broad concept that covers a variety of areas, but most of the research studies conducted on teacher knowledge have concentrated on PCK. Johnston and Goettsch (2000) describe it as a type of social construct that develops in each context. They tested these theories by studying four ESL teachers at an Intensive English Program (IEP) in the mid-west United States to see what kind of knowledge teachers possess and use while teaching a grammar class. The researchers categorized this knowledge under Shulman’s (1987) ideas of content knowledge, PCK, and knowledge of learners. The authors observed two classes with audio-recording and interviewed each teacher one time after observing the two classes. However, the questions and transcripts from the observations were given to the teachers before the interviews. This may have influenced the teachers to prepare answers to the questions before hand rather than answering them naturally. Johnston and Goettsch (2000) found that teachers use a mixture of all three types of knowledge while
teaching. They draw on their content knowledge of grammar when explaining grammar points with examples and draw on their PCK in how they explain it. Their knowledge of students and their needs is used when they develop tasks to help students. For example, the teachers in the study had students analyze texts to find patterns and examples of different grammar points. They were able to observe that students comprehend and have memorized the rules of grammar, but have trouble applying that knowledge. The teachers also seemed to know where to find and develop their content knowledge from textbooks, online sources, other teachers, and their own experiences. They used their PCK when creating lessons to know what aspects of the grammar point needed to be included in the lesson and how the grammar point needed to be explained. Finally, they used their knowledge of learners in choosing which tasks should be included in the lesson, and knowing which type of comprehension questions to ask to make sure the students truly understand the grammar point. It can be seen that teachers draw on different types of teacher knowledge in a variety of ways.

Based on their findings about teacher knowledge, Johnston and Goettsch (2000) suggest that teacher training should be process based, not as much content based. They compare teacher training to how teachers learn about language and teach language. For example, teachers have their students learn how to apply different rules and analyze different aspects of language. Language learning is not just memorizing facts, but a step by step process. Their suggestions lean towards a process knowledge base development, which means developing knowledge through experience in the classroom similar to the idea of teacher knowledge development I explained in Chapter 2. Also, Johnston and Goettsch (2000) propose the same should be true with teacher training from learning the
rules of language, to developing examples for students, to developing their overall teaching skills. Generally, teachers need to know how to develop a lesson plan step by step, know how to explain and apply that knowledge in the classroom, know how to develop tasks and examples to help their students become autonomous learners, and know where to find the content knowledge if questions arise. This study shows us that L2 teachers use different types of teacher knowledge combined with one another throughout the development and implementation of lessons, and with most interactions when assisting students.

Baker (2014) and Irvine-Niakaris and Kiely (2014) also evaluated how PCK is intertwined with other types of teacher knowledge and how that affects lesson planning and choices teachers make in the classroom. Baker (2014) assessed the connection between teacher knowledge and actual practices in the classroom with pronunciation involving five experienced teachers. Baker looked at the connection between knowledge on how to teach pronunciation and PCK, and the connection between subject matter knowledge and knowledge about phonology. The study included interviews, observations, and stimulated recalls of the observations, using footage of selected pronunciation tasks. It was found that the teachers used a large variety of tasks with different types of feedback: controlled tasks and feedback, which were teacher centered; some guided tasks and feedback, which were teacher and student centered together; and very few free tasks and feedback, which were student centered, like peer feedback and partner negotiation of meaning. The teachers who took a course that focused on the teaching of pronunciation during their graduate studies used the widest variety in types of tasks and feedback. Baker (2014) argues that, with the use of guided tasks and feedback,
students are able to become more autonomous learners. In addition, Baker (2014) argues that teachers need more training in how to integrate a variety of guided pronunciation tasks and feedback into lessons during graduate studies and during professional development. In other words, the amount of PCK and other types of teacher knowledge can affect the variety of task choice, which can help or slightly hinder students’ development of skills.

In another study about PCK and teacher knowledge, Irvine-Niakaris and Kiely (2014) examined PCK of reading comprehension for standardized test preparation for TESOL teachers and how that influenced reading lessons. They focused on knowledge about reading instruction and knowledge about texts. This knowledge about reading instruction influenced the teachers’ task choice and lesson planning, while their knowledge about texts influenced comprehension question development and task choice to assist with understanding different genres. The study shows the interrelatedness of PCK and other types of teacher knowledge with every step of lesson planning and assisting students with reading comprehension. Generally, Johnston and Goettsch’s (2000), Baker’s (2014), and Irvine-Niakaris and Kiely’s (2014) studies demonstrate the influence of teacher knowledge, especially PCK and content knowledge, on different aspects of teaching and how that knowledge develops over time. For L2 teachers, content knowledge includes both language knowledge and linguistic knowledge working together with PCK, and for this dissertation, I will evaluate how those different types of L2 teacher knowledge, teacher awareness, and teacher cognition work together to influence different aspects of language teaching.

TLA
TLA is described as an awareness rather than knowledge, for it is about knowing when to apply that knowledge in and out of the classroom, not just having teacher knowledge. Andrews (2003, 2006, 2007) has been the major researcher involved with TLA and grammar. More specifically, Andrews (2006) evaluated the development of TLA over about eight years by examining three teachers’ grammar knowledge and their “subject-matter cognitions, or TLA” (p. 2) about grammar. In other words, Andrews evaluated their thinking and understanding of how and when to use their knowledge about grammar. The study consists of data from a 1996-1997 study, and then again Andrews collecting data in 2004. Each teacher had more than ten years of teaching experience. In the study, Andrews uses Borg’s (2003a) definition of cognition about teaching as being what teachers know, their beliefs, and thought processes. This study evaluated the intertwining of TLA and cognition qualitatively by conducting interviews, observations, teacher narratives, and evaluating an essay the teachers wrote about the ‘role of grammar’ in teaching English. Quantitatively, the study evaluated the level of grammar knowledge with subject-matter grammar tests comparing scores from 1996-1997 to 2004. After analyzing the qualitative data, Andrews wrote a narrative about each of the teacher, which used quotes and summarized findings from 1996-1997 and 2004. Overall, it was found that the proficiency of the language knowledge had not changed a lot since none of them had really made an effort to increase their explicit grammar knowledge. However, teachers’ views towards an overall understanding of language knowledge had expanded upon further graduate level studies. This is related to my study about understanding how much linguistic knowledge and awareness affects language
teachers. Additionally, Andrews (2006) found that teachers were able to increase their awareness of the importance of TLA to help students understand the role that grammar played in understanding different types of text and discourse, and this increased awareness also influenced task choice. It was found that each teacher’s development of this knowledge and application slightly differed depending on the context of the teaching situation, previous language learning experience, and beliefs about grammar. All three teachers faced limitations in their teaching situations with having to teach explicit grammar, but their beliefs influenced their task choice, from text analysis to the incorporation of fun activities and textbook exercises. With this (2006) study, Andrews was able to see how much of a role cognition played in teaching over a span of about eight years. In order for us to understand the overall picture of each teacher, he used a narrative descriptive style, which brought together all his qualitative data sources. However, by doing this, there was never an in-depth thick description of each of the specific sources of data. For example, he mentions “videotaped classroom observations” (p. 4) in the 1996-1997 study and when describing his narrative methodology for the 2004 study, but as a source of data for the 2004 study, he describes these observations as “videotaped lesson data” (p. 5). He never describes what that means or if and how videotaped lesson data are different from observations. Actually, in the narrative descriptions, the observation data never come up. In order to avoid an overwhelming amount of data from different sources like Andrews and trying to tease apart which types of data showed which themes, I will concentrate on active interviewing for my study, which helps facilitate a slightly more direct analysis of the role of linguistic awareness in
different teaching scenarios, in order to better gauge and describe what types of links there are.

Additionally, Andrews and McNeill (2005) evaluated declarative knowledge of grammar and vocabulary and what aspects of TLA experienced and exceptional teachers possessed. In the three-month study, they looked at three experienced non-native speakers (NNSs) of English who taught ESL in Hong Kong and had been evaluated as exceptional. (The assessment criterion was based on RSA/Cambridge DELTA; UCLES, 2001.) The study involved (a) tests of grammar, correction and explanation of errors and assessment of knowledge of grammar terms; (b) tests of vocabulary knowledge, recognition and explanation of errors and recognition of terms with morphemes and lexical relationships; (c) two observations; (d) two interviews; and (e) a stimulated recall. The study revealed that the teachers overall had some gaps in knowledge with explanations of grammar and vocabulary errors and other small gaps in vocabulary knowledge, but overall grammatical knowledge was good. The teachers were willing to engage and help students with grammatical problems. They were aware of their limitations in their knowledge of language, but were willing to improve their knowledge. The teachers were also willing to reflect on teaching and were aware of learners’ potential difficulties. Finally, they were aware of their role in controlling the input of the learners in the classroom. Simply put, this study was able to evaluate and describe how knowledge and application of TLA influences ESL teachers and how much teachers are aware of TLA even in the development and improvement of TLA, much like how Johnston and Goetsch (2000) explain the development and application of teacher knowledge. In other words, this study shows the connection and similarity between the
development and application of teacher knowledge and teacher awareness. In my dissertation, I look at how years of experience and other factors affect the application and development of teacher linguistic knowledge and TLingA.

Looking at teacher cognition and grammar awareness more specifically, Svalberg (2012) studied a grammar awareness class for MA Applied Linguistics and TESOL students, in which students’ perceptions of group tasks with authentic texts doing different types of linguistic analysis were evaluated. Students needed to analyze texts in order to explain why the author used certain grammatical forms and how that added to the meaning of the text. Additionally students needed to be able to recognize other grammatical options that may change the meaning, to correct errors, to evaluate difficulty and reading level of the text, to figure out which grammatical points may be difficult to students, and generally to devise tasks to help students with these areas. Overall from this class, students were able to gain an awareness of the role of analyzing authentic texts and recognize the different roles grammar played in understanding a text. However, students with no teaching experience had more difficulty with the tasks and texts compared to students with teaching experience. This study shows that, as teachers develop knowledge, so does their awareness in how to apply that knowledge, specifically in reference to grammar awareness. For my study, I want to see what factors affect the activation and application of linguistic knowledge and awareness, much like Svalberg’s (2012) study shows that the factor of experience affects the application of grammar knowledge and awareness.

Finally, these three studies show how connected teacher awareness, knowledge, and cognition are and what factors affect the application of TLA. This is shown in
Andrews’s (2006) introduction of the role that teacher cognition plays in teacher awareness, Andrews and McNeill’s (2005) description of how being aware of the limits of knowledge can help teachers to improve their content knowledge, and Svalberg’s (2012) description of how teacher knowledge and awareness develop over time. These studies show us that a teacher’s awareness of their level of knowledge plays a role in how their knowledge and awareness develops over time, and that the connection between beliefs and practices affects TLA.

**Teacher Cognition and Teacher Beliefs**

**Grammar**

The main areas of teacher cognition and teacher beliefs research are grammar and literacy (reading/writing) and involve what teachers know, their beliefs, and thought processes (Borg, 2003a, 2006). For grammar, Borg (2001) studied EFL teachers’ perceptions and awareness of their knowledge of grammar and application in the classroom. In this study, he observed and then interviewed EFL teachers. He found that teachers’ self-perception of knowledge/level of confidence affects their approach to grammar, amount taught, openness for unstructured activities, how they respond to questions, amount of open discussion about grammar, how they react when explanations are questioned, and type of grammatical information they cover or review. Generally, Borg (2001) found a connection between what happens in the classroom and confidence. He explained the importance of teachers gaining confidence in their level of KAL, and how teachers’ self-awareness of that confidence level affects their task and decisions in the classroom. Additionally, Sanchez (2014) studied EFL teachers in Argentina and found that confidence in knowledge of grammar affected explanations and answering
questions, but so did self-perception with being a non-native speaker. However, Damavandi and Roshdi (2013) evaluated Iranian EFL teachers and found that previous language learning experience plays the strongest role with teachers’ beliefs. To get an overall picture, Borg (2003b) also conducted a literature review of different studies pertaining to grammar teaching and teacher cognition for first language (L1), L2 and foreign language teachers. He found from reviewing a number of studies that pre-service teachers have gaps in their knowledge about grammar, and that many studies recommend training should be added to increase teachers’ knowledge about grammar. Additionally, he found that many teachers do promote grammar instruction in some form in their teaching and that prior learning experience affected the teaching of grammar. This affect can be seen in which approach teachers choose to instruct grammar from a deductive style, to an explicit style, to having students talk about the language, and even to having students do language analysis to understand grammar or a variety of approaches. Borg (2003b) concludes that defining and explaining the cognition about instructional decisions is complex and involves many factors. Understanding how teacher cognition is related to what goes on in the L2 classroom helps to connect teacher beliefs and practices to the application of teacher knowledge and awareness. An example is understanding that the confidence level and awareness of level of grammar knowledge for L2 teachers is related to task choice and answering questions from students. In other words, understanding the factors that affect the connections of beliefs and practices in the classroom and the application of knowledge is one part in understanding the interconnectedness of teacher cognition, teacher awareness, and teacher knowledge. Similarly, I am evaluating the connection between beliefs and practices about linguistic
knowledge for L2 teachers, similar to these studies in how they evaluated the connection between beliefs and practices about grammar knowledge in this dissertation.

Phipps and Borg (2007, 2009) in Turkey and Nishimuro and Borg (2012) in Japan conducted studies on EFL grammar teaching and cognition involving L2 English teachers using pre and post interviews with observations. First, Phipps and Borg (2007, 2009) found a slight disconnect between what teachers say they do and what is observed in the classroom (which is more complex), for teachers are not always aware of this disconnect. Occasionally, some beliefs are stronger than others, like core beliefs about learning in general outweighting peripheral beliefs about language learning. Many of the teachers were more concerned with students being engaged, keeping order in the classroom, and the overall flow of the lesson. One example involved the use of group work for oral practice, in which one teacher liked it, but did not use it due to wanting to monitor students and maintain their classroom management style. Another example being one teacher’s belief was against controlled grammar practice, but it was used anyway to help with classroom management and calming students. However, with teacher cognition and reading, Kuzborska (2011) found that Lithuanian EAP teachers’ beliefs were in line with practices, which may correlate to teaching experience and/or context. Overall, Phipps and Borg (2007, 2009) concluded that teachers are always developing their beliefs and practices with classroom experience and learning why they do things with contextual factors affecting their practices. In another study on grammar teaching and cognition, Nishimuro and Borg (2012) found that in Japan, the presentation of grammar is teacher led in Japanese with direct translation of sentences and grammatical terms. The teachers explained that, by presenting grammar this way, it helps to keep the attention of lower
level students, helps to motivate students, and they as teachers feel a sense of security. For example, one teacher explains that sentence analysis is done in isolation with closed questions, for grammar needs to be mastered before truly understanding how to use it in other contexts. Nishimuro and Borg (2012) conclude that contextual factors, experience, and traditional views of grammar teaching seem to be the driving force behind many of classroom practices. In Phipps and Borg’s (2007, 2009) and Nishimuro and Borg’s (2012) studies, contextual factors seemed to be the driving force behind many of the teachers’ beliefs and choices in the classroom and understanding what role these factors play helps with evaluating what affects the application of teacher knowledge and awareness in the classroom. In my study, I also evaluate what factors affect the application of linguistic knowledge and what role teacher cognition plays in that.

**Pronunciation**

Where in the past most studies on teacher cognition had been about grammar and literacy, there has been a steady growth in research studies about teacher cognition and pronunciation. For instance, Macdonald (2002) interviewed ESL teachers in Australia about their cognitions having to do with teaching pronunciation. Generally, many teachers felt a lack of push to teach pronunciation due to unclear policies of administration and curriculum goal. They felt they had a lack of knowledge on how to assess it and only covered it when comprehensibility was a problem or a problem arose. Pronunciation seemed disconnected from the rest of the lesson, and there was a lack of resources to help address pronunciation problems. Additionally, Baker and Murphy (2011) did a literature review of teacher cognition and pronunciation and found a limited amount of research. According to Baker and Murphy (2011), this shows a need for more
research to understand and inform MATESOL and teacher training programs in order to see how beliefs and knowledge affect teaching practices of pronunciation in the classroom. In another study, Baker (2014) found that beliefs about pronunciation affected task choice. One example being that physical or tactical practice can help with phonological improvement, which is a type of listening task. Additionally, several teachers in the study explained that they viewed teaching pronunciation as boring with courses that are heavily textbook driven, so this led them to increase the variety of tasks in order to keep students engaged. In one other study, Couper (2016) interviewed EFL teachers in Uruguay in which they described their anxiousness about teaching pronunciation from lack of knowledge about their own pronunciation and even the avoidance of teaching it. They discussed their anxiousness in correcting adults and what contextual factors affected their teaching. These factors included textbooks that had a lack of content and exercises about pronunciation, curriculum that was more focused on grammar or exams, and lack of training on how to integrate it into lessons, how to teach it, which task to choose, what types of error corrections worked well in class, what listening exercises to increase awareness of sounds, and so on. From these studies, it can be seen that contextual factors like curriculum, textbook choice, and training affect teacher cognition about pronunciation, and personal factors such as a lack of knowledge and experience teaching pronunciation can too. By evaluating what factors affect teacher cognition, it can be better understood why teachers make certain decisions in the classroom and choose certain tasks. For my study, I look at what factors affect beliefs and practices in relation to the application of linguistic knowledge and TLingA, specifically phonology.
Moreover, Burri (2015) and Burri, Baker, and Chen (2017) evaluated teacher cognition about teaching pronunciation in Australia. Burri (2015) studied pre-service ESL teachers for a post-graduate class on pronunciation, where more of the pre-service teachers were NNSs. The study included group interviews, questionnaires, class observations and semi-structured interviews. The focus of the class was more on teaching pronunciation as a whole than the individual sounds trying to balance pronunciation into a class, not lessons in isolation. The findings showed that understanding of super-segmentals helped NNSs improve awareness of their own English and their pronunciation. By having class with NNSs, the native speakers (NSs) were able to better understand issues L2 learners face when learning English and develop an awareness of the varieties of English. In another study, Burri, Baker, and Chen (2017) studied pre- and in-service teachers who were taking a course about teaching pronunciation at a university. The study consisted of questionnaires, focus group meetings, classroom observations, semi-structured interviews, and assessment tasks. The findings showed that the teachers preferred teacher-centered controlled activities in isolation not integrated into the lesson, possibly due to previous learning experiences and ones that directly address problems previously faced in teaching experience. They previously understood how modeling of English pronunciation can help learners, but, while taking the class, they created new beliefs about kinesthetic or tactical teaching of pronunciation. They learned that it increased learner involvement and made teaching more enjoyable. Observing the use of kinesthetic or tactical teaching integrated into lessons increased their awareness and cognition about the concept. Even after the course, pre-service teachers still lacked confidence in teaching pronunciation and still wanted to
rely on the textbook, while in-service teachers became more aware of how to apply
knowledge due to their previous teaching experience and awareness of contextual factors.
The researchers concluded that possible factors restricting the development of cognitions
about teaching pronunciation are complexity of English phonology and intensity of
course content in which the students need more time for practice and development.
Additionally, teachers are still developing knowledge about English phonology itself
even before adding the knowledge of how to teach it on top of that. Generally, Burri,
Baker, and Chen (2017) believe that cognitions are complex and do not develop in a
linear form. Both studies show specific training in how to teach pronunciation in order to
help teachers develop skills and knowledge with practice, but that the development is
ongoing. In other words, as teachers develop their skills and go through different types
of trainings, their cognitions about different areas of teaching may change and evolve and
evaluating teachers with different levels of experience can help researchers better
understand that. Similarly, I evaluate different levels of experience for L2 teachers in
order to see how strong of a factor experience plays in the connection between beliefs
and practices and the application of teacher linguistic knowledge in this dissertation.

