

**Teacher Cognition in relation to
Pronunciation Instruction in Saudi English
Major Programs**

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Abstract

Teacher cognition plays a significant role in the teaching of language in the classroom. Research into language teacher cognition has tremendous value for education research and the potential to improve education systems. It provides an in-depth understanding of connections between teachers' knowledge, beliefs, practice and underlying factors involved in language teaching. It also shows how themes in language pedagogy interrelate, offering insights into teachers' local theories of learning. One area of language teacher cognition research which has received considerable attention recently is pronunciation instruction. Thus, previous teacher cognition research regarding pronunciation instruction tended to focus on individual themes, such as goals, models and methods. To date, however, no research has provided a holistic understanding in which the various themes in pronunciation instruction are investigated within a single study. This study aimed to fill this important gap by means of a thorough investigation of EFL teachers' cognition in relation to pronunciation instruction. Fifteen respondents teaching Pronunciation, Listening and Speaking, Phonetics and Phonology modules in Saudi universities participated in the study. The research used initial interviews, classroom observations, a follow-up stimulated recall interview and a final interview.

The analysis of data has provided useful insights regarding teacher cognition regarding pronunciation instruction. Key findings included that: perceptual training seemed to be implemented more frequently than production training; technology enhanced pronunciation training was viewed significant but not fully exploited; knowledge of L2 and L1 sound systems, and theories in the acquisition of second language phonology, was influential in teachers' decisions; segmental features were prioritized in classroom practice; the assessment of students' pronunciation, and the teaching of vowels and suprasegmental features proved challenging for teachers and learners; there was a connection between pronunciation and other skills; RP dominated as a model in classroom practice; different approaches of feedback were adopted; and finally, there was an interconnection of themes within pronunciation

instruction. In addition, other key findings into teacher cognition highlighted the factors in play. These included connections between teacher education, prior L2 experience, teaching experience and knowledge and beliefs, as well as classroom practice. It was found that teacher education played a significant role in influencing teachers' knowledge and beliefs whereas classroom practices were affected largely by contextual factors such as assigned textbooks and access to technology.

Table of Contents

List of Figures and Tables.....	ix
Acknowledgements	x
Declaration	xi
Chapter one: Introduction	1
1.1 Purpose of the research	2
1.2 Background	3
1.3 Research aims, questions and methods.....	6
1.4 The study context.....	6
1.5 Significance of the study.....	9
1.6 Thesis overview	11
Chapter Two: Literature review	12
2.1. Introduction.....	12
2.2 Defining teacher cognition	12
2.3 Models in teacher cognition research.....	15
2.4 Factors influencing teacher cognition	20
2.4.1 <i>Prior L2 learning experiences</i>	20
2.4.2 <i>Teacher education</i>	21
2.4.3 <i>Continuous Professional development</i>	22
2.4.4 <i>Classroom practice</i>	23
2.4.5 <i>Contextual factors</i>	26
2.4.6 <i>Teaching experience</i>	27
2.5 Key debates in pronunciation instruction	28
2.5.1 <i>Pronunciation instruction research</i>	28
2.5.2 <i>Goals of teaching pronunciation</i>	30
2.5.3 <i>Models of teaching pronunciation</i>	34
2.5.4 <i>Approaches and techniques in pronunciation instruction</i>	38
2.5.5 <i>Priorities of pronunciation features</i>	41
2.5.6 <i>Feedback on students' pronunciation</i>	43
2.5.7 <i>Pronunciation assessment</i>	44
2.6 Conclusion	45
Chapter three: Methodology.....	46
3.1 Introduction.....	46
3.2 Interpretivist paradigm	46
3.3 Research strategy	47
3.4 Theoretical framework.....	50
3.5 Multiple case study approach	52

3.6 Narrative inquiry	54
3.7 Sample and sampling procedure	56
3.8 Data collection instruments	58
3.8.1 Initial semi-structured interviews	59
3.8.2 Classroom observation	61
3.8.3 Stimulated recall interviews	63
3.8.4 Final semi-structured interviews	65
3.9 Piloting stage	65
3.10 Trustworthiness	69
3.11 Analysis	71
3.12 Ethical considerations	74
Chapter Four: Narratives	77
4.1 Introduction	77
4.2 Selection of participants for narratives	77
4.3 Saleh	78
4.3.1 Goals: “to be intelligible”	79
4.3.2 Models: “Native and non-native models are both good”	81
4.3.3 Prioritization: “they should cover all aspects”	83
4.3.4 Methods: “give the students the chance to practice”	84
4.3.5 Feedback: “feedback is quite effective”	88
4.3.6 Assessment: “sometimes we are taught and then assessed differently”	89
4.4 Ibrahim	90
4.4.1 Goals: “to express themselves in a meaningful way”	91
4.4.2 Models: “like a framework”	91
4.4.3 Prioritization: “we teach vowels and consonants”	92
4.4.4 Methods: “you must say what you see and write what you hear”	93
4.4.5 Feedback: “mistakes are the key to learning”	95
4.4.6 Assessment: “written format”	95
4.5 Suliman	96
4.5.1 Goals: “being able to communicate and interact with native speakers”	96
4.5.2 Models: “students should be familiarized with various accents in English”	98
4.5.3 Prioritization: “familiarize students with sounds of English, stress and intonation”	99
4.5.4 Methods: “a student should be able to recognize, know, and pronounce correctly”	100

4.5.5 Feedback: “I have to double check that the student is uttering the word correctly”	102
4.5.6 Assessment: “students ... are asked to write the spelling from this transcription”	102
4.6 Ali	103
4.6.1 Goals: “to pronounce... in [an] acceptable form... that people could understand”	103
4.6.2 Models: “they should be exposed to different pronunciations”	104
4.6.3 Prioritization: “vowels are sometimes challenging for the students”	106
4.6.4 Methods: “mix different methods to achieve the target or the desired goal”	107
4.6.5 Feedback: “I don’t believe in correcting the mistakes on the spot”	112
4.6.6 Assessment: “there is no hard and fast formula to evaluate their spoken language”	113
4.7 Conclusion	114
Chapter Five: Cross-case analysis.....	115
5.1 Introduction.....	115
5.2. Perceptual training vs production training	115
5.3 Technology enhanced pronunciation training	117
5.4 Achievability.....	120
5.5 Prioritization of pronunciation features	123
5.6 Feedback to students’ pronunciation	126
5.7 Knowledge of L1 & L2 phonology	130
5.8 Conclusion	133
Chapter Six: Discussion	134
6.1 Introduction.....	134
6.2 Key findings.....	134
6.2.1 Emphasis on perception more than on production in training and assessment	134
6.2.2 Limited utilization of available technology enhanced pronunciation training	142
6.2.3 Unachievability of native like pronunciation	144
6.2.4 The prioritization of segmental features and the challenge of teaching vowels and suprasegmental features	150
6.2.5 Variation of approaches to feedback	155
6.2.6 The dominance of British pronunciation as a model in classroom practice.....	Error! Bookmark not defined.
6.3 Summary of discussion	162

Chapter Seven: Conclusion	170
7.1 Findings highlights	170
7.2 Contributions of the research	171
7.3.1 A holistic study	171
7.3.2 Interconnections of themes within pronunciation instruction	172
7.3 Research challenges	174
7.4 Future research	174
7.5 Personal reflections	175
Appendices	176
Appendix 1: Course outline for Sounds of English	176
Appendix 2: Course outline for Listening and speaking	178
Appendix 3: Course outline for King Saud University	180
A. Course Identification.....	180
6. Mode of Instruction (mark all that apply).....	180
B. Course Objectives and Learning Outcomes	181
1. Course Description	181
2. Course Main Objective	181
3. Course Learning Outcomes	181
C. Course Content.....	181
D. Teaching and Assessment.....	182
1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods	182
2. Assessment Tasks for Students.....	182
E. Student Academic Counseling and Support.....	183
F. Learning Resources and Facilities.....	183
1.Learning Resources.....	183
2. Facilities Required	183
G. Course Quality Evaluation.....	183
H. Specification Approval Data.....	184
Appendix 4: Key themes, topics and questions	185
Appendix 5: Revised interview guide used in the main study	186
Appendix 6: Initial interview guide used in the pilot study	191
Appendix 7: Unstructured classroom observation schedule used in the pilot study	196
Appendix 8: Structured classroom observation schedule used in the main study	197
Appendix 9: Instructions for Stimulated Recall interviews	199
Appendix 10: Initial scheme of codes	200

Appendix 11: Information page and consent form.....	201
Bibliography	205

List of Figures and Tables

Figures

Figure 1: A model of teacher thought and action	p.16
Figure 2: Elements and processes in language teacher cognition	p.19
Figure 3: Revised model of Borg's (2015) 'Elements and processes in language teacher cognition'	page

Tables

Table 1: Pilot study timetable	
Table 2: Summary of the changes made to the interview guide	
Table 3: Characteristics of selected cases	
Table of Potential Questions: Appendix 4	

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Declaration

I hereby declare that this thesis is a presentation of original work and I am the sole author. This work has not previously been presented for an award at this, or any other, University.

All sources are acknowledged as References.

Chapter one: Introduction

Teacher cognition, which refers to what teachers think, know and believe, plays a significant role in the classroom, has tremendous value for educational research and is a valuable approach for improving education systems. Subsequently, it has been a key area of inquiry within teacher education research for many years. The current research sought to provide a holistic understanding of teacher cognition in relation to pronunciation instruction in English major undergraduate programs in Saudi Arabia. Whilst there has been heightened interest in teacher cognition in relation to language teaching in the last two decades (for reviews, see Borg, 2003; 2006; 2015), including cognition studies relevant to pronunciation instruction which have drawn on a range of themes (see, for instance, Baker, 2014; Couper, 2016), little is known about the interrelationships between different themes in pronunciation instruction.

Whilst research has touched on themes such as models (Jenkins, 2005; 2007; Sifakis & Sougari, 2005; Timmis, 2002), feedback (Baker & Burri, 2016), assessment (Cohen & Fass, 2001), for example, it seems that no previous research has examined these themes holistically. Furthermore, because contextual factors play an important role in shaping teachers' cognition and practice (Barnard & Burns, 2012; Borg, 2015), teachers' cognitions concerning pronunciation instruction have been explored in a number of contexts. Nonetheless, English as a foreign language (EFL) teachers' cognitions regarding pronunciation instruction in the Saudi context have yet to be examined. This is despite the fact that there has been considerable development in terms of the numbers of undergraduate English major (or undergraduate EFL) programs in the Saudi higher education system, in which teaching pronunciation is part of the curriculum. EFL teachers in this context not only prepare students to successfully communicate in English but also train them to teach English when they graduate.

The current study therefore addresses this important gap in knowledge, using a qualitative multiple method approach which employed semi-structured interviews, classroom observations, stimulated recall interviews and final interviews. This chapter provides an overview of the topic area, before discussing key aims, research questions and the methods used. It then discusses the study context and the significance of the research before an overview of the thesis structure is presented.

1.1 Purpose of the research

The initial motivation for this study stemmed from the researcher's experience with teaching pronunciation in the Saudi context. During that time, the researcher faced challenges in issues related to the teaching of pronunciation, for example, in terms of the aims, methods and models that should be adopted when teaching pronunciation. Seeking help from colleagues and reading the literature turned out various positions in regard to each of these issues. Most importantly, the researcher found this particular area of research to be a gap in the literature. The study aimed to explore teachers' cognition in relation to pronunciation instruction in the Saudi context, with a specific focus on teachers' knowledge and beliefs, classroom practice and factors underlying these.

In order to achieve this aim, the study sought to: first, identify teachers' knowledge and beliefs in regard to pronunciation instruction; second, to uncover teachers' practice in the classroom; third, to highlight gaps between beliefs and practices; and fourth, to explore the factors underlying teachers' knowledge, beliefs and practices. A teacher cognition inquiry in this area can facilitate understanding of teachers' cognition in relation to pronunciation instruction, which may assist in improving pronunciation instruction in the Saudi context, as well as in similar contexts. It is also hoped that this research will bridge an important gap in the literature, where themes in pronunciation instruction have not previously been examined together holistically in one study.

1.2 Background

The study of teacher cognition is important, as teachers play a prominent role in making important decisions and shaping what happens in the classroom. Teachers are of primary importance in selecting the content of a lesson, managing the time and environment and in facilitating students' goal setting. Furthermore, teachers are "active, thinking decision-makers who make instructional choices by drawing on complex, practically-oriented, personalized and context-sensitive networks of knowledge, thoughts and beliefs" (Borg, 2003, p. 81). Thus, teachers' practices in the classroom are central to the quality and effectiveness of teaching and, as concluded by many researchers, teachers' behaviors, practices and decisions in the classroom are heavily influenced by their cognitions (Burns, 1992; Borg, 2001; 2003; Johnson, 1992a; 1992b; Fang, 1996; Pajares, 1992; Parvaresh, 2017).

Teacher cognition research can cover a lot of issues within one study, producing reliable data and providing a holistic understanding of teaching that other types of research cannot bring. The value and amount of data that a single teacher cognition study may produce can be bigger and may have more valuable data than those produced by several experimental studies (Burkhardt & Schoenfeld, 2003). Burns and Richards' (2009) view of teacher cognition research as "very much concerned with teachers' personal and situated approaches to teaching" (p.5), is in line with Burkhardt and Schoenfeld's (2003) proposal of the "engineering approach". They argue that teacher cognition is a reliable source to generate robust evidence-based research that has strong links between research-based insights and improved practice. In other words, teacher cognition can give insights into teachers' local theories of learning that have developed over the course of their teaching experience within a specific context, through: teachers' interaction with instructional materials; teachers' knowledge of the learners; and the intersection of all these variables together. Furthermore, as Borg (2015) argues, understanding teacher cognition helps to bring reform to education:

Teacher cognition is central to the process of understanding teaching...This perspective on teachers and teaching has

provided insights into the process of teacher education and the nature of teachers' instructional practices. It has helped policy makers become more sensitive to the key role teachers - and their cognitions - play in the implementation of educational innovations (p.1).

Teacher cognition can thus provide a holistic understanding of a phenomenon that cannot be obtained, for example, through a single instructional experiment or a grand theory study. It may be, then, that a holistic understanding of an educational context can result in bringing reform to education. Therefore, studying EFL teachers' cognitions concerning pronunciation instruction in Saudi English major programs can produce valuable data concerning pronunciation instruction and can contribute to developing and reforming pronunciation instruction in the Saudi context.

Despite the significance of teacher cognition research, teacher cognition research in relation to pronunciation instruction has received relatively little attention. This is surprising considering, on the one hand, the importance of pronunciation, and on the other hand, the effectiveness of pronunciation instruction. Previous studies have, for instance, underlined the significance of pronunciation and in this study, the importance of pronunciation was highlighted by the participants. Not only are elements of pronunciation being taught within different modules such as Sounds of English, Phonetics and Phonology, Listening and Speaking, Reading and Writing, as well as Grammar, but the findings in this research showed that teachers view pronunciation to be connected to other language skills including listening, reading, writing and speaking. Furthermore, a number of studies have proved the effectiveness of pronunciation instruction on the improvement of students' pronunciation (Couper, 2003; 2006; Derwing, Munro & Wiebe, 1997; 1998; Macdonald, Yule & Powers, 1994; Saito, 2007).

Teacher cognition research relevant to pronunciation instruction has been conducted in a number of contexts. In English as a Second Language (ESL) contexts, teacher cognition studies in the area of pronunciation instruction have been conducted in North America (Baker, 2011a; 2011b; 2011c; 2014;

Burri, Baker & Chen, 2017; Thomson, 2012), in Australia (Burri, 2015; Burri, Chen & Baker, 2017). In EFL contexts, studies have been conducted in Colombia (Cohen and Fass 2001), Cyprus (Hismanoglu, 2010; 2013), Brazil (Buss, 2012; 2016), Japan (Saito & van Poeteren, 2012), Jordan (Alghazo, 2013), Turkey (Sarıkaya, 2013), Iran (Yunus, Salehi & Amini, 2016), Malaysia (Shah, Othman & Senom, 2017), Poland (Szyszka, 2016), Uruguay (Couper, 2016) and Cambodia (Lim, 2016). Nonetheless, no study has examined EFL teachers' cognitions in relation to pronunciation instruction in the Saudi context. As contextual factors play an important role in shaping teachers' cognitions and practices (Barnard & Burns, 2012; Borg, 2015), exploring teachers' cognitions and practice in the area of pronunciation instruction within different contexts would enrich this area of research.

Teacher cognition studies have explored different themes relevant to pronunciation instruction. The two major themes which have been investigated are pronunciation teaching techniques (Baker, 2011a; 2011c; 2014; Hismanoglu, 2010; Yunus, Salehi and Amini, 2016) and attitudes of non-native EFL teachers towards English accents (Jenkins, 2005; 2007; Sifakis & Sougari, 2005; Timmis, 2002). Other themes that have been explored are reluctance to teach pronunciation (Gilakjani & Sabouri, 2016; Macdonald, 2002); feedback in pronunciation instruction (Baker & Burri, 2016); development of teacher cognition and identity (Burri, Chen and Baker, 2017); development of teacher cognition as the result of a pedagogical pronunciation course (Burri, 2015); the lack of confidence in the ELT community to assess teachers' beliefs and practices concerning pronunciation instruction (Thomson, 2012); assessment in pronunciation instruction (Cohen & Fass, 2001); non-native teachers' perceptions of their pronunciation (Sarıkaya, 2013); and teachers' knowledge base for pronunciation instruction (Baker and Murphy, 2011). Although various themes have been explored in this area, a holistic understanding has not been reached. That is, different studies have focused on individual themes, but no study has focused on various themes in pronunciation instruction and how these themes interrelate within a single study.

1.3 Research aims, questions and methods

The study aims to examine EFL teachers' cognitions and practices in relation to pronunciation instruction in Saudi English-major programs, and to explore the relationships between - and significant factors affecting - cognitions and practices. In order to address these aims, the study will focus on the following research questions:

1. What relationships exist between EFL teachers' knowledge and beliefs about pronunciation instruction, and classroom practices in Saudi English-major programs?
2. What factors underlie EFL teachers' knowledge and beliefs, and practices regarding pronunciation instruction in Saudi English-major programs?

For the purposes of the current research, multiple methods were used to address the research questions. These included semi-structured interviews, classroom observations, stimulated recall interviews and final interviews (for further information on the methods, see Chapter Three).

1.4 The study context

The study was situated in the teacher education context, where the focus was on the cognition of teachers of EFL programs in seven different colleges within two large universities in Saudi Arabia. Saudi Arabia is the world's largest oil producer; and only recently, the government has initiated a development plan, Vision 2030 (Government of Saudi Arabia, 2016), with the intention to expand the economy. The end goal of this vision is to move away from depending solely on oil and look for revenue in other resources. As part of this plan, improving education and research has become a high priority. The teaching of English here is significant, especially as it is the lingua franca of the world today. At present, English is taught in public schools, and in many undergraduate and graduate programs in Saudi universities. In public education, students study English from the third grade

to the last year of secondary school (Alrashidi & Phan, 2015), while at the university level, students are required to complete intensive English training programs before they are admitted to scientific and technical or graduate programs. To meet the country's high demands, many English major programs across Saudi Arabia have been established. Some large universities have been developed through the merger of several colleges, and therefore can provide a similar program across a range of different colleges within that institution.

The sample for the current study therefore included fifteen participants who teach on undergraduate EFL courses across seven different colleges in Saudi Arabian universities, which include modules related to the teaching of pronunciation. The teachers in the sample were all educated to at least undergraduate degree level, with seven participants also holding Masters degrees and five also being qualified to doctoral level. All taught on EFL courses in Saudi universities and were non-native speakers, who have spent years in English-speaking countries while earning their graduate degrees (such as MAs and PhDs). The sample was diverse, however, in terms of educational and professional background, resulting from levels of experience, age and nationality. In relation to the latter, for instance, four were Saudi nationals who had been educated in western contexts, but the sample also included individuals who had been educated in their own countries and therefore had attended North African (four participants), Pakistani (four) and Indian (three) institutions. Subsequently, the educational backgrounds and experiences of the sample differed. Level of experience also differed amongst the sample, ranging from newly qualified teachers to those with between five and ten years of teaching experience. The ages of the sample ranged from late-twenties to late-fifties.

Different Saudi universities have slightly different objectives for their undergraduate EFL programs depending on the focus of the program (including, for example, English literature or translation studies). Despite the differences, most of these programs share the following objectives. To:

- Provide courses on language skills, theoretical and applied linguistics, translation and/or English literature, depending on the focus of the program.
- Prepare EFL teachers for public education (elementary, middle and high schools).
- Provide training support for in-service EFL teachers across Saudi Arabia.
- Contribute to research related to teaching English, theoretical and applied linguistics, translation and/or English literature.

Upon graduation from EFL programs, graduates have the opportunity to become EFL teachers, translators, or to work in professions where English is the medium of communication. A common career outcome, however, is to teach in public education or in academia. Employment within public education tends to begin right after graduation, whereas a career in academia requires the completion of graduate programs in high-ranking universities around the world.

Within EFL courses, students are required to complete various modules which include pronunciation instruction. The English pronunciation within EFL courses is primarily approached in three different ways; implicitly through listening and speaking modules, explicitly in separate pronunciation modules, and descriptively/articulatory through phonetics and phonology modules. It was the teachers of these three types of modules who were the focus of the current study, including four teachers teaching on Listening and Speaking modules, six teaching Pronunciation Instruction modules and five teaching Phonetics and Phonology modules.

The aim of a listening and speaking module tends to be to improve students' listening and speaking skills through communicative methods. Students are taught the mechanics of speech, including intonation, rhetoric, pitch, and their effect on meaning assignment. In a pronunciation module, students are introduced to English letters and sounds, English sounds (consonants and vowels), speech organs, stress and intonation. The main purpose of a

pronunciation module, according to an English major program at one Saudi university is that “students should be able to produce and perceive English utterances well” (see Appendix 1). In a phonetics and phonology module, students are introduced to human vocal tract and its mechanism. Students learn to describe and classify speech sounds based on their place, manner of articulation and voicing. Students are also trained to transcribe words and sentences using the International Phonetic Alphabet (IPA), and are introduced to phonemes and allophones, and the form and operation of phonological rules such as assimilation, deletion, and insertion (see Appendix 1, 2, 3 for pronunciation/phonology/phonetics course descriptions at three different undergraduate English-major programs; Imam University, Qassim University and Saud University). Despite the different approaches adopted within these modules, they all involve elements of English pronunciation instruction, and it is this that was the focus of the current study.

This context of this study is unique for several reasons. First, the context represents a typical teacher education program where students are trained to be EFL teachers. Such programs tend to have a great influence on English language education, training and research in Saudi Arabia, as mentioned above. Second, the focus on teachers in particular, rather than students in this EFL context, is under-researched (Ahmad, 2018; Alghanmi & Shukri, 2016). Third, whilst there has been research on pronunciation instruction in a variety of different countries, as will be discussed in Chapter Two, very little research focuses on this in the Saudi context.

1.5 Significance of the study

It is expected that the current study will contribute to knowledge in many ways. First, it will explore teacher’s cognition and practices in relation to pronunciation instruction in a context which has not been explored before. Second, it will endeavor to gain a holistic understanding of teachers’ personal theories on pronunciation instruction by examining how different themes interrelate with one another within a single study. Third, it could be used by policy makers to help inform change within educational policies in relation to English language education and pronunciation instruction in the context of

Saudi higher education. Furthermore, teacher cognition research is one of the most useful approaches for improving educational systems (Borg, 2015; Burkhardt & Schoenfeld, 2003). It has been shown that students value pronunciation instruction but have expressed some negative views regarding its instruction in English major programs (Alghazo, 2015). Therefore, the findings from this study may be used to enable researchers and material developers to understand what works and does not work in relation to pronunciation instruction from the perspectives of EFL teachers in the Saudi context. Fourth, the current study will emphasize the importance of teacher cognition research as well as pronunciation instruction research and will provide implications for teachers and educators in this context and other similar contexts to rethink the teaching of pronunciation. Most importantly, the current study will fill a gap in this research area and enrich current literature on teacher cognition and pronunciation instruction, as well as classroom-based research in Teaching English as a Second Language (TESOL).

The study also has theoretical and practical significance. Theoretically, it illustrates teacher cognition definitions, theories, models and factors influencing teacher cognition. It provides a detailed account of studies related to teacher cognition research relevant to pronunciation instruction in both ESL and EFL contexts, and also offers an overview of key debates in the literature of pronunciation instruction. Furthermore, it provides a revised version of Borg's (2015) model on teacher cognition in relation to pronunciation instruction, specifically highlighting relationships among teacher education, classroom practice, teaching experience. This can be used to holistically explore teacher's knowledge, beliefs and practice regarding pronunciation instruction. Practically, it explores teachers' cognition and practices in relation to pronunciation in Saudi English major programs. It also examines connections between teachers' cognitions and classroom practices in relation to pronunciation instruction. Finally, it investigates factors underlying teachers' cognitions and classroom practices related to pronunciation instruction.

1.6 Thesis overview

Following this introductory chapter, the remainder of the dissertation is divided into six chapters. In Chapter Two, an overview of existing literature in the field is explored. This begins by defining teacher cognition, models in teacher cognition research and factors influencing teacher cognition. It then moves on to explore key debates in pronunciation instruction. Chapter Three describes the research methodology underlying the study. The research paradigm and strategy are discussed, followed by the theoretical framework, and the research approach. The narrative inquiry, the sampling procedure and methods of data collection are then described. The latter of which included semi-structured interviews, classroom observations, stimulated recall interviews and final interviews. Subsequently, piloting, issues surrounding trustworthiness and data analysis procedures are explored. Finally, the chapter concludes with an overview of the ethical considerations of the study. In Chapter Four, the four most telling cases in the research are presented and discussed, in order to provide the reader with detailed insights into teacher cognition in relation to pronunciation instruction. Chapter Five provides a cross-case analysis of all fifteen cases. In Chapter Six, key findings which have emerged from the cross-case analysis are discussed. The thesis concludes in Chapter Seven, where finding highlights, contributions of the research, challenges and future research, and personal reflections are provided.

Chapter Two: Literature review

2.1. Introduction

Having provided background information about the current study in Chapter One, this chapter provides a thorough review and critique of the literature. This is divided into four key sections. First, teacher cognition is defined and key dimensions of teacher cognition are considered. Defining teacher cognition is essential for determining the direction, focus, and the interpretation of data from the study. Next, models in teacher cognition research are discussed (Borg, 2015; Shulman, 1986). The purpose of this section is to clarify and develop the methodology and theoretical basis of the current research. In the following section, factors influencing teachers' cognition are addressed. This section's aim is to highlight evidence on interactions between teacher cognition and other variables (e.g. Prior L2 learning experience, teacher education, context). In the last section of this chapter, key debates in pronunciation instruction are discussed. It was expected that these debates might influence the direction of the study and assist in interpretation of the data.

2.2 Defining teacher cognition

Given that teacher cognition denotes a complex concept, it has been variously described. For example, Borg (2003) refers to teacher cognition as the “unobservable cognitive dimension of teaching - what teachers know, think and believe” (p.81). Alternatively, Kagan (1990) defines teacher cognition as “teachers’ self-reflections; beliefs and knowledge about teaching, students and content; and awareness of problem-solving strategies endemic to classroom teaching” (p.419). In contrast, Calderhead (1988), uses the term “practical knowledge” to refer to a specific type of knowledge, and defines it as “the knowledge that is related to action that is readily accessible and applicable to coping with real-life situations, and is largely derived from teachers’ own classroom experience” (p.54). These definitions are just a small sample of the range of interpretations and explanations offered in

relation to teacher cognition. Despite the array of definitions provided, it is possible to draw out several key dimensions which emerge from these.

Firstly, definitions of teacher cognition tend to attribute it to a number of qualities or characteristics. It has been described as private (Borg, 1999; Burns & Richards, 2009; Kagan, 1992). That is, teacher cognition can differ from one teacher to another depending on, for example, their teaching experience, contextual factors, the teacher's training and education. In addition, teacher cognition has been recognized as implicit (Borg, 2003; Burns, 1992; Crawley & Salyer, 1995; Kagan, 1992) because it cannot be directly seen. Furthermore, teacher cognition has been labeled as practical (Borg, 2015; Calderhead, 1988; 1995; Schon, 1983; Tabachnick & Zeichner, 1986; Thompson, 1992) since it can be reflected in practice. Moreover, teacher cognition has been considered systematic (Borg, 2015; Burns, 1992; Grossman, Wilson and Shulman, 1989) as it belongs to a system of cognitive constructs.

Additionally, teacher cognition has been viewed as dynamic (Borg, 2015; Holt-Reynolds, 1992; Shulman, 1986), reflecting the fact that it changes over time as a result of teaching experience, professional development, and contextual factors. Since Borg's (2015) definition is based on analyses of different concepts used in teacher cognition research, and since it embodies most characteristics of teacher cognition mentioned in the literature, the current study was based upon Borg's (2015) definition. It states that teacher cognition is "(a) personal, (b) practical (though informed by formal knowledge), (c) tacit, (d) systematic, and (e) dynamic" (p.40).

Secondly, it is recognized that teacher cognition encompasses a number of interrelated dimensions (including classroom practice, prior L2 experiences, teacher education, and teaching experience) in a complex way. Deconstructing relationships between those variables can uncover teachers' cognitions, teachers' practices, relationships between cognitions and practices, and factors underlying them. For example, connections between teacher cognition and classroom practices are interactive (Borg, 2009; Sato & Kleinsasser, 2004). When they both are consistent with one another, this may

indicate that one is influencing the other, or that they are influencing each other. However, when they are inconsistent, this can be explained in the light of various factors (such as contextual issues such as time or curricula) which constrain what teachers do in the classroom (Borg, 2015). Furthermore, teacher cognition and classroom practice can influence and be influenced, directly or indirectly, by a number of factors (including prior L2 learning experiences, professional development, and contextual factors). Examining these complex interactions in relation to pronunciation instruction in Saudi English major programs helped to understand how teachers' cognitions and practices interact with each other, and what factors underlie their knowledge, beliefs and practices.

Thirdly, the investigation of definitions of teacher cognition demonstrates that teachers' knowledge and beliefs have been the most examined constructs. The difference between these two constructs, however, has raised debate among researchers. To distinguish between teachers' knowledge and beliefs, researchers such as Woods (1996), for instance, labelled knowledge as an objective construct (i.e. knowledge about language, knowledge of students) and belief as a subjective construct (i.e. attitudes, perceptions, assumptions). However, Pajares (1992) argues that belief is a messy construct and difficult to operationalize; therefore, knowledge and beliefs should not be separated from each other. Pajares (1992) suggested to clearly defining and constraining beliefs with the word *about* (for example, beliefs about students, beliefs about subject content knowledge) when discussing them. Furthermore, while some believe knowledge alone cannot truly reflect all psychological constructs teachers may have about teaching (Zheng, 2009), others suggest that knowledge, emotions and actions are filtered by beliefs (Johnson, 1999). In acknowledgement of the debate surrounding the terms, both 'knowledge' and 'belief' are used in the current study. In communication with participants, however, there is a preference for use of the term 'beliefs', as the word 'knowledge' might provoke feelings of being judged, while the word 'belief' implies opinion and therefore is considered less judgmental (Woods, 1996). In parallel with Pajares' (1992) argument, the two terms will be constrained to a specific type of knowledge and beliefs related to pronunciation instruction (for example, knowledge and beliefs in

regard to methods of teaching pronunciation), as will be discussed further later on (see Chapter Three). In addition to the debate surrounding definitions and terminology associated with teacher cognition, there are also a number of different conceptual models which have been developed in the field (Borg, 2015; Clark and Peterson, 1986; Shulman, 1986; 1987). The following section explores some of the more commonly used models, before identifying and providing justification for the selected model applied in the current research.