**Assessment**

While teacher cognition and pronunciation is a developing field of research, so is
teacher cognition and assessment. For example, Muñoz, Palacio, and Escobar (2012)
surveyed 62 teachers and interviewed five at a private university in Columbia about EFL
teacher beliefs and practices about a new assessment system that was a lot more
standardized than before. Overall, the teachers believe that the new assessment
instrument improves teaching and learning and is more trustworthy than past assessment tools. However, the interviews revealed more specific information about a slight disconnect between what teachers say they do and what they believe, with classroom and institutional factors playing a role in the application of the new assessment tool. In other words, teachers’ beliefs cannot always match their practices due to different types of situational factors, and, by doing interviews, the researchers were able to find more in-depth information. In another study about assessment, Yin (2010) conducted a case study of two teachers of an EAP course in the UK using interviews, observations and stimulated recall. Yin was evaluating the different types of cognitions teachers draw on when assessing students. The study revealed some factors involved, which were beliefs about language learning, class parameters, institutional reforms for uniformity of syllabus and final assessments, preconceived notions about different language groups’ problems with learning English, and hypothetical situations that students may face, for example how they would deal or would be judged outside the classroom. Both studies reveal that beliefs play a role when assessing students, but so do institutional factors. Simply put, when evaluating cognition in different areas of teaching, researchers must keep in mind the variety of factors that affect teachers. In my study, I take this into account by developing interview questions to ask L2 teachers about the influence different factors had on their teaching and application of knowledge.

**Communicative Language Teaching**

Another area of teacher cognition that has to do with beliefs and practices is about communicative language teaching. Feryok (2008) in Armenia and Nishino (2012) in
Japan studied teacher cognition and communicative language teaching for EFL teachers. Feryok (2008) conducted a case study of one teacher using six months of email interviews, two observations, and one in-person interview. It was found that the teacher implemented some beliefs into practice about participation, encouraging students, learning by doing, and using a variety of activities, but time and institutional constraints limited the application of those beliefs. For example, time was limited for students to be able to completely express themselves or fully develop ideas within the communicative framework. This study shows that teachers were able to apply some of their beliefs in the classroom, but contextual factors still limited that application. Additionally, Nishino (2012) found from interviews and observations of Japanese high school EFL teachers that in-service professional development, previous learning experiences, and contextual factors affected their beliefs and practices in the classroom about communicative teaching and teaching in general. From these two studies, it is revealed that a variety of factors affect teachers’ beliefs and practices in the classroom and by evaluating teachers’ beliefs about different subjects, researchers are better able to identify what those factors are. I also evaluate which factors affect teacher cognition in relation to linguistic knowledge and awareness.

**Teacher Training**

In order to understand how teacher beliefs and practices develop, researchers evaluate teacher cognition during teacher training. For example, Grijalva and Barajas (2013) evaluated teachers in a BA training program for English language teaching in Mexico. They used questionnaires at three different times and interviewed the pre-
service teachers at the end of their program. Overall, the pre-service teachers were able to link what they studied in methodology and theory classes to their teaching practicum, and the researchers were able to see the connection between theory and practice. Grijalva and Barajas (2013) found that the teachers’ beliefs changed as they moved through the program. The pre-service teachers became more aware of their own language learning experience and how that could affect their teaching and beliefs. They developed an awareness of how their beliefs can change as they develop as a teacher and an awareness of the complexity of language learning and teaching. They also learned that language learning is not all the same for everyone and takes a long time and lots of work.

Generally, the pre-service teachers believed that the program gave them the theory and tools to be aware of their own learning and teaching beliefs. From this study, it can be seen how interconnected the development of teacher cognition, knowledge, and awareness is during teacher training and throughout teachers’ careers. For my study, I assess how interconnected teacher cognition, knowledge, and awareness in relation to linguistic knowledge, for most L2 teachers studied linguistics during their pre-service training.

In another study, Cortés (2016) conducted a study of pre-service Spanish/English high school teachers in Columbia during a pedagogical practicum using interviews, questionnaires, verbal reports, and artifacts. The teachers described what teaching actually involved: learning to reflect, developing an awareness of what works and what does not, developing their attitude and understanding of teaching, integrating theory into teaching, developing an awareness of how context shapes teaching, and seeing what part emotions play in teaching. From this study, it can be seen how difficult it is to tease apart
teacher beliefs from the different areas of teacher training. Grijalva and Barajas’ (2013) study and Cortés’ (2016) study reveal the commonality and interconnectedness of the development of teacher knowledge, awareness, and beliefs during teacher training. Similarly, I try to evaluate in my dissertation how much that interconnectedness continues as teachers continue through their career by evaluating teachers with different levels of experience in relation to the application of linguistic knowledge.

**General Beliefs about Teaching**

Understanding general beliefs of teaching, from novice to experienced language teachers, help researchers understand what some common factors that affect teacher cognition and the application of teacher beliefs are. For example, Larenas, Hernández, Neira, Suárez, and Navarrete (2013) studied 30 Chilean university EFL teachers’ general beliefs about teaching English using interviews and journals. The findings showed the source of teacher beliefs are literature and work experience. Overall, the teachers believe they need to possess language proficiency, content knowledge, knowledge of lesson planning, and a good relationship with students. Additionally, the role of an English teacher is to be the source of information and facilitator, to answer questions, to give positive feedback, to model different activities, and to monitor students’ work. This study shows teachers’ cognition about teaching comes from their experiences and that understanding how and when to use different types of teacher knowledge is important. Similarly, Abad (2013) interviewed 12 EFL public school teachers in Columbia about how pedagogical factors affected teacher beliefs. It was found that how teachers feel about English strongly affects their task choice and language choice in the classroom. It
was also found that their lack of knowledge in one area affected how they taught that skill in class, like pronunciation, so they used other tasks and different types of input in order to make up for it. In other words, these teachers were able to draw several types of teacher knowledge and use teacher awareness in order to develop tasks even if they were lacking in some areas of content knowledge. Overall, Abad (2013) found teachers believe that professional development is key to improving teaching. Larenas, Hernández, Neira, Suárez, and Navarrete’s (2013) study and Abad’s (2013) study show how strong of a connection there is between beliefs and practices and teacher knowledge and awareness. For dissertation study, I assess how strong of a role L2 teacher’s beliefs about linguistic knowledge is and how that connects to their application and awareness of application of linguistic knowledge.

In one other study, Kang and Cheng (2014) conducted a case study of a novice EFL middle school teacher near Beijing using observations and interviews over two semesters. Overall, the teacher felt like the mentor was too busy but was still able to make changes in classroom practice due to experience. Professional development learning, discussions with colleagues, in-class experience, and reflecting on what worked, didn’t work, and needed to be slightly changed helped the teacher to develop her skills over the two semesters. Therefore, Kang and Cheng (2014) were able to observe that teacher cognition develops from the relationship between teacher knowledge and the beliefs and practices in the classroom. They were able to see this through (a) confirmation: theories she learned in school matched what she observed and practiced in the classroom; (b) elaboration: adding another dimension of knowledge or practice to what she already knew; (c) disagreement: did not match with current views; and (d)
reflection: where she tried it a different way by experimenting with new ideas and tasks. From these three studies, we can see what factors affect language teacher cognition in different contexts and at different levels of experience. This helps researchers better understand what factors affect the connection between beliefs and practices and how much experience affects it too. I also evaluate in my study what factors affect beliefs and practices in relation to linguistic knowledge and awareness.

Evaluating teacher cognition about instructing a course for the first time helps researchers understand what contextual and personal factors affect the application of their beliefs and practices. For example, Irving and Mullock (2006) evaluated a teacher teaching a test preparation course for the first time, the Cambridge Certificate in Advanced English (CAE). The researchers used journal data for the 12-week course for evaluation. The new teacher to the course received no training for the course, only a course book and the support of two experienced teachers, which led the teacher to rely heavily on knowledge from previous teaching experience. The new teacher had trouble with lesson planning due to lack of knowledge and experience of CAE, pacing, sequencing, understanding how to develop students’ strengths, and scoring tests. Lack of knowledge also led to tiredness of teacher, time management issues, dealing with workload, noticing what students needed to know to pass the exam, confusion over grammar, administration of practice tests and the incorporation of test-taking strategies into the lessons. Additionally, trouble arose with motivating students due to their tiredness, different reasons for taking the class, not putting the effort in, and not knowing how important independent work was. This study shows how interconnected the different types of contextual and personal factors are on teacher cognition when teaching
a class for the first time with no training, and where the teacher is unsure what knowledge
and awareness to draw upon when teaching the course. Similarly, I evaluate the
connection between and the effect of different types of factors L2 teachers face in the
context of the university setting in relation to linguistic knowledge and awareness for my
study.

Overall, teacher cognition and the connection between beliefs and practices
change slightly over time and with each new context of teaching. There are different
factors that affect teacher cognition in different ways from contextual to personal factors.
Understanding that connection and the different factors that affect teacher cognition in
relation to TLingA is one part of this study. Another part is how that all relates to teacher
training.

**Teacher Training**

**TLA training**

TLA starts in teacher training and teacher development and then proceeds as
teachers instruct in each context and in each classroom. Arnó-Maciá (2009) studied KAL
in English courses for future language teachers at a university in Catalonia, Spain. The
study itself focused on a course about language development where students develop
skills in language proficiency and increase their metalinguistic skills through theory and
practice, not language teaching. Generally, each lesson consisted of a language topic or
grammar topic as the focus. The teachers presented the idea in theory, had students do
practice exercises where they analyzed language or text to understand the grammar or
language topic. Overall, both teachers and students believe that graduates from the
program need a high proficiency in KAL, how to apply that KAL, and how to explain that KAL to students. Teachers also need some understanding of cultures to assist students, and some understanding of metalinguistics in order to develop analysis skills. By developing analysis skills, they can understand better what problems students are having and create tasks to help them. According to Arnó-Maciá (2009), all of these skills together help language teachers to become better at developing well-rounded lesson plans and tasks to assist their students with learning languages. It seems from this study that both teachers and students believe that teacher knowledge and TLA are very important parts of what makes skilled language teachers and that this should be included in teacher training programs. In line with those ideas, my study also evaluates how important knowledge and awareness is and how teachers apply their knowledge and awareness.

To understand the role language awareness plays in EFL teacher training, Başyurt Tüzel and Akcan (2009) in Turkey and Mok (2013) in Hong Kong evaluated the effects of language awareness training for pre-service EFL teachers. Başyurt Tüzel and Akcan (2009) found that language awareness training helped teachers to become more confident in their teaching, become aware of what type of language problems they have, and develop coping strategies to deal with those issues. Additionally, the training helped the pre-service teachers to become more reflective of their teaching needs and how to improve on their language skills. Overall, this study shows that language awareness training for non-native L2 teachers assists them in developing an awareness of their own language skills and limitations, which is another area of linguistic knowledge. Having and developing linguistic knowledge and awareness is not just about developing skills to help students, but it is also about helping teachers to understand how much knowledge
and awareness they have themselves, what areas of that knowledge they may need in the future and how to improve that knowledge. To further illustrate this point, Mok (2013) conducted a case study of online discussion forum of pre-service EFL teachers from a university in Hong Kong taking a TLA practicum course. During the first eight weeks, they received training in TLA in relation to the general structure of languages in different areas like phonology, grammar, and morphology. The next nine weeks, the teachers taught at different secondary schools in the local area and met once a week for a practicum. The online discussion forum was completely voluntary for pre-service teachers and tutors to post about TLA issues in the classroom, content-related issues, and/or questions about anyone of those issues they could not answer. Generally, the findings revealed connections between procedural knowledge of language with pedagogy in relation to TLA. The pre-service teachers felt comfortable reflecting and asking questions about specific areas of content language like phrasal verbs, run-ons, and adverbs. Additionally, they were able to create an online support community with fellow students, which helped them to develop skills in knowing where to look for help. Generally, TLA training seems to help pre-service teachers if they have a chance to practice what they learned and reflect upon it. These studies show how interconnected teacher knowledge and teacher awareness are within teacher training and by evaluating the interconnectedness of those, teacher-training programs can design curriculum to better support pre-service teachers. For my study, I evaluate the interconnectedness of these two concepts in relation to teacher linguistic knowledge and TLingA, in order to understand how L2 teachers use their linguistic training and in turn hopefully this can help inform MATESOL programs.
**Linguistic training**

Teacher linguistics training is a very common part of MATESOL programs in North America. In order to better understand how common, Govardhan, Nayar, and Sheorey (1999) evaluated the *Directory of Professional Preparation Programs in TESOL in the United States and Canada 1999-2001* and found that 120 out of 194 MATESOL programs in the US and Canada offer some form of a linguistics class. In addition, Murphy (1997) found in a survey of about 70 MATESOL programs that about 70% of the programs required some form of phonology course. In a survey of about half of the MATESOL programs in the US, Vásquez and Sharpless (2009) found that almost all of the programs emphasize or teach about pragmatics to some degree with most of these courses being introduction to linguistics, discourse analysis, and sociolinguistics. From these studies, it seems that linguistics training is a major part of most MATESOL programs and language teacher training; however, not much has been said or researched about how teachers use this linguistic training in their teaching. For my dissertation, I interview teachers about how different areas of linguistics influence their teaching and evaluate how teachers apply their linguistic knowledge.

Teacher linguistic training can cover general training of linguistics or specific areas of linguistics. For instance, Wang (2015) evaluated the linguistic, cultural, and technological awareness transfer ESL teachers had from an online Chinese course they took during pre-service training three years prior. The course covered basic Chinese language and culture lessons with different tasks focusing on reading, recording, online discussions, and other interactive online tasks. For the study, the teachers had to complete a survey, an interview and respond to an email answering questions about how
the course affected their teaching linguistically, culturally, and technologically. Most of
the teachers remembered some of the important language, cultural, and technological
aspects of the course. Those who were enthusiastic about learning Chinese online
remembered more and were influenced more by the course than those who were negative.
Many of the teachers had more empathy for their students and understood the difficulty
of learning another language, but other teachers had difficulty finding opportunities to
apply what they learned due to the limitations in their teaching contexts. The course
helped them to make connections with other courses that they had taken about
understanding cultural diversity, which helped in lesson planning, but found very few
chances arose to apply their direct linguistic knowledge. Overall, it helped them to gain a
linguistic understanding of how difficult it is to learn a language, and they were better
able to understand where Chinese students were coming from culturally. This study
shows that increasing teachers’ knowledge and awareness can help teachers be more
empathetic towards their students’ difficulties and increase their knowledge of different
languages. In my study, I ask L2 teachers about how culture and sociolinguistics affects
their teaching.

In another study, Attardo and Brown (2005) found that pre-service teachers
exposed to one or more courses of linguistics had a significant attitudinal change towards
the acceptability of non-standard dialects of English and the acceptability of alternative
grammatical forms not found in Standard English, which also shows that the increase of
linguistic knowledge and awareness helps teachers to better understand their students in
order to help them. Wang (2015) and Attardo and Brown’s (2005) study show the
importance of increased linguistic knowledge and awareness in influencing teachers early
Similarly, I assess novice and experienced teachers application of linguistic knowledge and TLingA in my study.

Generally, Grabe, Stroller, and Tardy (2000) describe the importance of linguistics training for ESL teachers in order to equip them for the classroom and beyond. They emphasize generally that teachers’ understanding that languages vary due to different dialects, registers, contexts, and purposes is helpful. Also it is beneficial for them to see how people use language to communicate in different contexts, how the different structures and forms shape communication, and our general ability to process it. Within linguistics, it is useful for teachers to understand basic syntax, but with a focus on understanding the rules of usage, language structure, and how that can help them in the classroom to assist students. Grabe, Stroller, and Tardy (2000) argue for teachers to have a basic understanding of phonology and phonetics to help students comprehend dialect variation, phonetic letter-sound connection, and pronunciation. This can help teachers to diagnose problems and assist students with solving them. Having a basic knowledge of sociolinguistics can help teachers to instruct students about context variation of language and socially implied aspects of language like body language. Understanding basic discourse analysis in multiple areas can help teachers to see how oral and written language varies, how teachers talk to their students, and how language output affects a lesson. Finally, Grabe, Stroller, and Tardy (2000) describe how it is helpful for teachers to have a basic understanding of psycholinguistics to see how cognition and L2 acquisition affect students’ learning. Overall, having a basic understanding in all these areas of linguistics helps teachers to improve their knowledge base for the classroom and general professional development. In other words, by helping teachers to increase their
knowledge and awareness about teaching and by understanding how teachers apply both knowledge and awareness, researchers can help teacher trainers design curriculum to assist future and current teachers.

Teacher linguistic training can start anytime during a language teacher’s development to help increase teacher linguistic knowledge and TLingA. For example, Yates and Wigglesworth (2005) researched part of professional development in an Adult Migrant English Program in Australia looking at teachers’ pragmatic awareness and explicit pragmatic teaching to assist students focusing on mitigation. It was a type of researched-based professional development that could be directly applied to the classroom. In small groups, teachers analyzed transcripts to look at how NSs versus NNSs used mitigating devices to ask for or request different acts or things in different contexts from simple to difficult requests, which included syntactic mitigation, propositional mitigation, and lexical mitigation. The teachers found that NSs used a larger variety of strategies than NNSs. Both groups delivered propositional support for their appeals in the form of reasons, but the NNSs did not try to create a bond with the person they were conversing with in the same way as the NSs did. The NNSs were much less prepared than NSs to ask for difficult requests. The NSs could anticipate critiques for those requests much more quickly than NNSs could and adapt their mitigating techniques to fit the situation. The teachers were able to see the need for explicitly teaching mitigating strategies to help students to cope with difficult requests and anticipate harsh criticisms for those requests. Overall, the teachers saw the need for professional development and research to improve their teaching techniques and curriculum. Additionally, the teachers were able to notice sociocultural aspects of
language in communication that they had never really thought about. Moreover, Riegelhaupt and Carrasco (2005) studied teachers involved in a graduate studies program trying to get the official Arizona Endorsement in Bilingual Education or ESL. The study focused on the effects of sociolinguistic awareness and teaching for teachers in the White Apache Mountain School District in Arizona where Apache English was not considered as an acceptable “legitimate” dialect of English in which Apache was the dominant language. With the Language Assessment Scale test, 90% of the students were considered Limited English Proficiency learners. Most teachers were not bilingual in Apache and English. The teachers got weekly instructions in applied linguistics topics while teaching, which helped them to be able to learn that each dialect of English is governed by its own rules and that local languages affect each dialect of English, like Apache affecting English. An example of this has to do with the rules governing plurals and past tense formation, which differs morphologically in Apache English compared to other dialects of English. The awareness of this variation helped teachers to not over-criticize mistakes by students in their classroom and become aware of register like how different written and spoken language is, thus helping teachers to be less critical and be more empathetic towards their students. In other words, from these two studies, it can be seen that teacher linguistic knowledge and awareness assist L2 teachers in the classroom and beyond. In my study, I evaluate how linguistic knowledge influences L2 teachers and what factors affect the application of that knowledge.