2.3 Models in teacher cognition research

There have been several attempts to conceptualize teacher cognition. One of the original conceptual models was provided by Clark & Peterson (1986) developed a model (see Figure 1 below) consisting of two components: “thought” (representing the cognitive constructs in teaching) and “actions” (accounting for observable actions in the classroom). The model recognizes constraints and opportunities as influential factors on teachers’ thoughts and actions. Teachers’ thought in the model is categorized into three informing sources: teacher planning, teachers’ interactive thoughts and decisions, and teachers’ theories and beliefs. Teachers’ actions are divided into three categories: teachers’ classroom behavior, students’ classroom behavior, and students’ achievements. Although Clark and Peterson’s (1986) model was innovative in connecting teachers’ cognitions and practice in a circular causation order, the model had limited empirical validity. In addition, it failed to capture the complexity involved in teaching. For example, the model limits influential factors on cognition and practices to “constraints and opportunities” (p.256), and it does not refer to important issues associated with teacher cognition such as contextual factors.

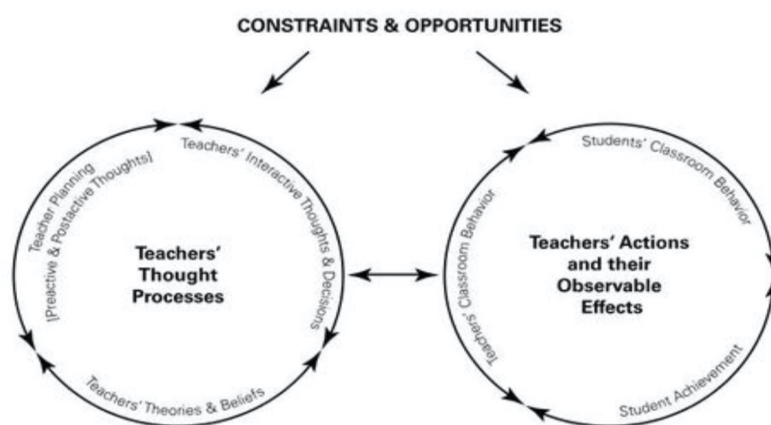


Figure 1: A model of teacher thought and action (Clark and Peterson, 1986, p. 256)

Another conceptualization of teacher cognition has been developed by Shulman (1986), who developed a base for teachers' knowledge by tracing sources of that knowledge. He examined the ways in which college graduates transfer subject matter knowledge obtained from college to students they teach after graduation. He concluded that teacher knowledge can be divided into seven categories:

- subject matter content knowledge;
- general pedagogical knowledge;
- curriculum knowledge;
- pedagogical content knowledge;
- knowledge of learners;
- knowledge of educational context;
- knowledge of educational ends, purposes, values and their philosophical and historical grounds.

This model has been widely used in the analyses of teacher cognition studies, including those related to L2 teaching (see, for instance, Baker, 2014; Baker & Murphy, 2011; Gathbonton, 2008; Gorsuch & Beglar, 2004; Johnston & Goettsch, 2000). For example, in their investigation of experienced ESL teachers' knowledge with regards to explanation of grammar and other points

in language, Johnston & Goettsch (2000) used Shulman's model to analyze data elicited from classroom observation and teachers' interviews. Their focus was on three categories of teacher knowledge: content knowledge, pedagogical content knowledge, and knowledge of learners. Their aim was to contribute to answering Johnson's (1998) call to conceptualize the knowledge base for language teaching and to help improve language teacher education programs. Similarly, Baker and Murphy (2011) used Shulman's (1986) model to develop a knowledge base for pronunciation teaching.

Shulman's (1986) model has been practical in distinguishing between different components of teachers' knowledge, especially that of pedagogical content knowledge (PCK). Prior to the introduction of Shulman's concept of pedagogical content knowledge, content knowledge and pedagogy were treated separately. Shulman (1986) argued that separating content knowledge from pedagogy resulted in teacher education programs focusing on either content knowledge or pedagogy at the expense of the other. Describing this situation as the missing paradigm, he emphasized the importance of examining how content knowledge is transferred to students and argued that even though general pedagogical knowledge is important for teachers, it is not sufficient to deliver content knowledge successfully. He therefore proposed that content knowledge and pedagogy be merged and investigated together.

For Shulman (1987, p.15), PCK is "the capacity of a teacher to transform the content knowledge he or she possesses into forms that are pedagogically powerful". This includes knowing what topics are taught in a subject area, how to represent ideas, how to provide analogies, examples, illustrations and demonstrations. This type of knowledge has proved valuable in the current study when referring to teacher cognition in relation to pronunciation instruction. For the purposes of the current research, then, PCK is understood as:

...the blending of content and pedagogy into understanding of how particular topics, problems, or issues are organized, represented, and adapted to the diverse interests and abilities of learners, and presented for instruction (Shulman, 1987, p.8).

In relation to pronunciation instruction - the focus of the current study - an L2 teacher will often have both knowledge about English pronunciation and general pedagogical knowledge about how to teach. In many cases, however, teachers lack the ability to transfer their knowledge of English pronunciation to a meaningful and successful pronunciation lesson. For this reason, Shulman's concept of PCK is found relevant to pronunciation instruction. However, Shulman's model is not considered sufficient to answer the research questions in this study. The model might be appropriate for addressing what teachers' cognitions are; nonetheless, it does not show clearly how teachers' cognitions, practices, and other related variables are interrelated. Thus, it does not provide an in-depth understanding of the many variables and factors surrounding teacher cognition.

In order to sufficiently and effectively address the research questions underpinning the current study, the conceptual model proposed by Borg (2015) has proved particularly valuable. It provides the most evidence-based framework in teacher cognition research, as will be demonstrated below (see Section 2.4). Borg's model, grounded in analysis of mainstream educational research and teacher cognition studies related to L2 teaching, makes clear connections between teacher cognition, classroom practices, and influential factors that interact with both teacher cognition and practice. In this model (see Figure 2 below), arrows refer to connections of different components in a circular order. Schooling (including teacher education and L2 prior learning experiences) appears to affect both teacher cognition and professional course work (such as teacher professional education) and professional course work in turn impacts on teacher cognition. The model recognizes interactions between teacher cognition and classroom practice (including practice teaching), as a reciprocal connection. That is, teacher cognition and classroom practice influence one another. The model also highlights the

effect of contextual factors on both teacher cognition and classroom practices, and the influence of teacher cognition on classroom practice.

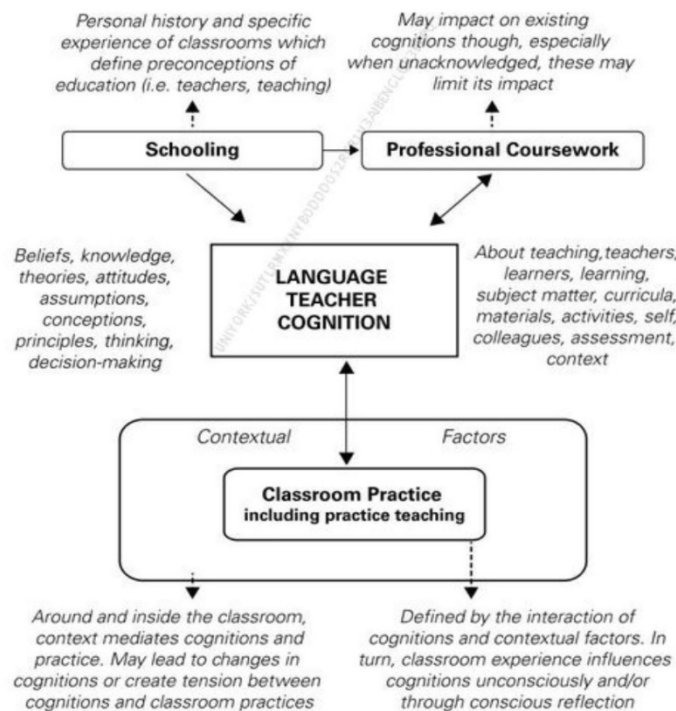


Figure 2: Elements and processes in language teacher cognition (Borg, 2015, p.333)

Borg's (2015) model therefore is especially effective in the identification of factors involved in the formation and development of teacher cognition, and the connections between these and teacher learning and classroom practice. Borg's model, for instance, highlights the significance of the interactions between teachers' cognition and schooling; the interactions between teachers' cognition and professional coursework; the interactions between teacher cognition and contextual factors; and finally, the interactions between teacher cognition and classroom practice. Borg (2015) importantly highlights the significance of practice teaching within this latter category. Teaching experience, for instance, highlights the importance of local theories of learning, which teachers develop over years of practicing teaching. These theories tell us what is really happening in the teaching context; providing in-depth information on many aspects; the teachers' educational background,

previous experience with students and so on. These are discussed in detail in the following section.

2.4 Factors influencing teacher cognition

Existing literature on teacher cognition has explored a range of different factors which may impact on the knowledge, beliefs and practices of EFL teachers. Influenced by the factors identified in Borg's model, the section below categorises the main themes emerging from the literature into: prior L2 learning experiences; teacher education; professional development; classroom practice; contextual factors and teaching experience.

2.4.1 Prior L2 learning experiences

Teachers' prior L2 learning experiences have a strong impact on, and play a significant role in shaping, teacher cognition, as demonstrated in a range of studies. Through a process called 'apprenticeship of observation', for instance, it has been shown that teachers learn about teaching through their experience as learners (Lortie, 1975), and thus the way teachers learn their L2 can be reflected later in their teaching (Freeman, 1992). It may be, for instance, that prior experiences impact on either theories of teaching, or are demonstrated in practice, or both. Furthermore, prior L2 learning experiences could be represented through continuation of the methods of learning adopted in the L2 experiences or reflected through the rejection of these methods in their own teaching. Bailey *et al.* (1996), for instance, examined the impact of the language learning histories of seven MA candidates on their current teaching philosophies. It was found that the origin of the candidates' theories about teaching came from their memories of previous language learning. However, no reference was made in this study to the influence of prior L2 experiences on actual classroom practices.

In terms of how prior L2 experiences are reflected in teaching practice, Warford and Reeves (2003) found that two out of three non-native teachers of English were affected by their EFL language learning experiences. Those teachers found it even more difficult to adopt different approaches than the ones they were taught by, suggesting continuation here. Woods (1996), on

the other hand, reported on the experiences of one teacher who, having been taught French through grammar-based instruction, did not find this helpful in communicating successfully with French speakers, and therefore believed communicative-based instruction to be more effective. Johnson (1994) found that pre-service teachers' decisions in the classroom were influenced by their early L2 learning experiences. Ebsworth and Schweers (1997) examined teachers' beliefs about grammar teaching and found that early language learning experiences have a significant impact on teachers' beliefs in relation to the teaching of grammar. These findings indicate that in order to find out what underlies EFL teachers' cognitions in relation to pronunciation instruction in Saudi English major programs, teachers' early language experiences need to be examined.

2.4.2 Teacher education

Research has shown that teacher education plays an important role in developing teacher cognition. Cabaroglu and Roberts (2000), for example, examined the nature of belief development in 20 student teachers at a Modern Languages postgraduate course at the University of Reading. They conducted three in-depth interviews with each one and found that beliefs changed in nineteen out of the 20 the participants. Furthermore, MacDonald, Badger and White (2001) studied the impact of courses in L2 acquisition on both undergraduate and postgraduate students with little or no teaching experience. The authors concluded that because of the course, most students started to adopt different views about language learning. On the other hand, in a ten-month longitudinal study, Almarza (1996) investigated the process through which four language student teachers learned to teach a foreign language at a postgraduate certificate course in the U.K. Findings suggested that while all four adopted the same methods they were taught in their teaching practice, they had different cognitions about their teaching approach. This implies that the program changed their teaching methods, but their cognition was less significantly influenced by education.

In relation to teacher cognition concerning pronunciation instruction, Burri, Chen and Baker (2017) examined the development of cognition and change

of identity in fifteen student teachers after attending a postgraduate course on pronunciation pedagogy. Through the triangulation of questionnaires, interviews, focus groups and observation, they found that the course had a profound impact on developing teachers' cognitions about pronunciation instruction. For example, one of the participants stated that:

I thought all this time that the best result was a native speaker teaching pronunciation, but of course that's not always possible ... and then [NNSs] have the experience of learning another language and learning about pronunciation and that, so in some ways they're better equipped (Burri *et al.*, 2017, p. 133).

Similarly, Burri (2015) examined the impact of a postgraduate course on pronunciation pedagogy on the development of teacher cognition about prioritization of teaching pronunciation features. By using a mixed methods approach consisting of questionnaires, interviews, focus groups and observation, he found that, as a result of taking the course, participants changed their position with regard to prioritization of teaching pronunciation features. They shifted from focusing solely on segmentals when teaching pronunciation, to focusing on both segmentals and prosodies.

It is important to note here that inconsistency between teacher education and teacher cognition can be due to a number of variables such as range of teacher education programs studied, contextual constraints, and what counts as evidence of change in teacher cognition studies (Borg, 2015). Overall, findings in the studies above indicate that teacher education has an impact on the development of teacher cognition and therefore must be investigated to understand what underpins EFL teachers' cognitions and practices in relation to pronunciation instruction in the Saudi context.

2.4.3 Continuous Professional development

Continuous professional development (CPD) is considered an important factor that may have an influence on teacher cognition (Borg, 2015). It refers to activities teachers engage in (for example, workshops, conferences) for the

purpose of enhancing knowledge and improving skills related to teaching. It has been best described as:

...the sum of formal and informal learning perused and experienced by the teacher in a compelling learning environment under conditions of complexity and dynamic change (Fullan, 1995, p. 265).

Although CPD has been encouraged by specialists in the field of language teacher cognition (for example, Borg, 2015), it seems that the impact of CPD - on students' performance, for instance - has produced conflicting results (Guskey, 2003). Yet, it has been argued that CPD cannot be effective without methodological rigor (Guskey & Yoon, 2008). Therefore, it has been suggested that for CPD to have a positive impact, it must have certain features. For example, Wyatt and Oncevska (2017) suggested that not only should bottom-up CPD strategies be adopted and teachers be intrinsically motivated, but also teachers need to be aware of the benefits of CPD to their development as teachers. Similarly, Borg (2015) offered several recommendations for CPD to be effective including consideration of teachers and students' needs, involvement of teachers in regard to CPD content and design, support from leadership, and valuing the experience and knowledge of teachers. In terms of CPD in relation to pronunciation instruction specifically, this seems to be still under-researched.

2.4.4 Classroom practice

Teacher cognition and classroom practice have a reciprocal connection in which they may influence on another. The significance of teacher cognition research rests on the assumption that there is a potential connection between teacher cognition and classroom practice (Buhl & Beck, 2014; Calderhead, 1996; Pajares, 1996; Richardson, 1996; Hoy, Davis & Pape, 2006). Despite this assumption, investigations into the relationship between teacher cognition and classroom practice have posited conflicting results (Basturkmen, 2012; Borg, 2015; Cummins, Cheek & Lindsey, 2004; Fang, 1996; Richards, 1998). Whilst several studies have shown a direct link

between teacher cognition and classroom practice, in the sense that beliefs directly influence the practice (Johnson, 1992a; 1992b; Kim, 2006; Knudson, 1998; Maloney-Berman, 2004; Mango and Allen, 1981; Rupley and Logan, 1984; Tam, 2006; Wing, 1989), other studies have demonstrated a more complex relationship between beliefs and practice here (Duffy & Anderson, 1984; Kinzer, 1988; Michell, 2005; Readence, Konopak & Wilson, 1991; Sinprajakpol, 2004; Sugiyami, 2003; Wilson, Konopak and Readence, 1991). The succeeding paragraphs discuss these studies as well as their implications for the current study.

Interaction between teacher cognition and classroom practice has been found in many studies. For example, Rupley and Logan (1984) reported that elementary teachers' beliefs about reading influenced the way teachers made instructional decisions. Mango and Allen (1981) found that the way teachers approached language arts instruction depended on their beliefs about writing. Teachers' beliefs in this study were found to have an impact also on the interactions between teachers and students. The interactions between teachers and students differed depending on teachers' beliefs about writing. Johnson (1992a), through the analysis of classroom observation, found a consistency between ESL teachers' theoretical beliefs and instructional practices. Wing (1989) found that teachers' beliefs about literacy development influenced their classroom practices and shaped preschool students' perceptions about the nature of reading and writing. Knudson (1998) found that preservice teachers' practices are consistent with their theoretical beliefs. These studies indicate that a strong relationship can exist between teacher cognition and classroom practice.

The consistency found between teacher cognition and classroom practice, supports the generally accepted notion that teacher cognition influences classroom practice (Borg, 2009; Fang, 1996). It also supports the argument that classroom practice could also influence teacher cognition (Basturkmen, 2012; Borg, 2009; Breen, Hird, Milton, Oliver & Thwaite, 2001; Buhl & Beck, 2014; Guskey, 1984). As Sercu and St. John (2007) point out, teachers interested in developing their professional competence will change their beliefs and practices to promote more learning for their students. This later

argument is based on findings of a study conducted by Guskey (1984) which suggest that teachers change their beliefs after finding out that a teaching technique does not result in effective learning.

However, consistency between teacher cognition and practice is not always found. Evidence suggesting that teacher cognition and the classroom may lack consistency between each other has been found in many studies. For example, Duffy and Anderson (1984) through a four-year study of teachers' beliefs and practices about reading, found a connection between teachers' beliefs and practices, however, the connection was found to be not strong. Kinzer (1988) concluded that although preservice and in-service teachers had similar beliefs about how reading is taught and developed, in-service teachers' beliefs were found to be less consistent with their classroom practices when compared to beliefs and practices of preservice teachers. Readence, Konopak and Wilson (1991) came to a similar conclusion when they compared teacher's beliefs and practices of elementary and secondary teachers. Wilson, Konopak and Readence (1991) through the use of interviews, classroom observation and written responses of a reading teacher, found inconsistency between her beliefs and actual classroom practices. These studies may imply that there is no need then to investigate teacher cognition if no strong relationships between teacher cognition and classroom practice are found.

The contradictory results on the relationship between teacher cognition and classroom practice, should not impede the significance of teacher cognition research. As Buehl and Beck (2014) point out, the lack of consistency between teachers' cognitions and classroom practice should not result a disregard for the importance of teachers' cognition in understanding the relationships between teacher cognition and the classroom and factors that influence their connection. In her review, Basturkmen (2012) argues that there are a number of reasons for the lack of consistency between teacher cognition and classroom practice. First, it could be that most studies that examined this relationship are case single studies, so a conclusion should be drawn from multiple case studies rather than from single case studies. Second, contextual constraints can obstruct teachers from applying their

beliefs into classroom practice (Basturkmen, 2012; Borg, 2003; Fang, 1996). Third, teachers might be in the process of changing their beliefs and practice, and changes in belief preceded changes in practice (Richardson, Anders, Tidwell and Lloyd, 1991). Fourth, it could be “the existence of multiple belief system” (Basturkmen, 2012, p. 284). That is one belief might contradict another belief. In line with this, Philip and Borg (2009) note that inconsistency between cognition and practice might be due to a conflict between a core belief and a peripheral belief.

It can be concluded from the above discussion that connections between teacher cognition and classroom are interactive (Borg, 2009; Sato & Kleinsasser, 2004). That is teacher cognition and the classroom practices may influence each other. However, if no consistency was found between teacher cognition and classroom practice, this can be explained in light of internal factors such as motivation and experience or external factors such as curriculum and time (Borg, 2015).

Whilst this section has shown the reciprocal connection in which teacher cognition and classroom practice may influence on another it is important to be aware that research on classroom practice cannot overlook the significant role played by contextual factors.

2.4.5 Contextual factors

Contextual factors have a significant impact on teacher cognition and the classroom. Evidence from numerous studies suggests that contextual factors not only influence teacher cognition and practice, but also can hinder teachers from adopting their beliefs in their classroom practices. Teacher cognition and practice are influenced by “the social, psychological and environmental realities of the school and the classroom” (Borg, 2003, p.94). This might include, for instance, administrative and managerial practices, the school environment (such as relationships, classroom layout and facilities, rules and regulations), resources and classroom sizes, and individual classroom situations. Therefore, examining the impact contextual factors have on

teacher cognition and practice is essential in teacher cognition research (Borg, 2015).

Spada and Massey (1992) examined connections between the beliefs and practices of two novice teachers. Since the first participant was placed at a private school and was given the chance to teach freely, she was able to apply the knowledge she obtained from her teacher education program. Thus, in this situation, the context facilitated the ability to apply teaching beliefs in practice. On the other hand, the second participant was placed at a public school where there were some disciplinary issues, and therefore spent most of the classroom time on classroom management. Furthermore, research by Richards and Pennington (1999) found that although novice teachers in Hong Kong were trained to teach English communicatively, their practices reflected other approaches mainly because of the large number of students in their classrooms. Thus, the size of the class was an important consideration here, indicating that the teachers were affected more by contextual factors than their teaching beliefs. The above studies indicate, then, that understanding contextual factors when conducting teacher cognition research is extremely important, as these can help in interpretation of the relationship between context, cognitions and practices.

2.4.6 Teaching experience

Teaching experience plays a significant role in shaping teacher cognition, with findings from a number of studies showing that teacher cognition changes as a result of teaching experience (Crookes & Arakaki, 1999; Cumming, 1990; Nunan, 1992; Tsui, 2003; Woods, 1996). In most of these studies, comparisons have been made between experienced and inexperienced teachers. For example, when Crookes and Arakaki (1999) examined ESL teachers' ideas relating to teaching practice, they found that teaching experience was the main source for their ideas. Nunan (1992) found that experienced teachers focused more on language issues while inexperienced teachers focused on classroom management. Woods (1996) reported a teacher changing his teaching approach after failing to implement a communicative approach with Japanese students.

2.5 Key debates in pronunciation instruction

Key debates in the literature of pronunciation instruction have revolved around important issues and these need to be investigated in order to understand teachers' cognitions and practices in relation to these. From these debates in the literature, it is possible to identify several themes:

- goals of teaching pronunciation;
- models in pronunciation instruction;
- priorities of pronunciation features;
- feedback on students' pronunciation;
- pronunciation assessment;
- approaches and techniques in pronunciation instruction.

Exploration of the debates surrounding these factors assisted in the interpretation and analysis of data that emerged from the current study, through the provision of initial themes and the organization of data emerging from the research. It is important, however, to first provide a summary in relation to the importance of pronunciation instruction, theories in relation to second language acquisition and the effectiveness of pronunciation instruction.

2.5.1 Pronunciation instruction research

Pronunciation instruction plays a key role in helping students improve their pronunciation skills. Nonetheless, considerable debate exists surrounding its value and effectiveness in improving learners' pronunciation. This section highlights the importance of pronunciation to communication as well as the significance of pronunciation instruction.

The importance of pronunciation has been stressed by many specialists, pronunciation researchers, language teachers and learners. Findings in a number of studies suggest that pronunciation is essential for successful communication and that mispronunciation leads to communication breakdown. For example, Varonis and Gass (1982) conducted a study to

determine factors that affect listening comprehension in native speakers of English when exposed to second language (L2) accents. They concluded that combined grammar and pronunciation errors influence overall intelligibility (i.e. the degree of match between a speaker's intended message and the listener's comprehension). Additionally, Jenkins (2000) analyzed samples of six learners of English speaking English and found that out of the 40 instances of communication breakdown, 27 of those were caused by pronunciation errors. Furthermore, findings in a number of studies suggest that mispronouncing prosodic features affects comprehensibility (Anderson-Hsieh, Johnson & Koehler, 1992; Field, 2005; Pickering, 2001), intelligibility (Hahn, 2004; Tajjima, Port & Dalby, 1994; Zielinski 2007), and fluency (Wennerstorm, 2002). Other studies show that appropriate use of prosodies enhances comprehensibility (Issacs, 2008; Pickering, 2012).

Whilst such studies emphasise the importance of pronunciation instruction, it has also been argued that pronunciation is resistant to change after puberty (Burill, 1985; Lenneberg, 1967) and that it is an acquired skill through which instruction is of no benefit (Krashen, 1982). In this sense, it is considered a futile exercise which is of little value within teaching. It has also been indicated, however, that an adult's pronunciation is not as resilient to change, as suggested by Lenneberg's hypothesis (see, for instance, Brown, 1992; Neufled, 1980; Pennington, 1995; Tarone, 1978). Furthermore, even if pronunciation is a skill to be learned, some have questioned the value of instruction. Research has suggested, for instance, that pronunciation instruction does not improve learners' pronunciation (Algethami, 2017; Derwing & Rossiter, 2003; Macdonald, Yule and Powers, 1994; Saalfeld, 2011). It could be argued, however, that this does not necessarily prove that instruction is ineffective, but might rather indicate inefficient teaching methods (Jones, 1997). There are many reasons why a study could fail to capture the effect of pronunciation instruction on learners' pronunciation. A synthesis of fifteen quasi-experimental intervention studies on the effectiveness of pronunciation instruction found, for example, that many variables could affect the outcome of a study (Saito, 2012). This synthesis of these variables were: focus of instruction (segmental vs. prosodic features); type of instruction (focus on form vs. focus on communication); type of

outcome measures (controlled constructed responses vs. free constructed responses); the teaching techniques that have been used; the length of instruction; the provision of feedback; and the type of assessment (comprehensibility/intelligibility vs. accentedness) (*Ibid.*).

It is also worth noting that a number of studies have indicated that pronunciation instruction can indeed improve learners' pronunciation, with studies suggesting that pronunciation instruction has a positive impact on phonological ability (Couper, 2003; 2006; Saito, 2007); improved intelligibility (Derwing, Munro & Wiebe, 1997; 1998; Macdonald, Yule & Powers, 1994); the development of segmentals and prosodies (Cardoso, 2011; Couper, 2006; Elliot, 1997; Saito, 2011), and on increasing listeners' overall rating of comprehensibility (Derwing *et al.*, 1997, 1998; Kennedy & Trofimovich, 2010; Lord, 2008).

Furthermore, findings in a number of syntheses studies suggest that pronunciation instruction in general improves learners' pronunciation. For example, in their review of studies that have investigated the effectiveness of pronunciation instruction, Derwing, and Munro (2005) found that "all studies suggest that pronunciation teaching can improve L2 learners' oral production" (p.386). As outlined above, Saito (2012) conducted a synthesis of fifteen quasi-experimental intervention studies which investigated the effects of pronunciation instruction on the development of L2 learners and found that findings in thirteen of the intervention studies suggested significant improvement resulting from instruction. Lee, Jang and Plonsky (2014) conducted a meta-analysis study of eighty- six reports on the effectiveness of second language pronunciation instruction. Findings in the study suggest that learners who received pronunciation instruction improved by 0.89 deviation units in comparison to their pretreatment performance.

2.5.2 Goals of teaching pronunciation

Goals in pronunciation instruction seem to influence the direction of teaching pronunciation in the classroom. Goals that have influenced pronunciation

instruction included the aim to achieve native-like pronunciation, intelligibility, comprehensibility, fluency and accuracy.

Pronunciation specialists have taken different positions in relation to goals of pronunciation teaching. Some specialists support the principle of ‘nativeness’ (see Levis, 2005 for detailed review). Taking a conservative attitude towards language, they perceive native speakers as the representatives of the language and its only owners. Therefore, under this view, learners should aim for native-like pronunciation and teachers should help students to achieve this goal. Belief in this goal was particularly dominant in the nineteenth and twentieth and is related to Direct Method and audio-lingual methods. This position underpins a number of language teaching methodologies, such as the reform movement and audiolingualism (Celce-Murcia *et al.*, 2010).

Advocates of this principle base their argument on the premise that since students want to achieve native-like pronunciation, students should not be prevented from having this aim (Harmer, 2001). Indeed, findings from a number of studies indicate that most students would prefer to have native-like pronunciation (Alghazo, 2013; Derwing, 2003; Timmis, 2002). As shown below, it is argued that prior to puberty, learners can attain nativeness. Some have suggested, however, that students can improve their pronunciation, even after puberty (Brown, 1992; Neufeld, 1980; Pennington, 1995; Tarone, 1978). Nonetheless, it is claimed that very few adult students can attain native-like pronunciation. Where nativeness is achieved, such students tend to have a special aptitude (Ioup *et al.*, 1994) or are highly motivated (Moyer, 2004).

Other specialists, holding a more liberal position, believe language belongs to all who speak it, regardless of when and how it has been acquired. They believe that learners should aim for intelligibility when they speak and teachers should train learners to be easily understood when speaking English (Jenkins, 2000). Intelligibility refers to the aim for the focus on the comprehension of an utterance, and the receipt of the intended message. This shift of attitude towards intelligibility, which occurred in the late 1990s, relates to a number of factors. First, Lenneberg’s hypothesis of the critical period (1967) which proposes that reaching native-like pronunciation after

puberty is biologically impossible and language acquisition can happen naturally only during the early life of a child. Coinciding with Lenneberg's hypothesis, a number of studies have reached the same conclusion (Asher & Garcia, 1969; De Keyser, 2000; Johnson & Newport, 1989; Krashen, Long, and Scarcella, 1979; Long, 1990; Oyama, 1976; Scovel, 1969). Aiming for native-like pronunciation as a teaching goal, therefore, might discourage learners from improving their pronunciation since this goal is almost unattainable (Derwing & Munro, 2005). Although Lenneberg's (1967) work regarding the Critical Period Hypothesis had a great impact on the literature of second language acquisition, it is important to note that his theories and the data upon which they were based have been under scrutiny (Krashen, 1973).

Second, a number of language specialists have questioned the ownership of English. Since English has become an international language; the ownership of English has also become international (Brumfit, 1995; Crystal, 2003; Widdowson, 1994). Jenkins (1998) went as far as to argue against encouraging students to aim for native-like pronunciation, even if they wish to do so. Jenkins (2000) even criticizes the usage of the term 'non-native' as she believes it to be offensive. Holliday (2005) suggests unshackling English language from the West and attributing it to the English-speaking world where it belongs to everyone.