In another study, Ishihara (2011) looked at instructional pragmatic awareness training for an EFL teacher training workshop, which was 5 hours of 30 hour training workshop in Japan. The training involved analyzing a dialogue for authenticity and
expressions used for greetings in English. They evaluated the textbook versus more naturalistic role-play to see how pragmatically informed the textbook dialogue was. The discussion during the training led to question if textbook creators took pragmatics into consideration in order to see if these types of dialogues would happen in real life and what kind of research the textbook developers did to develop the dialogues. The teachers brainstormed in partners what a role-play or naturalistic conversation may be but did not research to support their dialogues, for they just used their imagination. The training was short and study very small with limited exposure to pragmatic awareness. Thus the study was almost too small to really evaluate how effective linguistic training in pragmatics can be, but it gave us a glimpse into the importance of pragmatic linguistic awareness training for language teachers. Yates and Wigglesworth (2005), Riegelhaupt and Carrasco (2005), and Ishihara (2011) evaluated teacher linguistic training at the professional development level and found that the more practical, applied and structured the training was, the more effective it seemed. By understanding and evaluating how teachers use their linguistic knowledge and awareness in their teaching, which is a gap that needs to be researched, better and more well-developed professional development training can be designed. In this dissertation, I assess how L2 teachers apply different areas of linguistic knowledge by asking them hypothetical teacher scenarios related to those different linguistic areas, such as pragmatics.

Application of Linguistic Knowledge

Understanding how language teachers apply their linguistic knowledge is the next step in understanding the importance of linguistic training. In order to understand this, Grabe, Stoller, and Tardy (2000) did a case study of one teacher who received general
training in all aspects of these areas of linguistics in her MATESOL courses along with methodology and foundation courses. Data was collected three times during the study: a.) at the end of her first year, while she was teaching EFL overseas, by analyzing her daily journals where she reflected upon how she applied her knowledge from her first year in her lesson planning and implementation; b.) during her second year, by analyzing her lesson plans for an English for Specific Purposes course looking for details in how she implemented the training from the different courses she had taken; and c.) three years after she had graduated, by analyzing her reflection in which she described how her overall training and courses had affected her teaching and how she developed curriculum for English for Specific Purposes program overseas. The findings showed that she used a variety of knowledge from different areas of her graduate training, which intertwined together with the different areas of her linguistic training. This means that it was very difficult to tease apart how specifically different areas of her training affected her teaching. Overall, her MATESOL training helped her to read up-to-date research for the classroom, give students tools to become more autonomous learners, explain different grammatical and structural points of languages, and diagnose different types of language problems students had and assist them. She found it difficult to separate how each course helped her in her teaching, but the training overall helped her to become more aware of how language worked and of ways to help her students. For the different areas of linguistics, a few examples were found in applying her training:

1. morphology: strategies for teaching vocabulary
2. phonology/phonetics: pronunciation help and distinguishing similar sounds
3. discourse analysis: teaching structures of different discourse types
4. sociolinguistics: language variation, registers, and appropriateness of language in different contexts

Grabe, Stoller, and Tardy (2000) argued that methodology and theory courses in MATESOL programs teach transferable skills that may not always be measureable, but overall increase the awareness of teachers. Overall, the researchers presented a thoroughly descriptive study, but their theoretical framework was not quite entirely straightforward, for the study seemed more exploratory than traditionally empirically based. In addition, the results of the study are difficult to generalize because the study focuses on one person in one particular circumstance, whereby with my study, I evaluate multiple teachers’ linguistic knowledge and awareness, and attempt to understand what the trends may be and what factors may limit that application of both.

In another study on linguistics training, Gregory (2005) observed 22 pre-service Spanish language teachers at California State University taking two Spanish applied linguistics courses back to back. The study focused on phonetics and phonology training in the first course and how the pre-service teachers were able to absorb and apply that knowledge in a tutoring setting during the second course. The pre-service teachers had to answer open-ended questions in a journal they kept during the two semesters. The questions involved their reflections on the use of KAL in their teaching, aspects of KAL they overlooked when teaching pronunciation, how they viewed the usefulness of KAL in their training, and amount of KAL they acquired for teaching. In general, the researcher found that only a few of the pre-service teachers were able to apply a high level of KAL in their teaching. However, the wording of the questions for the journal may have needed to be a bit more direct about what specific types of KAL were used during tutoring, for
example, mentioning the application of phonetics and phonological concepts in tutoring. The pre-service teachers were able to apply their knowledge of diphthongs and contrastive phonemes with English, but not much else. Generally, the pre-service teachers found the training helpful and said that their TLA increased, but were unable to make many direct links or show examples in their teaching. This one major area of concern with linguistics training is its direct application in the classroom. TLA influences and assists teachers with designing tasks and lesson plans, but the direct practical link is hard to find and assess. Gregory (2005) argues that, for this type of training to work, teacher trainers need to set aside a specific time in class to model and practice, which I agree with. Modeling and practice help with other areas of teacher training, like lesson planning and task development. The same should be true for linguistic training because it is such an integral part of so many L2 teacher-training programs. Additionally, commercial textbooks for language teacher training need to include practical pedagogical applications of KAL concepts like phonetics and phonology. It can be seen that the direct application and measurement of KAL is very difficult to assess, but that the overall knowledge of it can assist teachers in different ways and situations. This is similar to understanding TLingA, for in my study I look at how L2 teachers apply their linguistic knowledge and whether they are aware they are applying that knowledge.

In order to see how much of an influence and connection linguistics training has had on teaching, LaFond and Dogancay-Aktuna (2009) conducted a survey of 61 current students and graduates of MATESOL programs with questions focusing on understanding their experience and perspective. The study involved 28 novice teachers, 15 teachers with one to a couple years experience, 11 teachers with a few to five years
experience, and seven teachers with more than five years experience. The researchers did not mention if they were male or female or a mix of both. LaFond and Dogancay-Aktuna (2009) use the theory of PCK being influenced by knowledge of linguistic theory and language analysis in relation to teachers’ perceptions of their own knowledge and skills. They also mention that teacher cognition (Borg, 2006) plays a role in their perceptions and teachers’ connection between declarative and procedural knowledge, which they only briefly mention and explain in the discussion using Andrews (2007). By mentioning both Borg (2006) and Andrews (2007), LaFond and Dogancay-Aktuna acknowledge that there are many factors that influence teaching and that those factors are very complex. However, by only mentioning both pieces of research once, they may not be evaluating the different areas of influence in as much depth as possible. The survey was conducted online and in person covering four areas: a) the importance of different areas of linguistics (syntax, phonology/phonetics, morphology, semantics, and sociolinguistics) in the classroom, b) reflecting on how linguistics may assist teachers in the classroom, c) opinions on the importance of theory vs. methodology courses in TESOL training, and d) their examples and suggestions about what connects pedagogy and linguistic theory in TESOL training. For questions in the areas a) and c), teachers were asked how relevant to irrelevant these topics were to teaching, and questions in areas b) and d) were open-ended.

Generally, LaFond and Dogancay-Aktuna (2009) found across groups that the study of linguistic theory is viewed as helpful or would be helpful for them as instructors. None of the respondents completely viewed teaching methodology by itself without theory as helpful for coursework training. Many of them wished that, during their
training, there were more explicit activities that helped to link linguistic theory to the classroom. Most novice and experienced teachers had a positive view of the link between linguistic theory and practice, while those with only one to five years experience were not as enthusiastic with the link. With the different areas of linguistic theory, most of the respondents felt that the training overall helped with their awareness of language, professional development, and lesson planning, with most of them believing that this is the rationale for including it in MATESOL training. For direct links of application of linguistics in the classroom, a few examples were found:

1. syntax: drawing trees
2. phonology/phonetics: helping with pronunciation and understanding stress patterns
3. morphology: explaining word forms
4. semantics: explaining small distinctions in meaning
5. sociolinguistics: explaining the differences in dialects of language

The number in each demographic group with different years of experience was not quite equal, which may have slightly influenced the findings. To put it simply, years of teaching may be a factor that affects the application of TLingA or other areas of teacher knowledge and beliefs about how teachers apply this knowledge may change with years of experience. This study also only goes so far as a survey can go. The researchers never really describe how they presented the online survey, in an email or Survey Monkey, and they never describe how they administered the in-person version of the survey, all together or one person at a time. If the researchers had conducted interviews similar to the survey questions, the researchers could have asked the teachers to more indepthly
explain the situations in which they apply their linguistic knowledge, and expand on their opinions about their linguistic knowledge and how it affects their teaching. Additionally, with an interview, the researchers could have asked about hypothetical teaching situations involving different areas of linguistics and seen how their linguistics training affected their decisions. This led me to select interviews where teachers are able to elaborate on their answers and give more detailed explanations of how they apply their knowledge and awareness in different areas of teaching.

**Conclusion**

Overall, this chapter reviewed how different types of teacher knowledge influence language teachers, how TLA influences language teachers in different ways, what factors affect teacher cognition in different contexts, the interconnectedness of teacher knowledge, cognition, and awareness, the effects of teacher training in relation to TLA and linguistic training, and how teachers apply their linguistic knowledge in different contexts. The next chapter will discuss the methodology, participants, and a general description of data collection for this study on TLingA, teacher knowledge, TLA, and teacher cognition for language teachers.
CHAPTER 4
METHODOLOGY

Introduction
This chapter discusses the methodology behind researching TLingA. First, the chapter starts off with the research questions that guided this study and then moves onto a description of the methodology behind this study. Next, the chapter reviews a pilot study I ran to get a better sense of which method to use evaluate TLingA. After that, there is a description of the participants who took part in this study. It is followed by a description of data collection and of the analytic procedures used.

Research Questions
In order to explore L2 teachers’ perspectives on how they think they are influenced by linguistic knowledge and awareness in their teaching and beyond, this study focuses on four questions:

1. How do L2 teachers define linguistic awareness and how does linguistic awareness influence their teaching?
2. What linguistic knowledge, if any, do L2 teachers claim they apply to teaching?
3. Are L2 teachers aware that they use linguistic knowledge?
4. What factors influence this application?

Methodology
As mentioned in Chapter 2, Johnson and Golombek (2002) and Freedman and Johnson (1998) explain that teacher knowledge is a type of social construct that comes from previous experiences, develops overtime from pre-service to in-service training, changes with self-reflection from lesson planning each day to overall curriculum
development, and is influenced by personal beliefs about different areas of teaching and language learning. Moreover, L2 teacher knowledge includes linguistic knowledge and awareness. This knowledge and awareness is a mix of PCK as defined by Shulman (1987), TLA and KAL as defined by Andrews (1999, 2001, 2003, 2007), and teacher cognition as defined by Borg (2006). As previously mentioned, teacher cognition is viewed in this study as beliefs, comprehension, views, and attitudes about teaching. In other words, TLingA is a combination of teacher knowledge, teacher awareness, and the connection between beliefs and practices in the L2 classroom. As a L2 teacher myself, with more than ten years of experience teaching at two IEP’s, with a MATESOL and MA in Linguistics, I have used linguistic knowledge while teaching, designing lesson plans, and developing my overall pedagogical knowledge. I have seen that my linguistic knowledge and awareness is an integral part of my L2 teacher knowledge, which leads me to think that this linguistic knowledge and awareness may influence my fellow teachers as well. Therefore, I wanted to evaluate and see how much linguistic knowledge and awareness L2 teachers use, since linguistics courses are required for most MATESOL program (Govardhan, Nayar, & Sheorey, 1999; Vásquez & Sharpless, 2009; Murphy, 1997). Additionally, I chose the conscious application of linguistic knowledge, for it seems the most straightforward place to start and most easily accessible for L2 teachers to apply. L2 teachers seem to be more able to describe their motivation, contextual factors, and task choice when applying intentional linguistic knowledge as opposed to unconscious or the unintentional application of linguistic knowledge. This led me to evaluate which type of data collection would be most feasible and appropriate for my study.
First, I thought about using questionnaires, for they do not require a large investment in time when administering them, can be applied in a variety of settings, and participants feel more anonymity than with interviews (Dörnyei, 2007). However, with questionnaires, there is no real chance for follow-up questions if I, as an interviewer, need more clarification of the respondent’s answer and/or if the respondent needs more clarification of the question. This is what I found with LaFond and Dogancay-Aktuna’s (2009) study where they used questionnaires. The researchers never got a chance to ask follow up questions for clarification or ask for more thick descriptions of how L2 teachers were connecting linguistic theory to their teaching. The structure of a questionnaire needs to be simple and straightforward for multiple people to reduce the chances of misunderstanding, which may lead the respondent to skipping or hurrying through questions they do not understand. If there are open-ended questions in the questionnaire, people may skip those questions due to lack of time or motivation to answer them. If the directions give too much information, that may skew answers that the respondents give. In addition, Moser and Kalton (1971) indicated that questionnaires are not the best format for probing deeply into a subject (cited in Dörnyei, 2007). In addition, an ethnographic study would be very time consuming and be more appropriate for uncharted topics or exploring new topics that have yet to be discovered. In other words, I needed a type of data collection that was more structured, but also allowed for flexibility if miscommunication, clarification, and/or the need for expanded answers arose. A case study also seemed like an illogical fit due to its limited scope with a very particular time and setting. Additionally, there is the issue of case studies being hard to replicate, although case studies do allow for thick description and in-depth insights (Dörnyei,
2007). Moreover, Grabe, Stoller, and Tardy (2000) had already conducted a case study of a MATESOL which helped as an example study, but more participants would help with evaluating how different L2 teachers apply linguistic knowledge, not just one person. Next, I ruled out diary studies for respondents could pick and choose what they wrote about and the length of entry could vary greatly. Along came the idea of observations, which seemed to be very close to the ideal fit for data collection for this study because the researcher can directly see what the teacher is doing in the class. Observations can be very objective with certain types of studies (Dörnyei, 2007).

However, there are several drawbacks of using observations, for example, not being able to see mental processes of the teacher being observed, not understanding why he or she chooses to do certain activities, the presence of the researcher being in the class affecting the behavior of the teacher, and the complexity of everything going on in the classroom at the same time (Dörnyei, 2007). Finally, this led to the idea of using interviews, for even Borg himself said in an interview that the best way to evaluate teacher cognition is to get teachers talking about their motivation for why they make certain decisions in the classroom (Birello, 2012).

Using interviews presented me with a number of strengths and drawbacks. As Dörnyei (2007) explains, interviews help the researcher to focus on a number of topics using different types of questions, unlike observations where several things may be going on at once, and the researcher has too many topics to focus on or keep track of. The researcher is also able to adapt questions to fit each respondent like novice teachers versus experienced teachers and ask follow-up questions if the researcher needs the respondent to clarify answers unlike questionnaires. The researcher is also able to clarify
questions for the respondents if they do not understand the question or need it repeated. Also, Dörnyei (2007) adds that with interviews, there are more chances for thick description and in-depth data than with questionnaires. There are a few drawbacks with interviews, for example how much time they consume with setting them up, conducting them, and analyzing the data, but the same is true for observations. There is also less of a chance of anonymity with interviews than questionnaires, but I have taken that into consideration with not including too much personal information questions and providing a form of letter coded pseudonym to each participant.

In addition, an interview can be defined as the exchange of views between two people over a particular theme (Kvale, 2007). First, the structure of the interview for my study followed Holstein and Gubrium’s (1995) style of the active interview, in which the interviewer is the activator of knowledge, and the interviewee responds to that activation. The active interview sets the stage where the interviewee’s interpretive skills are activated for a type of improvisational performance structured by the questions that the interviewer asks. For my study, I asked the teachers to activate their linguistic knowledge for different L2 teaching scenarios. While conducting the interviews, I took the perspective that interviews are socially co-constructed ‘speech events’ between interviewer and interviewee, where meaning and knowledge is created between the two (Talmy & Richards, 2011; Kvale, 2007). More particularly in this context, the co-construction was linguistic knowledge used in teaching. I also used the “interview as a research instrument” (Talmy, 2010, p. 131) in order to elicit descriptions and to interpret the meaning of a particular theme or phenomenon (Kvale, 2007). However, I also took into account that the relationship between the interviewer and interviewee during
different questions could affect what the interviewee says. This means that the role of the interviewee may change from question to question, like from language teacher to language learner (Block, 2000), and this may influence what answers the interviewee gives to questions. Their answers may be more about what the interviewee wished their language teachers knew or were like than what they themselves are like as L2 teachers.

Finally, in order to assess and evaluate this linguistic knowledge and awareness, this study used interviews with questions structured similarly to think-aloud protocols that probed different areas of linguistics in relation to teaching. A traditional think-aloud protocol is a type of verbal report, which is recorded, where the participant verbalizes what he or she is thinking while completing a specific task (Bowles, 2010), such as evaluating written feedback (Diab, 2005) or translating (Li, 2011). Gass, Behney, and Plonsky (2013) explain that think-aloud protocols evaluate the “cognitive processes” (p. 47) the participant uses while completing the task at hand. However, the questions for this study did not exactly fall along the same lines as traditional think-aloud protocol. These types of questions were used to better understand if and how L2 teachers access their linguistic knowledge while teaching and/or how much influence linguistic knowledge had when making certain decisions in the classroom. These questions are hypothetical teaching scenarios similar to ones L2 teachers face every day in an attempt to activate their linguistic knowledge (such as students having difficulty with word order). Generally, think-aloud questions can help to enhance the richness of data and help the researcher to better understand the mental processes of the respondent (Dörnyei, 2007). For this study, hypothetical teaching scenario questions were used to better understand how much or if linguistic knowledge and awareness is used or accessed by
teachers. In order to make sure my study would run smoothly, I conducted a pilot study first.

**Pilot study**

While developing a pilot study of observations and interviews of teachers, it became clear to me how hard it would be to specifically detect linguistic themes of awareness in teaching from observing alone. It would take many hours of observation to find ways of pinpointing what exactly a linguistic awareness teaching moment would look like and how I would code it. This led me to just focusing on interviewing in order to stimulate teachers to recall different types of linguistic knowledge they used while teaching and pose possible teaching situations where they would have to use their linguistic awareness. For my pilot study, I interviewed two female teachers from an IEP at a university in the US: one with a few years of experience and one with many years of experience. I wanted to see if more years of experience affected linguistic knowledge and awareness in order to understand how much of a factor it played in the application of teacher knowledge. For me, as I have developed over the years as a teacher, my understanding of how language and linguistics connect to the classroom has grown deeper. The more languages I study and the more I teach students with more diverse backgrounds, the more my teacher knowledge and awareness develop. I wanted to understand if that is true for other L2 teachers. First, I chose two native speakers of English so as to decrease the number of variables in the study between the teachers. Also, both teachers had an MA in TESOL from a university in the US, for most programs require students to take linguistics in some form (Govardhan, Nayar, & Sheorey, 1999; Vásquez & Sharpless, 2009; Murphy, 1997). I wanted to see how and if L2 teachers
applied that linguistic knowledge from their pre-service training, in order to better understand the connection between the requirement of the class during pre-service training and how teachers used that knowledge in their teaching.

The 25 questions involved general demographic information, language background, recently taught courses, educational background and influence, courses required, influential courses, textbook usage, direct questions about the use of different areas of linguistics in the classroom, things they wish they had been taught, the importance of knowledge for L2 teachers on how languages work and L2 acquisition, how often they read up on research about teaching, and teaching scenario questions that involved different areas of linguistic awareness. These types of questions were chosen in order to see what types of factors may affect the application of linguistic knowledge and awareness. A list of the 25 questions from the pilot study is attached in Appendix A.

I found that both teachers took a general linguistics course that grammar was the most influential course on their teaching from graduate school, and that general knowledge about language helped with teaching and understanding what students needed. There is some evidence that these two teachers do use linguistic knowledge and awareness to some degree in their teaching. They used it in areas of pragmatics, such as, explaining the multiple meanings of words in different contexts and example dialogues of how to address people in different contexts. They used it in sociolinguistics, for example, in grouping students and discussions about the different cultural backgrounds of students in the class. They also used it in phonology with pronunciation and in general linguistic knowledge like grammar. Paraphrasing one of the teachers, linguistic knowledge and awareness do not just help with teaching, but they help teachers to understand and
support the interaction of different cultures in the classroom. These findings led me to believe that more interviews needed to be conducted where I could analyze the data for more generalizable themes of linguistic awareness. For only having 2 participants, I really was unable to see if there were themes or trends to the types of factors that affected the application of this knowledge, such as, years of teaching or most influential courses. Also, I noticed that some of my questions needed to be simplified as several were too long and took me a couple of times to ask before the teacher understood what I was asking. Additionally, I needed a simple definition for pragmatics as both teachers somewhat knew what it was, but needed a more concrete explanation. However, the two teachers seemed fine with understanding the other linguistic terms I asked them about. Therefore I revised the questions for this study implementing the changes I found were necessary based on the issues I faced during the pilot study.

After reading more about Andrews’s (2006, 2007) definition of TLA and cognition, I saw how much of a role teacher beliefs and attitudes played in influencing their teaching. This led me to add a question about how they defined linguistic awareness and a question on how much their previous language learning experience influenced them. Based on conducting my pilot study, I was also able to see what the best setting for the interview would be and to let the interviewees answer naturally, so as not to lead them to the answers that I want to hear. Based on the findings from my pilot study, I can conclude that more research needs to be done with teachers of varying experience, for level of experience is a strong factor in the application of teacher knowledge (Johnston & Goettsch 2000; Freeman & Johnson, 1998), and that my interview questions needed to be
fine-tuned in order to learn more about linguistic knowledge and awareness of L2 teachers. This is the goal of this dissertation study.

**Participants**

There were 12 participants, with varying degrees of teaching experience, in this research study who had worked or taught in an IEP at a university in the Southwest United States. Each participant was finishing up or had graduated with an MA in TESOL, Applied Linguistics, or a related field. Following a similar structure of evaluating experience level and application of linguistic knowledge as LaFond and Dogancay-Aktuna (2009) and taking into account that teacher knowledge develops over time (Freedman & Johnson, 1998), I recruited three participants currently in a Master’s (MA) program, with the other participants having varying degrees of experience teaching from less than five years to over ten years of experience in order to see how much of a factor experience played in the application of linguistic knowledge and awareness. Studies where teaching experience played a role are Burri, Baker, and Chen’s (2017) study where years of experience affected the application of pronunciation knowledge and Nishimuro and Borg’s (2012) study where experiential knowledge appeared to be the driving force behind many classroom decisions in relation to grammar. Participants for this study were recruited using email correspondence, and they also signed a consent form.

All are native speakers of English or use English as a dominant language throughout work and school as to reduce the amount of variables with educational background and linguistic knowledge and awareness. I used letter pseudonyms to protect their anonymity and grouped them according to years of experience teaching: \( \leq 5 \)
meaning five or fewer years of experience; 6−10 meaning six to ten years of experience; and 10 < meaning more than ten years of experience. Table 1 gives a brief summary of the demographic information about the participants. Due to the different types of teachers with varying years of experience and degrees, the spectrum of experience and enrollment in MATESOL program did not match up completely. LL, one of the three participants who were enrolled in an MATESOL program, also had a Master’s in a different field. And JJ had two Master’s in literature, which is not a perfectly related field to TESOL. All of the participants had taken a linguistics or related course during their schooling except for JJ.

Table 1

*Demographic Description of Participants*
<table>
<thead>
<tr>
<th>Participant</th>
<th>Years of Experience teaching</th>
<th>MA Education</th>
<th>Linguistics or Language Awareness Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>BB</td>
<td>≤ 5</td>
<td>Currently enrolled MA in TESOL in US</td>
<td>Yes</td>
</tr>
<tr>
<td>FF</td>
<td>≤ 5</td>
<td>MA in TESOL in US</td>
<td>Yes</td>
</tr>
<tr>
<td>HH</td>
<td>≤ 5</td>
<td>Currently enrolled MA in Applied Linguistics in US</td>
<td>Yes</td>
</tr>
<tr>
<td>DD</td>
<td>6 −10</td>
<td>MA in TEFL TESOL in UK—currently working on PHD in Applied Linguistics</td>
<td>Yes</td>
</tr>
<tr>
<td>EE</td>
<td>6 −10</td>
<td>MSC TESOL in UK</td>
<td>Yes</td>
</tr>
<tr>
<td>GG</td>
<td>6 −10</td>
<td>MA in TESOL in US</td>
<td>Yes</td>
</tr>
<tr>
<td>AA</td>
<td>10 &lt;</td>
<td>MA in Education with ESL concentration in US</td>
<td>Yes</td>
</tr>
<tr>
<td>CC</td>
<td>10 &lt;</td>
<td>MA in TESOL in US</td>
<td>Yes</td>
</tr>
<tr>
<td>II</td>
<td>10 &lt;</td>
<td>MA in TESOL in UK</td>
<td>Yes</td>
</tr>
<tr>
<td>JJ</td>
<td>10 &lt;</td>
<td>MA in English Literature in US; MA in Spanish Literature in Spain</td>
<td>No</td>
</tr>
<tr>
<td>KK</td>
<td>10 &lt;</td>
<td>MA in ESL/Bilingual Education in US MA in curriculum and instruction in US PhD in Educational leadership—education and policy studies in US</td>
<td>Yes</td>
</tr>
<tr>
<td>LL</td>
<td>10 &lt;</td>
<td>MA in Post and Secondary education in US</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Currently enrolled in MA in TESOL in US

**Data Collection**

Data were collected using an open-ended question interview format with protocols similar to think-alouds lasting from 30 minutes to about an hour. A complete list of the 28 questions can be found in Appendix B. There were four questions similar to think-aloud protocols involving hypothetical teaching scenarios like the ones these teachers face every day in an attempt to activate their linguistic knowledge in phonology, grammar/syntax, pragmatics, and sociolinguistics as shown in Figure 4. These areas of linguistic knowledge similarly matched LaFond and Dogancay-Aktuna’s (2009) categories where teachers applied or were influenced by a larger amount of linguistic knowledge.

1. What kind of teaching lesson or tool would you use if students had trouble distinguishing two similar sounds?

2. How would you teach word order if students were having difficulty with it?

3. How would you teach requesting and addressing people with different levels of politeness?

4. What role does culture in general and your knowledge of different cultures play in the classroom?

*Figure 4. Four Hypothetical Teaching Scenario Questions*

The idea was to stimulate the participant into remembering situations or similar situations that they may have faced in the classroom. By doing this, I hoped the participants would describe how they would react to the hypothetical situations, and in doing that, I hoped the description would show how they would apply their linguistic
knowledge. These four questions matched four other questions that were asked about the influence of four different areas of linguistics as shown in Figure 5.

1. What role does phonology play in your teaching?
2. What role does grammar play in your lessons?
3. What role does pragmatics play in your lessons?
4. How much does your knowledge of sociolinguistics influence your teaching?

*Figure 5. Four Matched Linguistic Questions*

I pseudo-randomized the questions and slightly changed the wording of the linguistic questions to reduce the chances that respondents would figure out what I was specifically evaluating for. For the hypothetical teaching scenario question that matched sociolinguistics, I chose to ask about what role culture played in the classroom. To me, culture is an influential part of what sociolinguistics is. I am not saying that culture and sociolinguistics are the same thing, but they do conceptually run parallel to one another influencing each other in different ways. Additionally, I found it difficult to brainstorming specific examples of teaching scenarios where teachers were using only sociolinguistic knowledge. Both Grabe, Stoller, and Tardy (2000) and LaFond and Dogancay-Aktuna (2009) discussed language or dialect variation in relation to sociolinguistics, but it seemed that topic could also involve other areas of linguistics, such as World Englishes. It appeared to me that asking teachers about culture was the best option for seeing if teachers were aware of whether they were applying or were influenced by sociolinguistic knowledge while teaching language.

**Analytic Procedure**
I transcribed all of the interviews using a very broad transcription concentrating on the information given and the words spoken in relation to the questions asked. I looked for overall themes, which seemed to appear on a macro and micro level in relation to the topic of linguistic knowledge and awareness. This means that I looked if linguistic knowledge was used to influence the teacher’s overall knowledge and/or professional development and/or if there appeared to be more specific applications of this knowledge. The overall topic was built into the interview questions. However, these overall themes were not predetermined but developed as the data were collected. The analysis was iterative.

When groupings and themes started to appear, I saw if there was a connection between the different interviews. Since the coding was not predetermined, I coded cross-laterally with themes that appeared across teachers, and holistically to each teacher. After themes appeared and a coding system was developed, which changed as the study developed, the researcher holistically described each teacher’s beliefs and practices and how their background and years of experience influenced their linguistic knowledge and awareness. Additionally, I looked to see if there were other types of variables that affected their linguistic knowledge and how they used it, such as education, different teaching contexts, definition of linguistics awareness, how important linguistic knowledge is to them, and variables I was not aware of or did not know to take into account before the study. I coded understanding the interview questions happened in a sequence, and that one answer may affect another (Talmy & Richards, 2011). I did my best to address the validity of this study by relating it to previous theoretical research, empirical studies, and my overall research questions.
I categorized the 28 questions from the interview based on my four research questions in order to better understand what factors affected the application of linguistic knowledge. I then color-coded the interview questions to match the research questions, which is what you see in Table 2. I then reviewed the data and underlined the phrases that were directly answering the interview questions. Next, I moved those answers to an excel spreadsheet matching the categorization of the research question and color codes. The color codes helped me to jump back and forth between the spreadsheet and writing up the findings. After that, I then grouped answers according to my theoretical framework research, starting broader with areas of teacher knowledge, teacher awareness, and teacher cognition. Additionally, I grouped answers for the different areas of linguistic knowledge and awareness according to factors that seemed to affect teachers’ answers. I also grouped together factors where it seemed an influence was not found. I determined this by looking at which factors could be correlated to type, variety and/or amount of answers in relation the different hypothetical teaching scenario questions, such as years of experience being a factor, but amount of textbook use per session not being a factor. Moreover, I categorized factors that did not seem to play a role by the fact that the teachers’ answers did not involve linguistic knowledge or linguistic theory or were not connected to linguistic awareness, such as what type of ideas do you share with other teachers.

Table 2

<table>
<thead>
<tr>
<th>Interview Questions</th>
<th>Research Question</th>
</tr>
</thead>
</table>

_Categorization of Interview Questions Based on Research Questions_
Conclusion

This chapter reviewed the methodology behind the study. It covered the description of my pilot study and what changes needed to be made for this larger study. I discussed why I chose interviews over other types of qualitative data collection and described the specific hypothetical think-aloud interview questions designed to activate L2 teacher linguistic knowledge. I went over the teachers, with varying degrees of teaching experiences, I interviewed who had worked or taught at an IEP at a university in the Southwestern United States. I described my data collection using interviews and my analytic procedures of those interviews. The next chapter will cover the findings categorized by themes in order to provide a thick description of them.
CHAPTER 5

FINDINGS

Introduction

This chapter divides the interview questions into similar themed groups and reviews the overall findings of this study. It starts with questions related to more general teacher knowledge, content knowledge, and subject knowledge. Next, it covers the findings related to teachers’ definition of linguistic knowledge and how it influences their teaching. After that, I review factors that can affect teacher knowledge and awareness. This is then followed by the teachers’ personal perceptions and conceptualizations of teacher training, and then by factors which did not seem to play a role. The last grouping of questions focuses categories of TLingA: phonology, grammar, pragmatics, and sociolinguistics. Each sub-section also covers the influence of that area of linguistics on teaching and the answer to the hypothetical teaching scenario corresponding to it.

Teacher Knowledge, Subject Knowledge, and Content Knowledge

The teachers were asked how important it is for L2 teachers to understand how languages work. Ten teachers thought it was important, for it helped to improve and inform their teaching. Several examples that teachers discussed include explaining things, such as, structure, appropriateness of language, and the variety of ways to say things. And it helped these teachers to understand certain mistakes that students make such as how the L1 affects L2 production. Teachers BB and HH had similar quotes that summarize the overall comments made by the teachers interviewed. Teacher HH explained “how else will we teach it if we don’t understand how languages work”. Teacher KK in particular responded with “I learned a lot about English through Spanish.”
In other words, the experience and knowledge of learning another language gave Teacher KK more content knowledge about English. It seems that learning a 2nd language helped Teacher KK develop more teacher knowledge than just knowing one language.

Along similar lines, teachers were asked what parts and how much language knowledge should L2 teachers have, with their answers covering a variety of topics. Teacher CC said that L2 teachers need to have “a global understanding of language,” a sort of holistic understanding, while Teacher DD explained that they should “understand basic components like vocabulary, grammar, and word order, word structure…pronunciation.” Overall, the teachers described L2 teachers as needing to understand the structure and parts of language with a high level of fluency, with very few hindrances in comprehending what teachers say, and as being able to communicate ideas clearly. Five teachers described in more detail the types of language knowledge as needing to know culture, context, meta-language, how to analyze language, a mixture of different types of knowledge including pedagogy, understanding discourses and writing philosophies, SLA, the influences of the L1, and how to get information about language they didn’t know.

All 12 teachers interviewed viewed that understanding SLA was important for L2 teachers to understand. Nine of the 12 teachers went into detail describing the importance of understanding what factors affected SLA, what might be preventing SLA, students’ motivations for learning, how to assist students to improve their SLA, how understanding SLA could help with lesson planning or course design, and how complex language learning can be. Teacher EE described that one part in understanding SLA is the “institutional context in which you teach…the constraints that we have.” To clarify, L2
teachers must understand institutional factors that affect SLA both in and out of the
classroom. Teacher II in particular explained that SLA knowledge had to do with
“language knowledge or subject knowledge;” that “understanding how a language is
learned I think is more important than knowing every single detail about the language.”
To put it simply, SLA knowledge is a part of content knowledge having to do with KAL
and this type of knowledge is more important for L2 teachers than having extremely
detailed knowledge of the language. Generally, it seems from the variety of teachers’
answers about teacher knowledge that most of them think that L2 teacher content and
subject knowledge covers a variety of areas of language from holistically understanding it
to more specific areas of it that include SLA and knowledge of language itself.

**Definition and Influence of Linguistic Awareness**

The teachers’ responses to how they defined linguistic awareness and how that
influenced their teaching were varying. I grouped their responses by years of experience,
which was presented in Table 1 in Chapter 4. This type of grouping is similar to LaFond
and Dogancay-Aktuna’s (2009) study where they grouped answers by years of
experience. For the teachers with five or fewer years of experience, the general
consensus was that linguistic awareness is understanding the different parts of language
and its applications without always having to be directly taught what those rules are. The
influence on teaching seems to have to do with understanding student mistakes and how
that affects lesson planning, but also passing onto students how much a role language
plays in our lives.

For example, Teacher BB explained it as “understanding parts like language as a
whole, but also understanding the individual parts that make up language.” Teacher BB
explained that the influence was on how to “teach a lesson that’s understandable and understood…break things down to make it easier to understand…be more aware of what it is that they’re (students) exactly struggling with to help assist them.” In addition, Teacher FF described linguistic awareness as “how a language works, how it can and should be used.” Next, Teacher FF explained that linguistic awareness influences teaching thereby wanting “students to have the same appreciation for not just English, but for their own language.” Teacher FF goes onto explain that “you are not just teaching words, you’re teaching language as like a living thing that can be used for so many purposes and can really advance everybody’s life.” In another example, Teacher HH explained it as “being able to pay attention to things and kind of break them down yourself, so that you can learn new principles of that language without having to be explicitly taught… being able to deconstruct things in your mind.” Teacher HH explains the influence on teaching as being “aware of mistakes that students are making…this may be the time to have a lesson on those.” In general, it seems each teacher defines linguistic awareness slightly differently and that linguistic awareness influences different areas of their teaching.

In general, for teachers with six to ten years of experience, linguistic awareness is understanding language and its connections to teaching and beyond. Their views seemed slightly more diverse. From their perspectives, it seems to influence all aspects of language teaching, lesson planning, and problem solving in the classroom. For instance, Teacher DD explained linguistic awareness as “knowing about linguistics…I guess it’s just knowing about the study of language and knowing the research and how that informs your teaching.” Teacher DD went onto explain in regard to the influence on teaching that
“I think knowledge of language should be a basic thing you need to know as a teacher. So keeping up to date with study and research and finding solutions for problems you have in the classroom is important.” Next, Teacher EE described it as being “cognizant of language… like its use and its application and features,” with the influence on teaching being “everything to do with teaching…all encompassing.” In addition, Teacher GG noted linguistic awareness as “being aware linguistically of what is needed or present in your teaching,” with the effect on teaching “depending on the population of the classroom…changes what examples and content that I teach.” In other words, these teachers seem to make the connection between linguistic awareness and the classroom pretty strongly.

Overall, the teachers with over ten years of experience describe linguistic awareness and its effect on teaching as understanding language in relation to students’ needs, knowing how and when to apply their knowledge of language in relation to teaching, that it goes far beyond just being proficient in the language, and knowing the importance of helping students to communicate their ideas. Additionally, they describe linguistic awareness as how encompassing language can be and that language is ever changing. It also has to do with the variety of ways to communicate ideas. In other words, linguistic awareness and its influence on teaching has to do with understanding how very diverse language is, and that understanding the different parts of language is just as important as understanding how to explain those parts to students.

For instance, Teacher AA described linguistic awareness as “being aware or being attuned to…each individual student’s language and issues that their home language brings into learning English… how they learn English”. They described the influence on
teaching as having to “take into account when I work with students especially when I’m grading or if I’m planning a lesson and I know that I have people or students that have certain issues I can put that issue into the lesson plan like kind of hone in on it a little bit.” Teacher CC explained linguistic awareness “as an awareness of the parts of language and the phonology of the language…but also structure,” with affecting teaching, “when like focus on grammar or pronunciation or anytime we’re dealing with any of the language analysis we do and relationship of ideas. I think that comes into play.” Teacher II noted linguistic awareness as being “a lot more than just understanding of the systematic rules of a particular language. It also involves those things like pragmatics why we use a particular form based on what has come before in a conversation. I think understanding sociolinguistics things like politeness, how to express anger in an appropriate way.” Next, Teacher II explained that the influence on teaching involves “not just this expert knowledge of…language as a system of rules and knowing all of the detailed rules every aspect of constructing grammatically valid sentences…it is also…pragmatics, sociolinguistics, it’s understanding language in its broader context and looking at it as you know a means of communication and understanding that grammatical accuracy isn’t the only thing that determines whether a communicative act was performed appropriately or not.”