Whilst there is some merit in Jenkins' (1998; 2000) claims, particularly in the shift from nativeness to the goal of intelligibility, the political basis on which these views emerged, have perhaps taken a more central role than empirical evidence. The political driving force behind this shift may have distorted the importance of the role of the students' choice and agency within their learning. It could be argued that whilst the goal of intelligibility is a welcome addition to learning, respecting the liberty of choice should not be overlooked. The goal of nativeness, or intelligibility, should therefore be the option of the student depending on their circumstances and aspirations.

These debates surrounding the goals of teaching pronunciation are important in teacher cognition as they may influence how pronunciation is approached in the classroom. Studies have shown, for instance, that intelligibility has

gained popularity among English language teachers. For example, Timmis (2002) conducted a survey study to investigate the attitudes of both students and teachers regarding native-speaker norms. Through questionnaires with both students and teachers, 400 students from fourteen countries and 180 English teachers from 45 countries participated in the study. When teachers, both ESL and EFL, were asked about their goals for teaching pronunciation to students, most of them reported that they aim for ‘accented intelligibility’ as a goal.

In addition, Sifakis and Sougari (2005) conducted a survey to examine EFL teachers’ beliefs in Greek public education regarding pronunciation instruction. When teachers were asked how important it was for their learners to attain native-like pronunciation, most primary-level teachers thought that it was important for their students to attain a native speaker accent, while most upper secondary level teachers felt it is less important for their students to attain nativelike pronunciation. When the first group were asked about the reasons for selecting a native-like accent as a goal for their students, they reported that students need to communicate with native speakers and that this goal would help develop their students’ confidence. The other group’s reason for selecting intelligibility was that it is more valuable than achieving a native accent.

Although the two studies discussed above (Sifakis & Sougari, 2005; Timmis, 2002) provide a general view of what teachers’ beliefs regarding the goals of pronunciation teaching are, the following have been observed. Despite the importance of goals for teaching pronunciation, as they shape how pronunciation is approached, teachers’ cognitions in relation to this theme have not been deeply explored. In both studies, no classroom observation was conducted so connections between stated beliefs and practices could not be examined. This is an important oversight as observations can enhance our understanding of the relationship between beliefs and practice. Furthermore, both studies used questionnaires only. A reliance on this type of method only touches the surface level of this theme. In addition, what underpins teachers’ beliefs regarding the goals for pronunciation teaching have not been investigated. It is evident, then, that there is substantial debate surrounding

the goals of pronunciation teaching and teacher cognition. Such debate is also apparent in literature on the models of teaching pronunciation, which will be explored below.

2.5.3 Models of teaching pronunciation

Pronunciation specialists have taken different positions with regard to using native models (sometimes referred to as ‘accents’) when teaching pronunciation. On the one hand, some specialists believe using native models, such as Received Pronunciation (RP) and General American (GA), has a number of advantages. Using RP and GA can assist as a great dominator, and make learners sound more neutral when they use these models in the appropriate country (Lewis, 1987). Furthermore, RP speakers have greater chances of being understood by most people in the UK since it is the most familiar accent in the country and learners have more chances to hear RP since it is the most frequently heard in radio and television broadcasts (Hughes, Trudgill & Watt, 2012; Trudgill & Hannah, 2002). The same can be argued for GA in Canada and the US, since it is the most understood and used model in radio and television.

Some specialists, on the other hand, argue against the use of native models for a number of reasons. In the case of RP, it is not democratic since it does not mirror the reality of spoken English in England, nor is it representative of educated people, as many educated British citizens do not speak with RP (Abercrombie, 1951). In addition, RP has no geographical or regional characteristics, but a social variation connected with class differences rather than a specific region. It is also associated with privileged people in the UK, which sometimes evokes negative reactions (Przedlacka, 2008). In the case of GA, Preston (2008) examined the differences between the geometric representation of General American vowels conducted by Peterson and Barney in the 1950s and samples of spoken English by different people from the US. The author concluded that GA is a myth and does not represent spoken English in the US.

There has also been some support for the use of nativized models in teaching (Kirkpatrick, 2006; 2007). A nativized variety is the result of using English in a new sociocultural environment, in contact with other languages, and away from its native speakers (Kachru, 1981). This model has been suggested as particularly suitable for those who live in the outer circles (including India, Singapore, Nigeria) and the expanding circles (for example, Russia, China, Egypt), to encounter linguistic imperialism of native speaking norms (Canagarajah 1999; Kirkpatrick 2006; Philipson 1992). The use of nativized models in the outer and expanding circles would empower the local teachers to become role models for the learners and to use the linguistic background and resources to their advantage (Kirkpatrick, 2006). In addition, nativized models can be more intelligible in multilingual settings. In fact, findings in a study conducted by Smith and Rafiqzad (1979) show that nativized models are more intelligible than native speaker varieties in international settings. However, there have been some negative reactions towards nativized models (see Ashcroft, Griffiths & Tiffin 1989; Greenbaum 1985; Hill & Parry 1994; Prator 1968; Southworth 1985; Widdowson 1997).

Other pronunciation specialists have proposed the use of non-native models. For example, in research conducted by Murphy (2014), through a questionnaire, 48 pronunciation specialists were recruited to rate the intelligibility of a famous Spanish actor speaking English. Findings show that over 88 per cent agreed or strongly agreed that the Spanish actor was intelligible. The author concluded that the actor, therefore, could be a model for pronunciation teaching. The idea of using a non-native model is interesting and relevant to EFL contexts. A non-native model could therefore motivate learners, where the non-native speaker and the students speak the same mother tongue (Murphy, 2014). However, this needs further investigation as to whether EFL teachers would find this type of model beneficial to their students and the extent to which students would accept them in different contexts. It might be, for example, that students prefer native models where non-native models are not matched to the specific culture or context in which they are being taught.

Lingua franca core (LFC) is another non-native model which has been developed and proposed by Jenkins (2000). The model consists of a list of phonological features essential for mutual intelligibility between non-native speakers of English (for a review see Jenkins, 2000). The proposal is based on the assumption that English has become the world's lingua franca and that most communication in English takes place between non-native speakers. Therefore, native speakers no longer have the right to decide the standards of the English spoken among non-native speakers. However, Jenkins' proposal and ideas have received much critique. For example, some stress that students do wish to learn native accents, so why stop them from trying to achieve their goal? (Trudgill and Hannah, 2008).

Although a number of scholars are not advocates of the propagation of using native models to teach pronunciation (see, for instance, Brumfit, 1995; Crystal, 2003; Holliday, 2005; Jenkins, 2000; Widdowson, 1994), native models still play an enormous role in pronunciation teaching. In the case of GA, it is important to note that a model is not necessarily representative of a specific accent, it is rather a conventional standard based on an agreement between phoneticians, publishers and pronunciation teachers on a particular set of phonetic characteristics that together define what the accent is (Roach, 2008). The purpose of a model is to provide a proficiency scale to determine if a learner achieves proficiency according to a given norm (Kachru, 1992). Furthermore, RP and GA are the most common varieties of English (Wells, 1982). They have been the most extensively studied native speaking models and the most frequently used in English pronunciation. Most teaching materials such as dictionaries, textbooks on phonetics and technologies use RP model (Abercrombie, 1991). Findings in teacher cognition studies also show that most L2 teachers are in favor of using native models, as highlighted in the following paragraphs.

A number of studies have examined teachers' cognitions in relation to models in pronunciation teaching. For example, in Timmis' (2002) survey on native norms, teachers were asked about their attitudes regarding exposing students to native models. While 66 per cent of teachers agreed that students should be exposed to authentic spoken English, only eleven per cent of teachers

disfavored native models since they assumed that students are not going to communicate with native speakers. Similarly, Sifakis and Sougari (2005) found that EFL teachers in Greece demonstrated a preference for native models, however, some teachers thought native models should be introduced to high level students only. In a European on-line survey, conducted by Henderson *et al.* (2012), it was found that most teachers in seven countries; namely, Finland, France, Germany, Macedonia, Poland, Spain and Switzerland, prefer and use RP in their classrooms.

In relation to teacher cognition research in regard to the LFC, findings in two studies show that most EFL teachers were averse to this model. For example, Jenkins (2005) conducted in-depth interviews with eight non-native EFL teachers from Italy, Japan, Malaysia, Poland and Spain. When participants were asked about models in teaching pronunciation, particularly their views on the LFC, teachers' responses were somewhat similar. Although some teachers may consider teaching a LFC in the future, most of them rejected to use it for themselves. Similarly, Alghazo (2013) investigated EFL teachers' beliefs and practices in relation to pronunciation instruction in an English-major program at public Jordanian university using interviews, classroom observation and questionnaires. Findings show that the EFL teachers also reject the LFC, and favour British and American models. Similarly, in ESL contexts, Baker (2011b) examined teachers' cognitions in relation to pronunciation instruction at an intensive English major program in the U.S. through a triangulation of interviews classroom observation and stimulated recall interviews. When teachers were asked about models they use for teaching pronunciation, all teachers stated that they use their own variety of spoken English as a model.

A review of teacher cognition research in relation to models in pronunciation instruction showed that this issue has gained more attention in EFL, rather than in ESL, contexts. However, no study has examined the appropriateness of non-native models (Murphy, 2014) and nativized models (Kirkpatrick, 2006; 2007) in EFL contexts. Although Murphy (2014) has examined pronunciation specialists' cognitions about non-native models, it is important to extend the investigation to include EFL teachers as well. Furthermore, no

study has examined how models in pronunciation instruction interrelate with other themes such as goals of teaching pronunciation, approaches and techniques, priorities, feedback and assessment.

2.5.4 Approaches and techniques in pronunciation instruction

This section discusses the current status of research on techniques in pronunciation instruction, a review of approaches and techniques to teaching pronunciation, and assessments of their effectiveness in the literature. It also examines teacher cognition research in relation to pronunciation techniques used in pronunciation instruction. Although a large number of pronunciation teaching techniques have been identified and discussed in the literature, the extent of how effective pronunciation teaching techniques are on the development of pronunciation features has not been fully studied (Derwing & Munro, 2005). One of the pitfalls in the literature so far, is the disconnection between research and pronunciation teaching techniques, particularly the lack of reliance on empirical evidence (Derwing, 2010; Derwing & Munro, 2015). It has been argued, for example, that most techniques have been recommended on the basis of authors' familiarity with the literature, their own experiences as pronunciation teachers and their intuition (Murphy & Baker, 2015). It was not until recently that researchers began conducting empirical studies (in the classroom, laboratory settings, and natural settings) to examine the effect of different pronunciation teaching techniques, and to understand what teachers say about them. It is still difficult to know what techniques are effective, why they are effective, and in which situations they are most effective (Levis, 2017). Before discussing research on the impact of various pronunciation techniques, it is important to elaborate on approaches in pronunciation instruction.

English pronunciation has been taught through four approaches; an intuitive-imitative approach, an analytic-linguistic approach, an integrative approach, and a prosodic-based approach. The term approach here refers to assumptions about the nature of language, teaching and learning (Anthony, 1963). Within an intuitive-imitative approach, an audio-lingual methodology, it is assumed that listening to and imitating pronunciation features, improves learners'

pronunciation skills without the need for explicit pronunciation instruction (Celce-Murcia *et al.*, 2010). In an analytic-linguistic approach, influenced by the Reform Movement, it is believed that pronunciation teaching should be taught through the use of phonological aids such as the phonemic chart, articulatory descriptions, and International Phonetic Alphabet (IPA) transcription. In an integrative approach, pronunciation is regarded as a component of communication rather than an isolated feature practiced through drills. Traditional techniques of the intuitive-imitative and analytic-linguistic approaches are practiced as part of meaningful task-based activities. In prosodic-based approaches, features such as stress, rhythm and intonation are the centre of instruction. Examples of prosodic-based approaches include the intonation-based approach (Brazil, 1975; 1978; 1997; Chun, 2002; O'Conner & Arnold, 1973), the accent addition approach (Kjellin, 1999), the stress-based approach (Teschner & Whitely, 2004), the rhythm-based approach (Chela-Flores, 1991; 1994; 1997; 2003), and the connected speech-based approach (Kondo-Brown, 2006; Euler, 2014).

A large number of pronunciation teaching techniques have been used over the years. Techniques are defined in the current study as any specific activities used for the purpose of improving one's pronunciation. Those techniques have come from several sources such as pronunciation teacher preparation texts (Celce-Murcia *et al.*, 2010; Dalton & Seidlhofer, 1994; Foote, Holtby & Derwing, 2011), classroom pronunciation textbooks (Chan, 1987; Gilbert, 2012; Grant, 1993), activity recipe collections (Bowen & Marks, 1992; Brown, 2012; Hancock Hewings, 2004), and language pedagogy texts (Brown & Lee 2015; Crookes & Chaudron, 2001). Pronunciation techniques include the use of colour and sound associations (Gattegno 1963); body movements and other gestures to teach rhythm and intonation (Acton, 1983); the use of arms and hands to signal prosodic characteristics through tapping techniques (Underhill, 1994); controlled, rehearsed and extemporaneous production techniques (Moeley, 1991); critical listening techniques (Fraser, 1999); imitative games for working on gestures that accompany speech (Pennycock, 1985); listening comprehension techniques (Cauldwell, 2002); listening discrimination techniques (Gilbert, 2006); and shadowing and mirroring techniques (Goodwin, 2013). Other techniques also include

imitation and mimicking, phonetic training, minimal pairs, visual aids, tongue twisters, developmental approximation, vowel and stress shifts, reading aloud, silent articulation, recording of learners' production, fluency building, multisensory reinforcement, drama, gadgets, props, cartoons, games, jokes, poetry, songs, and computer assisted pronunciation training (CAPT) (Celce-Murcia *et al.*, 2010).

Whilst there are many techniques, as shown above, only a few of these have been examined. The following paragraphs discuss the effectiveness of those techniques that have been addressed in pronunciation research. Imitation and mimicking techniques have been investigated in a number of studies. Felps, Bortfeld, and Gutierrez-Osuna (2009), for example, examined the effect of a voice-transformation technique (i.e. imitating the voice of a native speaker) on 'accentedness' through a number of perceptual experiments. Findings revealed that this technique can reduce the accentedness of the foreign speaker. Kang, Gollan & Pashler (2013) compared between the repeating aloud of words produced by a native speaker with retrieval practice and found the latter to be more effective to learning an L2 vocabulary.

A number of studies have examined the effect of CAPT on vowels and consonants (Lambacher, 1999; Neri, Cucchiariini & Strik, 2006; Wang & Munro, 2004); on the general quality of pronunciation (Hanna and Gao, 2016; Seferglu, 2005); the improvement of children's pronunciation (Mich, Neri and Giuliani, 2006); intonation (Cauldwell, 2002; Chun, 1998; Hardison, 2004; Kaltenboeck, 2002; Levis and Pickering, 2004); on speech rate, fluency and liveness (Hincks, 2005); English stress timing (Coniam, 2002); and vowel lengthening and pitch accents (Hirata, 2004; Kawai & Hirose, 2000). Most of these studies have proven that CAPT may result in improvements in pronunciation.

In relation to teacher cognition research, a number of studies have examined teachers' cognition regarding pronunciation teaching approaches and techniques. Using a questionnaire, Hismanoglu (2010) investigated 130 EFL teachers' preferences in regard to pronunciation teaching techniques in five Cypriot universities. Findings in the study show that read aloud techniques,

use of dictionaries, and dialogues were the most preferred techniques by teachers. Findings in Alghazo's (2013) study conducted in the Jordanian context revealed that teachers exploited the use of listen and repeat techniques as well as minimal pairs techniques. Shabani and Ghasemian (2017) used a questionnaire to find out the pronunciation teaching techniques most often adopted by EFL teachers in Iran. Findings indicated that listening and imitating, reading aloud, and recitation were the most frequently used by teachers. In ESL contexts, Baker (2014) explored the knowledge of five teachers' about pronunciation techniques using semi-structured interviews, classroom observation and stimulated recall interviews. Findings showed that teachers used controlled techniques (for example, repetition drills, listening discrimination and minimal pair activities) more frequently than free techniques (such as role-play, drama and presentation).

2.5.5 Priorities of pronunciation features

Another important debate within the literature on pronunciation instruction concerns priorities around pronunciation features, particularly with regards to prosodies and segmentals. On the one hand, for instance, some pronunciation specialists believe that segmentals (individual phonemes: consonants and vowels) should be given priority. For example, Collins and Mees (2008) put forward six pronunciation errors which lead to a breakdown in intelligibility. Five of these were consonants and vowels (segmentals), and one was word stress (prosody). Similarly, Jenkins (2000) proposes that there is a lingua franca core consisting of features which are essential to intelligibility. The majority of these features were segmental, except one feature which was nuclear stress. Thus, because segmentals more frequently impact on intelligibility, this is where teachers should focus their instruction. On the other hand, a number of scholars have argued that prosodies (such as stress and intonation) are more significant to intelligibility than segmentals (see, for example, Celce-Murcia, Brinton & Goodwin, 1996; Gilbert, 1993; McNerney & Mendelsohn, 1992; Morley, 1991; Prator, 1971).

Although prosodies are more challenging for learners than segmentals (Acton 1984; Busa, 2007), findings in numerous studies indicate the superiority of

prosodies over segmentals. For example, Anderson-Hsieh, Johnson and Koehler (1992) conducted a study where 60 non-native speakers from eleven different L1 groups read a passage from the SPEAK test and three instructors rated how comprehensible and acceptable the learners' oral production. The findings showed a very high correlation between the instructors' ratings and the overall suprasegmental score, thus indicating that a focus on prosodies is necessary. This was supported in research by Kang, Rubin and Pickering (2010) who conducted a study where 26 speech samples elicited from the iBT TOEFL were examined using acoustic measures of accentedness and native speaking listeners' judgment. The authors concluded that prosodic features' errors contribute to perceived accentedness more than segmentals.

Several studies have focused on particular prosodic features, such as speaking rate. In Lennon's (1990) research, for example, experienced native-speaker EFL teachers were asked to judge recorded speeches of learners before and after attending courses in Britain. Teachers agreed that later samples sounded more fluent. A quantitative analysis conducted on the speakers' speech samples indicated the improvement of speech rate. Speaking rate - a prosodic feature - was therefore found to have an effect on fluency. In another study which also focused on speaking rate in relation to accentedness and comprehensibility, ten high-proficiency Chinese learners of English were rated by native English speakers reading passages at slow and fast rates. The findings indicated that speakers were perceived more comprehensible when speaking at a fast rate (Munro and Derwing, 1998).

Similarly, Isaacs (2008) conducted a mixed methods study to examine if intelligibility is an appropriate criterion for assessing pronunciation. Speech samples of eight non-native graduate students from different L1 groups were collected, rated by native speakers and then analyzed. The speaker who was rated as the most intelligible, had the fastest speaking rate. Speaking rate can also aid the prediction of an accentedness rating. When Trofimovich and Baker (2006) conducted a study to examine the effect of L2 experience on the production of English suprasegmentals by 30 Koreans and 10 native speakers of English, the speaking rate produced by speakers contributed significantly to predicting accentedness ratings. Blau (1990) conducted two studies where

he manipulated speaking rate and syntax in the first and compared the effect of speed and pauses in the second. The result of the two studies indicate that appropriate use of pauses had more effect on nonnative listeners' comprehension of native speakers than either syntax or speaking rate. Fayer and Krasinski (1995) found that the judgement of non-native speakers' speech by native speakers is affected by pause length. The longer and greater non-native speakers' pauses are, the less intelligible they seem to native speakers.

2.5.6 Feedback on students' pronunciation

Providing feedback on L2 learners' pronunciation is one of the most significant factors in enhancing their pronunciation skills, and is therefore a key element of pronunciation instruction. Findings in numerous studies indicate that the provision of feedback has positive effects on learners' pronunciation (see, for instance, Lee, Jang & Plonsky, 2014; Plonsky & Brown, 2015), though, when and how to provide feedback has been the subject of debate. Traditionally, feedback was given immediately and in response to every error, although it has since been argued that not all errors should be corrected and if an error was corrected, corrective feedback (CF) should not be provided immediately after the error (Krashen, 1982; Ancker, 2000). This is because not all errors are deviations from the correct pronunciation, and students might lose their self-confidence if corrected all the time (Engwall & Balter, 2007). Pronunciation errors should be corrected only when intelligibility or comprehensibility is at risk, but this will also depend on the teachers' goals and the students' aims (Morley, 1991).

CF has been shown to involve a number of different techniques. These include, for instance, explicit correction, recasts, repetition, clarification requests, metalinguistic feedback. Of all types of CF suggested by Lyster and Ranta (1997), recasts have been the most used techniques in the classroom and in research (Baker & Burri, 2016; Ellis & Sheen, 2006). This may be because findings have shown that recasts have a significant impact on improving learners' pronunciation (Mackey, Gass & McDonough, 2000; Saito & Lyster, 2012).

In relation to teacher cognition research regarding feedback in pronunciation instruction, only one study has been conducted. Baker and Burri (2016) examined the use of feedback by five ESL teachers through interviews, classroom observation and stimulated recall interviews. Findings indicate that teachers used feedback to help students be more comprehensible and they encouraged peer negotiations among peers. In addition, most teachers used explicit feedback through audio recording of students' speech as well as oral feedback. Four of the teachers reported using recasts occasionally with problematic pronunciation.

2.5.7 Pronunciation assessment

Feedback and assessment are similar in nature and thus sometimes grouped together, however, the literature has tended to distinguish between the two, regarding feedback as methods used to correct students' pronunciation errors and assessment as students' production evaluation. Assessment of pronunciation is relevant to the goals of pronunciation teaching. That is, assessment of pronunciation is determined by native norms or intelligibility and comprehensibility, even though goals of teaching pronunciation have arguably changed in the last three decades.

In relation to teacher cognition research concerning pronunciation assessment, a number of studies have examined teachers' cognition. For example, Henderson *et al.* (2012), as outlined earlier, conducted a study using an online survey and found that 84.5 per cent of teachers did not use an established scale to assess pronunciation. Although the focus was on assessing speaking in general, Cohen & Fass (2001) examined the beliefs and practices of forty EFL teachers regarding the assessment of learners' speaking through questionnaires, follow-up questionnaires, interviews and classroom observation. In relation to assessment of pronunciation, findings indicate that teachers generally believed that pronunciation should be assessed on the basis of accuracy.

2.6 Conclusion

The literature has shown different types of knowledge, beliefs and practices in regard to important themes in pronunciation instruction. However, a holistic study where all such themes are brought together and investigated within one study has not been done before. Furthermore, although knowledge, beliefs and practices regarding pronunciation instruction have been identified in different studies, relationships between knowledge, beliefs and practices, as well as underlying factors, have not been fully examined. Moreover, teachers' cognition in relation to pronunciation instruction have not been fully explored in the Saudi context. In addition, this context is unique for it has a great impact on how English is taught in Saudi Arabia, in all levels of education.

Chapter three: Methodology

3.1 Introduction

This chapter explores the methodology underpinning the study. It begins by discussing the conceptual paradigm - interpretivism - which has guided the study as a whole. The strategy of qualitative mixed methods adopted for data collection is then highlighted, before the importance of adopting a multiple case study approach is discussed. Following this, the theoretical framework leading the study is explained. Next, the chapter presents the sampling strategy used, and the participants who took part in the study. The piloting stage which preceded the main study is reported afterwards. Given the importance of design and validity in the choice of research instruments (initial semi-structured interview, classroom observation and post observation interviews), justification of each data collection method is provided. This includes an overview of the development process each method has gone through, and implications for each method deriving from the piloting stage. The subsequent two sections identify key issues in data analysis, and the ethical considerations within the current study.

3.2 Interpretivist paradigm

This study embraced an interpretivist ontology in which the world has multiple realities (Bryman, 2015). Such an approach maintains that different realities exist due to varying human experiences, including people's knowledge, beliefs, interpretations and experiences (Cantrell, 2001). It views reality as subjective and constructed by the individual (Scotland, 2012). It also holds an interpretivist epistemology in which understanding a phenomenon happens through its interpretation (Schwandt, 1994). This is due to the fact that, unlike research in the natural sciences, studying people and their actions requires a different logic that reflects the uniqueness of humans' behaviour (Bryman, 2015). This was considered a more appropriate position than the positivist perspective where researchers have arguably reduced complex ideas down to something that is easily measurable for the sake of simplicity (Pring 2004). Therefore, an interpretivist researcher seeks

to understand people's thoughts and actions according to their point of view (Bogdan & Taylor, 1975), and through their own voices.

It was felt that the interpretivist perspective would more effectively address the research questions, and the aims of the study, particularly due to the challenges associated with the operationalization of complex concepts such as teachers' beliefs (Skott, 2015). Adopting an approach influenced by interpretivism does not undermine the value of research within other paradigms but asserts the importance of *understanding* teacher cognition. Thus, the interpretivist paradigm was perceived to correspond with the aims of the current study, with its focus on exploring EFL teachers' beliefs and practices regarding pronunciation instruction in Saudi universities, relationships between beliefs and practices and factors underlying beliefs and practices. Understanding teachers' realities through the exploration of their cognitions and practices, and their interpretations of those cognitions and practices was considered essential for interpreting the data in the current study and for generating an insight into teachers' developed local theories of learning in relation to pronunciation instruction in the Saudi context.

3.3 Research strategy

In language teacher cognition research, different research strategies for data collection have been used. These have included quantitative (Allen, 2002; Cathcart & Olsen, 1976; Hislam & Cajkler, 2005; Sato & Kleinsasser, 1999), and qualitative approaches (see, for instance Basturkmen, Loewen & Ellis, 2004; Bigelow, Ranney & Hebble, 2005; Borg, 1998; Burns & Knox, 2005; Hawkey, 2006; Johnson, 1992a; 1992b; Samuda, 2005). Several researchers have also used a mixed-methods approach, employing both quantitative and qualitative methods (see Alghazo, 2013; Baker, 2011c; 2014; Christ & Makarani, 2009; Polat, 2009). Furthermore, research on teacher cognition concerning pronunciation instruction shows that a broad range of research methods have been adopted. This has included interviews (Couper, 2016; Jenkins, 2005; 2007); questionnaires (Cathcart & Olsen, 1976; Buss, 2016; Gilakjani & Sabouri, 2016; Hismanoglu, 2010; Macdonald, 2002; Sarikaya, 2013; Sifakis & Sougari, 2005; Thomson, 2012; Timmis, 2002); a

combination of interviews and questionnaires (Salehi & Amini, 2016; Yunus, Salehi & Amini, 2016); a combination of interviews and journals (Baker, 2011a); and one study using internship reports (Buss, 2012). Furthermore, studies have used stimulated recall interviews (Baker, 2014; Baker and Burri, 2016); focus group discussions (Burri, Chen & Baker, 2017; Burri, 2015); and classroom observations (Alghazo, 2013; Baker, 2011b; 2014; Burri, Chen & Baker, 2017; Cohen & Fass, 2001; Hismanoglu, 2013; Shah, Othman & Senom, 2017). Triangulation of methods has also been adopted by several of these (Alghazo, 2013; Baker, 2014; Baker & Burri, 2016; Burri, Baker & Chen, 2017; Cohen and Fass, 2001).

For the purposes of the current research, multiple methods were used to address the research questions. These included semi-structured interviews, classroom observations, stimulated recall interviews and final interviews. Whilst the current research intended to employ a range of data generation techniques within the study, it was felt that quantitative methods would not be sufficient, in the sense that they would not provide the kind of data which represents what teacher cognition really is. The superficial and limited level of information provided by such quantitative techniques was not considered necessary or beneficial for any stage of the study and would limit the in-depth inquiry in terms of eliciting knowledge, beliefs, practices and underlying factors for each of these.

Qualitative methods tend to provide rich and deep accounts of data necessary for understanding a context (Willis, Jost and Nilakanta, 2007). They are also a means for exploring and understanding meaning in varied participants' experiences regarding a social or human problem (Creswell, 2009). Whilst quantitative strategies could enhance generalizability of findings, as a larger sample could be used and more voices could be embraced, they arguably do not offer the depth necessary to understand interpretations and variations in experiences. Qualitative strategies offer the openness and flexibility to be able to more directly question and effectively prompt participants in order to better understand responses, and thus experiences, perspectives and interpretations.

The influence of the interpretivist perspective is evident in the adoption of the qualitative strategy which informed the study. A qualitative inquiry helped in understanding participants' beliefs and practices in relation to pronunciation instruction through their experiences. The research adopted a qualitative multiple method strategy consisting of initial semi-structured interviews, classroom observation, stimulated recall interviews and final semi-structured interviews, with participants taking part in each stage. The choice of a multiple method approach was influenced by Borg (2009) who suggests that the use of a range of methods potentially helps to overcome the weaknesses associated with the use of a single method (see also section 3.7) and enhances trustworthiness of the data (see section 3.9 for further discussion here).

The particular selection of methods involved the need to adopt an approach which would elaborate on the stated beliefs or practices of the teachers to understand not only what they think, believe, know and do, but also why. For example, it was felt important not only to explore a teacher's beliefs and practices regarding native-like pronunciation, but also to observe this in action and to understand the underlying factors behind it. Initial semi-structured interviews provided a useful instrument for eliciting data on teachers' knowledge, beliefs and reported practices, whereas classroom observation enabled the researcher to view actual practices in action, and to identify potential gaps between beliefs and practices. The stimulated recall interviews were important for allowing the researcher to explore classroom practice, by providing the teachers with the opportunity to elaborate on and explain their practice. The final interviews were necessary to draw on the teachers' knowledge, beliefs and practices, and helped to shed light on the interconnections between these and underlying factors. Further justification for the selected methods is highlighted below (see section 3.8). The triangulation of these methods was perceived, then, to assist in enhancing the validation of data and contributing to richer contextualized data. The use of a qualitative multiple method approach was therefore in line with an interpretivist perspective, as it allowed the researcher to understand and interpret meanings, through participants' elaboration of their thoughts and actions in a range of ways, expressed through their own words.

3.4 Theoretical framework

The current study was grounded in a theoretical framework influenced by key debates in pronunciation instruction. These included Shulman's concept of PCK (1986), and Borg's model of teacher cognition (2015). Developing the theoretical framework involved three stages. Firstly, in conducting a systematic review of key debates in pronunciation instruction (see Chapter Two), the following themes emerged:

- goals of teaching pronunciation;
- models in pronunciation instruction;
- prioritization in pronunciation instruction;
- pronunciation teaching approaches and techniques;
- pronunciation assessment;
- feedback in pronunciation instruction.

These themes were central in informing the decisions made with regard to the methods adopted for data generation. It was important, for instance, to not only attempt to explore teachers' knowledge and beliefs in relation to these themes, as well as to uncover practices concerning these, and the interconnections between beliefs, knowledge, practice and underlying factors. It was therefore necessary to employ a range of different methods to enable the generation of appropriate data which went beyond description, towards understanding how these cognitions have been formed, and enabling the interpretation of what teachers think and do. Thus, the methods selected aimed to facilitate an in-depth investigation into teacher cognition in relation to pronunciation instruction. These themes were also important in the data analysis stages, particularly in the categorization of the data.