In addition, Teacher JJ stated, “from being a teacher I would describe linguistic awareness as being aware of maybe the cultural historical and evolutionary steps or epics within language… that awareness of what informs language is more important sometimes than the language itself…the many different ways…to say the same thing…where it comes from,” with the influence on teaching being that “it’s easier to explain to your
students...helps you to teach it more effectively but also to understand its use more effectively.” Teacher KK explained linguistic awareness as “knowing the label for whatever that function is and then knowing how it works...then the ability to describe and apply how it works.” In addition, Teacher KK explained the influence on teaching as being “expository in nature...put something out on display, you name it, and then you talk about how it works and then the trick is to get students to be able to do that thing.” Teacher LL noted linguistic awareness as “being less ignorant of different languages,” and explained, “I don’t think I would become a second language teacher if I don’t have an awareness of other languages...have some awareness of the diverse languages that are out there...how important they are for the students.” Generally speaking, the teachers with over ten years of experience described that linguistic awareness covers multiple levels of understanding language and how that connects to the classroom.

To sum up, all 12 teachers’ definitions of linguistic awareness and its influence on teaching seem to encompass much of, but also expand upon, my definition of TLingA. To review, my definition of TLingA is the intertwining of different types of teacher knowledge, cognition and awareness in relation to linguistics and language.

Factors that Affect Teacher Knowledge and Awareness

A multitude of different factors may affect the application of different types of teacher knowledge and awareness such as the ones described by Andrews (1999, 2006, 2007). TLA can be affected by personality, attitude, cognition and context. One type of influence in particular is cognition, which is what teachers know, their beliefs, and thought processes according to Borg (2003a, 2006). In his conceptual framework of teacher cognitions, he mentions different areas of cognition and areas of influence, which
are schooling, professional coursework, contextual factors, and classroom practice. These areas of influence can affect teachers’ theories (or terms), attitudes, perspectives, conceptions, metaphors, images, and related areas (Borg, 2003a). This is connected to Question four where all 12 teachers were asked about their educational background, in other words, schooling. This is because schooling may affect the development of different types of teacher beliefs.

The findings showed a wide variety of undergraduate majors ranging from music to law to literature to print management to international relations to African American studies. Moreover, a couple of teachers majored in psychology, a couple majored in different languages, a couple majored in communication, and one teacher minored in communication. All the teachers have been or are in school studying to get an MA in TESOL or a related field, except Teacher JJ with two Master’s degrees in literature. On top of that, Teacher DD is studying to get a PhD in applied linguistics, and Teacher KK has a PhD in Educational leadership with a focus on education and policy studies in the US.

To expand upon understanding the role of educational background, the teachers were asked about how their educational background affected their teaching. Overall, eight teachers commented on the influence of their MA degree on teaching styles, teaching methods, curriculum development, lesson planning, content, and theories of teaching. Five teachers commented on how their undergraduate major or other parts of their educational background affected their teaching. For example, Teacher BB studied cognitive psychology and mentioned how understanding “learning and memory” can assist with helping “students to remember.” In another example, Teacher CC, with over
10 years of experience in the classroom, explained about having a BA in French and how that helps to understand “language learning and what I like and what I don’t like…how I teach about cultural sensitivity and wanting to make my classroom a communicative classroom.” Studying a language as a student helps Teacher CC better understand what type of tasks help promote a communicative classroom and what types of tasks are not as supportive. In addition, Teacher HH and Teacher II talked about how their undergraduate major helped them to understanding writing more. For Teacher HH, whose major was English literature, understanding the development of “compositional skills” was one major influence. Moreover, Teacher II mentioned the effects of studying law during undergrad by developing “high standards for writing from students” and understanding “forms of writing” and “argumentation” better. In contrast, Teacher EE talked about “the frustration that is in my current job that I have and seeing things that are done in a way that contradicts maybe what I have learned.” In other words, educational background may influence teaching, but other factors like institutional factors may restrict or limit the influence of that educational background.

Another area that can affect L2 teachers is their own language learning experience, which some may describe as schooling mixed with personal influences. Their first thoughts about learning a language and what are good practices and bad practices in the classroom start from their own experiences. These ideas can follow L2 teachers throughout their career and can affect their teacher training (Borg, 2003a). Overall, it was found that all the teachers interviewed had studied a L2 or more in some form or another either as a home language, in primary or secondary school, or during undergraduate or graduate studies. More specifically, 11 of the 12 teachers identify
themselves as native speakers of English or that their L1 is English. Teacher FF describes using Spanish as a home language and identifies English as a L1. Additionally, Teacher JJ describes Hungarian as a childhood L1 and home language and English as their dominant language for school, work, and their adult life.

Question eight covered this topic about the influence of each teacher’s own language learning experience on their teaching. Nine teachers explained that it gave them compassion, sensitivity, and empathy for students. It helped two teachers to understand what not to do in the classroom, such as lecture at students with very few communicative activities or use a large amount of translation in class. However, for seven teachers, it helped them to learn what to do in the classroom, such as giving students time to learn, finding different ways to help students, anticipating areas of difficulty, creating a comfortable classroom, developing stories and examples for students, examining how to view errors and corrective feedback, and how to remember vocabulary. For four teachers, it helped to improve upon their teacher knowledge in understanding that language and culture are intertwined, that they couldn’t do their job without the experience, that language learning is a building process and life-long process, and that understanding how to analyze language helps them to assist students with understanding it. For example, Teacher BB explained that it helped with “understanding sort of the general things that I struggle with as a learner…knowing what are some more language specific aspects of English that I know are kind of difficult.” However, Teacher GG explained that it helped with “actually listening to what my kids needed and wanted, for it is just as important as what the teachers and the curriculum were telling me to do.” In other words, having the experience of being a L2 learner helped Teacher BB with
being sympathetic to the struggles of being a L2 learner. It also helped Teacher GG to really understand that listening to students is just as important as developing curriculum for the class.

To understand more specifically the role different courses played in influencing teacher’s knowledge, the teachers were asked to describe what courses they took or were taking during their MA program. All the teachers except Teacher JJ took or were required to take linguistics or language awareness courses during their MA program. Also, all the teachers took a course that involved teaching methods in some form except Teacher HH, but Teacher HH was an education major the first 2 years of college. Teacher BB, CC, GG, HH, II, and KK all took SLA. Teacher BB, CC, DD, FF, HH, and KK took more than one linguistics course. The rest of the courses taken or being taken were a variety of theory courses on teaching, intercultural communication, research methods, linguistics or something of that sort.

The teachers were asked which class or classes were the most influential to their teaching. Eight teachers answered teaching methods, three answered SLA, three described a type of linguistics course, two mentioned assessment or language testing, and a few other courses here and there. For example, Teacher FF answered teaching methods and syntax, for “I got a lot of good ideas from my course instructor but also my classmates who had various experience teaching. I would say probably also syntax cause when I had to teach grammar classes, the syntax class really helped to refresh. I thought back to it quite a bit.” In another example, Teacher LL described the internship as the most influential course, “cause you were working right in the field. So it’s really connected in what you’re doing” and also mentioned grammar teaching as an influential
course for its direct connection to the classroom. An interesting answer came from Teacher KK who talked about teaching methods but also mentioned learning from the professors themselves through a type of modeling, “when professors teach their own classes you’re learning from them, sometimes the pacing, the rhythm, the activities.” Generally, eight teachers talked about how they could connect what they learned into their teacher training to what they could use in the classroom such as Teacher CC talking about an assessment development course and that connection to the classroom. When describing these practical connections, it seems from my interpretation that many teachers are describing the interconnectedness of the different types of factors and teacher cognitions like the connection of professional coursework and the effects on classroom practice. An example is taking a research methods course and applying that knowledge in the classroom to teach students about writing research papers as Teacher JJ described. This leads to the next section about perceptions and conceptualizations of teacher training that teachers develop from different contextual factors and classroom practice.

**Personal Perceptions and Conceptualizations of Teacher Training**

Teachers were asked about things that they wish they had been taught during their MA program. Generally speaking, seven teachers talked about more practical training for the classroom, such as teaching practicums, activity based classes, classes practicing connecting theories to different classroom situations, a class about how to teach in real world contexts, longer teaching methods courses or something similar. For example, Teacher FF explained that training should include “actually talking about effective ways to implement knowledge and help students understand better.” Five teachers talked about more training in how to teach grammar, how to develop assessments, how to manage the
classroom, how to understand the effects of culture, and how to understand the
expectations of students. For instance, Teacher II described more training in “classroom
management on how to deal with kind of difficult students, with problematic issues…you
don’t actually see a lot of literature on it…it tends to be more anecdotal.” In another
example, Teacher EE explained that “there’s nothing I think oh I wish I had been taught
this or had more instruction on this. I think you just have to learn as you go and it’s up to
you to be kind of autonomous and keep informed... because it is such a wide and varied
field that we work in.” In other words, Teacher EE is describing the idea of developing
experiential knowledge and that teachers themselves need to keep up on their
professional development since L2 teaching covers so many different areas. From being
in the classroom, teachers are able to figure out what skills or training might have been
more helpful for them in the long run, which then leads to the next question about what
future teachers need to know.

All the teachers were asked what teaching techniques or knowledge they thought
future L2 teachers need to know. Table 1 summarizes the range of answers teachers gave
to this question.

Table 3

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA</td>
<td>knowing what Basic Interpersonal Communication Skills (BICS) and Cognitive Academic Language Proficiency (CALP); silent period; Bloom’s Taxonomy; first-hand knowledge of culture</td>
</tr>
<tr>
<td>BB</td>
<td>appropriateness and fairness of the material assessment and feedback</td>
</tr>
<tr>
<td>CC</td>
<td>tasked based learning, content based learning, incorporating technology; stage a lesson so that the activities build in a logical and meaningful way</td>
</tr>
</tbody>
</table>
Table 3 shows that four teachers mentioned task based and communicative based teaching approaches, while three teachers mentioned the importance of technology. Additionally, three teachers mentioned topics related to lesson planning, while four teachers talked about grammar/subject/content knowledge. Teacher LL, and also other teachers, talked about future teachers needing to understand that knowledge can come from training, while Teacher FF suggested that teachers constantly need to be improving their own knowledge of language and KAL in order to help their students. However, there were a few topics here and there that only one teacher mentioned, such as SLA, actual classroom experience, cultural knowledge, appropriateness of materials and assessment, ESP, Bloom’s Taxonomy, etc. To sum up, it seems from the variety of
answers to this question that what L2 teachers think future teachers need to know is very individualistic and based on their own personal experience and cognitions about teaching.

**Categories of TLing A**

Teachers were asked about four different areas of linguistic knowledge, which were phonology, grammar, pragmatics, and sociolinguistics. For each area, there were two questions, each equaling eight questions total. The first question related to what role the different areas of linguistics played in their teaching, and the second question involved a hypothetical teaching situation where linguistic knowledge in that particular area may be applied, but these questions were not asked back to back, but pseudo-randomized with the other interview questions. The questions were asked in the same order for each interview conducted in this study. The findings were divided up according to years of experience following the structure of LaFond and Dogancay-Aktuna’s (2009) study.

**Phonology**

The first area covered was phonology, where teachers were asked teachers about what role phonology played in their teaching. Overall, seven teachers described pronunciation, listening and speaking class, and/or communication classes, and three teachers talked about phonology in relation to learning new vocabulary. Additionally, four teachers answered that phonology played a small to not very much of a role at all, with two of those teachers—Teacher AA and Teacher JJ—not giving any examples. Only one teacher actually said that it played a pretty important role with the rest of the teachers answering the questions with examples of how it influenced their teaching.
For teachers with five or fewer years of experience teaching, they talked about speaking, phonetics, helping with correcting students, and pronunciation. For teachers with six to ten years of experience, they discussed that time restrictions played role in the amount of phonology covered in their classes, the objectives of the class, and how it helped with communication and learning new vocabulary. For teachers with ten or more years of experience, they described that they wish they could do more but time constraints limited that. Additionally, they explained that phonology did not play that much of a role, and that they only used it when troubles arose. For example, Teacher II, with over ten years of experience, noted that “I wish I’d incorporated more systematically into particularly my listening speaking courses…really important to teach both on the listening and the pronunciation side…pronunciation and listening awareness…make it clear and intelligible but also hear what people are likely to say…recognizing the sound from what they hear.” In other words, phonology is important for the development of both speaking and listening skills and that even with pronunciation, students need to understand what sounds they are hearing. On the other side of the spectrum, Teacher JJ, with over 10 years of experience, explained that it “doesn’t play a very major role in my teaching only because I teach students from so many different backgrounds that sometimes I feel that some of them maybe have a background and some of them don’t. Some don’t understand language concepts that way.” To put simply, it seems Teacher JJ interpreted the question in terms of what role actual phonological terms or vocabulary played in the classroom and not how did teacher knowledge of phonology assist with teaching. These two teachers interpreted the question quite differently. This may be
because they conceptualize or define phonology differently due to their educational background, courses taken or not taken or because of other factors.

On the practical use of phonology in the classroom, the teachers were asked what kind of teaching lesson or tool they would use if their students were having trouble distinguishing between two similar sounds. Six of the teachers talked about or described minimal pairs in some form or another, with some sort of visual aid like a Power Point slides or sound aid such as recordings to assist. All 12 teachers explained they would show how to pronounce the two sounds using their mouth and tongue or using some other type of visual to show it, like a website or YouTube video.

Table 4

*Summary of Answers to Distinguishing Between 2 Similar Sounds*

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>Number of teachers</th>
<th>Type of Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤5</td>
<td>3</td>
<td>• Showing how the sounds were made</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>• Practice producing and identifying sounds</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>• Minimal pairs</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>• Sound recordings</td>
</tr>
<tr>
<td>6−10</td>
<td>1</td>
<td>• Games</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>• Using their own mouth</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>• Drawing diagrams</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>• Practice producing the sound</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>• Minimal pairs</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>• Physical object</td>
</tr>
<tr>
<td>10 &lt;</td>
<td>2</td>
<td>• Voiced/Voiceless sound using throat</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>• Importance of communicating difference</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>• Bringing realia to the classroom</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>• Minimal pairs</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>• Visual example diagram/ website/Video/own mouth</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>• Hearing difference in sound</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>• Practice repeating sound</td>
</tr>
</tbody>
</table>
In Table 4, we can see that the teachers with five or fewer years of experience talked about showing how the sounds were made, lots of practice producing and identifying sounds, using minimal pairs, and sound recordings. For the teachers with six to ten years of experience, they discussed using games like the minimal pair tree game, using their own mouth as an example, drawing diagrams on the board, using physical objects to represent the sounds to make them tangible, practice producing the two sounds and using minimal pairs. Finally, the teachers with over ten years of experience explained the use of comparing voiced and voiceless sounds by touching the hand to the throat, hearing the difference between the two sounds, describing to students the importance of communicating the difference between two similar sounds when it is important, bringing realia to the classroom to connect the situation to everyday life, some sort of visual example, using minimal pairs and practicing. On the one hand, Teacher HH, with five or fewer years of experience, explained the use of a Power Point presentation with “two words that are minimal pairs…for example if the students come from a background that doesn’t contrast between voiced and voiceless consonants…doing pictures…doing some sound recordings…play those back and forth with all these different minimal pairs…for example putting your finger up to your throat…building context and what voicing would be phonotactically required.” On the other hand, Teacher JJ, with over ten years of experience, noted using “the University of Iowa…the phonetics website…it gives real world examples. You can hear the differences. You can see the differences. You can understand what’s going on because there’s like actually a diagnostic of the throat that’s being shown and the tongue.”
Additionally, Teacher AA, also with over ten years of experience, described the use of “a lot of minimal pairs and I would also find online website that shows the mouth pronunciation both front and then like the tongue and the inside part of the mouth.”

Generally speaking, all the teachers described the importance of showing how the two sounds are produced using some type of visual, and the teachers with more years of experience were able to brainstorm a larger variety of tasks to help students.

**Grammar**

The next grouping of questions covered the topic of grammar. The teachers were asked what role does grammar play in their lessons. Nine teachers said that grammar did play quite a big role in their teaching, especially in a reading and writing class and in a grammar class. For three teachers, it played a role in some form in a listening and speaking class and influenced them when meeting with students about their writing, sometimes discussing why something was marked incorrect or needed changing. It seems from my interpretation that the objective of the class is one major reason of why the role that grammar played varied so much from class to class. For the teachers with five or fewer years of experience, two described that grammar played a big role in teaching for it is a major part of language learning and all four major skills. However, one teacher talked about how, at times, it could be arbitrary in relation to prescriptive versus descriptive grammar. For the teachers with six to ten years of experience, all three teachers explained that it is a major part of writing and grammar and that, for speaking and listening, it depends on topic or function of the lesson. For the teachers with over ten years of experience, five teachers discussed its influence overall as being very strong in a variety of areas. This includes editing writing and conferencing with students, teaching
students about sentence structure, and language analysis. For one teacher, it is important to think how it can fit into each lesson, not in isolation. For another, it is infused into all classes in some form or another and that it is important to show students that there are a variety of options for the appropriate grammatical form in writing and speaking. For two teachers, it is also important to show students examples of different grammatical forms and functions in different types of texts. For example, Teacher AA, with over ten years of experience, noted that “Grammar plays a big role…explicit instruction…particularly if it’s a grammar class,” and when “I am editing writing and peer conferencing…you know you have to go over certain grammar points or whatever so, and modeling, followed by practice.” In addition, Teacher CC, with over ten years of experience, answered with, “I love grammar and I find it like a personal challenge to make it interesting for my students or relevant at least…So I would say that while we don’t focus on it necessarily every day, that my classes are infused a lot with language analysis…how do the words relate to each other, how are the sentences formed, what are the relationships between ideas.” In other words, both teachers seem to define or conceptualize the term grammar very similarly and that it does play a role in their teaching, maybe not in the same exact way, but very similarly. Overall, the teachers seemed to define grammar rather alike, even with varying educational backgrounds, courses taken, and years of experience.

Question twenty-three was a hypothetical teaching scenario, which asked how they would teach word order if their students were having trouble with it. 11 teachers talked about creating examples with the students’ help in labeling the parts of speech either with different colors, on cards, or drawn in a diagram form on the board. Seven teachers talked about starting out simple and then adding on the more complex
interchangeable parts of a sentence, making sure to provide many examples with repetition. 6 teachers talked about students developing their own sentences in groups, figuring out what was wrong with examples, and/or students looking for example sentences in different types of text. Six teachers seemed to emphasize the importance of creating activities in steps where students slowly become more independent with their knowledge of sentence structure. For the teachers with five years or less experience, one teacher discussed color coding parts of speech like a puzzle, and another teacher talked about creating cards to make it physical for the students. Two of the teachers talked about using examples where students find the patterns, create sentences working together, and move around the order to show the various patterns of English. For the teachers with six to ten years of experience, all three teachers explained making sure to review the basic structure with examples and repetition. One teacher discussed reviewing the less interchangeable parts, expanding onto the more flexible parts and reviewing passive voice. Two teachers talked about having students figure out what is wrong with the example sentences. For the teachers with over ten years of experience, all six teachers noted the importance of giving examples by starting out simple and then adding to make sentences longer. One teacher talked about having students find examples of sentence structure in different texts, and one teacher described labeling categories or parts of speech with different colors. Three teachers described reviewing the word order for different types of clauses and two discussed the passive voice. One talked about using games to review adjective order, and one talked about using an acronym to remember adjective order. Finally, two teachers emphasized the importance of having students work together to figure out the patterns and create sentences. For example, Teacher AA,
with over ten years of experience, explained, “Starting off with real simple and just a lot of practice with just the real simple SV and then SVO and just really hammering that and then gradually getting longer sentences and I think also um maybe having them find examples of that sentence structure using that word order in like a paragraph or something or reading simple paragraphs or simple books.”

Additionally, Teacher HH, with five or fewer years of experience, talked about the idea to “develop kind of almost like a puzzle thing. So cut out words on cards and have them work in groups and have them put together a sentence using all those words. So they would come up with these sentences and…I would come and take a look at that and I would tell them…make slight adjustments by moving around the words, so that they could see the word order in a physical way.” In other words, both teachers seemed to have similar conceptualizations about what word order consisted of. It seems from answers that teachers gave to this question that they generally had the same conceptualization of it, except for teacher LL, to whom I had to explain what word order meant. However, for this particular question, some of the teachers with more experience seemed to think of all the different areas where word order comes into play, such as the passive voice, adjective order, and the different types of clauses, while the teachers with less experience did not mention a lot of these areas where word order comes into play.

**Pragmatics**

Question eighteen asked teachers what role pragmatics plays in their lessons; however, with this question, six teachers asked for a definition. Therefore, this is the definition that was given: *Pragmatics is the way you use different forms of language in different contexts. It is sometimes reading between the lines or understanding word*
choice in relation to connotation. From reviewing multiple answers, giving a definition may have influenced four teachers’ answers slightly, for the teachers who were given this definition shared similar conceptualizations about it, mainly focusing on vocabulary and having their answers specifically match my definition. Six teachers, Teacher DD, EE, HH, II, JJ and KK, did not ask for a definition of pragmatics. All of those teachers except for Teacher JJ had taken at least one course related to linguistics, and Teacher EE even had taken a course specifically about pragmatics. Therefore, five of those six teachers had some educational background or training where they probably were able to conceptualize a generally held definition of pragmatics in relation to linguistics where Teacher JJ may not have. On one hand, Teacher JJ, with over ten years of experience, commented “that would depend…I don’t know who your audience is for this but because I’m level specific in what I do in my classes…I think it’s much more important with beginning students maybe even students at a lower intermediate level…Because I think that’s an important way to learn languages…but in my classes here at this university where I’m with very advanced levels I don’t. It’s not important at all.” On the other hand, Teacher KK remarked, “I think it’s contextualizing it within…I think it’s important for students to understand that…basic, dogmatic, ungrammatical structure…the most standard global way to say this, but this is actually what we mean by it…this is how we’re using it…necessary to understand both of them.” It seems from their answers that they both define pragmatics similarly in understanding the basic underlying form of something, while Teacher JJ does not think that it is important when fine tuning the skills of more advanced learners.
For the teachers who did ask for a definition, there were four teachers for whom it seemed like it highly affected their answers, and for two teachers the effect did not seem so strong. For example, Teacher AA, with over ten years of experience, explained, “Yes it does…reading between the lines definitely, critical thinking, connotation, multiple meanings of things. You know you’ve heard it this way, you could hear it this way, you might have heard it used as this.” In contrast, Teacher BB, with 5 or fewer years of experience, answered, “the use of pragmatics is good for I think language as a whole, but if you are there for a more specific purpose…for academic English, I don’t think pragmatics would play a huge role in that and may not help students succeed in the way they want to succeed like based on their needs. But in terms of if someone wanted to acquire the language, pragmatics is key.” Both teachers heard the same definition, but Teacher BB’s answer was actually closer to Teachers JJ and KK. Therefore, it seems from these types of answers that, with or without a definition, some of these teachers still conceptualized what pragmatics is similarly as understanding the basic underlying form of something or message behind something.

Overall, it seems that pragmatics plays at least some kind of role in their lessons. The teachers talked about the importance of understanding language as a whole, politeness in different languages, how it is culturally based, and that it is important in communication and listening and speaking classes. Additionally, the teachers described how it helped with understanding context, vocabulary, tone, and what people would or would not say naturally in that situation to reduce confusion. For the teachers with five or fewer years of experience, one teacher discussed how words change meaning in different contexts, one teacher talked about how politeness is different in different
languages, and one teacher explained its importance in understanding language as a whole. For the teachers with six to ten years of experience, one teacher explained the use in communication class, speaking functions like the use of different phrases, and the importance of it in writing in relation to registers. One teacher talked about the importance of pragmatics to become a part of a target language group. And one teacher described the importance of it to reduce confusion. For the teachers with over ten years of experience, one teacher noted the importance of it in critical thinking, and two talked about vocabulary and understanding meaning behind a thing. One teacher each talked about tone, formal versus informal, what people would or would not say naturally in that situation, and contextualizing language. Much like Question twenty-three about word order in the previous section on grammar, the variety of answers in areas of influence seemed to increase with years of experience.

The next question involved a hypothetical teaching scenario asking the teachers how they would teach requesting and addressing people with different levels of politeness. Overall, the teachers talked about (a) listing in some form in categories formal versus informal ways of requesting things, (b) demonstrating by using examples with videos, role-playing, or scenarios of students talking to different people, (c) reviewing different topics or speech functions, (d) teaching about how audience and purpose affect language, (e) analyzing conversations, (f) hedging, (g) using pictures as examples, (h) reviewing model verbs to request permission, and (i) comparing how it is done in English compared to students’ L1s. For instance, Teacher GG, with six to ten years of experience, explained using “indirect and direct question lessons I’ve done before. And using dinner manners as the basis.” In other words, Teacher GG is using his
experience from a previous lesson to answer this question, thus applying his teacher experiential knowledge. In another example, Teacher JJ, with over ten years of experience, described “that’s very unique in English because there is no formal or informal, so I think a lot is using these words that show that respect. For most L2s they have that already built into their language. We don’t in English. We always have these additional words that come in like sir and madam and please and may I bother you. So teaching these modal verbs to request permission. Using words that show I guess seniority or at least a respect for maybe elders or strangers.” From this example, it seems that Teacher JJ has a clear understanding of one area of language where pragmatics plays a role. It seems he has developed this from experiential knowledge in the classroom, working with students who have a variety of L1s, and his own knowledge of language. For both these teachers and others involved in this study, experiential knowledge seems to be one of the larger factors in answering the questions about these different teaching scenarios. It seems that the more experience teachers have in the classroom, the more of a variety of tasks they can brainstorm to help students.

In general, for the teachers with five or fewer years of experience, one teacher remarked having students role-play and using videos. One other teacher discussed developing different scenarios with students talking to different people and analyzing the language. One teacher explained the idea of listing in categories in some form the differences between formal and informal language in different contexts. For the teachers with six to ten years of experience, one teacher emphasized indirect and direct questions, one teacher discussed reviewing a specific topic or speech function to learn different phrases you versus people you come in contact with, and one teacher explained focusing
on different types of texts and discourse in how audience and purpose affect language using a sort of language analysis approach. For the teachers with over ten years of experience, one teacher focused on examples, role playing, and brainstorming, while one teacher described having students use pictures of different scenarios with different contexts on the same topic. One teacher described analyzing short conversations, and another teacher talked about reviewing modal verbs to request permission. One teacher brought up using humorous videos with extreme examples and focusing on hedging in order to understand what to add to requests to create distance between people. One teacher explained about students developing their own dialogues, while another discussed comparing how people request things in different languages. Much like Question twenty-three and Questions eighteen, classroom experience seems to be a huge factor in the variety of ideas and things to keep in mind when developing lessons.

Sociolinguistics

The teachers were asked how much their knowledge of sociolinguistics influences their teaching, with no definition of sociolinguistics provided unless further clarification was needed, which only Teacher LL, with over ten years of experience, asked for (Sociolinguistics can be interpreted in multiple ways. It can mean how language functions inside the classroom or how language functions outside of the classroom or what influences language, such as society and culture, in different contexts, so it varies. It can be top down, but then bottom up at the same time). Overall, six teachers talked about it playing a pretty big role, three saying not so much to none, and three describing the role as somewhere in the middle. Nine teachers discussed (a) language in the real world, (b) language used in social settings, (c) communicating ideas, (d) dialectal
differences, (e) how language is connected to society, (f) understanding culture of students in the class, (g) its connection to tone and context, (h) understanding the role of audience, (i) the community in the classroom, and (j) the connection of language to the classroom. For example, Teacher AA, with over ten years of experience, noted that it “plays a big part. I am very comfortable teaching Japanese students because I know…what that’s like or what their culture is like to kind of feel out what is going on. I think knowing a person’s culture is really important because by accident insult by saying something and it’s that culture doesn’t or pairing students up. I think also even knowing their history.” Additionally, Teacher FF, with five or fewer years of experience, explained that it affects their teaching, “Quite a bit like…I want my students to leave and be effective communicators in the US right or in whatever it is they want to do. And so that requires that they are aware of how language is used by society and in particular the groups that they’ll encounter…understand how people use language to form relationships to kind of just get through life.” Both of these teachers talked about how sociolinguistics affected their teaching but on different levels, with one being the culture of the classroom and the other with how language and culture are connected. In contrast to that, Teacher DD, with six to ten years of experience, emphasized that the effects were “Not that much…I’m not really thinking about whether the student is disadvantaged or whether their identity is represented by teaching them this…more practical…how to be polite with someone who’s a teacher or something like that.” Contrasting Teachers FF and AA with Teacher DD, it seems that Teacher DD conceptualizes the meaning of sociolinguistics differently than Teachers FF and AA, much like how Teacher JJ and II defined phonology differently. It seems that how a teacher defines certain terms affects whether
they think they apply that type of knowledge, are influenced by that type of knowledge, or are aware they applied that type of knowledge.

Generally speaking, for the teachers with five years or less experience, one teacher explained the influence in reference to real world language, one teacher described the relationship between society and language, and one teacher talked about understanding different dialects, which affect vocabulary, syntax and pronunciation. For the teachers with six to ten years of experience, one teacher explained that it influenced the content of teaching and addressing the class as a whole, but two of the teachers said it played a rather small role in the classroom. For the teachers with over ten years of experience, two teachers discussed how understanding the culture of students affects the classroom in all four skill areas, one teacher explained the connection of language and culture in different settings and with different audiences, one teacher noted the understanding of interpersonal communication skills, one teacher described the understanding of the culture of the classroom itself, and one teacher said it had no effect on the classroom. To put simply, it seems that the more years of experience a teacher has in the classroom, the more variety of tasks they can think of to help students and that how a teacher defines a linguistic term influences if they think they use that type of linguistic knowledge.

Culture

Finally, Question twenty-five asked teachers what role culture in general and their knowledge of different cultures play in the classroom. In general, teachers explained that language is culturally based, and students come from a variety of different types of classroom cultures. In addition, culture can affect feedback, interactions with students,
students’ perspectives, grouping students, material choice, lesson planning, and classroom management. Two teachers even talked about university culture and teaching students about that. For example, Teacher LL, with over ten years of experience, explained, “You have to respect somebody’s background especially if you’re working with international students. You know where people have different cultures and some have a very kind of low thinking of other cultures so it would be nice if that can be addressed first.” In other words, it is important to create a safe classroom culture where different cultures are respected, especially in a L2 classroom. In addition, Teacher DD, with six to ten years of experience, indicated,

**Culture plays a big role in learning English especially here in the US…it is important to teach culture at the same time…one role is in the language itself. My focus is on cognitive linguistics, so we really look at how your perspective shapes how you speak and so the culture really influences things like idioms that students can use correctly or not. Even the way we frame things and how you could explain grammar. Second for our students here culture affects a lot of like the social aspects like what’s going to be appropriate to say to people or how to interact with people, so I think like that is a secondary level that you get with the ESL students. What things are appropriate at a university, what American university culture is like, what can you be expected to do when you go to school.**

In other words, culture affects the classroom on multiple levels, from the content taught to the interactions between students, to understanding the culture of the university. Teacher DD defined sociolinguistics as very different from culture, but some teachers defined them as being quite similar, such as Teacher AA’s answer to the question where they explained how large of a role understanding culture is to the classroom in relation to the influence of sociolinguistics on their teaching.
Generally speaking, for the teachers with five years or fewer experience, all explained that language and culture are interconnected with history being a part of that. Moreover, they discussed that L2 students come from a variety of different classroom culture, that learning styles are culturally based, and that culture can affect classroom behavior and interactions between students. For the teachers with six to ten years of experience, all explained that teaching culture is important in how it affects our perspective, how it affects students’ interactions and grouping, how it affects expectations of students, and how it affects lesson planning like covering sensitive material or content. For the teachers with over ten years of experience, all discussed its effects on partnering students, creating a comfortable environment, being sensitive towards certain topics, relating topics to students’ home cultures or global issues, and understanding and teaching students about sociolinguistic errors. Additionally, they described how important it was for students to understand the different cultures of English speaking countries like the US versus the UK, and the overall influence of culture on the classroom. Overall, it seems from the interview questions about linguistics is that years of experience is the number one factor in the variety of tasks brainstormed and that how a teacher defines a term really affects whether they think they apply linguistic knowledge.

Factors that Did Not Seem to Play a Role

In the development of the interview questions for this study, I tried to include questions that took into account a variety of factors in order to figure out what were the strongest influences on the application of linguistic knowledge and the awareness of that application. After reviewing all the data, some factors did not seem to play much of a
role or no role at all in influencing teacher knowledge, teacher cognition, and/or TLing A. These factors included questions about textbook use, reading up on research, sharing ideas with other teachers, what materials teachers used for a lesson, and classes taught.

Conclusion

This chapter presented the overall findings of this study. The chapter talked about L2 teachers’ opinions on content/subject knowledge in relation to language knowledge. More specifically, this chapter talked about how L2 teachers define linguistic knowledge and how that affects their teaching in relation to the intermixing of TLA, PCK and other types of teacher knowledge. Next, the chapter reviewed teachers’ educational background and personal factors that affect their teacher knowledge and teacher beliefs. This then led into the discussion about teachers’ personal beliefs about things they wished that had been taught and what future teachers need to know in connection to teacher cognition. The final section covered the four areas of linguistic knowledge and how they affect teachers generally, with four hypothetical teaching scenarios representing those four areas. Overall, it was found that educational background, classes taken, classroom experience, and teachers’ different conceptualizations of concepts were major factors in the application of TLingA. It was also a bit of a surprise that there seemed to be several non-influential factors in the application of TLingA. The next chapter will cover the discussion by analyzing the findings and connecting them to the research questions.
CHAPTER 6

GENERAL DISCUSSION

Introduction

This discussion chapter is divided up by the four major research questions proposed in the methodology section relating to TLingA. The goals of this study are to understand how and if L2 teachers apply linguistic knowledge and to see what factors affect the application of that linguistic knowledge. This chapter reviews how the findings connect to empirical studies and my theoretical framework about teacher knowledge, teacher awareness, and teacher cognition.

How do L2 teachers define linguistic awareness and how does linguistic awareness influence their teaching?

Based on participants’ responses to various interview questions, the results provided a sense of how each group of teachers, based on years of experience, define linguistic awareness along with its influence on teaching. Generally, years of experience did not seem to play a huge role in the overall definition of linguistics awareness and its influence on teaching. Most of the teachers defined it as having to do with understanding the different parts of language and its applications and with connecting that to the classroom and beyond. The influence on teaching seems to have to do with understanding student mistakes, assisting in developing lesson planning, problem solving in the classroom, helping students to communicate ideas, and helping students to understand the diversity and ever-changing aspects of language. Together, these definitions and influences seem similar to the mixing of different types of L2 teacher knowledge and awareness in my definition of TLingA. This definition involves Andrews’ (2003, 2007)
and Thornbury’s (1997) definitions of TLA that involves the understanding of the underlying structure of language to assist students. L2 teachers are able to have the awareness of how and when to apply that type of teacher language knowledge, which is intertwined with Shulman’s (1987) definition of PCK including the mixing of pedagogy with content knowledge to help students. The findings of this study are similar to La Fonda and Dogancay-Aktuna’s (2009) study explaining how L2 teachers were influenced by their linguistic training, which helped overall with language awareness, professional development and lesson planning. Also these findings are similar to Grabe, Stoller, and Tardy’s (2000) study on linguistic and teacher training and how these trainings influence L2 teachers in relation to helping students, explaining grammatical and structural points, and diagnosing language issues. However, one difference in the findings between La Fonda and Dogancay-Aktuna’s (2009) study and this study is that teachers with one to five years of experience in their study were a little less enthusiastic about their linguistic training and its connection to teaching, whereas, with this study, there did not seem to be much of a distinction with years of experience in relation to definition and influence of linguistic awareness. It seems that the teachers in this study conceptualize this term linguistic awareness similarly along with its influences.

The small distinction in this study that was found between teachers with different years of experience was more about the different areas of TLingA. Each group seemed to highlight different areas of TLingA. For the teachers with five or fewer years of experience, their definition of linguistic awareness and its influence on teaching seemed similar to Thornbury’s (1997) definition of TLA with understanding the structure and underlying system of language to assist teachers. Additionally, their definition appeared
to be similar to Grabe, Stoller, and Tardy’s (2000) findings that linguistic training helps
teachers to diagnose student’s language issues and how understanding those issues affects
lesson planning for L2 teachers. For teachers with six to ten years of experience, their
definition of linguistic awareness and its influence is similar to Andrew’s (1999, 2001,
2003) definition of TLA, not about grammar, but about how their knowledge and
awareness of language assists them as teachers inside and outside the classroom. For the
teachers with over ten years of experience, their definition of the mixing of different
types of knowledge, both teacher and linguistic knowledge and the different types of
awareness in relation to language is very similar to my definition of TLingA. My
definition involves Andrews’s (2003, 2007) and Thornbury’s (1997) definitions of TLA
in which teachers understand the underlying structure of language that helps to assist
them with teaching far beyond the construct of grammar. My definition also involves
teacher linguistic knowledge in connection to Shulman’s (1987) PCK and teacher
cognition with the understanding of how and when to use that knowledge in instructing
and in terms of the conscious application of teacher linguistic knowledge. Generally, it
seems that experiential knowledge is not a huge factor in the teachers’ overall definition
of linguistic awareness and its effects on teaching, but it is a small factor when defining
the different areas of what makes up TLingA. Overall, it appears that the L2 teachers in
this study conceptualize linguistic awareness similarly to how I define TLingA.

What linguistic knowledge, if any, do L2 teachers claim they apply to teaching?

During the interview, teachers were asked if four different areas of linguistic
influenced their teaching: phonology, grammar, pragmatics, and sociolinguistics. Each
area of linguistics was matched with a hypothetical teaching scenario that covered that
area.