Second, as discussed earlier in the literature review, PCK refers to the merging of content and pedagogy together (Shulman, 1986). The merging of content and pedagogy in the current study was achieved by merging knowledge and beliefs with themes which have emerged from key debates in pronunciation instruction. That is, PCK in the current study represented the accumulation of knowledge and beliefs about those themes together. It was

assumed that in this study, the accumulation of knowledge and beliefs in regard to goals, models, prioritization, assessment and feedback in pronunciation instruction represents the PCK of the study. The reason for selecting the words ‘knowledge’ and ‘beliefs’ here has been previously discussed in the literature review chapter (see section 2.2.). Thus, exploring the PCK of language teachers participating in the current study, required examination of their knowledge and beliefs about each of these themes.

Third, to find out what underlies teachers’ PCK about pronunciation instruction, Borg’s model (2015) was considered key to the study. This model is helpful for understanding interactions between teachers’ cognitions and other variables such as classroom practice, prior L2 learning experiences, continuous professional development, and context, and also the relationships between themes. For the purposes of the current study, at the initial stages, Borg’s (2015) model was adapted to include the PCK at the centre, rather than Borg’s focus on teacher cognition in general (see section 2.3). The following figure demonstrates the revised model used in the current study (this was later further modified during the analysis stages; see Chapter Six).

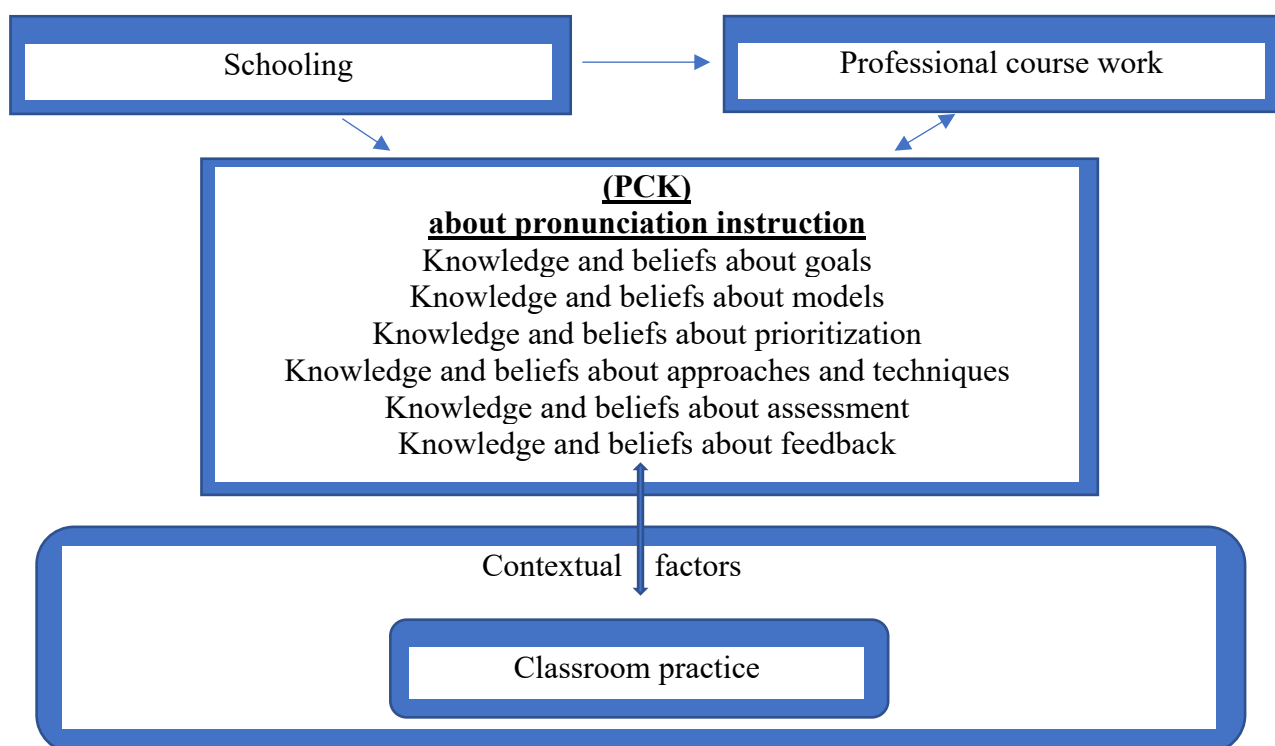


Figure 3: Revised model of Borg’s (2015) ‘Elements and processes in language teacher cognition’

3.5 Multiple case study approach

The current study adopted a multiple case study approach. Defining what a case study is has been much debated in the literature (Stake, 1995; Flyvbjerg, 2006; Yin, 2014; Mertins, 2015), with some lack of consensus surrounding whether it constitutes a method or a methodology. The current research adopts a perspective on the matter influenced by the work of Simons (2009) who suggests that case study research should be considered an ‘approach’ which is methodological in purpose, and which subsequently impacts on the ‘methods’ adopted. Methods here are considered to be the data collection strategies, such as interviews and observations, as applied in the current study. This definition is supported by Creswell (2013), who describes case study research in more depth as:

a qualitative approach in which the investigator explores a real-life, contemporary bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in depth data collection involving multiple sources of information (e.g., observations, interviews, audiovisual material, and documents and reports), and reports a case description and case themes. The unit of analysis in the case study might be multiple cases (multisite study) or a single case (a within-site study) (p.97).

Furthermore, following Stake (2005), it was believed that the case study provides an important approach for studying cases holistically, through the use of multiple methods.

A case study approach was adopted because it allows an in-depth understanding and a focus on a particular, unique case, and an ability to understand what is distinctive about that case (Simons, 2009). This is often understood or explained as exploring “a phenomenon of some sort occurring in a bounded context” (Miles and Huberman, 1994, p. 25). Each ‘case’ within the current study was considered to be the teachers of pronunciation instruction within the context of English major programs within Saudi universities. The aim was to understand the case through examining the

knowledge, beliefs and practices involved. The words of Simons (2009) are helpful here:

Subjective data are an integral part of the case. It is through analysis and interpretation of how people think, feel and act that many of the insights and understanding of the case are gained (p.4).

Given that teachers' cognitions and practices regarding pronunciation instruction are diverse, this approach was selected to allow the researcher to make potential connections among cases. In addition, since those cognitions and practices are complex, this approach enabled the researcher to identify patterns across cases during analysis (see Chapter Five).

There are many benefits to the use of the case study approach. One of the most significant advantages in terms of the current study was that the case study approach would enable teachers experiences and complexities related to the context studied to be analysed and interpreted in depth (Zainal, 2007; Simons, 2009). This has been supported by Starman (2013), who suggests that in contrast to more quantitative approaches, case studies enable contextual factors to be accounted for, and to "observe any unexpected aspect of the operation of a particular causal mechanism, while quantitative studies in their correlations lack such causality" (p.37). In addition, the ability to document multiple perspectives, in a 'real life' setting (Yin, 2014) was considered particularly important. In terms of the practicalities of the case study approach, this was something that appealed to the current research, for as Simons (2009) explains, such an approach is flexible and not constrained by time or method, enabling the use of a range of methods and for research to be conducted over a timescale appropriate to the study. Finally, the case study approach allows the researcher to reflect on the data, their interpretations and their role in the process (Simons, 2009), which arguably enhances trustworthiness in the study.

In terms of the limitations of the case study approach, questions have often been raised around the subjectivity of the researcher (Simons, 2009) and concerns surrounding generalizability, particularly in terms of inferring from

a single case (Zainal, 2007). It has also been argued, however, that when searching for connections between variables within a case, or between cases, the case study could actually produce theoretical conclusions, and through the understanding of how things are and people's views and interpretations naturalistic generalization can occur. Thus, as Starman (2013) explains:

Generalization is therefore possible by recognizing the similarities of the objects and issues in different contexts and by understanding the changes as they happen (p.39).

It has also been suggested that case studies have been criticized on the basis of bias, in terms of confirmation of researcher expectations and interpretations (Starman, 2013). The interpretation of data is, however, bound to a specific theoretical framework that should help decrease the level of bias. Finally, the vast amount of data that can be produced within case study research is also highlighted as a potential limitation (Yin, 2014), especially where these are not effectively organized and managed (Zainal, 2007). Within the current study, however, care was taken to ensure meticulous records of data, analysis and interpretations at each stage of the research.

Recognition of these limitations was important, but the benefits were perceived to outweigh these. In the current research, the use of multiple case studies allowed an in-depth understanding of teachers' lived experiences so that teachers' knowledge, beliefs and practices could be explored, relationships between EFL teachers' knowledge and beliefs about pronunciation instruction and classroom practice understood, whilst also highlighting factors underlying teachers' knowledge, beliefs and practices.

3.6 Narrative inquiry

Narrative inquiry is an umbrella term often used to describe the exploration of the relationship between experience and cultural context, involving capturing and re-telling people's stories. As Clandinin and Huber (2010) explain, narrative inquiry involves the examination of individual human experiences and "...follows a recursive, reflexive process of moving from

field (with starting points in telling or living of stories) to field texts (data) to interim and final research texts” (p.436). As a result, narrative inquiry acknowledges the significance of the experience itself, rather than simply focusing on the outcomes, and allows researchers to access the knowledge that participants do not always consciously know themselves (Bell, 2002).

It has been argued, however, that the definition of narrative research is largely disputed and must therefore be fully integrated into the epistemological position of the researcher (Barkhuizen, 2011; 2014). Furthermore, narrative inquiry requires extensive time commitment (Bell, 2002), and the requirement of close collaboration with participants means that the role of the researcher in the process of data generation and interpretation must be acknowledged (Bell, 2002), not least because they raise important ethical, ideological and emotional concerns and obligations (Barkhuizen, 2011). Ethically, it may also be easier to identify participants from the detailed lived experiences that they share and thus requires caution here on the part of the researcher (Bell, 2002). Finally, narratives are bounded to particular contexts (Barkhuizen, 2011), which may be less generalizable, yet at the same time providing in-depth insights into the context of the study.

Despite the limitations of narrative inquiry, it was considered a particularly suitable approach for the current study. Narrative inquiry has gained increasing recognition as interest in teacher knowledge and reflection within classroom practice has grown (Ford, 2011), and is valuable in capturing “...the stories within which knowledge and understanding are embedded” (Doyle and Carter, 2003, p. 2). In relation to teacher education specifically, Craig (2011) suggests that:

Because teacher education is inextricably linked to teachers’ lives and narrative inquiry studies lives in motion, the link between teacher education and narrative inquiry could not be stronger (p.20).

It has also been asserted that as newly qualified teachers, because of their lack of experience, may not be able to make sense of or conceptualize their experiences, story-telling can provide a suitable or effective cognitive

strategy for reaching their interpretation of lived experiences of the classroom (Doyle and Carter, 2003). Carter (1993) suggests, for instance, that the stories that teachers share embrace a more complex picture than statistical data, providing insights into "...the richness and indeterminacy of our experiences as teachers and the complexity of our understandings of what teaching is and how others can be prepared to engage in this profession" (p.5). This was particularly important for the first stage of the current study which sought to understand in depth, the knowledge, beliefs and practices of the teachers. This would help in answering the research questions regarding the relationships between these and their underlying factors.

3.7 Sample and sampling procedure

The sample for the current study included EFL teachers who work in the Saudi higher education system, and more specifically, within English major programs/departments/colleges, and who currently teach a subject where English pronunciation is part of the course. This includes teachers who teach modules such as English phonology, phonetics, speaking and listening skills. This was the main inclusion criteria. The sample size in a qualitative study should not be too small, so it becomes hard to achieve theoretical saturation, and not too big where it is difficult to generate deep and rich data (Onwuegbuzie & Collins, 2007). It was also necessary to consider the fact that each participant would be required to participate in all four stages of the study (semi-structured interviews, classroom observation, stimulated recall interviews and follow-up interviews), which may have impacted on participation. Therefore, for the current study, ten to fifteen participants were considered an appropriate and achievable number, especially given the multiple methods involved with each participant. Since education in Saudi Arabia is segregated, and access to female teachers would not be possible (due to permission to this group not being granted), it was an all-male sample. There were no other sample inclusion and exclusion criteria within this research, for instance, on the basis of age, educational or teaching experience.

To recruit participants, convenience sampling was used to sample cases which were most relevant to the research questions (Bryman, 2015). This

was also deemed the most suitable sampling procedure for accessing those who could provide rich data and also those who would be interested in participating. Convenience sampling is a form of non-probability sampling where potential participants are selected for their availability (McMillan, 1996), or as Etikan, Musa and Alkassim (2016) explain, they “meet certain practical criteria, such as easy accessibility, geographical proximity, availability at a given time, or the willingness to participate” (p.2). According to Stake (1995), the selection of cases, due to often limited time and access in the field, should be based on the willingness of participants to take part in the study, and on what can be learnt from each case.

Information about teachers on the relevant courses, and their contact details, is available through the Saudi university websites, on specific department pages. The first stage of sampling, therefore, involved contacting these teachers via email to inform them about the research and to request their participation. This stage was successful in gaining access to a small number of participants, but this was supplemented by contacting the Heads of Saudi English major programs/departments to explain the research, seek permission and to request distribution of the research aims and advertisement on the researcher’s behalf. Contacting the Heads of departments proved particularly helpful in gaining access to participants, but it was necessary to find additional participants through another method. As a final stage, then, the researcher gained access to four more participants through colleagues working in different universities.

Dornyei (2007) suggests that whilst convenience sampling is the most widely used method, it could also be considered the least desirable form of sampling. It has been suggested, for instance, that convenience sampling can be both biased and lacking in credibility (Dornyei, 2007; Etikan *et al.*, 2016) and questions have been raised surrounding generalisability (Cohen, Manion & Morrison, 2007). Rather than being purposive, however, it is a more practical or ‘convenient’ form of sampling and draws on those participants who are available to take part in the research. This also tends to mean that the participants are willing to take part, and thus, a rich data set is often achieved as a consequence (Dornyei, 2007). In addition, McMillan (1996) suggests

that the intention of the research may not be to generalise, but rather “to better understand relationships that may exist” (p.91). The latter certainly applied in the current research. In addition, according to Stake (1995), generalization in case study research is not always possible. He further explains that it is usually the responsibility of the reader to generalize findings in case study research to their situation. In the current study, nevertheless, the recruitment of participants from different departments and universities across Saudi Arabia potentially increased some degree of generalizability to the Saudi context.

Another limitation of the use of convenience sampling is that researchers are in control of the sample. This may be true in situations where the potential sample population is large. However, for the current study, the potential participant population was restricted to EFL teachers in higher education in Saudi Arabia, where their teaching involves pronunciation instruction. Typically, there is a small number of participants within each program or department who fit this criterion, as evidenced in the piloting stage, and so researcher control was limited here to those who were willing to participate in the research. Furthermore, during the pilot study, the recruitment strategies were successful in gaining access to four participants, and so these strategies were employed again within the fieldwork stage to achieve the required sample.

3.8 Data collection instruments

As mentioned in Chapter One (see section 1.3), researchers within the field of teacher cognition have employed a range of different methods, and various combinations of methods, depending on the purpose and approach of the study. In the current study, as previously discussed, a combination of qualitative methods was also used, including initial semi-structured interviews, classroom observations, stimulated recall interviews and final interviews. The choice of such a combination of methods was related to the need to not only explore teachers’ knowledge and beliefs, through the semi-structured interview, but also their practices, through classroom observation, and to identify the underlying factors that may have influenced these, through

stimulated recall and final interviews. This was seen as important as the triangulation of methods which can help to avoid the weaknesses associated with using only one method (Borg, 2009). In addition, the inclusion of classroom observation has been argued to be essential (Borg, 2015), yet under-utilized as a method in teacher cognition research in relation to pronunciation instruction (Baker, 2011b; Derwing & Munro, 2005). In the current research, it was found to be important in exploring the relationship between stated and actual practice. Furthermore, stimulated recall interviews, as well as final interviews were found to be valuable in the study, especially in understanding interconnections between beliefs, practices and influential factors. In order to effectively address the research questions, it is important to explain the approach adopted with each method and to highlight the rationale for each of these methods.

3.8.1 Initial semi-structured interviews

In this study, one semi-structured interview was conducted with each participant. Qualitative inquiries collecting large descriptive data from a small number of participants using semi-structured interviews has been widely used in teacher cognition research (Borg, 1998; Borg, 2015). Teacher cognition cannot be directly observed (Borg, 2015), therefore, interviews can be an invaluable tool to find out what is in and on the participants' minds (Patton, 1990). They are appropriate for finding out tacit and invisible aspects of participants' lives (Glense and Peshkin, 1992). Furthermore, they give participants the chance to freely express themselves, providing a fuller account of experiences and interpretations around their teaching (Mangubhai *et al.*, 2004). Consequently, unlike structured interviews, semi-structured interviews make available the flexibility to explore unexpected discoveries (Cohen *et al.*, 2007). In addition, given that building rapport with participants is essential to the quality of data, semi-structured interviews help in constructing a relationship between the researcher and participants (Fontana & Frey, 1994). In contrast to unstructured interviews, semi-structured interviews allow key issues drawn from previous literature to be discussed with participants. These aspects were, then, perceived to be particularly valuable for the first and last stages of data generation in the current study.

Despite the merits of this approach, it is important to bear in mind that the use of semi-structured interviews is not without limitations. For example, this method has been associated with issues surrounding its objectivity (Dingwall, 1997) as well as the ability of the researcher to conduct a successful interview. Therefore, several steps were taken to counter these limitations. For example, literature on managing the researcher's own biases, anxieties, and emotion in the interview (see, for instance Rubin & Rubin, 1995; Fontana and Frey, 2005; Kvale, 2006), the interpretation of responses (see Oppenheim, 1992; Silverman, 2000), the role of technology in the interview (Dornyei, 2007), and the possibility of inaccurate responses from participants (see LaPiere, 2004; Dornyei, 2007) was reviewed. In addition, the interview guide was piloted and refined to ensure its quality before the main study. The piloting stage improved the ability of the researcher to conduct interviews and to foresee the unexpected during interviews.

In parallel with Dornyei's (2007) suggestion to develop an interview guide before conducting a semi-structured interview, the interview schedule was designed to address knowledge and beliefs about different areas of the PCK (such as goals, models, prioritization, methods, feedback and assessment), followed by potential themes derived from key debates in pronunciation instruction. The process involved developing broad potential questions regarding different areas of teachers' knowledge, beliefs practice and underlying factors about pronunciation instruction (see Table of Potential Questions, Appendix 4 for further detail). To allow flexibility for the semi-structured interviews, the order and wording of questions shown in the schedule (see Appendix 5) was not necessarily followed in the actual interviews. Interviewees were given the chance to answer open-ended questions so that important information for the participants could be identified. Therefore, the purpose of this schedule was only to broadly guide the interviews. This level of flexibility is a benefit of semi-structured interviews often cited in the research literature (Dingwall, 1997; Kvale, 2006; Rubin and Rubin, 1995), and also fit with the researcher's interpretivist perspective in facilitating understanding of participants' own meanings and interpretations through their own voices, with little restriction from the researcher.

An initial interview guide (see Appendix 6) was tested in the pilot stage, after which several changes were made. The themes in the Table of Potential Questions (Appendix 4) were expanded upon for the final interview guide (see Appendix 5). These involved addressing the organization of the schedule, the need to build rapport, use of terms, types of questions, and follow up questions. In relation to the organization of the interview guide, for example, initially it delved straight into the topic questions, and was designed as a list that was not presented in sections. Following piloting, however, it was decided that dividing the guide into three parts: introduction, teacher cognition, and background information, would assist with the flow of the interviews. The introduction, for instance, allows for discussion of the research and assists in building rapport with the interviewees (Brinkmann & Kvale, 2015; Cohen, Manion & Morrison, 2007; King & Horrocks, 2010; Mertens, 2015). Having an introduction where the name of the researcher is introduced, the topic of the study is identified, the purpose of the study and ethical considerations are explained, therefore potentially increases the chances of establishing trust in the interviewer and may help to make interviewees feel more at ease during the interviews.

In addition, following the pilot stage, the general questions in the initial interview guide were then moved to the second part; teacher cognition. By placing the background information at the end of the interview guide, it was felt that participants would only need to be asked further questions if they had not provided such details earlier in the interview, or it would allow the researcher to refer back to specific issues raised and relate it to them. To assist with information flowing freely during the interviews, a variety of questions were therefore included, such as introducing, follow-up, prompting, probing, interpreting, structuring and indirect questions (Kvale, 1996; 1999; 2006).

3.8.2 Classroom observation

Classroom observation is essential in teacher cognition research since understanding teachers' practices cannot be complete without some reference to classroom observation (Borg, 2003; 2006). Using classroom observation

helps to inform the extent to which teachers' cognitions regarding pronunciation instruction are consistent with their classroom practices. In addition, classroom observation in this study assisted in designing a stimulus for the third method (stimulated recall interviews). Where observations can be potentially limited is through the researchers' interpretation, or indeed misinterpretation, of events and actions (Colton and Covert, 2007). In the case of the current study, however, the use of stimulated recall and follow-up interviews were intended to avoid such issues arising. Another oft-cited limitation of observations is interrater reliability (*Ibid.*) where several different observers are involved, but again, this was unproblematic in the current study due to the presence of just one observer across all observations.

Conducting classroom observations was profoundly important in this study. Typically, teacher cognition studies tend to involve observations which consist of one to four classes per teacher (see, for instance, Baker, 2014; Basturkman, Leowen & Ellis, 2004; Johnston & Geottsch, 2000) and in the current study, three classes were observed for every teacher during one academic semester. In Saudi universities, each class usually consists of fifty minutes, so a total of 150 minutes was observed. Since unstructured observation can offer more flexibility to respond to unanticipated events in the classroom (Baker, 2011c), the current study used an unstructured classroom observation schedule (see Appendix 7) to record the details of each class.

Following the observation of the three lessons taught by three teachers in the pilot study, two alterations were implemented to the classroom observation schedule. The first alteration involved the addition of an information page to the observation schedule. The information page was divided into three sections. The first section included information about the teacher: name of the teacher, name of the institution, date of observation, time of the observation, duration of observation and title of the course. The second section contained information about the classroom; location, equipment, and students' size. The third section consists of information about the course; method of delivery, title of the lesson, textbook, page number and other materials. The purpose of adding the information page to the observation

schedule is to facilitate organizing information as much as possible about each observed lesson. The second alteration made was the removal of the unstructured classroom observation schedule, as this was not found to be practical.

The unstructured classroom observation schedule used during the piloting stage was not practical as it was difficult to comment on everything happening inside the classroom. In addition, because the focus was on themes related to pronunciation instruction (such as goals, models, prioritization), a more structured schedule was considered more appropriate. Therefore, a structured classroom observation schedule with time (minutes) on the left column and columns including themes on the right at the top, followed by evidence and reference, was designed for the main study (see Appendix 8). In addition, the structured classroom observation schedule included quotations and detailed notes on the interactions between the teacher and the students in the classroom to support all claims made in relation to key findings. Drawing on such data is important because the discourse in the classroom provides insights into the actual relationships and workings in the classroom, which deepen understanding of language learning (Walsh, 2006; 2011).

3.8.3 Stimulated recall interviews

A stimulated recall interview is an introspective research method used to help access participants' cognitive processes during an earlier event (Gass & Mackey, 2017). This technique has been widely used in teacher cognition research (see, for example, Andrews & McNeil, 2005; Basturkmen *et al.*, 2004; Borg, 1998; Burns & Knox, 2005; Golombek, 1998), and involves the use of a recorded event (video/audio/transcript) as a stimulus to help participants articulate what they were thinking at the time the event took place (Baker, 2011c).

In the current study, an audio recording was used in the stimulated recall interviews to prompt discussion for the purpose of finding out what the teachers were thinking at the time and what meaning they assigned to what they did in that early event. Most importantly, this technique provides insight

into teachers' personal theories that motivate their behaviours in the classroom (Kormas, 1998; Meade & McMeniman, 1992). Thus, interpreting teachers' behaviours can be subjective (Gass & Mackey, 2017), and giving teachers the chance to articulate what they think they were doing while teaching will potentially increase the validity of data interpretations. Second, it was felt that stimulated recall interviews would help provide concrete examples, more contextualized, and richer data than data obtained from the other methods.

As mentioned above, stimulated recall interviews were important for allowing participants to talk through their teaching practice. Researchers must be cautious when using such a method, however, to ensure that reliable data is generated here (Gass & Mackey, 2017). In preparation for the stimulated recall interviews, therefore, the following steps were taken. First, data obtained during classroom observation was used to help identify pronunciation-related episodes from the audio recordings. Second, a stimulated recall interview guide was designed for each participant, with questions focusing on what teachers were thinking at the time, what meaning they assign to that early event and what the reasons are behind their practice. In this sense, there are quite standard questions used in stimulated recall interviews (see Gass & Mackey, 2017). Third, since stimulated recall interviews should take place as soon after the event as possible (Brtels, 2005; Mackey & Gass, 2017; Schepens, Aelterman & Van Keer, 2007), they were conducted shortly after the last observed lesson. Fourth, to help participants respond to questions, a stimulated recall interview instruction sheet was prepared for this purpose (see Appendix 9).

Following the pilot study, it was seen as helpful to also include materials teachers used during observations (such as textbooks) in the stimulated recall interviews, to enrich their memory when responding to questions in the stimulated recall interview guide. This approach to strengthening the stimulus has been recommended by several researchers (see, for instance, Lyle, 2003; Mackey & Gass, 2017). Furthermore, whilst notes were jotted down during the pilot observations, it was also felt that a reasonable amount of time was needed in between the observation and stimulated recall

interviews to be able to reflect on the observations and develop the recall interview guide. Thus, whilst interviews took place as soon as possible following the observations, it was found that 72 hours was the most appropriate amount of time in between for both the researcher and participants.

3.8.4 Final semi-structured interviews

Following the pilot study, it was seen as necessary to add final semi-structured interviews. Since the stimulated recall interviews were dedicated to discussing teachers' practice in the classroom, the aim of the final interviews was to elaborate on issues that had emerged from the initial semi-structured interviews and classroom observation. This is because a potential gap may exist between what participants have reported in the initial interviews and what they had done in the classroom. A further investigation of these gaps would potentially provide richer data and give more insight into teachers' beliefs and practices. In addition, it was seen that these interviews would uncover the interconnections between themes in initial interviews, classroom observation and stimulated recall interviews. This would eventually allow a holistic understanding of teacher cognition in relation to pronunciation instruction. Designing the interview guide for these interviews took place after the classroom observation. The interviews were conducted immediately following the stimulated recall interviews.

3.9 Piloting stage

Collecting data for the main study was preceded by a piloting stage. Given that many aspects of the study are novel, it was seen as necessary to conduct "a small-scale trial of the proposed procedures, materials and methods" (Mackey & Gass, 2005, p.43). Piloting the study was important for several reasons. Firstly, it was necessary to find out about the size and accessibility of the population, and the suitability of the recruitment strategy. Secondly, the pilot study was essential for exploring the context of English major programs in Saudi universities. Exploring the context, for instance, helped to gain a general understanding of processes involved in recruitment. Thirdly, it was vital to test the qualitative instruments and identify any shortcomings

before collecting data in the main study. It was critical to ensure that questions in the semi-structured interviews, for example, were exhaustive and clear to participants, given that a comprehensive interview guide can help to address key issues (King & Horrocks, 2010). Furthermore, avoiding pitfalls such as asking leading or ambiguous questions is essential to elicit rich and relevant data (Brinkmann & Kvale, 2015). Fourthly, it was necessary to find out how the initial coding scheme was applicable to the study. In addition, provided that qualitative methods such as interviewing require a lot of practice (Brinkmann & Kvale, 2015; King & Horrocks, 2010), it was also regarded as an opportunity to improve the qualitative skills of the researcher. Finally, by collecting some data from this context, the analysis plan could be implemented, and qualitative analysis skills improved before analyzing data in the main study.

The pilot study was conducted at one of the largest universities in Saudi Arabia. A convenience sampling procedure was used to recruit three EFL male teachers. All three participants (Teacher 1, Teacher 2, and Teacher 3) were working at different English major programs within this university. For details on the pilot sample, see Table 1 below. All teachers were non-native speakers and were teaching courses which included pronunciation (Sounds of English and Listening and speaking). While Teacher 1 was a novice EFL teacher, Teacher 2 and Teacher 3 were experienced EFL teachers. Teacher 3 was the most qualified teacher who earned his Masters and PhD qualifications from Egypt and the USA in Curricula and instruction in English. Teacher 2 gained his Masters from Pakistan and was about to complete his PhD from a Malaysian university in Applied linguistics. Teacher 1 had just completed his Masters from an American university majoring in Phonetics and phonology. Both Teacher 1 and Teacher 2 were teaching Sounds of English to male English major program students in two different colleges. According to the module outline of this course (see Appendix 1), the purpose of Sounds of English is to “enable students to produce and perceive English utterances well”. It also shows that this course focuses primarily on differences between letters and sounds, English sounds, syllables, stress, and intonation. Teacher 3, on the other hand, teaches Listening and speaking. The course outline of this course (see Appendix 2) states that the purpose of this course is to “help

students build strategy-awareness of predicting language for different academic and social contexts”. Each of the teachers participated in one semi-structured interview and one stimulated recall interview. In between these interviews, one lesson was observed with each teacher (see Table 1).

Table 1: Pilot study timetable

Teacher	Module	Semi-structured interview	Classroom observation	Stimulated recall interview
Teacher 1	Sounds of English	26/03/2018	02/04/2018	04/04/2018
Teacher 2	Sounds of English	01/04/2018	03/04/2018	03/04/2018
Teacher 3	Listening and speaking	02/04/2018	04/04/2018	05/04/2018

As discussed previously, changes were made to the data collection tools following the pilot study, particularly to the semi-structured interview schedule, and the observation schedule. Whilst the above has touched on some of the alterations made, it is worth noting some of the additional, more specific modifications made to the interview schedule. It was necessary to alter some of the wording used in the schedule. In relation to use of terms, for example, the word ‘pronunciation’, was changed to ‘features of the spoken language, to avoid the use of a term which has a narrow meaning and might implicate the teaching of individual words or sounds. In addition, the use of complex and technical terms such as ‘segmentals’ and ‘prosody’ were avoided in the revised interview guide as it was felt that they may not be well understood by all interviewees.

Concerning types of questions, several questions in the interview guide were also changed. For example, the second general question was changed from ‘Please tell me about your teaching of speaking/pronunciation’ to ‘What is it like to teach (name of the course)?’. This question was changed because it has been suggested that asking an open question in the beginning of the interview may provide a more extensive response (Richards, 2003), and generates spontaneous and rich descriptions of important aspects related to the phenomena investigated (Brinkmann & Kvale, 2015). An additional

example here is related to the questions on prioritization in pronunciation instruction. They were modified to be less leading and more open questions. The question about beliefs, for instance, was changed from ‘What pronunciation features do you think are the most important to teach?’ to ‘What features of the spoken language should teachers focus on the most?’.