**Phonology**

For the influence of phonology, all 12 teachers explained about demonstrating how the two sounds are produced using their own mouth or some type of visual that shows how the two sounds are produced. These findings are similar to Grabe, Stoller, and Tardy’s (2000) findings that explained linguistics training helped with pronunciation and teaching students about distinguishing between two similar sounds. Moreover, Gregory (2005) described that pre-service training in phonetics and phonology helped with teaching students about understanding contrastive phonemes. Additionally, it seems from the findings of this study that the more years of experience a teacher has, the more of a variety of activities the teacher was able to brainstorm to help students to understand the difference between two sounds. Baker’s (2013) study seemed to have slightly different findings in which teachers who took a course on pronunciation used more variety in tasks and feedback about pronunciation in their teaching, which seems to show that increased pronunciation training and knowledge can affect the teaching of pronunciation. My findings seem to show experiential knowledge to be a larger factor than pronunciation training. Burri, Baker, and Chen’s (2017) findings seem to match my findings that, even after a course in pronunciation training, pre-service teachers still wanted to rely on the textbook due to a lack of confidence, while in-service teachers became more aware of how to apply knowledge due to their previous teaching experience and awareness of contextual factors. It seems that contextual factors, such as curriculum goals and lack of time, may limit the application of knowledge, but experiential knowledge can help teachers to adapt and find ways around those factors.
For teachers with five or fewer years of experience teaching, they mostly talked about helping students with pronunciation problems, which is similar to La Fonda and Dogancay-Aktuna’s (2009) study and Grabe, Stoller, and Tardy’s (2000) study in which the researchers found phonology helped with teaching pronunciation and assisting students with their pronunciation problems. Teachers with six to ten years of experience and over ten years of experience discussed that time restrictions, curriculum goals, and institutional factors played a role in the amount of phonology covered in their classes. This is similar to Macdonald (2002) discussing unclear policies of administration and curriculum goals as institutional factors that limit the amount of pronunciation covered. In addition, Couper (2016) noted how institutional factors, such as curriculum focused on grammar and exams, limited the teaching of pronunciation. Moreover, in general, in relation to teacher cognition, Phipps and Borg (2007) discussed contextual factors that reduce the connection between beliefs and practices as time, curriculum restraints, and goals of a course. This means that teachers may have beliefs about the importance of particular types of knowledge and skills, but factors sometimes outweigh those beliefs thus reducing the connection between beliefs and practices. In other words, L2 teachers may have beliefs about different types of linguistic knowledge, but contextual factors, such as lack of time, may limit the application of that knowledge.

For teachers with six or more years of experience, contextual factors seem to be the area that affects the application of phonological knowledge. Specifically, Teacher AA and Teacher JJ did not give any examples and explained that phonology played a very small role in their teaching. This could be due to several areas of influence on beliefs and practices, which Borg (2003a) describes as schooling, professional
coursework, contextual factors, classroom practice. For schooling and professional coursework, Teacher JJ has two Master’s degrees in literature and has taken no linguistics courses, while Teacher AA has a MA in TESOL and took a linguistics course during teacher training. This means that Teacher JJ does not have any linguistics training from their professional coursework, but Teacher AA does. According to Murphy (1997), about 70% of MATESOL programs require some form of phonology course. Teacher AA never mentioned taking a specific phonology course, but they did mention taking a general linguistics course. In other words, how these teachers describe the influence of phonology could be due to how both teachers define or conceptualize the term phonology, which could be due to schooling and/or classroom experience. In order to better understand how they conceptualize phonology, I need to examine the hypothetical teaching question about what lesson or tool Teacher AA and Teacher JJ would use if their students were having trouble distinguishing between two similar sounds. By examining their answer to a hypothetical teaching scenario involving phonology, I can better understand if they are applying phonological knowledge without being aware that they are.

Next, Teacher JJ, which I mentioned previously has two Master’s in literature, described the use of a phonetics website as a tool. Teacher JJ’s decision to choose this tool seems influenced by classroom experience, or experiential knowledge, rather than educational background. In addition, it seems that phonology plays some sort of a role in Teacher JJ’s teaching, but his awareness of this influence does not seem present, which may be due to his conceptualization of the term phonology. Borg (2003a) describes that teacher’s cognitions or beliefs about knowledge or concepts can be influenced by
schooling, professional coursework, contextual factors, or experiences in the classroom. As previously mentioned, Teacher AA, with over ten years of teaching experience, talked about using minimal pairs and an online website to help teach the pronunciation of the two sounds. There appears to be a slight disconnect here between what Teacher AA and Teacher JJ believe that phonology involves or how it is defined and their practice of using phonological knowledge such as instructing about pronunciation. Both of these teachers seem to define phonology similarly. This disconnect for Teacher JJ could be due to their educational background, for Teacher JJ has never taken a linguistics course. In contrast, Teacher AA has taken a linguistics course; therefore, Teacher AA’s conceptualization of the term phonology could be due to experiential knowledge or how that particular linguistics course defined phonology. In other words, it appears that the conceptualization of the term phonology plays a role in whether teachers are aware that they are using phonological knowledge. Additionally, experiential knowledge seems to be a larger factor in the development of phonological knowledge, but contextual factors limit the application of that knowledge in the classroom.

**Grammar**

For the influence of grammar on teaching, nine teachers across groups talked about the large role it played in teaching reading and writing with a few teachers discussing its influence in listening, speaking, and meeting with students about writing. This relates to Johnston and Goettsc’s (2000) findings that grammar teaching involves knowledge of learners, content knowledge, and PCK, which can involve both in class teaching or teacher/student conferences. Additionally, Borg (2003b) explains that most L2 teachers do promote grammar instruction in some form in their teaching. The
teachers with five or fewer years of experience mainly focused on the influence of teaching the four major skill areas. The teachers with six to ten years of experience instead focused on how much the goals of the class determined the use of teaching grammar. For the teachers with over ten years of experience, they discussed the largest variety of areas of influence for grammar on teaching. They were able to brainstorm more than double the amount of areas than the other groups, such as editing students’ writing, conferencing with students, instructing about sentence structure, reading and writing class, teaching students about language analysis, and figuring out how it could fit into each lesson. These findings are similar to what Nishimuro and Borg (2012) conclude: Contextual factors and experience seem to be the driving forces behind many classroom decisions related to grammar. Additionally, Andrews (2006) suggests that contextual factors, like overall curriculum goals of the course and language learning experience, sometimes influences the application of grammar knowledge beyond just the traditional explicit teaching of it. The effect of these types of factors may be seen in the variety of topics and areas of influence the teachers with more than ten years of experience discussed and that included editing writing, meeting with students, reviewing sentence structure, analyzing language analysis, infusing it into all classes, explaining the variety of options for the appropriate grammatical form, and using different types of text for examples of grammatical forms and functions. The findings of my study are similar to Svalberg’s (2012) findings discussing the importance of language analysis with authentic texts for students to gain awareness. Additionally, Svalberg found that teachers with experience were able understand and apply this type of task to their lessons more easily than novice teachers. Years of experience and objectives of the class seem to be
the largest factors in the influence of application of the knowledge of grammar for the teachers in this study.

Overall, for the hypothetical question about teaching word order, 11 of the 12 teachers discussed providing examples with the help of students labeling the parts of speech. This seems to be similar to the idea that Borg (2003b) discusses that most L2 teachers support grammar teaching in some form. The teachers with 5 years or fewer years of experience seemed to focus on developing examples, labeling, and helping students to recognize the patterns of English sentence structure. For the teachers with 6 to 10 years of experience, they appeared to want to focus on reviewing the basic structure with examples and repetition and help students deductively figure out the rules of English. Finally, the teachers with over ten years of experience seemed to focus on beginning with simple examples and then adding more complex patterns. They also covered a larger variety of activities and types of clauses to review when discussing word order. It seems overall that most of the teachers had similar conceptualization of grammar and word order except for Teacher LL, which could be due to her lack of experience in the L2 classroom. Teacher LL has experience as an intervention specialist with math, reading, and writing, but not very much experience being the main teacher in a L2 classroom. An example of this similar conceptualization of grammar and word order as the other teachers is Teacher AA with over ten years of experience. To explain, it seems that Teacher AA’s answers followed along similar lines that sentence structure, word order, and grammar are related terms. It is important to observe that teachers conceptualize terms similarly in order to evaluate if they are applying different types of teacher knowledge. If teachers are conceptualizing terms in a large variety of ways, it is
difficult to measure whether they are applying that particular type of knowledge and if they are aware they are applying it. For word order and grammar, years of experience seem to be strongest factor in the variety of activities and areas of influence described by the teachers in this study. Similarly, Nishimuro and Borg (2012) found that years of experience was a strong factor with grammar teaching. Generally, it appears that the teachers in this study conceptualize grammar and word order similarly and that years of experience is the largest factor in the application grammatical knowledge.

**Pragmatics**

The teachers were asked what role does pragmatics play in their lessons and they all answered that it influenced them in some form. Six teachers asked for a definition, and for four of those teachers, it seemed to affect their answer. For the other six teachers, five of them had taken some form of a linguistics course. However, even with or without a definition overall, looking at the example answers, the teachers in the study generally seemed to conceptualize the term similarly. The idea of similar conceptualizations seems to match Vásquez and Sharpless’s (2009) study where they found that most MATESOL programs emphasize or teach about pragmatics to some degree. This may be one reason why most of the teachers conceptualized the term similarly. For the teachers with five or fewer years of experience, the teachers talked about how context and culture affect language at different levels from word choice to how we address one another to language overall. The teachers with six to ten years of experience explained the effect on communication in different formats and its relation to becoming part of a culture. For the teachers with over ten years of experience, they discussed how much of a role pragmatics played in the contextualization of language, such as word choice, tone, formal vs.
informal language, critical thinking, and understanding meaning behind things. Along those same lines, Ishihara (2011) explained the importance of understanding pragmatic awareness when developing naturalistic dialogues for textbooks and the impact on teaching when not taking into account all the levels of pragmatics in communication. These findings are very similar to the findings to the grammar and word order questions with years of experience seeming to be the largest factor in the variety of areas where pragmatics plays a role. This may be due to classroom experience and teacher experiential knowledge, which are different areas of influence that Borg (2003a) discusses about teacher cognition.

For the hypothetical teaching question about requesting and addressing people with different levels of politeness, the variety of teaching tools discussed was larger than for the hypothetical teaching scenario targeting word order and phonology. Generally, teachers talked about (a) how language changes by listing formal versus informal ways of requesting things using examples in some form, (b) how the language changes due to audience and purpose, and (c) how requesting and addressing people with different levels of politeness can be culturally based. The teachers with five or fewer years of experience talked about role-playing and understanding the differences in language with formal versus informal contexts, sometimes using language analysis. For the teachers with six to ten years of experience, they discussed the different types of textual and spoken modalities in which formal versus informal language came into play like indirect and direct questions. In particular, they described which phrases were added to questions or requests when addressing different audiences. The teachers with over ten years of experience described using examples, role-playing, language analysis of conversations,
videos, dialogues, and comparing the differences between languages. Years of
teachers brainstormed they could use for this teaching situation. Experience in the classroom is one area of
influence that Borg (2003a) describes when talking about teacher cognition.
Additionally, all of the teachers seem to conceptualize different levels of politeness
similarly, and even some teachers mentioned politeness when they mentioned areas of
influence for pragmatics in lessons. Seeing that teachers conceptualize terms similarly is
important because understanding the connection between beliefs and practices helps
researchers to understand if teachers are aware that they are applying the different types of knowledge from their teacher training. Having similar beliefs about the meaning of terms helps researchers to evaluate and teachers understand if they are using or applying particular types of teacher knowledge. Understanding this knowledge helps teacher trainers evaluate whether teachers are applying the knowledge from their training. Borg (2003a) even explains the development of knowledge from teacher training and which factors can influence it, like experiential knowledge. For the area of pragmatics and politeness, Teacher JJ’s conceptualization of the terms seemed to match the other teachers, which may be due to experiential knowledge in the classroom, working with students who have a variety of L1s, and/or his own knowledge of language. As mentioned previously, Teacher JJ had conceptualized phonology slightly differently where their answer to the hypothetical teaching scenario did not quite match up to the answer given about the influence of phonology on their teaching. In other words, teachers can conceptualize different areas of linguistics similarly and differently even working at the same IEP for each teacher’s experiential knowledge is slightly different than the
others. Overall for pragmatics and the teaching scenario question about politeness, years of experience seemed to be the largest factor and most teachers seemed to conceptualize pragmatics similar, even with half of the teachers asking for a definition.

**Sociolinguistics**

For the question about how much does their knowledge of sociolinguistics can affect their teaching, half of the teachers explained that it played a pretty big role, with three somewhere in the middle, and 3 saying not a lot to none. Three quarters of the teachers explained about the connection between society, the classroom, and context and language. In addition, they talked about differences in dialects, the importance of sociolinguistics in communication, culture of the classroom and cultures in the classroom, and the role of the audience. Overall, it seems these teachers see the connection between different areas of sociolinguistics and the classroom. These findings resonate with Grabe, Stoller, and Tardy (2000) who found that sociolinguistic training helped with understanding the appropriateness of language in different contexts. Additionally, these findings are similar to La Fonda and Dogancay-Aktuna (2009) and Riegelhaupt and Carrasco (2005) who found that L2 teachers used their knowledge and awareness of sociolinguistics in understanding differences in dialects in and outside of the classroom. Finally, these findings are connected to Attardo and Brown (2005) who found that, if teachers during their pre-service training were exposed to one or more linguistics courses, they were more able to accept non-standard dialects of English. In other words, generally, linguistics training for L2 teachers can increase teacher linguistic awareness in specific areas of linguistics like sociolinguistics.

For this question, there seems to be more similarities between the teachers with
five years or less experience and the teachers with over ten years of experience. For the teachers with six to ten years of experience, there was only one teacher who mentioned an area where sociolinguistics affected them. This could be due to how different individuals interpret what sociolinguistics means from experiential knowledge or educational background. This is similar to La Fonda and Dogancay-Aktuna’s (2009) study where the novice and most experienced teachers had similar positive views on the connection between linguistic theory and practice in the classroom, and their group of one to five years of experience was not as supportive of it. La Fonda and Dogancay-Aktuna’s (2009) suggested this had to do with teachers in the beginning years of teaching who were more focused on their development of pedagogical skills and experience in the classroom than trying to figure out how to apply their training in linguistic theory. They were more worried about practical skills in the classroom. This could be similar to the teachers in my study of six to ten years of experience, for they may be more worried about developing lessons and their pedagogical knowledge than applying and developing their linguistic knowledge. Additionally, in my study, the teachers with over ten years of experience talked about how this area of linguistics affected more of a variety of areas than the other teachers. For teachers who conceptualized sociolinguistics differently than the other teachers, Teacher DD and Teacher JJ explained that sociolinguistics played little to no role in their teaching. These two teachers did not seem to conceptualize the idea similarly to each other either. Teacher DD described it having to do with identity and being disadvantaged, whereas Teacher JJ talked more about focusing on teaching writing at the university level. By understanding how the two conceptualize the term, teacher trainers may better understand the variety of interpretations there are of the
different areas of linguistics and how that connects to the classroom. This idea of conceptualization of terms or defining concepts relates to teacher beliefs, as Borg (2003a) describes. For Teacher DD, this could be related to the influence of educational background, such as courses taken in which sociolinguistics could have been defined differently. However, for Teacher JJ, this conceptualization of terms is probably more influenced by experiential knowledge, for Teacher JJ did not take any linguistics courses. Overall, it is very interesting to see the multiple conceptualizations of one linguistics term like sociolinguistics and what may have influenced those conceptualizations.

**Culture**

It seems that the teachers’ knowledge of culture plays some sort of a role in all of the teachers’ classrooms in this study. They described how culture is connected to almost every aspect of the classroom from feedback to interactions to grouping of students to material choice to language used in the classroom to classroom management to the effect on perspectives, and even university culture itself plays a role in the classroom. It appears that all three groups of teachers described a wide variety of areas in which culture plays a role. No one group described a larger variety of areas of influence. Years of experience did not seem to play a role in the conceptualization of culture and variety of areas of influence. It appears that all of the teachers conceptualized the term culture similarly and that it affects all of the teachers’ instructing. These findings mirror Arnó-Maciá’s (2009) idea that understanding cultures help teachers to assist students, and Wang’s (2015) findings that it is important for L2 teachers to understand culture in order to grasp where students are coming from especially how Chinese culture affects the classroom.
Specifically, Teacher DD, with six to ten years of experience, and Teacher JJ, with over ten years of experience, described a wide variety of areas of influence for culture, but not for sociolinguistics. Sociolinguistics did not play much of a role, but culture played a big role in the classroom for both teachers. Both teachers seemed to conceptualize sociolinguistics differently than culture. This too like pragmatics could be due to teacher beliefs about defining concepts (Borg, 2003a), which could be related to the influence of educational background, and more specifically courses taken or experiential teacher knowledge. Overall, most of the teachers seem to conceptualize that culture and sociolinguistics are connected, but not the same thing.

For the application of the different areas of linguistic knowledge, years of experience and how teachers define those linguistic terms seem to be the largest factors. Overall, it appears that the teachers in this study conceptualize pragmatics and grammar similarly, while there are some differences in the conceptualization of phonology and sociolinguistics. Teachers with over ten years of experience seem to be able to brainstorm the largest variety of teaching tools for the different areas of linguistic and describe the largest variety of areas of influence on their teaching for the different areas of linguistics.

**Are L2 teachers aware that they use linguistic knowledge?**

It seems from most of the answers to the interview question that teachers are generally aware of their use of linguistic knowledge. There were just a few exceptions, but that was mainly due to how those few teachers define or conceptualize those specific linguistic terms. In the area of phonology, both Teacher AA and Teacher JJ, with over ten years of experience, said that phonology did not play that large of a role in their
teaching. However, when asked if students had difficulty distinguishing between two similar sounds, both teachers were able to describe tools that help with pronunciation and articulation. In other words, it appears that, when asked about a specific hypothetical teaching scenario or situation, these two teachers use linguistic knowledge, but in general they seem to believe that phonology does not influence their teaching unless a specific situation, like the one provided in the scenario, arises in the classroom. Most of the other teachers conceptualized that phonology is related to areas of pronunciation and articulation by brainstorming tools where they would demonstrate how to produce the two similar sounds, use visuals to show how the sounds are made, and generally describe pronunciation when asked if phonology influenced their teaching. These findings are similar Grabe, Stoller, and Tardy’s (2000) and LaFond and Dogancay-Aktuna’s (2009) findings when they talked about the connection between phonology and pronunciation. Teacher AA and Teacher JJ seemed to conceptualize phonology in more the theoretical or generative sense using phonological terms not as much a practical connection to the classroom.

Similarly, in the area of sociolinguistics, Teacher DD and Teacher JJ, with over ten years of experience, said that it did not influence their teaching a lot. However, when asked about what role culture played in their classroom, both teachers said it played a rather large part, and both teachers described multiple areas where culture influenced their teaching. Most of the other teachers conceptualized that sociolinguistics is related to culture or deals with the connection between language and culture, such as variety of dialects, the connection between context and language, and how culture influences the classroom. Similarly, Borg (2003a) describes that the connection between beliefs and
practices can have a very strong influence on the classroom. One area of beliefs is the conceptualization of terms, which can be influenced by schooling, professional development, contextual factors, and experience in the classroom. For Teacher DD and Teacher JJ, one of whom has taken one or more linguistic courses during their training, it is hard to tease apart which specific area influenced how they defined phonology and sociolinguistics. It could be from experiential knowledge in the classroom or it could be from teacher training. Similarly, Phipps and Borg (2007, 2009) discuss the idea of a slight disconnect between beliefs and practices in the classroom, and they point out that teachers are not always aware of this disconnect. For this study, the disconnect between belief and practice or the awareness of the application of linguistic knowledge seems to be due to how teachers define particular linguistic terms.