Some of the follow-up questions were also modified. For example, those related to continuous professional development such as ‘Describe any professional training programs/workshops/conference you have had while you are a teacher and is related to pronunciation instruction?’ was changed to ‘Describe any professional training program you have had related to teaching aspects of the spoken language while you are a teacher?’. Following this question, ‘workshops, conferences, publications’ were added as probes to stimulate interviewees to talk further about this issue. As mentioned earlier, the reason for using the phrase ‘aspects of the spoken language’ was to make the question more open and less direct in order to elicit richer data. The following table (Table 2), includes a summary of the changes that were made to the interview guide.

Table 2: Summary of the changes made to the interview guide

Area of change	Initial interview guide	Current interview guide
Organization	It included three parts; general questions, pedagogical content knowledge, background information.	It includes three parts; introduction, teacher cognition, and background information.
Use of terms	Complex terms were used.	Simple and broader terms are used.
Type of questions	Direct, specific and leading questions were used	Indirect, open and less leading questions are used.
Follow up questions	No follow up questions were formed when beliefs and practices differed.	Includes follow up questions when beliefs and practices are different.

3.10 Trustworthiness

The aim of this section is to provide an overview of the measures taken to enhancing the quality of the current study. The concept of trustworthiness includes four criteria: credibility, transferability, dependability and confirmability, and it is believed that maximizing trustworthiness in each of these criteria, would potentially lead to producing high-quality qualitative research (Lincoln and Guba, 1985).

Credibility in qualitative research is in parallel with internal validity in quantitative research (Guba & Lincoln, 1989) and deals with achieving consistency between findings in the study and reality (Merriam, 1998). Several techniques have been suggested in the literature on qualitative inquiry to increase the level of credibility in a qualitative study. Those include prolonged engagement, persistent observation, member checking, triangulation of methods and reflexivity (Shenton, 2004). In the current study, the researcher spent three months in the context, collecting data, and eleven months engaging with the data through transcription and analysis. Prior to the current research, however, the researcher also spent four years teaching in the specific context in which the research was conducted. This has enabled prolonged engagement with the context of the study. The time spent collecting data, starting from the pilot study through to the main data collection stage; the four methods of data collection used; and the modification of the methods as a result of the piloting stage have strengthened the researcher's ability to understand the context and thus to ensure persistent observation.

In terms of member checking, this has been referred to as the ways in which "data and interpretations are continuously tested as they are derived with members of the various audiences and groups from which data are solicited" (Guba, 1981, p.85). In the current research, participants were played audio recordings of their observations and were given the opportunity to discuss and explain their practice. In addition, the stimulated recall interviews and final interviews were individually designed for each participant following initial interviews and observations, based on the researcher's interpretations. Thus,

when questioned, the participants were able to respond to these interpretations, and in the final interview, participants were asked to elaborate on things they had said or done in the interviews and observations. Thus the design of the methods took into consideration elements of member checking. The design of the methods also involved the triangulation of methods, which should have increased the level of credibility in the findings. Finally, in terms of reflexivity, as recommended by Nowell *et al.* (2017), trustworthiness at this phase is achieved by reflexive journaling, auditing the trail of code generation and the use of a coding framework, all of which were applied in the current research. The researcher kept very detailed notes throughout the research process, which were later used in the process of analysis and interpretation of data. In addition, through diagramming, connections were made between themes and notes kept about the development of concepts and themes.

Transferability in qualitative research parallels external validity in quantitative research (Guba & Lincoln, 1989), and refers to the degree to which findings in a study can be applied to other situations (Merriam, 1998). Techniques that have been suggested in the literature to increase transferability in a qualitative study are thick description of data and the inclusion of multiple cases (Mertens, 2015). In the current study, the use of four methods to collect data generated a wealth of data which was analysed and presented in different ways, including as narratives and a cross-case analysis of fifteen cases, in order to generate rich insights into teacher cognition and thick description of the participants' knowledge, beliefs, practice and underlying factors.

Dependability in qualitative research is similar to the concept of reliability in quantitative research (Guba & Lincoln, 1989), and deals with the extent to which repeating the study in the same context will produce the same findings (Cohen *et al.*, 2011). To increase dependability in qualitative research, Yin (2014) suggests using a case study protocol which details decisions and procedures taken in the research process, so that if another researcher repeats the study, they would come to the same findings. The researcher should be able to understand the process that the researcher has gone through by reading

the methodology chapter, and this is something that the current research has aimed to achieve.

Confirmability in qualitative research is parallel to objectivity in quantitative research (Guba & Lincoln, 1989), and refers to minimizing the influence of researcher's judgment on the study (Mertens, 2015). To minimize the influence of the researcher on the study, Yin (2014) suggests using chains of evidence whereby the reader of the study can follow the evidence from its source. In the current study, the interpretation of the findings was always supported by evidence from their sources, and description of the context of the evidence was provided.

3.11 Analysis

A thematic analysis approach was used for analyzing data obtained through initial semi-structured interviews, classroom observation stimulated recall interviews and final semi-structured interviews. Thematic analysis is defined as a means of identifying, analyzing, organizing, describing and reporting themes discovered in data (Braun & Clarke, 2006). By paying attention to meaning across a data set, thematic analysis can assist in making sense of participants' common meanings and experiences important to answering a particular research question (Braun, Clarke & Terry, 2014).

The current study used an adapted version of a six-phase thematic analysis approach suggested by Braun and Clarke (2006). The first phase in this approach is familiarization with data and entails transcription and immersion in the data through reading and re-reading the transcripts of interviews and observations and listening to their audio recordings. The second phase involves generating codes which are labels referring to a specific meaning or description of data in a study. The third phase requires searching for themes and aims at capturing patterns in data relevant to the research questions, as well as finding similarities, relationships and overlaps between codes. The fourth phase entails reviewing themes and involves the review of developed themes to ensure quality check. The fifth phase consists of defining and naming themes and aims at stating what is unique and specific about each

theme. The sixth phase involves producing the report by writing a compelling and complicated story about the data that shows a valid analysis.

The above six phases were applied within the current research. Unlike Braun and Clarke's approach (2006), however, which seems to apply to interview data only, the current study used multiple data sources (semi-structured interviews, classroom observation, stimulated recall interviews and final semi-structured interviews). Therefore, an additional phase was added to the analysis plan for the current study (see the third phase below). In addition, the current research drew on a range of sources to further develop the phases of Braun and Clarke's (2006) approach. The following paragraphs detail the techniques used in each phase.

The first phase, familiarization with data, includes taking notes and asking questions while reading the text and listening to the audio recordings actively and analytically. Using memos and notes when reading transcripts has been recommended by several qualitative researchers (see, for instance, Corbin & Strauss, 2008; Miles, Huberman and Saldana, 2014; Yin, 2014). The three interviews were recorded, transcribed and notes taken when listening to the recordings. The observations were audio-recorded with consent, and notes taken. The recordings and notes were reviewed to ensure familiarity with the data.

The second phase of Braun & Clarke's (2006) approach is the generating of codes. Thematic analysis is highly dependent on coding of data as a means of identifying themes (Bryman, 2015). Coding is essential for separating and classifying the data into simpler and general categories to help formulate new questions and levels of interpretation (Coffey and Atkinson, 1996). Coding in the current study was theory driven, drawing on relevant literature on pronunciation instruction and teacher cognition. When an extract of data was selected for a code, the code was written down and the text associated with it was marked. This phase ended when all data were coded, and relevant data to every code were put together. A scheme of codes was developed which drew on previous literature on pronunciation instruction and on Borg's model of teacher cognition (see Appendix 10).

The third phase - which is an addition to Braun and Clarke's (2006) approach - involved the validation of data obtained from the four sources of data. The purpose of this phase was to look for consistencies and inconsistencies between teachers' cognition (including knowledge, beliefs and practices) and underlying factors through different methods of data collection. In addition to checking the validity of the data, this phase was beneficial for organizing the data prior to searching for themes, and thus was an important exercise within the data analysis stage. It is hoped that the inclusion of this phase will assist future research which utilizes a multiple method approach.

The fourth phase in Braun & Clarke's (2006) approach is searching for themes. It begins after data are coded and validated, and it highlights the issues and concepts across data in order to tell an overall and coherent story. Themes are analyzed not only at a surface level but also at a latent level. This takes into account the identification and examination of underlying beliefs, ideas, assumptions and conceptualizations, which shape the surface level of data. The research was designed to first explore teachers' beliefs and practices in relation to pronunciation instruction through initial interviews and observations, before investigating the underpinning interpretations of these through recall and final interviews. Borg's model (2015) of teacher cognition was used as a theoretical framework for interpreting and connecting themes in the qualitative data.

The fifth phase as proposed by Braun & Clarke (2006) - reviewing of themes - involves the review of developed themes, with the aim of ensuring quality checking. Every theme is checked against the associated extracts of data to make sure that every theme works in relation to coded data and the entire data set. If it does not, some codes may need to be discarded or relocated under a different theme. For example, initial proposed themes in the current study included goals, models and techniques of pronunciation instruction, and following the collection of data, these themes were further developed. According to Nowell *et al.* (2017), trustworthiness is accomplished during this phase by vetting themes and sub-themes and testing for referential adequacy by returning to raw data. This was carried out in the current study.

The sixth phase in this approach is related to the fifth and involves defining and naming themes, aiming to identify what is unique and specific about each theme. This is achieved through making sure that every theme has a single focus, does not overlap with other themes, and directly addresses research questions. Themes were defined and named, and included goals, models, methods and techniques, prioritization, feedback, assessment, amongst many others. These were also developed into subthemes, for example, subthemes in regard to models included beliefs about models, practices regarding models, and justifications for models employed.

Finally, the last phase in Braun & Clarke's (2006) analysis approach entails producing the report. This phase involves writing a compelling and complicated story about the data that shows a valid analysis. The story should be "concise, coherent, logical, non-repetitive, and interesting" (Braun & Clarke, 2006, p.23). Thus, in the current research, the themes were explained and discussed, and illustrated with accounts and direct quotations from the participants, and examples drawn from the observations, in both the narratives and cross case analysis.

3.12 Ethical considerations

Several ethical issues were considered before conducting the current study, and guidelines were consulted from the University of York, the British Sociological Association (BSA) (2017) and the British Educational Research Association (BERA) (2018). The most significant issues in relation to the current research, for instance, included consent, confidentiality, data storage and protection, and risk. The research was initially approved by the Department of Education, University of York Ethics Committee. No ethical approval from Saudi Arabia was needed, as the approval from the York Ethics Committee was sufficient to conduct the study in Saudi Arabia. However, a request for access to university classrooms was found necessary during the piloting stage. Therefore, required permission to the site was requested after participants agreed to take part in the study and before starting the classroom observations.

Participants were informed about the purpose of the study and what their involvement would entail. This occurred at the recruitment stage, prior to participants deciding whether or not to take part in the research. Participants then read an information page about the study and signed a consent form (see Appendix 11), before they participated in the study. Through the consent form, participants were assured that their information would remain confidential and that their identities would be anonymized. It was explained that any information that identifies participants would be stored separately from the data and no image or audio which may identify teachers or their students would be used in publications or presentations resulting from the research. Moreover, the participants were informed that the focus of the observation was on the teacher, and no data on students would be collected.

Interviews were conducted in a private setting in which the participants felt comfortable and able to share their opinions openly. This was in either the teachers' office or in an empty classroom at the university, at a pre-arranged time and location. With the interviews being conducted in the university setting, this ensured a familiar and public environment for the participants. Furthermore, as it was their workplace, there was minimal travel required to attend the interviews. There was no anticipated physical risk to the participants taking part in the study, or emotional risk, as the subject area was not of a personal or intimate nature. According to the BERA (2018), it is important to consider the length of interviews and the impact they might have on the participants. As a result, it was intended that the length of the interviews would not exceed an hour, to facilitate a fluid and interactive conversation which would not impact on the interviewees' time and energy. However, four participants appeared to find the topic interesting and as a consequence of their lengthy responses, the interviews were longer than planned. In such cases, since a small break was taken or the rest of the interview was rescheduled for later in the day, the participants remained engaged and enthusiastic, and the length of the interview did not appear to be problematic.

Data was stored on a password protected computer and only the researcher had access to the data. Furthermore, following recent data protection laws

(the General Data Protection Regulation [GDPR] 2018), identifiable data should not be stored for longer than it is needed. Identifiable data will therefore be destroyed following the completion of the thesis, while anonymized data will be kept for seven years. Moreover, data may be used for future analysis and shared for research or training purposes, but participants will not be identified individually.

Participants were provided with contact information in case they had any concerns about the study, although it was hoped that participants would feel able to raise any issues directly with the researcher at any one of the different stages of the study. Finally, participation in the study was voluntary, and respect to all participants was prioritized. Participants had the right to withdraw from the study within two weeks after data was collected, and they were informed of this in both the information sheet and the consent form. This was also reiterated during the different stages of the research.

Chapter Four: Narratives

4.1 Introduction

This chapter presents the rich and detailed accounts of four participants in the current study through story-telling, focusing on their knowledge and beliefs in relation to pronunciation instruction, as well as the practices adopted. The intention here is to provide an insight into teacher cognition in relation to pronunciation instruction through the voices of the teachers themselves. This approach is distinct from the cross-case analysis which is presented in the following chapter, in its focus on the most telling, individual cases detailing how pronunciation instruction is viewed and practiced. In this way, they provide a more holistic perspective in terms of themes addressed within the interviews. The next chapter explores such issues across the whole sample of participants. Before the participants' narratives are explored, the justification for the selection of these four participants is offered. In each of these narratives, following an introduction to the teaching and professional background of the teachers, an overview of knowledge, beliefs and practice in regard to themes drawn from the literature is provided. Further discussion of all cases in the current research with regard to relationships between knowledge, beliefs and practices, as well as underlying factors is provided in Chapter Six.

4.2 Selection of participants for narratives

For the narratives, four cases were selected which differ in terms of levels of experience and module taught, although it is important to note that all modules are part of English Major programs. As mentioned in Chapter One, these programs are Bachelors degrees where students specialize in English language for the purpose of teaching English as a foreign language in public and higher education. These cases have been selected as they are the most telling cases, in the sense that they are rich in data, which will assist in understanding teachers' beliefs and practices. In addition, each case participated in all four stages of the research, thus offering the most complete

sets of data. It should be noted that names have been changed for the purposes of anonymity.

Table 3: Characteristics of selected cases

Participant	Quals	Subject	Teaching Experience	Initial interview (II)	Classroom observation (CO)	Stimulated recall interview (SRI)	Final interview (FI)
Saleh	BA, MA, PhD	Sounds of English	3 years	√	√	√	√
Suliman	B.Ed., MA, PhD	English Pronunciation	4 years	√	√	√	√
Ibrahim	BA, MA, CELTA, PhD candidate	Phonetics & Phonology	2 years	√	√	√	√
Ali	BA, MA, CELTA	English Pronunciation Practice	20 years	√	√	√	√

4.3 Saleh

Saleh has been teaching for eleven years and has BA, MA and PhD qualifications. He has been teaching Sounds of English to first-year English major students at a university in Saudi Arabia for three years. In this three-credit hour module, a total of 150 minutes is spent in a language lab (see Figure 1 below) every week. The language lab is equipped with a projector, smart board, computers and an instructional technology/communication management computer system. According to the module specification, the main objective of this module is to train students on the perception, production and phonemic transcription of sounds in English. It states that “the main purpose of this course is to train students to correctly produce, perceive and phonemically transcribe English sounds” (Module specification, Case 1). The required textbook for this course, which has been designated by the department, is Marks (2008) *English Pronunciation in Use (Elementary)*.

Saleh's teaching practice is confined by the requirement to use the department-allocated textbook, however, there appeared to be some flexibility to the selection of the textbook level. Saleh had opted to use the elementary version of the allocated textbook over the intermediate version following his own observations of the students' level. Saleh's comments suggested that he did not seem to feel constrained by such a requirement and considered the allocated textbook to be a valuable aid to the teaching of this module. Saleh explained that he considers the textbook helpful because it "is very, very well written, it's a self-learning book, it has lots of very good activities" (Saleh, Initial Interview). It appeared from the observations and interviews with Saleh, however, that the textbook was not the only resource within his teaching, but rather was used in combination with other teaching tools such as online resources and the language lab.

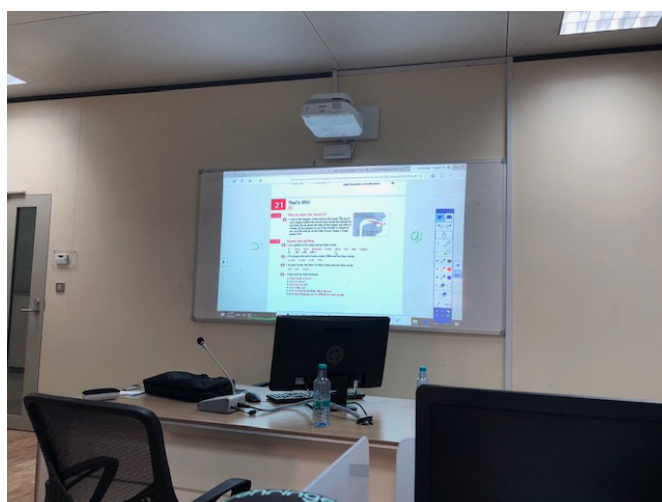


Figure 1: Classroom observation; Saleh's teaching of Sounds of English

4.3.1 Goals: *"to be intelligible"*

Saleh believes that intelligibility is the most realistic goal for pronunciation instruction. He thinks achieving native-like pronunciation, although very difficult, is not impossible. He reported that "our target is not to be native like because this might be a very difficult goal, but rather to be intelligible" (Saleh, Final Interview). He maintains that the context of learning as well as students' age are the reasons why intelligibility is the most realistic goal. He stated:

We are teaching pronunciation now in English as a foreign language context. Those students did not start learning English at an early stage, they've only started effectively to be studying English at the university level. So trying to get them to a native like level I think is very, I wouldn't say impossible task but will be unrealistic (Saleh, Initial Interview).

Saleh's attitude towards nativeness can be felt in his discussion of students who graduated from the program. He illustrated that some of his colleagues who had studied in the same context still find it difficult to communicate in English. His awareness of graduates' levels implies his stance that learning to communicate in English in this context is hard, let alone aiming for native-like pronunciation. As he explained:

You could graduate without being able to communicate in English. I mean I sit with my classmates, I still meet some of them now...we graduated and we were unable to speak in English, and they still face the same problem (Saleh, Initial Interview).

Considering the difficulty students may face communicating in English, one can only imagine how unrealistic native-like pronunciation can be to be adopted in this context. Another indication of Saleh's attitude towards nativeness was felt when he talked about "students' agenda". He explained that passing courses drives students more than learning. He said:

honestly speaking, our students are guided by their own agenda, which is passing the course, right? And that's why you know I'm trying to tell them that, okay you can pass and learn, so aim for both, right? (Saleh, Initial Interview).

Saleh's view of "students' agenda" implies his attitude regarding goals of teaching pronunciation. In a situation where students' main goal is to pass the course and the fact that Saleh tries to convince them that they can "pass

and learn” suggests that nativeness is indeed unrealistic in this context for most students. Nevertheless, in cases where students prefer to aim for a specific English pronunciation, such as American and British, Saleh gives students the chance to select any goal they prefer. He actually thinks that it is important to know how a given word is pronounced in different English accents. But eventually, he reminds students that what is most important is to be intelligible. Saleh’s attitude can be seen in the following statement:

Some of them in the beginning they say, ‘Okay we like American accents, we like British accents, should we approach or try to be native-like in American accents?’. I tell them ‘Okay that’s a good thing to do because we have words that are different in pronunciation in the different accents. But as long as you are intelligible this is our target (Saleh, Final Interview).

The possible discrepancy between Saleh’s stated beliefs and his practices in regard to goals of teaching pronunciation may be a consequence of the nature of intelligibility. That is, intelligibility is a grey area where it is not always easy to distinguish intelligibility and native like pronunciation. In other words, the construct of intelligibility is a subjective criterion and what sounds intelligible to one person, may not sound as intelligible to another. This inconsistency between beliefs and practices in regard to goals, however, can be attributed to Saleh’s deep value of native-like pronunciation. Although he established that achieving nativeness may not realistic, he appeared to still wish to inspire students to aim for native-like pronunciation, if they could. His use of the word ‘ambitious’ in the statement “we should not be overly ambitious”, seems to align with this interpretation. That is, in a situation where he feels ambitious, he would hope for students to achieve native-like pronunciation.

4.3.2 Models: “Native and non-native models are both good”

Saleh holds that selecting a good model is important in pronunciation instruction. He recommends that teachers should aim for “materials that present a good model” when teaching pronunciation (Sale, Initial Interview).

He considers both native and non-native models appropriate to use in the classroom and stated that a good model for students can be “a native model or a good second language speaker model” (Saleh, Initial Interview). He believes non-native models could potentially help students feel more comfortable with their pronunciation. He stated:

I think it's a very good point to play some of the non-native models and use them in teaching. This will help students at least feel more comfortable with their own pronunciation (Saleh, Final Interview).

British English seemed to be the most frequently used model in the classroom. This is because, as Saleh explained, the textbook used in the classroom focuses on British English. He stated, referring to the model used in the textbook, “it's the English Pronunciation in Use which is focusing on this” (Saleh, Initial Interview). He noted that other models are also highlighted in the textbook and by himself whenever a sound is pronounced differently in other models. This was actually noticed during the observation when Saleh addressed /l/ sound. He did not only stick to how /l/ is pronounced in RP as presented in the textbook, but also provided how /l/ is pronounced in American, Scottish and Irish models of English. In the classroom, Saleh tends to advise that a student must be consistent when it comes to selecting a model. That is, when a student prefers to speak with a specific accent, he should state in advance that he is using that model.

Saleh's use of native models in the recordings he played in the classroom, may also show his preference for native-like pronunciation. Yet, all this would seem to stem from his desire to build a teaching strategy where students with different goals can achieve their aims. This can be inferred from his statement, “I'm trying to set a framework for their targets” (Saleh, Initial Interview) where all students' aims can be met. As mentioned earlier, this may be related to why he appeared to encourage native-like pronunciation in the classroom rather than feeding back based on intelligibility. This seems to suggest an alignment between beliefs and practices concerning models. Whilst there was a strong correspondence between Saleh's stated beliefs and

practices in general, however, there was perhaps one mismatch relating to his presentation of non-native models. Although he believes that students should be exposed to different models, for example, he appeared to use native models in the classroom. Since Saleh is a non-native speaker who started learning English as an adult at university level, however, it could perhaps be argued that Saleh's pronunciation in the classroom can be viewed as a non-native model.

4.3.3 Prioritization: “they should cover all aspects”

Saleh believes that segmentals, interactions between sounds as well as suprasegmentals should all be taught. He stated, referring to language teachers:

I think they should focus on both the segmental level and the supra-segmental level. By segmental level I mean the sounds of themselves. Consonants and vowels and their interaction. And the supra-segmental level, they should focus on stress and intonation as well...if possible, they should cover all aspects (Saleh, Initial Interview).

In addition, Saleh believes that similar sounds, but not identical ones, in both L1 and L2 sound systems should be more prioritized, as similar sounds can pose a challenge for students. He clarified this in the following statement:

If we compare for example a sound like /b/ sound which is available in Arabic with the /p/ sound, which is a similar sound, not totally new, it's a similar sound, we find that similar sound is causing a lot of trouble for our Arabic second language learners of English (Saleh, Stimulated Recall Interview).

Saleh based this argument on theories in acquisition of second language phonology. Furthermore, he holds that vowels need more time to be acquired. He explained that he finds “students requiring much time to practice vowels”

due to the “huge gap between the vowel system between the two languages” (Saleh, Initial Interview).

There appeared to be an alignment between Saleh’s beliefs and practices concerning prioritization. He believes that segmentals, interactions between sounds as well as suprasegmentals should be all taught, but he dedicates most of the semester to segmentals. He stated that he allocates “more than 80% of the time of the course” to teaching segmentals (Saleh, Initial Interview). In relation to consonants, Saleh appeared to focus more on particular consonants in the classroom. During observation, for example, Saleh appeared to give less attention to the sound /h/ than to other consonants such as /ŋ/. Furthermore, Saleh seemed to address vowels more frequently than consonants. Saleh’s prioritization of vowels is evident in his feedback to students’ mispronunciation in the classroom. During observation, whilst the lesson was on consonants, he repeatedly explained how a vowel should be pronounced. Saleh actually reported that he spends “about seven or eight weeks for the vowels and then consonants we take about four or five weeks” (Saleh, Initial Interview). It appears, therefore, that there is a mismatch between Saleh’s stated beliefs and practices. Although Saleh believes that segmentals, interactions between sounds, as well as suprasegmentals, should all be taught, he spends most of the course time on segmental features, as he explained that there is not enough time for suprasegmentals.

4.3.4 Methods: “give the students the chance to practice”

Offering a good model and providing a chance for students to practice so they can achieve their own goals appears to be Saleh’s general view of how pronunciation instruction should be approached. Therefore, his recommendation for anyone who wants to teach pronunciation is to “aim for the materials that present a good model, either authentic materials...or language teaching materials”, which include a “description of the pronunciation process” as well as “sound recordings or video recordings”. Guided by the module specification, Saleh explained that he tends to use many of the techniques, exercises and activities offered in the textbook, which is allocated by the department and which must be used in the teaching of this

module. It is an elementary self-study textbook with the title *English Pronunciation in Use* and is authored by Jonathan Marks (2007). It is worth noting, however, that teachers can influence the selection or rejection of a textbook through “a course report” which “they have to present at the end of each semester” (Saleh, Final Interview), and in this particular case, as mentioned above, Saleh used the elementary version of the textbook to suit the students’ level.

In addition to the textbook, Saleh described taking advantage of online resources such as Computer-assisted Pronunciation Training (CAPT), as demonstrated in the following statement:

I use the BBC website which is focusing on the teaching of individual sounds, vowels and consonants. It gives very good examples and my students find it very helpful. Also, we use the website which was created by the Iowa State University which I think it’s called Sounds of Speech (Saleh, Initial Interview).

Moreover, Saleh has a tendency to use the language lab, online dictionaries, and a blackboard system. He reported that “I teach them in the lab. So, they have for example, they have online dictionaries which they can use to listen to the pronunciation of words...Since we have the internet...we access blackboard” (Saleh, Initial Interview).

The classroom observations showed that Saleh used a range of techniques in the classroom, including: descriptions of place and manner of articulation for each sound; phonemic transcriptions; read aloud techniques; imitating techniques; minimal pairs; reference to the L1 sound system; reference to challenging sounds and use of diagrams; animations and videos; and recordings of students’ pronunciation (weekly assignment). The following few paragraphs elaborate on how Saleh used these techniques.

In the classroom, during one observation, Saleh introduced the International phonetic symbol of the sound he was teaching and explained how the sound is made by using a diagram showing what articulators to use in order to

produce the sound. He also showed the students how the sound is pronounced in isolation and in words and asked students to mimic his pronunciation of the sound. He used “tactile enforcement” where he directed students’ attention to the physical sense of touching the vocal cords to determine how voiced or voiceless the sound is (See Cele-Murcia, *et al.*, 2010). Then, he provided examples of words containing the sound, and how the sound is spelled in different words. He also played the soundtracks in the textbook, so students could hear the sound in isolation and in words, as well as in sentences, and asked students to repeat after the speaker.

Although the textbook includes several exercises, during one observation, Saleh seemed to focus on a particular phonemic transcription exercise, which involved writing down words according to their phonemic transcriptions. Students took a few minutes to write down the spelling of the given phonemic transcriptions and were asked to use the dictionary to help them complete the exercise. When they had finished, Saleh selected some of the students to read aloud the words they had written. When a student was reading aloud one of the words, Saleh asked the whole class to evaluate their classmate’s pronunciation. The pronunciation was supposed to match its phonemic transcription. Although this exercise, as indicated in the textbook, requires writing down words only, the reading aloud and peer feedback elements were added by Saleh. Saleh explained that he developed this exercise in order for it to meet one of the objectives of the module, which is “for students to be able to or pronounce the IPA transcription when they see them” (Saleh, Stimulated Recall Interview).

During the same observation, Saleh then logged into an application, Sounds of Speech, which helps students to understand the formation of American English speech sounds. The application includes animations, videos, and audio samples that describe consonants and vowels in American English. Saleh then asked students to get back to their textbook to complete another exercise. In this exercise, minimal pairs were used so that students are trained to distinguish between similar sounds. Students listened to the soundtrack, and between two given words, they decided which word they had just heard. For the remaining exercises in the textbook, Saleh asked students to finish

them by themselves. After completing this exercise, students were asked to watch a video on the smartboard taken from BBC English Learning-Pronunciation. In the video, a native British English speaker talked about the sound. She explained how the sound is produced, gave examples of the sound and asked viewers to repeat after her. During the lesson and whenever needed, Saleh appeared to refer to the students' L1 sound system, giving examples of sounds or explaining the difference between sounds. He also pointed out typical mistakes made by Arab learners and explained why those mistakes are made. For example, when one of the students mispronounced the word 'decision', Saleh responded that the student should have used /s/ instead of /z/. He explained that there is a phonological reason for this mispronunciation. He stated that "when the /s/ sound is between two vowels, it tends to be a /z/, now it is between two vowels, so you find it more convenient to your tongue to say it as a /z/".

The last part of the lesson was dedicated to weekly assignments, which Saleh explained he considers to be the main technique in his teaching of pronunciation. These involved samples of students' audio recordings of words containing sounds they have learned in the classroom. Students had uploaded the samples on blackboard ready for evaluation in the classroom. Saleh described the process in the following statement:

I ask students every week to record themselves producing words which have the sounds we discussed in the relevant week...Every week, the night before we meet, on blackboard they will have to submit their sound recording, their voices, saying the words and basically for each sound they would have to provide me with three words...they know that for each sound they need to give me three words; the first word it has the sound initial position, a word in medial position, and last word in final position (Saleh, Initial Interview).

In the classroom, Saleh asked students for a volunteer and then he looked for the student's sound recording files uploaded on blackboard. Saleh played the sound recordings and asked other students to evaluate their classmate's

pronunciation of each word. Saleh also commented on the students' pronunciation and provided him with feedback on how to better pronounce a sound in a word.

Saleh's beliefs and practices regarding methods appear to be in agreement. This is evident in his views about how this module should be taught and how he actually tends to approach the module. He stated that teachers should:

Try to teach it practically not theoretically. Because I came across some... teachers who deal with this course as a content course, as theory course rather than a skill or practice course. So I would say try to teach it practically, always remember that it's a skill course (Saleh, Final Interview).

A comparison between his views about how the course should be approached and the practical methods and activities Saleh tends to use in the classroom suggests a strong match between the two.

4.3.5 Feedback: "feedback is quite effective"

Saleh believes that feedback is very important in pronunciation instruction and has an effect on improving students' pronunciation. For him, the feedback process should take different forms. He stated, for instance, that "we need to provide feedback both ways. I mean from the teacher and from the peers, the other students" (Saleh, II). Saleh explained that he provides feedback in certain situations in the classroom. Most commonly, he stated that he gives feedback when "mispronunciation is one that could hinder intelligibility" or where one word could be "mistaken for another word" (Saleh, II). In relation to peer feedback, Saleh explained that he asks students to evaluate each other's pronunciation as in the phonemic transcription exercise and weekly assignments. He reported that he finds peer feedback to be more effective than teacher's feedback since it tends to encourage students not to make the same error again. He compared peer feedback with teacher's feedback in the following excerpt:

I would say it triggers something and then when you get the feedback from the other student, you try to avoid making the same mistake again so that you don't get the same feedback from other students. Whereas from the teacher it doesn't. You know the teacher is better than you right? So when he is correcting you right? It's okay, I am a student, he is a teacher, he can correct me right? (Saleh, Initial Interview).

Beliefs and practice in regard to feedback seem to align with each other. Saleh revealed that feedback in pronunciation instruction could be valuable. He stated, for instance, that "in pronunciation teaching, feedback is quite effective" (Saleh, Initial Interview). Checking out his practices regarding feedback indicates that feedback plays an important role in the discussions of activities and assignments in the classroom. For example, in the assignment, which students have to complete every week, teacher feedback as well as peer feedback take a significant part of discussion in the classroom.

4.3.6 Assessment: "sometimes we are taught and then assessed differently"

Saleh believes that a spoken module, like this one, should be assessed on the basis of the objectives of the module. He explained that one of the issues with the module as a whole is that sometimes it is taught in one way (through speaking) and assessed in a different way (in a written form), and to solve this problem he created an oral exam. This exam takes place by the end of the semester. Saleh invites each student to his office to complete this oral exam where they must pronounce a list of given phonemic transcription. He stated:

I sit with them, I show them phonemic symbols, for words or sometimes non-words, to be able to assess...it will have to be intelligible enough for me to give them the good or the final mark for each word (Saleh, Initial Interview).

Similar to feedback, Saleh also asks students to assess each other's pronunciation. He stated that he asks students when hearing their classmate's

pronunciation to tell him “how much will you give him, if you were examining him. Say out of ten” (Saleh, Initial Interview).

As with the previous themes, Saleh’s beliefs regarding assessment seems to line up with his practices. He holds a strong opinion about the assessment of students’ oral production. He complained that one of the problems faced in the teaching of pronunciation is that students are assessed not in accordance to with the ways in which they have been taught. Subsequently, he had addressed this by introducing an additional form of assessment. Delving into his methods of assessing students’ pronunciation therefore indicates that they are in alignment with his beliefs about assessment.

4.4 Ibrahim

Ibrahim has a BA, MA, CELTA, and is currently working towards his PhD qualification. He has been teaching Phonetics for two years to third-year English major students at a university in Saudi Arabia. In this three-credit hour module, a total of 150 minutes is spent in the classroom every week. According to the module specification, one of the main objectives of this module is to enhance students’ pronunciation. It states, for instance, that “this course improves students’ pronunciation via knowledge of the features of segmental and Supra-segmental” (Module specification). The required textbook for this course, which has been designated by the department, is Roach (2010) *English phonetics and phonology fourth edition: A practical course*.

Ibrahim believes that teaching Phonetics to students is important for two reasons. First, he argued that Phonetics improves students’ comprehensibility. As he explained, “Phonetics helps students understand how they speak in a correct way, because sometimes you are misunderstood if you are pronouncing the word not in a correct way” (Ibrahim, Initial Interview). Secondly, he views Phonetics as a basis for the department’s Phonology course, which students will take the following year. He stated that this course “paves the way for them to study phonology, because before they

go to how to use sounds in sentences...they need to know how sounds are articulated first” (Ibrahim, Final Interview).

4.4.1 Goals: “to express themselves in a meaningful way”

Ibrahim recommends that teachers aim for a level where students are able to communicate successfully in English. He seems to value comprehensibility, fluency and suprasegmentals. He stated, “the level of my students I aspire for, is to express themselves freely in a meaningful way...pronouncing words smoothly, especially in connected speech...people don’t speak words, people speak sentences” (Ibrahim, Initial Interview). For this module, Ibrahim explained that his goal is to assist students to learn how to pronounce sounds. As he stated, “my objective of the course is to help students understand how sounds are articulated” (Ibrahim, Initial Interview). He considers both perception and production of sounds orally and through phonemic transcription to be important in this module. He reported that students should be able to “perceive and produce...produce in speaking and produce in writing” (Ibrahim, Initial Interview).

4.4.2 Models: “like a framework”

Ibrahim believes that a speaking model functions as a structure and helps students to be more focused. He stated, “a model...[is]...like a framework. If you picked a model and tried to find different ways to enhance the language via this model, this helps them to concentrate more” (Ibrahim, Initial Interview). Furthermore, he suggested that native models which have been designed for non-native learners should be used. He noted that students should not be exposed to “natural real-life language”, but to “language for education. Language or videos that is meant for teaching elementary non-native students” (Ibrahim, Initial Interview). He explained this preference for educational language resources, stating that natural interactions between native speakers might be more difficult initially for his learners due to their low proficiency level. As a result, “...they may get frustrated...” (Ibrahim, Initial Interview) through such interaction, which could presumably affect their learning of the language. He reported that he uses native-speaking

models including British and American, often using both in the classroom as “the course is a British accent...I myself tend to use the American accent” (Ibrahim, Initial Interview). This was confirmed during the observation, where he used recordings which sounded like British English.

Ibrahim’s selection for native speakers as models in this module may be influenced by two factors. First, he uses British English as a model because this is the model used in the textbook and is recommended in the module description. He stated this explicitly in his explanation that “we follow the British accent because this is what’s prescribed in the course syllabus” (Ibrahim, Initial Interview). Thus, his teaching methods are directly influenced by the module requirements. Second, however, Ibrahim himself feels that non-native models are not appropriate as models. He explained that non-native models could interfere “with the target language...and this may cause conflict in my students” (Ibrahim, Initial Interview). It would seem, then, that his selection of models within his teaching practice is influenced by both module requirements and personal beliefs or knowledge.

4.4.3 Prioritization: “we teach vowels and consonants”

Ibrahim appeared to believe that all spoken features should be taught to students as they are directly connected to each other. He argued, “those features are integrated...you cannot separate them and say ‘I’ll teach this in isolation’...it is difficult because it’s language” (Ibrahim, Initial Interview). Nonetheless, he did state that he prioritizes segmentals and explained that “we teach vowels and consonants. We focus on both...I start with vowels and then moves to consonants” (Ibrahim, Initial Interview). His justification for beginning with vowels related to his experience of vowels posing a challenge for students. He stated that, “I want to draw students’ attention that...they are pronounced in different ways...because vowels are a problematic thing” (Ibrahim, Initial Interview). Although he noted that all features should be taught, suprasegmentals did not seem to be part of his teaching practice. He explained, however, that he does not address suprasegmental features in this module because they are taught in another one called Phonology. He stated “Phonology is the study of relationship of sounds together. The sounds in

connected speech, stress, intonation, assimilation, all these features are taught in a different course” (Ibrahim, Initial Interview). In this module, he explained that he concentrates, instead, on the “distribution, description and articulation of sounds” (Ibrahim, Initial Interview).

4.4.4 Methods: “you must say what you see and write what you hear”

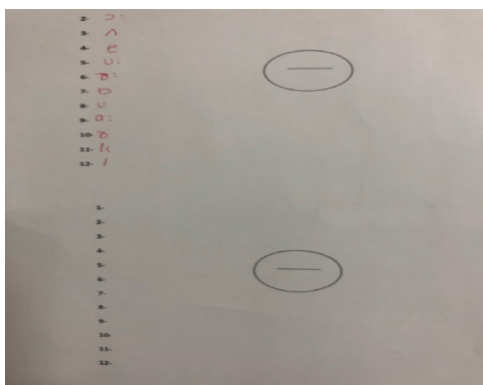
Ibrahim recommends using communicative language teaching (CLT) methods when teaching a course relevant to the spoken aspect of the language. Thus, he explained that he thinks teachers should not be limited to one method. He stated that “communicative language teaching is effective when we follow it in teaching things related to communication, like English, like Phonetics, Phonology, Listening, Speaking and so on...though we should not be like slaves to one technique or one approach” (Ibrahim, Initial Interview). In the classroom - as observed during the study - Ibrahim began the lesson by talking about the International Phonetic Alphabet (IPA). He used a phonemic chart taken from the BBC website (see Photo 2 below), alongside student worksheets.



[Photo 2: Classroom observation of Ibrahim’s teaching of Phonetics]

The chart contained English vowels on the top, and consonants on the bottom. Every icon on the chart represented an English phoneme. Ibrahim pointed at one of the vowels and asked students to guess how it was pronounced. Then he clicked the vowel’s icon to play the sound for students, as well as examples of words containing the vowel. He repeated this activity with all vowels. Once this step was completed, he provided students with a sheet containing numbers from one to twelve. Listening to a recording played by the teacher,

students were asked to write down a phonemic symbol for each of the twelve sounds (see example in Photo 2 below).



[Photo 3: Student sheet from Ibrahim's classroom observation]

Next, Ibrahim talked about articulators such as the pharynx, soft palate, tongue and velum. He provided students with a description for each articulator and elaborated on their function in speech. Afterwards, he requested that students complete an exercise in their textbook. Students were expected to accurately label the articulators on a diagram of speech organs that he had provided. Following these tasks, Ibrahim asked the students to complete an exercise where they were required to write down a phonemic symbol for each of the given words.

Despite Ibrahim's expressed support for CLT, his practice - as observed during the study - seemed to focus on describing and transcribing sounds. He frequently mentioned his "golden rule" to students in the classroom, which involves transcribing sounds phonemically. Explaining this rule, for instance, he stated in the initial interview that:

I usually tell them I have a golden rule, if you master it, you will master Phonetics and Phonology and a lot of important things. What's the rule? I tell them you must say what you see and write what you hear (Ibrahim, Initial Interview).

4.4.5 Feedback: “mistakes are the key to learning”

Ibrahim believes that speaking errors should be allowed in the classroom. This is because, he explained, “mistakes are the key to learning” (Ibrahim, Initial Interview). However, he clarified that he would correct the error if it affects comprehensibility. He therefore stated that he “usually tolerates errors...unless the error changes the meaning” (Ibrahim, Initial Interview). He stated that he usually provides feedback to the whole class; however, when the error made is not particularly common among students, he explained that he may also decide to provide personal feedback either face-to-face or directly to the student via WhatsApp. As he stated, “if the problem is not common...you can give personal feedback...you can use WhatsApp” (Ibrahim, Initial Interview). He added that the type of feedback he provides depends on whether the error is in speaking or in writing. Perhaps understandably, he noted “if they have a problem in speaking, usually the feedback is spoken. If they have a problem in writing the symbols, usually the feedback is written” (Ibrahim, Initial Interview).

4.4.6 Assessment: “written format”

Although Ibrahim explained that he believes that “correct pronunciation”, “fluency”, “accuracy” and “intonation” should all be considered when assessing students, he does not offer an oral assessment in this course. Whilst students are requested to prepare short presentations, students’ pronunciation in this activity is still not assessed. He admitted that as a consequence of this lack of assessment of oral production, on completion of the module, whilst students may be able to transcribe a sound in writing, their oral production of the sound may be incorrect. As he stated, “sometimes they write in a correct way, but their pronunciation is different and so this is a problem” (Ibrahim, Initial Interview). In this module, then, students are assessed on their ability to describe and transcribe a sound. This is potentially problematic, however, for as acknowledged by Ibrahim, whilst their perception of the sound might be achieved, their production of that sound is not assessed.

4.5 Suliman

Suliman has B.Ed. MA, and PhD qualifications and has been teaching English to EFL students for ten years. He has been teaching Pronunciation to first-year English major students at a university in Saudi Arabia for four years. In this three-credit hour module, a total of 150 minutes is spent in the language lab every week. According to the module specification, perception and production of English sounds are the main purpose of Pronunciation. It states, “the main objective is that students should be able to produce and perceive English utterances well” (Pronunciation module specification). The textbook required in this module is Hancock (2003) *English Pronunciation in Use*.



[Photo 3: Language lab; where Suliman teaches Pronunciation]

4.5.1 Goals: “being able to communicate and interact with native speakers”

Suliman seemed to have several goals in his teaching of pronunciation. He pointed out that the overall goal of teaching pronunciation in this context should be to help students to communicate in English. He stated:

A student should be able to express himself well. A student should be able to interact with, let us say, a native speaker asking questions, having a regular kind of conversation, reflecting of their culture and understanding other cultures; being able to study in English; being able to communicate and interact with native speakers in a normal way (Suliman, Initial Interview).

In addition, he explained that he thinks Pronunciation ought to develop accuracy of students' pronunciation. This was evident in his view of how the students' production of phonemes should sound. He stated, "a student must be able to produce, to utter, to say, to pronounce the sounds of English correctly, properly" (Suliman, Initial Interview). This could be also felt in his unneutral attitude towards pronunciation errors. As he explained, "mispronunciation to me is an issue that should be corrected on the spot" (Suliman, Initial Interview). Moreover, this aspiration for accuracy was apparent in his clarification of the need to correct students' pronunciation. He stated, "I don't want them to go away from me with more like fossilized mistakes...they came in here with from high school" (Suliman, Initial Interview). Suliman also claimed that he believes that Pronunciation should help improve students' listening skills. He explained that teaching students suprasegmentals will help them understand native speakers. He stated, "students encounter a big problem when listening to native speakers' material...because students are not familiar with the features of connected speech" (Suliman, Initial Interview)

Whilst Suliman had such goals in his teaching, he argued that reaching native-like pronunciation in the classroom context is unattainable. He stated, "mastering a level of a native speaker is almost impossible in the context we are teaching English" (Suliman, Final Interview). Suliman defended his argument by highlighting two issues; the difference between language acquisition and language learning, and the impact of the learning environment on language learning. Firstly, he made a distinction between language learning and language acquisition. He explained that given the students' ages, they are actually learning the language rather than acquiring it. He added, this means that those students will not be able reach the level of someone who has acquired the language before adolescence. He made the following statement:

acquisition is different from learning. Especially when you are becoming adolescent, there is no room for acquisition anymore. Anything you are getting after that will be learning. So, learning

no matter what you did, you could be really good but it's never like acquisition (Suliman, Initial Interview).

Secondly, Suliman explained that students in this context have little exposure to English. He stated "the environment in which they are living, there is no high opportunity of communication interaction using the language" (Suliman, Initial Interview).

4.5.2 Models: "students should be familiarized with various accents in English"

Suliman stated that he considers native speakers to be the most appropriate models in pronunciation instruction. He explained that native speakers use a language which is representative of the target language. He described the oral production of native speakers as "something really authentic, something coming from a reliable source" (Suliman, Initial Interview). In addition, he reported that he believed teachers should use "authentic materials" in their teaching of pronunciation. He stated that these might include, "authentic materials from magazines, newspapers, audio, I mean materials taken from the news, from movies, from whatever native speakers are involved in, to be brought up and taught in classes" (Suliman, Initial Interview). He added that students should be exposed to a range of different accents of native speakers of English, so that students are at least able to understand them when encountered in the future. He stated:

students should be familiarized with various accents in English. It is for their own good because they don't know to which country one day they will be. So even if not being able to produce to use these accents but at least they should maintain a level of comprehending and understanding them when they are exposed to them (Suliman, Initial Interview).

Suliman also highlighted the importance of being a model for his students in the classroom. He explained that whoever teaches pronunciation should be someone "who is really qualified and good at speaking" (Suliman, Initial

Interview). He talked about the negative impact of teachers' imprecise pronunciation on students' learning in the following statement:

Imagine that someone else who is teaching this course and they are making horrible mispronunciations in class and they don't know where and when to place you know stress at word level or sentence level...imagine asking the students to listen to something of native speakers and out of the blue you are the teacher saying it in like a different way. So this discrepancy is kind of confusing to the students (Suliman, Initial Interview).

In the classroom, during observation, all audio tracks played by the teacher sounded like British English. Those tracks are part of the textbook and can be downloaded online.

4.5.3 Prioritization: “familiarize students with sounds of English, stress and intonation”

Suliman believes that the main objective of Pronunciation is to teach segmental and suprasegmental features. He stated, “the main purpose is to familiarize students with the sounds of English. Students should be acquainted with the 44 phonemes, the 24 consonants and the 20 vowels, the 12 monophthongs and the 8 diphthongs” (Suliman, Initial Interview). He also added that students should be informed about suprasegmentals. He stated that students should be “familiarized with stress and intonation, features of connected speech” (Suliman, Initial Interview). He complained that he had to dedicate most of the semester to segmentals (as required by the module), when he believed that they could be taught in a shorter time so that other features could also be taught. This was evident in the following statement:

ten weeks should be dedicated to sounds of English, and the one final week should be to stress and intonation... it is not distributed like fairly over here...there should be a reduction in the teaching period of sounds of English. Because we can do them in six

weeks max...other features should be there (Suliman, Initial Interview).

4.5.4 Methods: “a student should be able to recognize, know, and pronounce correctly”

Suliman stated that language teaching should be approached through CLT methods, explaining that, “I’m a big believer in communicative language teaching” (Suliman, Initial Interview). At the same time, he argued that teachers should have the opportunity to be imaginative and inventive in their approach, not being dependent on one teaching method only but rather a mixture of methods, depending on students’ backgrounds. He explained that a teacher should use “a cocktail, a mixture of all methods...according to their cultural background, their educational background...there should be a room for creation and innovation” (Suliman, Initial Interview).

During the classroom observation, Suliman appeared to approach pronunciation features deductively, providing examples and then explaining their rules. For instance, he gave examples of sentences where some words are unstressed. He also explained that pronouns and possessives are function words, and function words are unstressed in fast speech unless a special meaning is intended by the speaker. The textbook seemed to play a big role in the classroom. Suliman described the way he teaches Pronunciation in the classroom:

They have the textbook in front of them. Then they listen to tracks. Then they are supported by clarification from me. Then, according to the nature of the activity, they are asked to do these activities whether on their own, I mean individual student, pair work or group work (Suliman, Initial Interview).

Several techniques, taken from the text, were used in the classroom during the observation, including: using poems to teach stress; listening to sound recordings; filling in gaps with unstressed words; using dark and light dots to distinguish between stressed and unstressed words; changing content words

to function words in a sentence (e.g. name of person to pronoun) on the basis of the given stress patterns; using double slashes to indicate speech units; ordering of speech units in a phrase depending on the meaning intended by speaker; reading aloud a story; and underlining stressed syllables. Despite the range of techniques used, three seemed to stand out. The first technique was the use of poems to teach stress. Suliman explained that using poetry has several advantages for the students:

Because as we know that in poetry there is a rhyme kind of thing at the end of lines or verses. And poems are liked by a big group of people so they could be funny, they could be motivating, and they have a theme, they have a message, a lesson to be sent across to the students (Suliman, Stimulated Recall Interview).

The second technique involved the use of the International Phonetic Alphabet (IPA) to teach sounds. Suliman stated that he views the IPA as valuable in the perception and production of sounds, as evident in his claim that:

It is significantly beneficial and important and helpful to the students...students are being familiarized with the sounds of English...there so many silent letters. There are many words which are not English in the first place. A number of things like that could get students confused...so with the help of IPA, a student could be able to recognize, know, and pronounce correctly a number of sounds and words (Suliman, Stimulated Recall Interview).

The third technique which was most commonly used consisted of listening to a recording, as almost all activities completed in the classroom included listening to soundtracks. Thus, Suliman's teaching practice seemed to demonstrate a preference for particular techniques, although there was evidence overall of the use of multiple techniques during the observation.

4.5.5 Feedback: “I have to double check that the student is uttering the word correctly”

Suliman did not seem to take students’ pronunciation errors lightly. He explained that not paying attention to students’ errors may result in such errors becoming permanent in the students’ use of language. He stated, “if you just turn a blind eye to a mispronunciation then it will be kind of a fossilized mistake” (Suliman, Initial Interview). As highlighted earlier, he believes that an error should be immediately corrected. He described the way he tends to provide feedback on students’ pronunciation as follows:

If the utterance is proper it’s correct, then it’s ok. If I’ve observed any kind of mispronunciation, I try to attract the attention of the student, that he should rectify the situation, by repeating it to him and asking him to chorus it, to repeat it out loud again. So I have to double check that the student is uttering the word correctly (Suliman, Initial Interview).

4.5.6 Assessment: “students ... are asked to write the spelling from this transcription”

Suliman complained that in this module students are assessed via written format. He described the way students’ assessment in the following excerpt:

Listening to some tracks, they provide answers on a sheet of paper, this is one part of the test. The other part of the test is written, they have kind of questions to they respond by writing... students are given the transcription of five words and they are asked to write the spelling from this transcription. Or it could be the other way around. Or it could be like giving them two options of transcriptions of one word and they select the correct answer (Suliman, Initial Interview).

Provided that students in this module are assessed via written exams only, Suliman seems to have some reservations about that. He explained that oral exam should be part of the assessment. He stated, “there should be room for

that... at least 10 marks should be assigned to production” (Suliman, Initial Interview).

4.6 Ali

Ali has got BA, MA and CELTA qualifications. He has been teaching English pronunciation for twenty years. He has been teaching English Pronunciation Practice since 2014 to first-year English major programs, who are expected to teach English in the Saudi public or higher education. In this three-credit module, a total of 150 minutes is spent in the classroom (see figure 4 below) every week. According to the module specification, the main objective is to improve students’ perception and production. It states that the module “aims primarily at training students to both pronounce and understand English pronunciation” (module specification, Case 4). According to Ali, this module “was meant for future teachers... they should learn pronunciation and also then they should be able to teach pronunciation when they graduate” (Ali, Initial Interview). The required textbooks, which have been designated by the department, are English Phonetics and Phonology by Peter Roach and Pronunciation in Use by Mark Hancock.

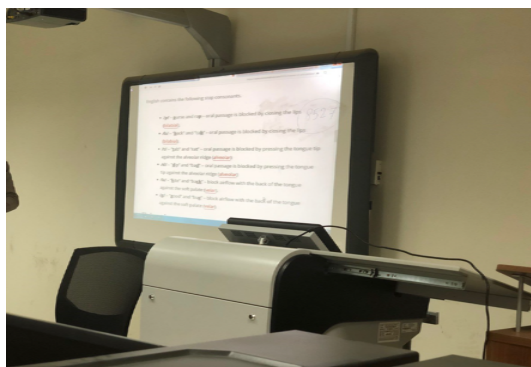


Photo 4: classroom Ali used to teach the module Teaching Pronunciation

4.6.1 Goals: “to pronounce... in [an] acceptable form... that people could understand”

Ali believes that comprehensibility, which refers to the understanding of an utterance (Derwing and Munro, 1997), should be the goal for teaching pronunciation. He explained that after completing this module, students’

pronunciation “should be understandable” (Ali, Initial Interview). He added that students “should be able to pronounce the words in acceptable form or standard form that people could understand” (Ali, Initial Interview). According to Ali, given that students in this context are learning English rather than acquiring it, aiming for native-like pronunciation can be difficult. Although Ali wishes that students would aim for native-like pronunciation, he finds such a goal unattainable. He stated, “that is actually the standard that we want to achieve, but the problem is that learning English and acquiring it is a different thing” (Ali, Initial Interview). This suggests that Ali seems to adhere to the critical period hypothesis (Lenneberg, 1967), where leaning a language as an adult cannot be the same as acquiring it at an early age. Furthermore, Ali believes that students are not only expected to learn about English pronunciation in this module, but also take what they learn in this module and apply it in their teaching of English when they graduate from this program. He stated that students “must be able to teach pronunciation to prepare the coming generations for speaking accurately, for speaking competently and confidently” (Ali, Initial Interview). That’s maybe why Ali believes that teaching pronunciation to groups. To Ali, this module seems to be also part of a preservice teacher education training.

4.6.2 Models: “they should be exposed to different pronunciations”

Ali considers using a model in the teaching of pronunciation important and helps teachers to be systematic. He stated, “we have to have some models... we have to have some standards. If we don’t have any standards, what can you teach... so to be systematic, we focus on these things” (Ali, Initial Interview). In addition, he believes that students ought to be exposed to different accents, so that students can understand users of those accents when they encounter them. Ali stated that “we say that they have to be exposed to different accents...they should be exposed to as many accents as possible because this is a world of globalization, in which various nations and various people are using English” (Ali, Initial Interview). Ali considers the teacher to be a model and therefore their pronunciation should be precise. He stated “the teacher is a model for the students. They have to copy him. If his

pronunciation is not accurate or he's not competent enough to teach that pronunciation, that will cut a sorry figure" (Ali, Initial Interview).

Ali reported that in this module the focus is mainly on British and American models of English. Because Ali also teaches Listening and Speaking, another module in the in the same program, he mentioned that students are exposed to native and non-native models including British English, American English, Indian English, Japanese English and Chinese English. He stated that in Listening and Speaking module, students "are exposed to various pronunciations. Multiple pronunciations, like American pronunciation, British pronunciation, and sometimes there are conversations in English of the multilingual people... from Japan, from China, so they are exposed to various accents" (Ali, Initial Interview). During classroom observation, students were exposed only to British English. Interestingly, during one of the lessons I observed, a student raised a question about the different accents of English. His question was about how different speakers with different accents may differ when producing the same sound. Ali seemed to suggest that using a British model alone to teach pronunciation to beginners is adequate since phonological variations between different models are not that big to worry about at this stage. In addition, Ali believes that exposing students to different models at an early stage may confuse students. Ali's response to the student's question was as follows:

This course basically British pronunciation. Actually, there is no big difference. We have some differences but not very big differences...If you want to focus on one accent, then you can understand the variations if there are any...we will take some American, but we have to go step by step. Otherwise, there will be confusion (Ali, Classroom Observation).

Furthermore, Ali added that British model is used in this module because the designated textbooks adopt British English. He stated, "we are focusing on the British system of phonology because Peter Roach is British and then we have another book which is also British" (Ali, Classroom Observation). Thus, he thinks that more American pronunciation should be added to the

module. He stated, “because now pronunciation is not confined to British, obviously American pronunciation is also popular, so I would suggest some changes... some elements of American pronunciations should be there” (Ali, Final Interview). A comparison between Ali’s beliefs and practice in regard to models, suggests a mismatch between the two. Whilst Ali believes that students should be exposed to different models, British model is mainly used in this module. As mentioned above, his justification for that is that students at the beginning should be exposed only to one model so they are not confused.

4.6.3 Prioritization: “vowels are sometimes challenging for the students”

Ali believes that when teaching pronunciation, the focus should be on segmental features. He stated, “when we teach pronunciation, our primary focus is on sounds” (Ali, Stimulated Recall Interview). Thus, he maintains that vowels need to be given more priority than consonants since vowels are more challenging and more complicated than consonants. He stated, “consonants are not so complex but vowels, the use of vowels is very complex...vowels are sometimes challenging for the students” (Ali, Initial Interview). Therefore, Ali thinks students should be first exposed to consonants and then to vowels, starting from something easy and then proceeding to the more complex. He stated that students should be “familiar with consonant sounds...so in the beginning they feel easier with consonants” (Ali, Initial Interview). In addition, Ali reported that students should be familiarized with articulators and the way sounds are made. He stated, “a student must be able to understand the places of articulation, what are the organs they have to use while producing sounds or making utterances... the manner of articulation, how [a] sound is produced... [and about] voicing” (Ali, Initial Interview). Furthermore, Ali feels that a pronunciation course should also shed light on how words are spelled. He stated that students “should be able to distinguish between the words where the sound is the same, but the spellings are different” (Ali, Initial Interview).

During classroom observation, what seemed to be prioritized by Ali appeared to be segmental features, articulatory description of consonants and vowels

such as voicing, place of articulation, manner of articulation and drilling. It looked like that each lesson was divided into two parts; theoretical and practical. In the theoretical part, Ali would begin with introducing the phonemic symbol of a sound. Then, he would talk about the articulators students must use to produce the sound. After that, he would explain the way the sound is made. Next, he would talk about voicing. Following that, he would introduce the next sound, but also compare it to the previous one. Ali tends to introduce each category of sounds together. For example, he would talk about bilabial sounds together, describe them and compare them with each other in relation to voicing, place of articulation and manner of articulation. In the practical part of the lesson, Ali would guide students to do activities and exercises related to each sound including listening to audio tracks, exercises to distinguish between letters and sounds and spellings of sounds.

Ali's beliefs regarding priorities seem to line up with his practices. He highlighted the importance of familiarizing students with the distinction between letters and phonemic symbols. He reported providing students with articulatory phonetic information about each sound and he appeared to focus on that during observation. Classroom observation took place in the beginning of the semester and during observation he began with consonants before vowels. In addition, during observation, he led students to complete activities involving listening to audio-tracks and spelling exercises.

4.6.4 Methods: “mix different methods to achieve the target or the desired goal”

Ali believes that teachers should not be restricted to one method but to a mixture of methods when teaching pronunciation. He reported that teachers should use “[an] eclectic method, in which you mix different methods together to achieve the target or the desired goal...we cannot focus on one method only” (Ali, Initial Interview). Ali also believes that teachers should use different tactics in the classroom. He reported that “there are different strategies which [teachers] have to follow, like pairing, sharing, grouping, group activities, conversation” (Ali, Initial Interview). In addition, Ali thinks

that a teacher should help students speak more often than the teacher. he stated “there should be less TTT and more STT. TTT means teachers’ talking time. It should be reduced gradually. STT, this should be increased. The students’ talking time should be increased” (Ali, Initial Interview).

Ali reported using a number of methods in English Pronunciation Practice. IPA symbols seems to play an important role in his teaching. He stated, “we have to actually focus on the symbols. The consonant symbols and the vowel symbols... transcription of words...from English to phonemic symbols [and] from phonemic symbols to words” (Ali, Initial Interview). He explained that one of the benefits of teaching the IPA to students is to help them use the dictionary and be able to read the phonetic transcription of any word. He stated the following:

so later on, they use a dictionary right and find the symbols over there... they should be able to decode them... it will facilitate learning how to use a dictionary for learning pronunciation and the correct pronunciation of a word (Ali, Initial Interview).

In addition, Ali mentioned that he gives emphasis to drilling, which he refers to as continuous repetition of a sound, “saying it again and again” (Ali, Stimulated Recall Interview). He explained that such an activity helps students learn pronunciation. He stated “they have to listen, they have to repeat. So, this is how they learn pronunciation in a better way” (Ali, Initial Interview). He added that the reason for focusing on drilling is that some sound in English are not in their native language. He stated, “some of the sounds are not there in Arabic so that’s why the focus was on drilling” (Ali, Final Interview).

There are also other activities which Ali reported using in the classroom including podcasting, presentation, and tactile/auditory reinforcement techniques. In podcasting, students are asked to upload an audio-file of their recorded conversations. Ali described this activity in the following quote:

They should record their conversation... then they upload it in our Dropbox... sometimes they have written dialogues and they have to record it...recording is not instant; they have to practice it. So, they have to practice it and then they record it and then they upload it” (Ali, Initial Interview).