What factors influence the application of linguistic knowledge?

The strongest two factors that influence the application of linguistic knowledge seem to be years of experience and conceptualization of the linguistic terms themselves, which comes from teacher cognition.

Experience in the Classroom/Years of Experience

For a general definition of linguistic awareness and its effect on teaching, years of experience did not seem to play a role. However, with the different areas of linguistics, years of experience did appear to play a role. For the influence of phonology, teachers with six or more years of experience seem to understand how strong a role contextual factors play in integrating phonological knowledge into lessons, such as pronunciation. These findings are similar to Burri, Baker, and Chen’s (2017) study, which found that teachers with more years of experience understood how strong of a role contextual
factors played when trying to apply phonological training to their teaching. For example, with the hypothetical teaching situation of distinguishing between two sounds, the more years of experience teachers had, the larger the variety of tools they were able to brainstorm. It seems the more experiential knowledge a teacher has the more awareness they develop in how to assist students with language problems. For the influence of grammar and pragmatics, teachers with over ten years of experience described the largest variety of areas where grammar and pragmatics influence their teaching, and they were able to brainstorm the largest variety of tools to help with word order and teaching politeness. Being in the classroom for more years and having more years of contact with students seem to help teachers understand how much of an influence grammar and pragmatics play in the classroom and the ability to know about more tasks that can help students. Finally, for the influence of sociolinguistics, teachers with over ten years of experience did describe the largest variety of areas of influence, although for culture, years of experience did not seem to play a role. It seems that all the L2 teachers in my study are aware of the importance of culture and that years of being in the classroom help to expand their awareness of the connection between sociolinguistics and language. The findings from my study are similar to Lareñas, Hernández, Neira, Suárez, and Navarrete’s (2013) findings where the source of teacher beliefs comes from work experience. The findings also echo those from Grijalva and Barajas (2013) where the more experience a teacher has, the more aware they are of what affects their beliefs and practices. Experiential knowledge seems to play a large role in the development and application of linguistic knowledge.

**Teacher Cognition/Beliefs and Practices**
The conceptualization of terms is closely related to educational background and schooling as Borg (2003a) explains and can also be one of the largest influences. All teachers had studied a L2 in some form and were asked how their own language learning experience affected their teaching. Overall, it seemed to give them compassion and understanding for what their own students were going through, and for some, it affected their task choice and lesson planning. These findings relate to Andrews’s (2006) study where increasing TLA and a L2 teacher’s own language learning experience in grammar affect task choice and lesson planning. In addition, in my study, teachers’ own L2 learning experience helped to improve their teacher knowledge by anticipating students’ needs, types of feedback, and how intertwined language and culture is. Borg (2003a) explains that L2 teachers’ first thoughts about learning a language and what good practices and bad practices are in the classroom start from their own experiences. These ideas can follow L2 teachers throughout their career and can affect their teacher training. Simply put, Andrews (2006) discusses how L2 teachers learning grammar can affect how they teach grammar, such as lesson planning and task choice. Generally, it seems that studying a L2 helps L2 teachers in multiple ways and can influence their teaching.

Professional coursework is another factor Borg (2003a) describes as affecting cognitions about L2 teaching, and understanding how influential their educational background is on their teaching and which courses are the most influential help researchers to better understand L2 teachers’ thoughts and beliefs about teaching. First, 11 of the 12 teachers had received or were in process of studying to get an MA in TESOL or a related field and had taken a linguistics or a language awareness class when this study was conducted. This matches Govardhan, Nayar, and Sheorey’s (1999) study that
most MATESOL programs require a linguistics course in some form. Moreover, eight of the teachers mentioned how their MA degree generally influenced their teaching in relation to lesson planning and teaching methods, although Teacher EE mentioned contextual factors limiting how much she could apply her teacher training. This idea of contextual factors limiting the application of knowledge is similar to Borg (2003a, 2006). Additionally, the teachers were asked what courses influenced their teaching the most, with eight teachers mentioning teaching methods, three SLA, three a type of linguistics course, and two an assessment course. It can be seen from these findings that the introduction to linguistic course was not the most influential course for any of the teachers. These findings do match Grabe, Stroller, and Tardy’s (2000) study and those findings are that teaching methodology courses in MATESOL programs increase awareness for teachers overall, but teasing apart how linguistics and teaching courses specifically influence teachers is very difficult. Professional coursework and schooling are where teachers start to develop their conceptualization of beliefs and practices, but experiential knowledge from years in the classroom seems to be the strongest influence for application of linguistic knowledge. This finding is similar to Svalberg’s (2012) study where even if teachers receive training on increasing grammar awareness, teachers with more years of experience are able to understand how and where to apply that grammatical knowledge over novice teachers with no experience in the classroom. Experiential knowledge seems to be the largest factor when understanding how to apply knowledge, for teachers are able to anticipate contextual factors and the needs of their students.

The study also asked several questions about teachers’ beliefs in relation to a few areas of teacher knowledge. Two questions are specifically related to content knowledge
(Shulman, 1987) or KAL (Ellis, 2004) with understanding how languages work and the amount and what parts of language knowledge should L2 teachers understand. Most teachers thought understanding how languages worked in general informed their teaching. The teachers overall described that L2 teachers should understand the structure of language in general and be highly fluent in that L2, some even went into detail into the different areas. The types of knowledge described are similar to different parts of KAL with the intertwining of PCK as described in Chapter 2 (Shulman, 1987; Ellis, 2004) and the different areas of content knowledge described in Andrews (2003). These findings are similar to Arnó-Maciá’s (2009) study where both teacher trainers and novice L2 teachers believe that L2 teachers need to understand how to apply their knowledge of KAL and explain their KAL to students. All 12 of the teachers said that understanding SLA is important for L2 teachers and that it can inform teacher knowledge. This did not seem to be very surprising, for several teachers mentioned taking SLA classes as part of their teacher training. The other two questions asked the teachers about their beliefs about what they wish they had been taught during teacher training and what teaching techniques or knowledge they thought future L2 teachers need to know. Half the teachers described wishing teacher training involved more practical training in the classroom. They wanted more time to learn how to apply the theory they learned in class. These findings coincide with LaFond and Dogancay-Aktuna’s (2009) study where MATESOL graduates wished they had more experience or training in how to apply their linguistic training in the classroom. Additionally, Bartels (2005) explains that teacher training needs to involve concrete lessons where teachers can see and get time to directly apply those theories in the classroom. This is because teachers are able to develop their own
perceptions and conceptualizations of what they wish they had been taught due to their experience in the classroom with contextual factors playing a role (Borg, 2003a). In other words, the more experiential knowledge a teacher has in the classroom, the more they understand what types of trainings would help them to develop their skills and knowledge. There was a large variety of topics described that most of the teachers thought future teachers need to know. The areas described covered teaching methods, technology, lesson planning, KAL, cultural knowledge, and material development. All the areas described involve different areas of teacher knowledge: content knowledge, PCK, curriculum knowledge, pedagogy knowledge, and knowledge of students (Shulman, 1987). These findings show that teacher knowledge is complex and that as teachers develop their experiential knowledge they see that they draw skills from a variety of areas, but it is difficult to tease those different types of knowledge apart. These findings are similar to Grabe, Stoller, and Tardy’s (2000) study where MATESOL graduates draw on a variety of different types of teacher knowledge from methodology to linguistic knowledge, but teasing apart the influence of the different types of knowledge is difficult.

There were also some factors where it seemed as if they did not play a role in the application of linguistic knowledge or teacher knowledge in this study; these were textbook use, reading up on research, sharing ideas with other teachers, what materials teachers used for a lesson, and classes taught. It is a little surprising that there was not some evidence that some of these factors played a role in the application of linguistic knowledge like classes taught. However, most of the teachers interviewed for this study were full time IEP teachers which means for most sessions they would teach both a
listening and speaking class and a reading and writing class. Moreover, there is really no research that shows these particular factors play a strong role in the application of different types of teacher knowledge. Most studies talk about experiential knowledge and teacher training like Borg (2003a) explains as being strong influences on L2 teacher cognition.

Conclusion

This chapter connected the findings to theory and empirical studies about teacher knowledge, teacher cognition, and teacher awareness. I was able to answer the four research questions proposed in the methodology chapter. Overall, it was found that experiential knowledge and conceptualization of terms were the strongest factors in the application of linguistic knowledge. How teachers defined terms or what they believed to be the definition of those terms was the strongest factor in the awareness in the application of linguistic knowledge. In the final chapter, I will conclude this paper by reviewing the implications and limitations of this study and explaining the possible future areas of study for TLingA.
CHAPTER 7

CONCLUSION

Summary of Findings

This study overall looked at and defined TLingA for L2 teachers as a mixture of teacher knowledge (Shulman, 1987), TLA (Andrews, 2003, 2007; Thornbury, 1997), teacher cognition (Borg 2003a, 2006), PCK (Shulman, 1987), KAL (Ellis, 2004), and teacher linguistic knowledge (Summer Institute of Linguistics’ website, 2015; Grabe, Stoller, & Tardy, 2000; LaFond & Dogancay-Aktuna, 2009) that helps teachers inside the classroom and with class preparation. The participants involved in this study were 12 teachers, three with five or fewer years of experience, three with six to ten years of experience, and six with over ten years of experience who worked at an IEP in the Southwest United States. Each participant was finishing up or had graduated with an MA in TESOL, Applied Linguistics, or a related field.

This study evaluated which factors affected the application of different areas of linguistics knowledge and if L2 teachers were aware they used their linguistic knowledge in the classroom. Moreover, these teachers were asked to define linguistic knowledge and how that influenced their teaching. The general findings showed that teachers define linguistic awareness similarly to TLingA and its areas of influence involving PCK, KAL, TLA and other types of teacher knowledge. Years of experience did not seem to play a large role in the definition of linguistic awareness. The largest factor that seemed to influence the application of linguistic knowledge is years of experience. For teachers with over ten years of experience, they tended to be able to describe a larger variety of areas of influence, such as, editing papers, meeting with students, teaching of
pronunciation, grouping of students, task choice, lesson planning, and brainstorm a larger variety of tasks in the hypothetical teacher scenarios. Generally, teachers were aware of their application of linguistic knowledge with a few exceptions in the areas of phonology and sociolinguistics. Teacher beliefs, in the area of conceptualization of terms, appear to be a factor in whether teachers believe that different areas of linguistics influence their teaching, specifically phonology and sociolinguistics. This conceptualization of terms seems to also be a factor in whether they are aware they are using linguistic knowledge. It is unclear which area of influence affected their conceptualization of linguistic terms, whether it was professional coursework, their experience in the classroom, or something else. These findings fit into the larger context of the connection between L2 teacher beliefs and practices (Borg 2003a, 2006) or the disconnect between L2 teacher beliefs and practices (Phipps & Borg, 2009), teacher knowledge (Shulman, 1987), and TLA (Andrews 2003, 2007). The findings show how teachers conceptualize terms can affect their awareness of the application of different types of teacher knowledge. In short, a teacher’s belief about a certain term can show a connection or not or lack awareness in the application of knowledge or practices in the classroom.

Limitations

Overall, this study had a few limitations in a few different areas. This study was conducted at one IEP, and the findings may not be similar if conducted at another IEP. However, by using one IEP, I was able to show the variety of different perspectives that one IEP represents and the variety of level of teaching experience present at most IEPs. 12 teachers were interviewed and not the entire IEP teaching staff. The findings may be slightly different if the entire staff had been interviewed. However, the groups of
teachers I did interview represent the variety of years of experience present at that IEP from almost no experience to over ten years of experience. There was an unequal amount of teachers interviewed according to years of experience, with the teachers with over ten years of experience having six people in that group and the other two groups having three people in them. However, at most IEP’s, teachers do not easily fit into equal groups according to levels of experience. Some IEP’s have more novice teachers while others have teachers with many years of experience. To overcome this unequal amount of people in each group, I analyzed each teacher individually. I found that each teacher with over ten years of experience brainstormed a larger variety of tasks and areas of influence of linguistic knowledge compared to the other groups. These limitations may have affected the findings slightly, but overall concrete findings were still produced.

This study was able to build on previous studies like Grabe, Stoller, and Tardy (2000) and LaFond and Dogancay-Aktuna (2009). While Grabe, Stoller, and Tardy's (2000) study was a case study of one TESOL graduate, I was able to interview 12 teachers in order to understand how multiple L2 teachers applied their linguistic knowledge. While LaFond and Dogancay-Aktuna (2009) conducted a survey that relied on questions of a very limited scope, I was able to ask open-ended questions where L2 teachers provided thick descriptions of how they were influenced by and applied their linguistic knowledge. Finally, this study expanded upon the theory of TLA (Andrews 2003, 2007; Thornbury, 1997) by adding TLingA, which L2 teachers use much more than just language awareness, but are also influenced by linguistic knowledge awareness in their teaching.

Implications
There are several implications of the study. By understanding what factors affect the application of teacher knowledge in the classroom, teacher trainers can develop curriculum that helps teachers to better connect their beliefs and practices. For my study, I evaluated the connection between beliefs and practices about teacher linguistic knowledge that builds upon Borg’s (2003a, 2006) evaluation of the connection teacher cognition and grammar teaching. By having teachers define what different linguistic terms mean, researchers may be able to get a clearer picture of how teachers conceptualize different linguistic terms and how that conceptualization affects their teaching and/or application of linguistic knowledge. Additionally, understanding how strong of a role the conceptualization of terms plays in beliefs and practices in the classroom, teacher trainers can help pre-service and in-service teachers become more aware of the development of those beliefs and practices with reflections. This type of training, may help reduce the disconnect between belief and practices as Phipps and Borg (2007, 2009) describe and help teachers to be more aware of how their beliefs connect to their practice. By evaluating how L2 teachers apply their linguistic training in their teaching, TESOL trainers can help to develop curriculum to better connect linguistic theory to the classroom and maybe give pre-service teachers time to practice that connection. Additionally, this study is building on Grabe, Stoller, and Tardy’s (2000) and LaFond and Dogancay-Aktuna’s (2009) studies by being able to ask follow-up and more open-ended questions directly to teachers about the influence of the different areas of linguistics on teaching. This study measures how teachers actually think they apply their linguistic training and evaluates their awareness in the application of that linguistic
knowledge by asking them hypothetical teaching scenarios that involve different areas of linguistics.

**Future Studies**

There are a myriad of areas in which future studies can be conducted in relation to TLingA and expand upon the findings of this study. Researchers could duplicate this study using L2 teachers at a community college, K-12 teachers, EFL teachers, L2 teachers of Spanish, or NNS teachers. Different questions could also be added or dropped to the interviews, such as asking how teachers themselves define phonology, pragmatics, grammar, and sociolinguistics and how that affects their teaching. I could possibly add questions about semantics and morphology to see if the same factors, *conceptualization of terms* and *years of experience*, play a role in other areas of linguistics. Additionally, follow-up interviews could be conducted to see if answers to linguistic knowledge questions changed over time. Researchers could see if conceptualization of terms changed with the development of more experiential knowledge from time in the classroom and working with students. Researchers could see if teachers with five or fewer years of experience changed their answers after they were in the classroom closer to ten years or if teachers with over ten years of experience changed their conceptualization of different linguistic terms the further away from the MATESOL training they were.

Overall, this study looked and evaluated TLingA for L2 teachers at an IEP in the Southwestern United States. Thanks to this study researchers are now able to see how important the conceptualization of terms is for L2 teachers and its connection to teacher beliefs and practices of linguistic knowledge. Additionally, this study showed how
strong role experiential knowledge played in the application of teacher linguistic knowledge and awareness.
REFERENCES


APPENDIX A

PILOT STUDY INTERVIEW QUESTIONS
1. How old are you?

2. What is your language background? What and how many languages do you speak?

3. How long have you been teaching?

4. What kind of courses have you taught?

5. What is your educational background? What was your major in undergraduate and graduate school?

6. What kinds of courses were you required to take in graduate school?

7. What courses have been influential on your teaching?

8. What materials do you use to prepare for a lesson?

9. How much of the textbook do you use?

10. How often do you share ideas with other teachers?

11. How do you use phonology in your teaching?

12. Do you have any comments about how your educational background has affected your teaching?

13. Do you have any comments about things that you wished you had been taught in school or during teacher training?

14. What role does grammar play in your lessons?

15. How important is it for second language teachers to understand how languages work?

16. What role does pragmatics play in your lessons?

17. What parts of language knowledge should teachers understand and how much?

18. How do you use culture in your teaching?

19. How important is it for second language teachers to understand what affects language acquisition?
20. What kind of teaching lesson or tool would you use if students had trouble distinguishing two similar sounds?

21. How would you teach word order if students were having difficulty with it?

22. How would you teach requesting and addressing people with different levels of politeness?

23. How do you use knowledge that you have of different cultures in your teaching?

24. How often do you read up research about second language learning and/or teaching?

25. In your own words describe kinds of teaching techniques or knowledge future and current second language teachers need to use and understand.
APPENDIX B

INTERVIEW QUESTIONS
1. What is your language background? What and how many languages do you speak?

2. How long have you been teaching?

3. What kind of courses have you taught in what context? EFL? ESL? Community College? University? (Is there a difference in setting?) (EFL?) (ESL?)

4. What is your educational background? What was your major in undergraduate and graduate school?

5. What university did you get your MATESOL from?

6. What kinds of courses were you required to take in graduate school?

7. What courses have been influential on your teaching? Why?

8. How does your language learning experience affect your teaching?

9. What materials do you use to prepare for a lesson?

10. How old are you?

11. How much of the textbook do you use?

12. How often do you share ideas with other teachers? Do you use other ideas from other teachers? What type? Explain.

13. What role does phonology play in your teaching?

14. How does your educational background affect your teaching?

15. Do you have any comments about things that you wished you had been taught in school or during teacher training?

16. What role does grammar play in your lessons?

17. How important is it for L2 teachers to understand how languages work?
18. What role does pragmatics play in your lessons? (Pragmatics is the way you use different forms of language in different contexts. It is sometimes reading between the lines or correct word choice at times with reference to connotation.)

19. What parts of language knowledge should teachers understand? How much language knowledge should they have? Explain why.

20. How much does your knowledge of sociolinguistics influence your teaching?

21. How important is it for second language teachers to understand what affects language acquisition?

22. What kind of teaching lesson or tool would you use if students had trouble distinguishing two similar sounds?

23. How would you teach word order if students were having difficulty with it?

24. How would you teach requesting and addressing people with different levels of politeness?

25. What role does culture in general and your knowledge of different cultures play in the classroom?

26. How often do you read up research about second language learning and/or teaching? How helpful is it? If no, how helpful would it be?

27. In your own words describe what kinds of teaching techniques or knowledge future and current second language teachers need to use and understand.

28. How would you define linguistic awareness? How does that affect your teaching and you as a second language teacher in general?