Students are also asked to give a presentation before the class. In the presentation, students come up with examples of words containing specific sounds and explain how sounds in those words are produced. Ali talked about the nature of presentations in the following quote:

[students] prepare some vocabulary words. They have to say it in the same way it has been taught. For example, I say ‘Ok, you have to bring ten dental sounds’... so when they say these ten words before the class, the [other] students also learn (Ali, Initial Interview).

In the tactile and auditory reinforcement technique, Ali asks students to touch their vocal cords to feel the vibration of voiced sounds. He stated, “I say ‘put your fingers in your ears and then say the words’... Adam’s apple, you put your fingers on it” (Ali, Initial Interview).

Furthermore, beside the two required textbooks mentioned above, Ali reported using several resources in the teaching of this module, including a language lab, a blackboard system, and social media applications. Ali mentioned that the language lab is equipped with computers connected through a software where Ali can communicate with students, and students communicate with each other. Students can use pronunciation training software, online dictionaries as well as websites on pronunciation instruction. He stated, “in the language lab, we have computing facilities where they can use dictionaries, we can use various websites for learning and teaching pronunciation...we have some pronunciation programs...they can use headphones and they can also interact with each other” (Ali, Initial Interview). Ali uses the blackboard system to send videos and links to different websites to his students, and students can upload their assignments

onto the blackboard. He described how he uses the blackboard system in the following quote:

upload different videos, different links to different websites...that is very useful for the students because they have everything in there, easy access. They can do it at home, they can do it in the classroom. Even on the mobile they can do it (Ali, Initial Interview)

In the beginning of the lesson, during observation, Ali briefly reminded students about the previous lesson, in which they were introduced to the IPA. On a sheet of paper with a list of phonemic symbols of consonants Ali had distributed previously, he asked students to tell him what the sound he was pointing at is called. One student responded that the sound is /p/. Ali then asked, “from where do you produce this sound?”, and another student replied “from the lips” (Ali, Classroom Observation). Ali asked the same questions about /b/ and how different it is from /p/. Both Ali and students agreed that whilst /p/ is produced with a lot of force, /b/ is produced with less force. Ali then told students that because these two consonants are articulated using lips, they are called bilabial sounds. Following that, Ali asked students to give him examples of words containing bilabial sounds. Ali did the same with the rest of consonants; dentals, labiodentals, palato-alveolar, fricatives, affricates, glottal discussing with students the name of consonant and its place of articulation.

Afterwards, Ali asked students to open their textbook, *Phonetics and Phonology* by Peter Roach, and asked them to look at a chart of phonemic symbols along with their places of articulation. Next, he asked students to do an activity where they write down the phonemic symbol for each consonant along with its place of articulation. Later, Ali displayed a phonemic chart of consonants on the smartboard and did a recap to names of symbols and their places of articulation. He reminded students that the reason for studying the phonemic symbols is because some letters in English may sound differently. He explained that for example the letter C could be pronounced as /s/ or /k/ and using phonemic symbols could help them learn how words are

pronounced. After that, Ali played a recording of a speaker producing consonants and asked students to repeat after the speaker in the recording.

Next, Ali asked students to open the second textbook, *Pronunciation in Use* by Mark Hancock (2003). He talked briefly about the difference between letters and sounds and to give examples he read out loud examples of word pairs which have the same pronunciation but different spellings such as buy and bye, weak and week, write and right. He then told students that every word must have a combination of consonants and vowels. On the smartboard, using an online dictionary, he showed students examples of words and their phonemic transcription. Ali, subsequently, played a recording of words which have the same sounds but different spellings. After that, he asked students to complete an exercise where students have to write down the number of sounds in each of the given words as well as the order of consonants and vowels. Then, Ali asked students to complete the next exercise where they listen to a recording of word pairs words and decide whether the given words have the same initial sound. Next, students listened to a recording producing a list of phonemes in English and were asked to decide if they have a similar sound in their first language.

In the following lesson, Ali followed a similar pattern to the previous one. He did a recap of what students had studied previously and then introduced them to manner of articulation, defining and providing examples of plosives, nasals, fricatives, approximant and lateral. He used a chart in Peter Roache's book to further explain more places and manner of articulation of consonants. Ali then asked students to open the other textbook *Pronunciation in Use*. Students were asked to move to vowels /eɪ/ and /æ/. With Ali's guidance, students completed several activities. These included listening to a speaker in a recording producing the two vowels alone and in minimal pairs and repeating after him and the spelling of words including these two sounds.

There seems to a discrepancy between Ali's beliefs and practices in regard to methods. Although he reported using several methods, he appeared to some of them during observation. He used, for example, IPA symbols and phonemic transcription, phonemic charts, articulatory description of

consonants, listening to recordings, repetition after the teacher as well as the speaker in the recordings, minimal pairs, online dictionaries and spelling exercises. However, podcasting, online pronunciation training software, videos were not used during observation. It seems that the reason for this mismatch is that Ali cannot currently use the language lab. He stated, “unfortunately there is a shifting of the college. Before, we were in the old building. In that everything was there. Now, they are fixing the lab” (Ali, Initial Interview). Not being able to use the language may have prevented Ali from using many of the methods he had reported using.

4.6.5 Feedback: “I don’t believe in correcting the mistakes on the spot”

Overall, Ali did not seem to view feedback to pronunciation a lot of thought in his teaching of this module. Thus, he believes that when a student makes a pronunciation error, they should not be provided with feedback immediately. He stated, “I don’t believe in correcting the mistakes on the spot because the students sometimes do not feel, that he is being criticized or being corrected before all the students here” (Ali, Initial Interview). He reported that he tends to postpone providing students with feedback to their pronunciation errors, and that he usually talks to them in private when they need feedback. He stated, “we delay it for an appropriate time... sometimes we call them to the office...in the office hours, we can correct the mistake” (Ali, Initial Interview). He also mentioned that sometimes he provides feedback indirectly by asking a student to produce the sound that had been mispronounced by another student. He stated that feedback is provided:

indirectly through his classmate... we chose one of the best students and he has to say the same word again. The students who have made a mistake in that, he’ll listen to that. Then, again, we shift over to him (Ali, Initial Interview).

During observation, Ali appeared to give feedback to students in one situation only. When he asked students to complete an exercise in which they had to write down phonemic symbols of consonants, he moved around the classroom and asked them to produce the sound of each symbol. Whenever a student

was unable to produce the sound or incorrectly pronounce the sound, he would correct them. The feedback appeared to be private and directed towards only the involved student. Ali's beliefs and practices regarding feedback seemed to be in agreement with one another. This evident in his beliefs as well as his reported and observed practices regarding feedback in the teaching of this module.

4.6.6 Assessment: "there is no hard and fast formula to evaluate their spoken language"

Ali did not feel quite happy with how pronunciation is assessed in this module. He had issues with the distribution of marks in this module as well as the absence of oral assessment. He explained that English Pronunciation Practice is assessed through formative and summative methods. Ali stated that whilst in the formative method "we are evaluating [students'] performance with the passage of time... we have 40% for formative assessment... we assess them through classwork, their group activities, for their group activities, for their peer activities, for assignments" (Ali, Initial Interview). The summative assessment is "60% marks...because they have a final exam. In the final exam, we have to cover the whole course" (Ali, Initial Interview). He seemed to disagree with more marks being given towards the summative assessment than to the formative assessment. He stated "at least 60% should be formative, in which we should observe their classwork, their activities. The 40% should go to the final exam" (Ali, Initial Interview).

Furthermore, Ali seemed unhappy that there is no oral assessment of students' pronunciation. He mentioned two reasons to why there is more focus on written exams than on oral assessments. First, assessment of oral production is challenging for the lack of clear guidance on how to do that. He stated, "there is no hard and fast formula to evaluate their spoken language" (Ali, Initial Interview). Second, teachers' evaluation of students' production, therefore, can be unobjective. He stated, "the evaluation becomes subjective... it depends on his likes and dislikes" (Ali, Initial Interview). Ali's disapproval of how pronunciation is assessed within this module suggests that there is a mismatch between his beliefs regarding assessment of

pronunciation and his practices which are guided by the module's specification.

4.7 Conclusion

This chapter aimed to provide a sample of cases and a summary of knowledge, beliefs and practice in regard to goals, models, prioritization, methods, feedback and assessment related to pronunciation instruction. These four cases - which were represented through a narrative inquiry approach - were selected as they were the most telling, which could help provide an insight into the context as well as other associated factors which may have an impact on how pronunciation was approached. This will be taken further in the cross-case analysis and the discussion chapters.

Chapter Five: Cross-case analysis

5.1 Introduction

This chapter is the result of the cross-case analysis, which involved all fifteen cases. Participants' perspectives and positions are presented in relation to pronunciation instruction, with the aim of providing a summary and a discussion of the recurrent themes that have emerged from the analysis of the cases. Recurrent themes emerged regarding participants' perspectives and positions in relation to pronunciation instruction have been categorized into six core themes, including perceptual training vs production training; technology enhanced pronunciation training; achievability; prioritization of pronunciation features; feedback to students' pronunciation and knowledge of L1 and L2 phonology. The following chapter takes the discussion further by relating the findings of teachers' perspectives and positions towards pronunciation instruction to teacher cognition, looking at relationships between teachers' knowledge beliefs and practice as well as underlying their factors.

5.2. Perceptual training vs production training

The literature has shown that teachers tend to use one of two approaches within pronunciation instruction; perceptual and production training. Perceptual training refers to techniques which aim at improving the perception level of sounds. This includes the identification of sounds through the use of IPA symbols, phonemic and phonetic transcription, exposure to native models, and discrimination between sounds through minimal pairs. Production training, however, is concerned with techniques which focus on the development of production, such as imitation, reading aloud and dialogues. Amongst the participants within the current study, thirteen of the fifteen participants reported using perceptual training more than production training within their teaching. All thirteen participants acknowledged, however, the importance of using both types of training. Abdulhameed, for

instance, noted that he should pay more attention to production. He stated, “I need to do something a bit more than just telling them about the sounds, I should ask them to produce sounds” (Abdulhameed, Initial Interview). Similarly, Suliman expressed the need to provide students with more opportunities for production. When asked whether there was anything he would do to improve his teaching, he claimed, “I would create a room for more production...in classes” (Suliman, Final Interview). Likewise, Saleh reported that the aim of pronunciation instruction is to improve students’ perception and production. He commented:

One of the main important goals of the course as set out in the syllabus, is that for students to be able when they hear English words, they should be able to transcribe them. So both perception and being able to perceive the sounds and put them in symbols and also production (Saleh, Initial Interview).

He felt, therefore, that there should be more of a balance between perception and production training. He explained that he was planning to introduce more production training into his classroom practice:

I’m currently trying to do production exercises relying on what I’m doing in class but if I can add more, I will add production exercises that are relying on tools that have been designed specifically for this purpose (Saleh, Final Interview).

In terms of actual practice, perception-based training appeared to be evidenced in twelve of the thirteen classrooms. One, for instance, was found to employ production training techniques more often (in addition to the other two participants who both reported using, and were observed employing, production-based training). The overwhelming majority of teachers, then, adopted perceptual training more often than production training. The teachers seemed to focus more on having the students acquire the sounds through perception training. Most teachers, for instance, utilized the IPA to teach consonants and vowels. For example, while observing Ibrahim’s classroom, he asked students to write down the IPA symbols of a given twelve

consonants on a sheet of paper. He played a recording of someone who sounded like a native speaker of English, to which students listened and wrote down the IPA symbols of the twelve sounds they had heard. Even when teaching supersegmental features, the majority of teachers tended to focus on perception through, for example, listening to recorded audio. For instance, Suliman's teaching of intonation appeared to involve playing a recording of a native speaker producing the phrase 'children drive slowly' with different intonations. It seemed that the purpose of this technique was to help students recognize what intonation is and how it could affect meaning. Furthermore, listening appeared to be the main tool to help students perceive sounds. The relationships between knowledge, beliefs and practice with regard to type of training, as well as the factors underlying these, will be discussed further in Chapter Six.

5.3 Technology enhanced pronunciation training

The literature has shown how technology plays an important role in pronunciation training (Thomson, 2011), and this seemed to be supported by the findings in the current study. All fifteen participants regarded the use of technology for the purpose of pronunciation instruction to be important either by stating that verbally or through their use of it during observation. In terms of actual use of technology, thirteen participants either reported or were observed using it. Omer, for example, noted that "technology enhance[s] your teaching, helping you to teach well" (Omer, Initial Interview). Abdulmajeed also mentioned that technology helped him in his teaching. He commented, "in my setting, for example, this semester they have set up a very good lab... It really helps me a lot" (Abdulmajeed, Initial Interview).

Six participants discussed in detail their use of technology in the classroom. The participants gave a range of examples of the specific ways in which they found technology to be supportive in their teaching of pronunciation. For instance, Ali commented on the advantage of using the internet to prepare for lessons and to add practical activities for students. He stated:

Beside books, you have many many websites. We have Voice of America. We have BBC language programs and language websites. They offer very useful materials for the teachers, as well as for the students. The teachers, they can prepare even the lesson plan for teaching pronunciation and the students, they can have a lot of practice from these websites (Ali, Initial Interview).

Saleh found technology helpful for developing students' pronunciation, not only through listening to recordings, but also through watching real people's pronunciation, especially in the teaching of vowels. He commented that the:

BBC is a very good website... because it's a human pronunciation, rather than automated or... So, they just see a video with a human or a person saying the sounds rather than listening... So, they see the actual movement of the mouth, for example, this is very good for the vowels (Saleh, Stimulated Recall Interview).

Four participants also reported having access to language labs, which included projectors, smartboards, and computers connected to centralised communication systems. Such facilities appeared to be important in offering all-encompassing technology which could strongly support the teaching of pronunciation. In the case of Saleh, for example, he reported that if it was not for the installation of the language lab, he would not be able to apply many of his beliefs. Saleh explained this in the following quote:

Quite recently...the lab was introduced, had you interviewed me before this semester, I mean I would not be able to say that. I would have lots of things that I could not apply... this semester we have the lab, so I was able to do all these things (Saleh, Initial Interview).

Similarly, Suliman confirmed that a language lab is important to help in the teaching of pronunciation. He viewed the language lab as "contributing to the facilitation of the course" (Suliman, Initial Interview).

In general, the teachers in the study explained that they used technology for two main purposes. First, teachers appeared to use technology for the aim of exposing students to native models, through listening to recordings brought either from the internet or materials which are accompanied with the textbook. Second, it was also used for the purpose of teaching IPA symbols. A typical example wherein technology was used to teach IPA symbols was in Ibrahim's case. During observation, he appeared to use a smartboard connected to the internet to present the IPA symbols. He then explained how each symbol is produced and provided examples of words which contained the sound being taught (for more details, see Ibrahim's narrative on methods).

Although technology was reported to be important in the teaching of pronunciation, this was not available to all teachers. For example, Ali reported that he used a variety of apps and software to assist him teaching pronunciation. However, he was not able apply some of his reported practices, he had mentioned in the initial interviews, because the language lab was not available during the time of observation. He stated:

because there is a shifting of the college. Before, we were in the old building. In that, everything was there. Now they are fixing the lab again. They have brought the material from that lab here and now we are to install that lab here. So, unless they are reinstalled, we don't have access to that (Ali, Initial Interview).

Shareef complained that there is no language lab in the college where he teaches a Phonetics and Phonology module, which he thinks is crucial for the teaching of pronunciation. He stated, "we don't have a language lab...it is important that these students are learning pronunciation...so [it] must be installed somewhere in the college" (Shareef, Initial Interview).

Where technology was available, only two teachers seemed to fully exploit technology in their teaching of pronunciation. For example, online dictionaries had been reported to be used only by Saleh and Ali. Yet, it was only Saleh who appeared to actually use online dictionaries in the classroom

during the observations. He reported that students use “online dictionaries which they can use to listen to the pronunciation of words” (Saleh, Initial Interview). Furthermore, Ali and Saleh reported using technology for the purpose of uploading recordings of students’ own pronunciation; however, again, Saleh was the only one who appeared to use it in the classroom during the observations. He explained that he tends to give his students weekly assignments through the use of technology. He stated, for example, that:

every week, the night before we meet, on blackboard they will have to submit their sound recording, their voices, saying the words and basically for each sound they would have to provide me with three words, all the time (Saleh, Initial Interview).

Other forms of technology discussed included speech recognition apps, which were reported to be used by Ali. He explained that he uses two such apps, called Sppechace and Sanako Pronounce App, for providing feedback to students’ pronunciation. However, the researcher did not observe his actual use of these apps during the classroom observation.

Although technology was viewed to play a significant role in the teaching of pronunciation and can assist teachers in different ways, it was evident that technology was not fully exploited in practice. It is important, then, to explore the limited utilization of technology to teach pronunciation through looking at relationships between knowledge, beliefs and practice, as well as underlying factors (see Chapter Six).

5.4 Achievability

The findings seemed to indicate that for fourteen of the teachers in the study, native-like pronunciation was felt to be highly unachievable. This was evident in the claims of Saleh (mentioned previously in Chapter Four), for instance, as well as Suliman, who commented that achieving this level “is really kind of very tough” (Suliman, Initial Interview). Furthermore, Abdulmajeed, for example, argued that teachers should not aim for native-like pronunciation since it is an impossible target. He stated that:

You can't aim for native-like of course, the highest aim is becoming like a native speaker, but you can't do that right! This is very rare. I mean by learning a second language, a few people might claim they are native-like (Abdulmajeed, Initial Interview).

Therefore, Ali (as mentioned previously in Chapter Four) explained that students should not be pushed to achieve native-like pronunciation since such a goal can be difficult to attain. He pointed out that there should be a distinction between first language acquisition and the learning of a foreign language. He stated, "the problem is that learning English and acquiring it is a different thing" (Ali, Initial Interview). Likewise, Majid finds it unnecessary to aim for native-like pronunciation. He said, "I don't believe that they have to be native-like speakers, but I want them to communicate in English with no problems at all" (Majid, Initial Interview). Similarly, Qassim suggested that there is no need for having students speak like American or British people. He stated, "it's not easy to bring them to have the accent as the people are speaking, Americans or British" (Qassim, Initial Interview). In agreement with this, Mahmood also recommended that students should not aim for native-like pronunciation. He implied this position by stating that students "don't have to force themselves to speak like a native speaker" (Mahmood, Initial Interview).

Achievability of native-like pronunciation seemed to be adopted in Shareef's case only. He explained that his aim of teaching of pronunciation was to help his students reach a level where they sound like native speakers. He stated, "when somebody listens or somebody hears the learners, they feel that the speaker is a native speaker" (Shareef, Initial Interview). Although achievability of native-like pronunciation was viewed as difficult by the overwhelming majority of participants, they varied in their aims of teaching of pronunciation. Four participants, for example, adopted intelligibility as their goal for pronunciation instruction. Saleh, for instance, explained that since native-like pronunciation is unlikely possible, he chose intelligibility as his goal. He stated, "our target is not to be native like because this might be a very difficult goal, but rather to be intelligible" (Saleh, Final Interview).

Similarly, Omer considers having his students easily understood more important native-like pronunciation. He said, “For me it is not about how good you are speaking like a native speaker, but the message should be passed on” (Omer, Initial Interview). Likewise, Ali sought after helping his students produce intelligible pronunciation. He explained that students ““should be able to pronounce the words in acceptable form or standard form that people could understand” (Ali, Initial Interview). Furthermore, Mahmood seemed to value intelligibility as a goal. This was concluded from his position regarding pronunciation errors. He warned that students should be corrected when they “speak a very strong accent and other people can’t understand them” (Mahmood, Initial Interview)

There were two participants who adopted intelligibility as well as fluency in their teaching of pronunciation. For example, Ibrahim explained that he did not only want his students to be understood but also pay attention to fluency. He commented, “the level of my students I aspire for, is to express themselves freely in a meaningful way...pronouncing words smoothly, especially in connected speech...people don’t speak words, people speak sentences” (Ibrahim, Initial Interview). In the same way, Taha demonstrated that he values fluency and intelligibility. He said that his aim is “to make our students speak the language fluently. At least they should use the language in order to make others understand them” (Taha, Initial Interview). One participant (Ahmed), however, adopted fluency alone in his teaching. He explained that his goal “is to make them capable of speaking English fluently” (Ahmed, Initial Interview).

In addition, three participants adopted fluency and accuracy. For example, Waleed seemed to improve students’ fluency and accuracy. He stated, “we focus on fluency and accuracy” (Waleed, Initial Interview). Similarly, Khalid reported that his aim of teaching features of pronunciation is accuracy and fluency. He said:

their pronunciation should be accurate. They must use the features of connected speech, like they should know where to put stress. They also know intonation, how to apply intonation in speaking” (Khalid, Initial Interview).

Likewise, Abdulhameed explained that he expects learners to be role models for their students in the future and therefore must be accurate in their pronunciation. He stated:

Level of accuracy must be 100%, they are models, they are teachers, this means that their learners will depend on what they see and hear, and they will imitate what their teachers will say and this is mostly sounds and words in context (Abdulhameed, Initial Interview).

Furthermore, two participants seemed to adopt accuracy as their aim in their teaching of pronunciation. For instance, Suliman (as explained in Chapter four) is not tolerant towards pronunciation errors. He stated, “mispronunciation to me is an issue that should be corrected on the spot” (Suliman, Initial Interview). Likewise, Majid feels that the audio-lingual method as the most appropriate in the teaching of pronunciation, a method known for its focus on accuracy. He said, “I know about the audio-lingual method. I believe it is one of the best methods in teaching pronunciation” (Majid, Initial Interview).

It seems that the fourteen participants do not see native-like pronunciation to be achievable, despite the fact that their practices indicate that it is. It is therefore important to understand the lack of connection here, through exploring the relationships between knowledge, beliefs and practice, and the underlying factors here (see Chapter Six).

5.5 Prioritization of pronunciation features

Previous research has tended to demonstrate the superiority of segmental over suprasegmental features (Collins & Mees, 2003; Jenkins, 2000), and the findings from the current research, with regard to classroom practice, initially appeared to support this. It was also shown, however, that teachers seemed to have different attitudes towards prioritization of features. The prioritization of segmental features in some of the teachers’ classroom practice did not necessarily relate directly to the belief that segmental features

were more important than suprasegmental features. Five participants explained, for instance, that it was not a matter of importance, but rather a matter of order, that is, it would seem necessary to teach segmental features before suprasegmental features. Abdulmajeed reported, for example, that beginners cannot learn about suprasegmental features before learning to speak the language. He stated that:

They are equally important. If, for example, somebody has suprasegmental features and he doesn't know about words and consonants and vowels, there is no benefit. If someone does not know the language, there is no logic of teaching him intonation and stress (Abdulmajeed, Initial Interview).

Ahmed reported that students should be introduced to suprasegmental features only after being taught segmental features. He stated, “vowels and consonants are basic...stress and intonation, these are things which come later” (Ahmed, Initial Interview). In the same way, Taha considers segmental features to be the basis for learning suprasegmental features. He commented that segmental features are “considered to be a basic grounding for the learners in this stage” (Taha, Initial Interview). Mahmood mentioned that suprasegmental features are to be taught afterwards. He stated, “these [suprasegmental features] come last for me” (Mahmood, Initial Interview). Similarly, Khalid reported that students should learn segmental features first. He stated that:

from the very beginning, the students must know the difference between vowels and consonants and also types of vowels...so I suggest the first part should be focused on vowels [and] consonants (Khalid, Initial Interview).

For other teachers (three participants), segmental and suprasegmental features were believed to be equally important and should be taught together, rather than prioritizing one over the other. For example, Majid reported that both features should be taught. He stated that this was “because segmental features focus on each sound by itself where suprasegmental features focus on a group

of sounds” (Majid, Initial Interview). Likewise, Saleh stated that teachers “should focus on both the segmental level and the suprasegmental level” (Saleh, Initial Interview). Similarly, Shareef reported that that segmentals and suprasegmentals should be both taught. He stated that the “focus should be on everything” (Shareef, Initial Interview). However, it was also noted by those three teachers that covering *all* segmental and suprasegmental features tends to be difficult since teachers need more time teaching segmental features.

For another group of teachers (five participants), it was felt that suprasegmental features should be prioritized over segmental features. For example, Suliman believes that suprasegmental features are more important than segmental features. When prompted to elaborate more on which features he would focus on, he stated that:

features of connected speech, because connective speech is surely a feature that is mainly related to native speakers of a language and students encounter a big problem when listening to native speakers (Suliman, Initial Interview).

Similarly, Khalid, for example, reported that for the improvement of speaking, the focus should be on suprasegmental features. He stated, “for speaking related...of course suprasegmental...is important for speaking” (Khalid, Initial Interview). In addition, Khalid reported that in a module where improving speaking skills is the aim, suprasegmental features should be prioritized. He stated, “for speaking-related, spoken language-related things, of course suprasegmental. These features are really important for ... speaking” (Khalid, Initial Interview). Ali teaches both a Pronunciation module as well as a Listening and Speaking module and reported that in the latter, he would focus on suprasegmental features. He stated, “we have another course which I told [you] that I teach, listening and speaking. When we go to Listening and Speaking, there is a focus shift on the language functions, on features like intonation, stress” (Ali, Initial Interview). Such assumptions about the importance of suprasegmental features were perhaps explained further in the comments of Mahmood and Abdulmajeed.

Mahmood, for instance, reported that stress is important to speaking. He stated:

Without stress, you'll become like a robot, you will speak. As I told you before, we teach listening to focus on speaking. So, I need my students to speak more natural. When they tend to speak with no stress, it's not natural at all (Mahmood, Initial Interview).

Furthermore, Abdulmajeed reported that stress and intonation help students to be more comprehensible. He said, "intonation and stress really play a very important role in conveying the message. So as a teacher I really focus on stress and intonation" (Abdulmajeed, Initial Interview). He added, "in my understanding, one of the reasons that a non-native speaker sometimes faces a big a problem when he talks to a native speaker is because of intonation and stress" (Abdulmajeed, Initial Interview). He also said that "[students] need to know the importance of suprasegmental features because this is something they are not aware of" (Abdulmajeed, Initial Interview).

There appeared to be a focus on segmental features and an overall negligence of supra-segmental features in classroom practice during observation. Yet, it seems that all participants have different views in regard to prioritization of pronunciation features. It is important then to find out more about the relationships between knowledge, beliefs and practice regarding prioritization of pronunciation features and factors underling them which will be discussed in the next chapter.

5.6 Feedback to students' pronunciation

The findings in this research show teachers have different attitudes towards feedback in pronunciation instruction. Several themes in regard to feedback have emerged from the data. Firstly, all fifteen teachers agreed that feedback is significant in pronunciation instruction. For example, Saleh (Initial Interview) reported that feedback to pronunciation errors is helpful. He stated:

...there are theories about providing feedback, is it effective or not? But I would say that in pronunciation teaching, feedback is quite effective (Saleh, Initial Interview).

Ali reported that not addressing students' pronunciation errors may lead to the fossilization of their errors. He stated, "correction is very important, otherwise the mistakes or error will go with them" (Ali, Initial Interview).

Secondly, findings show that eight teachers had different beliefs in regard to what errors ought to be corrected. Ahmed, for example, reported that errors in suprasegmental features should be corrected. When prompted to identify errors he would always correct, he stated, "stress, intonation, rising and falling" (Ahmed, Initial Interview). Ibrahim reported that he provides feedback to pronunciation errors which may affect students' comprehensibility. He said:

crucial errors...if it changes the meaning for example. If the error changed the meaning completely because we would be misunderstood... if the error changes the meaning and there is a word that carries this meaning so misunderstood is probably happens (Ibrahim, Initial Interview).

Similarly, Saleh commented that he tends not to ignore errors which may change the meaning of a word:

When I see that my students are going to mispronounce a word, this mispronunciation will lead to this word being mistaken for another word, this is where I don't actually overlook the mistake, it will have to stop at it and provide feedback (Saleh, Initial Interview).

Yet, Taha reported that he tends to focus on errors which indicate competency flaws. He stated:

competency errors are the errors related to the ignorance of the rules. And if the errors are under this umbrella, they are considered to be

serious errors and we should focus on them and correct them (Taha, Initial Interview).

Suliman, however, reported that all pronunciation errors must be corrected. He commented:

I do not tolerate any mispronunciation in my classes... being strict for the sake of the students themselves [is] for their own good, I don't want them to go away from me with more like fossilised mistakes are the ones that they came in here with from high school... So, I advise my students to correct them (Suliman, Initial Interview).

Thirdly, findings show that two teachers find peer feedback to be useful in pronunciation instruction. Mahmood (Final Interview) reported that students feel less intimidated by feedback provided by other students. He said:

when a student talks to a professor... he will be a little bit afraid of making mistakes. With peer to peer, it's easy for them to make mistakes and to correct themselves and the other person can correct him.

In line with this, Saleh reported that he finds peer feedback to be more effective than teacher feedback. He commented, "I try to focus more on peer feedback. I try to focus on that more than me providing feedback" (Saleh, Initial Interview) (see also Saleh's narrative in Chapter Four for further detail).

Fourthly, five teachers reported that providing feedback to errors should be immediate. For example, as Suliman reported that not only all must be corrected, as stated above, but also be corrected right away. He stated:

mispronunciation to me is really an issue that should be corrected on the spot...because if you just turn a blind eye to a mispronunciation then it will be kind of a fossilised mistake. So, a student will go away

with this sort of mistake believing that he is saying it right because you did not correct them (Suliman, Initial Interview).

Saleh explained that he prefers to provide immediate feedback through peer feedback. That is, whenever he hears a mispronunciation by a student, the teacher would encourage other students to correct their classmate's mispronunciation. This was evidenced by the following excerpt taken from one segment of Saleh's interaction with his students during observation:

Saleh: Please listen to him [one of the students], I would like to judge his pronunciation. Tell me, how accurate he is!

Student 1: /wæʃ/

Saleh: All we are judging is the match between the transcription and his pronunciation. Everyone is looking at the transcription.

Saleh: say it again!

Student 1: /wæʃ/

Saleh: what do you think? Does it match?

Students: No.

Saleh: what we hearing is a long vowel and what we are seeing is a short vowel.

Saleh: [directed to student 1] what we are hearing is a long one. So what do you think that is? [directed to all students]

Student 2: it's /wɒʃ/

Saleh: say it again.

Student 2: /wɒtʃ/

Saleh: what do you think?

Students: yes.

Finally, however, there seemed to be six teachers who reported that feedback should be delayed. For example, Ali reported that some students may not like to be corrected. He stated, “I don’t believe in correcting the mistakes on the spot because the students sometimes don’t feel good, that he is being criticized or he is being corrected before all the students” (Ali, Initial Interview). Ali reported that he tends to use another method to provide feedback to his students. He commented, “we delay it for an appropriate time. Sometimes we call them to the office and indirectly or in a polite way” (Ali, Initial Interview). Similarly, Taha reported that he tends to not interrupt students when speaking. He stated, “it’s not a good way to correct them at the time of their making slips of mistakes. I always keep these types of mistakes and these type of slips and comment on them at the end of the lecture” (Taha, Initial Interview). Likewise, Ahmed stated that “when they make mistakes or errors, personally I don’t like to stop them and I don’t interfere while they’re speaking and I don’t to break their flow” (Ahmed, Initial Interview).

In relation to feedback, then, it was shown that all participants believed feedback is important in pronunciation instruction, but that variation exists in terms of how and when such feedback should be provided. Whilst important insights have been shown here, understanding the relationships between knowledge, beliefs and practices in relation to feedback, as well as the underlying factors, can provide further detail and potentially explain such variation in responses, as shown in the following chapter.

5.7 Knowledge of L1 & L2 phonology

Whilst applicable to two participants in the current study, but worthy of note, there was some suggestion that knowledge about L1 and L2 sound systems,

as well as theories in the acquisition of second language phonology, may have an important effect on teachers' decisions in regard to pronunciation instruction. This knowledge seemed to help the teacher in his decision regarding prioritization of vowels over consonants. It was also beneficial not only to detect a pronunciation error but also to know the cause of the error and ways to treat it. Among all cases in the study, this type of knowledge was most probably obvious in Saleh's and Majid's cases. Saleh's knowledge about L1 and L2 sound systems was evident in his description of vowels in English and Arabic. He explained that:

British English, for example, has around 25 vowels. Whereas Arabic has only three short vowels, standard Arabic, three short vowels, three longer ones and two diphthongs. So, we're talking about a huge gap for students to grasp the difference and be able to both comprehend and produce the English vowels correctly, we need lots of time (Saleh, Initial Interview).

Saleh's knowledge about theories in the acquisition of second language phonology was evident in his justification for the apparent prioritization of some consonants over others in the classroom during the study. He commented:

If we go back to the theories about second language acquisition of phonology, we see that some scholars are referring to the difficulties in the acquisition of a new sound as they relate to their status to the first language. If I remember these correctly I think it was Flege in the 80s who was talking about hierarchy of difficulty for acquiring new sounds as they relate to whether they are totally new sounds or identical sounds to what's available in the first language or similar ones. And my observation actually confirms these difficulties (Saleh, Stimulated Recall Interview).

Saleh reported that he tends to focus more on vowels than on consonants in the classroom because vowels in the students' L1 sound system are much fewer in number than those in the L2 sound system. He stated, "when it

comes to vowels, there is a huge gap between the vowel system between the two languages” (Saleh, Initial Interview). Furthermore, Saleh’s knowledge seemed to help him not only to identify the mispronunciation of clusters made by his students, but also to talk about the cause of this error in great detail. This was evident in his comments on the challenges associated with Arabic speakers learning the sound system of English. Moreover, Saleh’s knowledge along with his teaching experience seemed useful in the treatment of his students’ mispronunciation on clusters. He detailed how he provided feedback to students on the latter:

One of the tricks that I have been teaching them or taught them before is that when they have a triple cluster, like for example spring, sa- pa- ra- which is not available in Arabic, you wouldn’t find this. I told them ‘What is the Arabic word for it? When you put this word in Arabic what do we say?’ They say sa-pring So I ask them, ‘Why do we have a vowel here?’. That’s before the presentation, they try to discuss, I put them in groups and then some of them will come up with the answers, most of the time they say ‘Is it because of Arabic?’. We don’t have it, we don’t have these sounds. Yes, that’s the answer, right?’ So, when you realize this, you start to notice your pronunciation. You start to observe your output okay. And one of the tricks I found them to find helpful is that in the beginning, for example, in pronunciation of a triple cluster, try to prolong the first consonant which is a sss, so instead of saying sa-pring. Make it long say spring, right? This works in the beginning. And then you can make it shorter and shorter, until you are comfortable producing the three without a vowel (Saleh, Initial Interview).

When Majid talked about feedback to pronunciation errors, he referred to differences in first and second sound systems. He explained that the sound system of the student’s first language could interfere with the sound system of the target language. He stated that pronunciation errors were normal at the beginning of learning a second language:

this is not your problem by yourself but this is because of the sound system we all share, we all have. It needs more time to practise to just evolve through these kind of mistakes.

This seemed to align with previous literature on knowledge required for pronunciation instruction. For example, it has been suggested that someone who teaches pronunciation must know about features which may affect the intelligibility of students' pronunciation and be able to prioritize areas that need more training (e.g., Celce-Murcia *et al.*, 2010). However, based on findings of this research, the researcher would add that knowledge of students' L1 sound system is also important in helping teachers know what the cause of the error is and to possibly find ways to treat the error.

5.8 Conclusion

As shown in this chapter, perceptual training was adopted more than production training in the majority of cases. Most teachers also had access to technology but did not fully exploit this. The majority of teachers believed that native-like pronunciation is unachievable, however, their practices seemed to encourage students to aim for native-like pronunciation. Segmental features seemed to be prioritized more than supra-segmental features. Teachers had different approaches to feedback. Although found in only one case, knowledge of L1 and L2 was found to be very important in the teaching of pronunciation instruction. These findings are further explored in the following chapter.

Chapter Six: Discussion

6.1 Introduction

This chapter aims to address the relationships between knowledge, beliefs and practice, as well as the factors underlying these, by drawing on the key findings which have emerged from the cross-case analysis. As mentioned in the last chapter, however, these key findings were predominantly related to pronunciation instruction. The current chapter takes the discussion further by relating these to teacher cognition. The focus is around six key themes, including: emphasis on perception more than on production in training and assessment; limited utilization of available technology enhanced pronunciation training; unachievability of native like pronunciation; the prioritization of segmental features and the challenge of teaching vowels and suprasegmental features; variation of approaches to feedback; and the dominance of British pronunciation as a model in classroom practice. Influenced by Borg's (2015) model of teacher cognition, the chapter concludes with a summary of the relationships between knowledge, beliefs and practices and underlying factors within pronunciation instruction, and offers an adapted model to teacher cognition in relation to pronunciation instruction.

6.2 Key findings

6.2.1 Emphasis on perception more than on production in training and assessment

Previous research on teacher cognition regarding pronunciation has shown that within teacher cognition, there has been more of a focus on production training than on perceptual training (Alghazo, 2013; Baker, 2014; Hismanoglu & Hismanoglu, 2010; Shabani and Ghasemian, 2017). The findings in the current research, however, seemed to suggest that perceptual training tends to be the focus of pronunciation instruction in this context. It is important, then, to find out teachers' knowledge and beliefs in regard to

pronunciation training and assessment and to compare it with actual practice in the classroom.

As touched on in Chapter Five, there seemed to be a disconnection between teachers' beliefs and practice when it comes to training and assessment. For example, most teachers utilized the IPA to teach consonants and vowels. Even when teaching suprasegmental features, they tend to focus on perception through, for example, listening to recorded audio. This discrepancy between teachers' knowledge, beliefs and practice should be placed under scrutiny, which will help highlight factors underlying these.

Findings in this research also showed that perceptual assessment techniques were found to be heavily used as a means to assess students' overall pronunciation. This was reported to be the case for thirteen teachers. Findings in the current research seemed to align with the assumption that perception is assumed to precede production (Fledge, 1995), and that perceptual and phonetic training has had an impact on production (Bradlow, Pisoni, Yamada & Tohkura, 1997; Saito, 2015). Lee, Plonsky and Saito (2019), however, conducted a study where they examined the effectiveness of perceptual vs production training and found that perceptual training was more effective than production training in the teaching of both segmental and suprasegmental features. They concluded that teachers should prioritize perceptual training in situations where time is tight. Nonetheless, as noted above, students' production can go unchecked and some sounds are still not acquired as thought by previous research. Furthermore, the difficulties associated with assessing students' production remains challenging, even for researchers.

Whilst previous research has identified the focus on this type of training, it has provided limited explanation as to why this is the case. The findings from the current research provided important insights here. The type of pronunciation training a teacher uses in the classroom could be, for instance, the result of activities and exercises suggested in a textbook. Saleh noted, for example, that the textbook he used was perception-based, which he viewed as a shortcoming that needed to be addressed. He stated:

I'm trying to let's say make up for that by doing production exercises myself in the class... I have noticed that this is one of the main, say drawbacks of the book (Saleh, Final Interview).

This quotation therefore demonstrates that the type of training Saleh employed in the classroom could be linked to activities and exercises in the textbook. When he realized that there was little attention given to production training in the textbook, he decided to adjust his training accordingly to include more of what he believed was necessary. Furthermore, Suliman reported that he follows the textbook to the letter, stating that “over here we are dealing with textbooks, so we should exactly follow them up” (Suliman, Initial Interview). He described the way he teaches approaches to pronunciation in the classroom in the following quote:

They [students] have the textbook right in front of them. Then they listen to tracks. Then they are supported by clarification from me. Then according to the nature of the activity they are asked to do these activities whether on their own, I mean each individual student, pair work, or group work.

Suliman's account here shows the link between the textbook and his classroom practice, through the impact of activities and exercises in the textbook on his classroom practice.

It could also be the case that the focus on perceptual training was perhaps related to teachers' education. That is, the way pronunciation had been approached during teacher education somehow may have influenced teachers' classroom practice. This was felt in Omer's case where he reported that he had learned to teach pronunciation during his postgraduate studies in a Phonetics module. He revealed that the practical side of the module involved phonetic transcription, stating “we did some practice, how to transcribe any word” (Omer, Initial Interview). During classroom observation, IPA symbols and phonetic transcription of words appeared to play a big role in Omer's classroom practice. Similarly, Waleed's classroom

practice appeared to involve a lot of phonetic transcription; a technique which was part of his teacher education. He stated, “you are supposed to write the whole thing in the IPA way...the format [of the exam] is we’ll give you a word and you should write the IPA” (Waleed, Initial Interview). These two cases seemed to suggest that teacher education may contribute to shaping teachers’ classroom practices.

There seemed to be a strong connection, then, between teacher education and teacher cognition in relation to methods of pronunciation instruction in this context. This was evidenced in several cases in the current research where teacher education seemed to influence teachers’ knowledge, beliefs and practices regarding pronunciation instruction. Mahmood, for instance, reported that the training he had to teach pronunciation goes back to those who taught him. He explained that he taught pronunciation the same way his teachers had taught him, stating “I’m imitating my teachers” (Mahmood, Initial Interview). Furthermore, Omer reported that the way he learned to teach pronunciation was through a module he took during his postgraduates. He stated that the focus of that module was on “the sound system [and] the transcription, how to transcribe” (Omer, Initial Interview). Looking into his reported practices in the interviews as well as his apparently practices in the classroom during the study suggested that there was a link between his adopted methods in his teaching of pronunciation and his teacher education regarding methods of teaching pronunciation. His teaching of pronunciation revolved around IPA symbols and phonetic transcription. During observation, he appeared to focus on the IPA symbols and teach students phonetic transcription.

It also appeared that a negative situation during teacher education may have an influence on teachers’ beliefs regarding assessment. For example, Majid elaborated on how students’ pronunciation should be assessed. He said:

We have to create a very normal condition for students to give them a chance to practice their language, to practice language in general. Not an environment where they are watched and heard, and everyone is listening to them (Majid, Initial Interview).

For Majid, then, he felt that the environment for assessing students' pronunciation was as challenging as it had been when he was a student. However, because he went through an unpleasant experience during his teacher education, he acted upon that experience in his classroom practice. He reported he was once requested to have his oral production recorded as part of a final exam for a pronunciation module. He stated:

Some teachers record their students, and this happened with me when I was a student. In a final exam they record my interview and this just like made me score very low score than I should, it's like how? Why because they are recording. When they are recording, I'm not feeling very comfortable to give what I have or to speak as I like. I felt like I'm being watched not just assessed. Being assessed by itself makes someone uncomfortable and being watched as well (Majid, Initial Interview).

Because of that experience, Majid felt that recording of students' oral production may be unfair to students. Teacher education therefore appeared to have an important effect on training and assessment in pronunciation instruction. Moreover, teacher education may influence teachers' beliefs regarding teaching materials. Suliman was asked to talk about materials that teachers should use to improve the students' spoken aspect of the language, he suggested using literature. He stated:

bringing up to class materials which are favored and liked by the students. Music, plays, novels which have been made into movies. So, all these things. So, if students are watching the novel and then you're asking for a recap for a summary and so listening to these authentic materials and then you ask for the students to reflect it up on presentations to the rest of the class (Suliman, Initial Interview).

It was found then that Suliman' teacher education during his MA and PhD qualifications involved studying and researching the use of literature to teach language.

Other reasonings for the emphasis on perceptual training were reported by Abdulhameed. He explained that he expects students themselves to work on their production: "my belief is that learners can get this [production training] somewhere else...they can listen to someone, a native speaker, a good model and that's where they improve their pronunciation individually" (Abdulhameed, Initial Interview). Thus, for him, there was an assumption that it was the students' responsibility to make improvements here. He also mentioned, however, that he does not have time to provide production training. He stated, "real practice is to take them to a language lab and have them listen and produce sounds properly, something I don't have time for... I don't have luxury of spending enough time to have them speak" (Abdulhameed, Initial Interview). Interestingly, Abdulhameed's recommendation for listening to native speakers to improve students' production is a technique which probably belongs to perceptual training rather than production training.

As shown in Chapter Five, the current findings also showed that perceptual assessment techniques were found to be heavily used as means to assess students' overall pronunciation. Such a focus in the current context arguably prevents accurate assessment of students' production. The challenge with solely using perceptual assessment to evaluate students' pronunciation is that it could lead to a situation where students' perception is assessed but their level of production is unknown. As a result, when pronunciation at production level is not assessed, a student with low level of production could pass a pronunciation course undetected. In fact, this is one of the issues encountered in the researcher's own experience of teaching pronunciation prior to conducting the research in this area. It was felt at the time by the researcher, that it was problematic that a student could pass a pronunciation module with a low level of production. Perception is therefore important, but with regard to assessment, there must be assessment of students' production, rather than assessing only the perception of sounds.

Recognizing this, Saleh reported that one of the issues he faced when studying English in the Saudi context was that sometimes students were taught in one way and were assessed in a different way. In line with this, Omer reported the need for examining both perception and production. He stated, “we should test the student more orally or verbally instead of in writing... it’s a speaking course. So, all tests should be like speaking based” (Omer, Initial Interview). Likewise, Shareef expressed his concern about not being able to accurately assess students’ attainment. He stated, “there should be oral assessment...here it is difficult to judge the level of the students of how much they have achieved or how much they have learned” (Shareef, Initial Interview).

When participants were prompted to talk about the reasons for not considering students’ production in the assessment of students’ pronunciation, their responses varied. Ali, for instance, mentioned subjectivity, administrative policy and lack of knowledge about how to assess oral production. Ali explained that one of the challenges in the assessment of production is teacher bias. He said, “the evaluation becomes subjective with the teacher. It depends upon his own likes and dislikes” (Ali, Initial Interview). In addition, he mentioned that avoidance of production assessment was an administrative decision, since it was found that some teachers would give students marks without actually assessing students’ oral production. He stated, “the teacher’s evaluation isn’t really reliable because sometimes they just allocate the marks without evaluating their spoken capability” (Ali, Initial Interview). Furthermore, as Ali explained, it could be the case that teachers did not assess students’ oral production because they did not know how. He commented that:

There is no hard and fast formula to evaluate their spoken language. This is the problem. That’s why there’s more focus on the written exam. So, in the written exam they have some items and they have to evaluate the answer (Ali, Initial Interview).

Another reason for not including production assessment in the evaluation of pronunciation was time. For Khalid, for example, such assessment was

considered time consuming. He stated that “It will take a lot of time to create such activities to judge, to evaluate, to assess the practical side” (Khalid, Final Interview). It was also found that assessing students’ production was not part of the module requirements. For example, Abulhameed reported that he had assessed students’ production in other contexts, but not in this context, since he was not aware that this was a requirement. He explained:

...well before in other contexts, I used to have both exams, oral and written. So far, unless I have term work as we describe it, I can’t judge them by oral assessment, only written. But before I used to have both, oral and written... I’m not aware of the system yet. I’m new to the system (Abdulhameed, Initial Interview).

Among all cases, the exception to this was Saleh who reported using both perception and production in the assessment of pronunciation. Saleh explained that one of the module’s objectives is to have students produce IPA symbols. Therefore, he came up with an exam where oral production of sounds is assessed. He stated:

This oral exam is very basic. It’s targeting one of the objectives of the course. That is which we talked about earlier which is being able to pronounce, now we talked about two main objectives, being able to perceive when you listen. And being able to pronounce the IPA symbols when you see them (Saleh, Initial Interview).

Saleh gave a detailed account of the exam in the following quotation:

I sit with them, I show them phonemic symbols, for words or sometimes for non-words, to be able to assess. Because some of them I told them but they keep doing the same mistake, I say, ‘When you look at the phonetic or phonemic symbols, don’t try to imagine what the word is, just try to say what you have in front of you’. But they still try to guess and most of the time their guessing is not correct. So I tell them ‘Be careful, I could provide

you with symbols which do not represent any English words’
(Saleh, Initial Interview).

Saleh reported that he tends to assess students’ production on the basis of intelligibility. As he explained, “their assessment... it will have to be intelligible enough for me to give them the good or the final mark for each word” (Saleh, Initial Interview). It seems, then, that there is a mismatch between teachers’ beliefs and practices in regard to training and assessment of students’ pronunciation. It has been explained that this discrepancy was related to several factors, including textbook, teacher education, belief in student responsibility for improvement of production, time and the challenges associated with assessment of production in pronunciation instruction.

6.2.2 Limited utilization of available technology enhanced pronunciation training

The current study supported existing research which underlined the importance of technology in the teaching of pronunciation (Thomson, 2011). As shown in Chapter Five, however, not all teachers had access to technology which therefore directly impacted on teachers’ classroom practice. Nonetheless, for those where technology was accessible, only a few teachers appeared to fully exploit the use of technology in their classroom practice. Therefore, it is important to highlight connections between teachers’ knowledge, beliefs and practice in regard to use of technology in the teaching of pronunciation and their classroom practice.

As mentioned in Chapter Five, findings in the current research showed that the overwhelming majority of teachers agreed that using technology is important in pronunciation instruction. However, there appeared to be a discrepancy between teachers’ belief in the significance of technology and their utilization of technology in in actual classroom. For example, as explained in Chapter four, Ali believed strongly in the use of technology in the teaching pronunciation, but he did not appear to apply all technology he reported to be useful in pronunciation instruction. Furthermore, Omer explained that the use of technology is important in pronunciation instruction,

especially in the assessment of students' pronunciation. Yet, he did not report using such methods nor did he appear to use technology for assessment during observation.

There seemed to be a number of reasons why technology was not always used by teachers. For example, Ali reported that he used to have access to technology but following the relocation of the college where he teaches, he did not have access to such technology at present in the new location. This may explain why evidence of his use of technology was lacking in the classroom observations. For other teachers, the facilities were simply not available at all. Taha and Shareef, for example, complained that no language labs existed in their colleges. Taha reported that "the only problem is that we are not teaching this course... in a laboratory" (Taha, Initial Interview). Similarly, Shareef stated that they "do not have a language lab... it is necessary [since] students are learning pronunciation [and] they are learning phonetics and phonology" (Shareef, Initial Interview).

Technical problems may also prevent teachers from using technology. Mahmood explained, for instance, that he wanted to use other methods in his teaching of the Listening and Speaking module; however, he stated that the reason for not being able to do that is that "there is no connection to the internet" (Mahmood, Initial Interview). In addition, it seemed that when the focus of pronunciation instruction is mainly on perception training rather than production training, and on developing the theoretical level of pronunciation rather than the practical level, less technology is used in the classroom. For example, as mentioned above, Abdulhameed stated he did not have the time to make use of the language lab for production training. Such experiences appear to support Thomson's (2011) claim that unequipped classrooms can hinder teachers' use of effective teaching techniques when teaching pronunciation.

It appeared, then, that technology was not used in all cases due to lack of availability. Even when technology is available, however, it was found that it is not fully utilized in most cases. This has previously been noted in the literature (Kafyulilo, Fisser & Vogot, 2016) which has shown teachers do not

fully use technology in their teaching even when it is available for them. What the current research has underlined, however, is the need to explore the reasonings behind such lack of use. The findings indicated, for instance, that these could include technical problems and lack of experience or knowledge of technology, the influence of the assumption that focus should be on perception rather than on production and other contextual factors such as administrative obstacles.

6.2.3 Unachievability of native like pronunciation

As shown in the previous chapter, findings seemed to suggest that native-like pronunciation for the most part is an unachievable goal, although this did not appear to be supported by their practice. The latter, for instance, seemed to demonstrate a focus on the need to achieve native-like pronunciation. As mentioned in Chapter Four, in the case of Saleh, for example, he stated that his goal of teaching pronunciation was intelligibility, but his classroom practice appeared to encourage students to imitate the sounds played by native speakers exactly, although the students' pronunciation was intelligible.

The mismatch between teachers' knowledge and beliefs and practice in regard to achievability was found in several cases. For example, this was evident in the interaction between Saleh and his students during classroom observation. Although Saleh believes that intelligibility should be the goal for pronunciation instruction, it appeared from classroom observation that he tends to encourage students to produce native-like pronunciation. This most often comes in the form of feedback to students' pronunciation errors. For instance, the researcher observed that when he was providing feedback to one of the students pronouncing the word 'heavy', he insisted on having the student use /e/ after /h/ instead of /æ/, even though the word 'heavy' with /æ/, as pronounced by the student, was still intelligible.

In a similar situation, Saleh asked one of the students to use a schwa after /r/ in the word 'provide' when the student used /ʊ/ which actually sounded intelligible to the researcher. Comparing Saleh's knowledge and beliefs with his practices in the classroom, then, shows a mismatch between them. Saleh

believes that intelligibility should be the goal for pronunciation instruction, but his practices seem to advocate native-like pronunciation. It is possible, however, that these particular students were the most proficient students in the class, and Saleh was simply encouraging them to reach a higher goal. This was indicated in his statement regarding his development of a teaching framework.

Furthermore, discrepancy between teachers' knowledge and beliefs and practice in regard to achievability was also found in Omer's case. Although he explained that is concerned with students' pronunciation being understood rather than producing native-like pronunciation, he appeared to use native speaking models and asked students to imitate them. He appeared during observation to train his students match the exact pronunciation in the audio recording. This indicates that although he believes interlegibility is his aim in pronunciation instruction, his classroom practice suggests that he favored native-like pronunciation. This seemed to align with previous research which suggested aiming for native-like pronunciation is still adhered by some teachers (Sifakis & Sougari, 2005). The current research has underlined, however, that teachers may think they aim for one goal, and their practice support a different goal.

There were a number of different factors underlying teachers' knowledge, beliefs and practice regarding aims of teaching pronunciation. First, it seems that prior L2 experience has an important effect on teachers' belief in regard to goals of teaching pronunciation. As discussed in Chapter Five, Abdulhameed seemed to aim for a high level of accuracy due to his experience of learning L2. It seemed that his belief regarding the goal of teaching pronunciation, accuracy, and the use of native models to improve speaking is a consequence of his prior L2 experience where he developed his speaking skills by learning from and interacting with his teachers who were native speakers of English during teacher education. The impact of L2 experience was evidenced in a number of cases. Ibrahim explained, for example, that although he spent time learning English from books, his speaking skills did not improve until he was immersed in native speaking environments. He stated:

I learnt English from books. But it turned out that I cannot acquire fluency or speaking in a good way until I'm then exposed to the native English environment, I traveled to America four different times and I had a direct contact with American people working in [name of a country] and we have a lot of projects worldwide. So, to me, acquiring language must be via language environment, so the language itself, you cannot learn from books. You can have something from books, but you cannot be like a good speaker. I know teachers who, those who never been exposed to native environment, they have problems in speaking, they cannot express themselves freely. If you talk to them on the phone they may not respond" (Ibrahim, Initial Interview).

As a result, it seemed that his prior L2 experience had him believe that teachers should use native models in their teaching of pronunciation. He stated, "we usually focus on native speakers", and added that, 'the problem that non-native you know because I feel like L1 sometimes, interferes with the target language'.

Second, the age of learning L2 also impacted on teachers' beliefs here. Saleh's justification for his decision on aiming for intelligibility, for example, rather than nativeness, was his students' age. Reasoning based on age, here, appears to support the critical period hypothesis of Lenneberg (1967). This theory refers to biological explanations based on the premise that laterization in the brain after puberty may act as an obstacle to achieving native-like pronunciation. Third, inadequate experience with the target language by students may be another reason why native-like pronunciation is hard to reach. Suliman explained that students use of the language within this context is limited to few hours a day. He stated:

the exposure of a student to English language is not that ample, is not that sufficient. Students are coming to class, listening to English and barely communicate in English for two to three, maximum four hours a day. The rest of the day they are not

communicating in English so there is a lack of exposure (Suliman, Initial Interview).

To support the above argument, Suliman described a minority of students who appeared to be more motivated and have better pronunciation and communication skills than other students. He commented on this group in the following quote:

a few of them I ran into over here of my students, and this is a very few number, they took some courses in Canada, in the US, in New Zealand but for like a summer course. Let us say a two months course or so...they are really better than the other students. At least they are highly motivated than the other students because they have been placed into a situation in which they encountered the challenge and if they don't know the language well, they wouldn't be able to interact with people in that exact society... it is reflected clearly and obviously upon their accent. It's really better than the other students. So at least they are understanding what I am saying in class, they are interacting with me, I get a better feedback from them than from the other students (Suliman, Initial Interview).

This seems to align with research on the effect of learners' experience with the target language (Flege, Bohn and Jang, 1997; Piske, MacKay and Flege, 2001). It has been shown, for instance, that direct experience with the language enhances students' ability to communicate. Fourth, students' low proficiency levels may also have an impact on the achievability of native-like pronunciation for the class as a whole. For example, Ali explained that because some students with low language proficiency levels were accepted into the program, this had an effect on him, resulting in a lowering of his expectations. Ali said,

they came there without any screening. Any student could join the program, so that was very challenging because we have a lot of students...in which some students were very slow

learners...[and] have very little background about pronunciation (Ali, Initial Interview).

Fifth, teaching a large number of students in a classroom may contribute to hindering the achievability of native-like pronunciation. For example, Majid described the impact of the students' size on his teaching goals. He stated:

if you have a huge number of students in your class you cannot focus on the relevant outcomes as much as if the class numbers were low. You do not have the chance. I mean students will feel just like they are invisible inside the crowd and they should not do anything regarding this course... Because they think that the chance of asking them a direct question will be very low because they are one in 40 students (Majid, Initial Interview).

Sixth, it seems that students' goals of learning might have an impact on teachers' beliefs regarding achievability. For instance, Suliman expressed his disappointment in regard to students' learning goals. He stated the following about his students:

They don't view talking in a very excellent manner is kind of required, since they already predetermined their goal of the whole program is to be like an intermediate teacher or high school teacher. So, they know it is going to be like very simple, just like those teachers who taught them back in the day. So, they don't want to be really fluent in English (Suliman, Initial Interview).

He felt that his students did not care about improving their skills, but would rather simply pass the course. Likewise, Saleh explained that he does impose native-like pronunciation because students are concerned about grades rather than improving their pronunciation. He stated, "honestly speaking, our students are guided by their own agenda, which is passing the course, right" (Saleh, Initial Interview). This seems to align with the literature on extrinsic motivation where students' behaviors are affected by means external to the student such as reward or punishment (Kimberly, Clement & Pelletier, 1999).

This also relates to socio-linguistic factors, and more specifically identity preservation, whereby achieving native-like pronunciation may not be favourable for all students. For example, Majid believes that some students may appear to be fluent speakers of English; yet, they do not wish to adopt native-like pronunciation. He stated, “some students hate to speak like English speakers... they don’t like to act like they are American...maybe to preserve their own identity” (Majid, Initial Interview). Likewise, Abdulmajeed explained that students trying to sound like native speakers may be mocked by other students. He stated that other students may react to someone who tries to do this by saying “he pretends to be an English man and that he knows English, that kind of thing” (Abdulmajeed, Initial Interview). This seems to align with previous literature on the relationship between one’s identity and pronunciation (see, for example, Dalton & Seidlhofer, 1994; Jenkins, 2000; Levis, 2005; Setter & Jenkins, 2005; Rogerson-Revelll 2011; Ur, 1996; Walker, 2010).

Finally, as mentioned by many of the teachers, achieving native-like pronunciation is difficult and therefore aiming for native-like pronunciation may be counterproductive. For example, Waleed explained that aiming to achieve native like pronunciation may add unnecessary burden for students. He stated, “I don’t like to stress them too much, because if you stress them too much, they will just decline to learn more” (Waleed, II). This seems to support previous literature on the justifications for not adopting the nativeness principle (Levis, 2005). Thus, the belief in the unachievability of native-like pronunciation seemed to be adhered to by the majority of the participants for a range of factors, including prior L2 experience, age of students, inadequate experience of target language, low proficiency levels, size of class, students’ preferences regarding goals of learning, and difficulty involved in the achievement of native-like pronunciation.

In addition, although studies have shown that intelligibility has gained popularity among English language teachers, as shown in Chapter Two, findings in the current study informed us that although native-like pronunciation was viewed as unachievable, teachers did not share the same

beliefs regarding goals of teaching pronunciation. For example, participants adopted accuracy and fluency as their goals of teaching pronunciation, rather than intelligibility.

6.2.4 The prioritization of segmental features and the challenge of teaching vowels and suprasegmental features

It was shown in Chapter Five that teachers tended to focus on segmental features in classroom practice and to neglect supra-segmental features and these were related to a range of different attitudes. In their classroom practice, teachers seemed to focus on segmental features although they explained that they believed that suprasegmental features should also be taught. The reasons for this could be related to teachers' beliefs or the influence of context. One participant believed that both should be taught, but because he follows the textbook to the letter, he did not include any teaching of the suprasegmental features. It seems also that there is a common belief among participants that unlike segmental features, suprasegmentals, as well as vowels, are difficult to teach and hard to acquire by students.

The findings showed that teaching experience may have an influence on knowledge, beliefs and practices in regard to pronunciation instruction. Teaching experience may act as a testing phase where the teacher tries out his beliefs. For example, Saleh explained a theory regarding hierarchy of difficulty for the acquisition of new sounds. He then commented "my observation actually confirms these difficulties" (Saleh, Stimulated Recall Interview). Saleh's comment about his own teaching experience confirming his knowledge about a theory may indicate that teaching experience could play an important role in filtering teachers' knowledge and beliefs. Furthermore, teaching experience seemed to provide teachers a tool for evaluating their overall approach to teaching. For example, reported his of thinking in regard to goals in pronunciation instruction, and how his teaching experience seemed to balance his aim of pronunciation instruction. He stated that:

Sometimes you teach in a certain way thinking that this is enough for them to reach a target. But once you assess, you find that your expectations were very unrealistic. So, you'll have to redesign and readjust to the actual level of your students and then take them back again trying to raise their level (Saleh, Initial Interview).

Similarly, Shareef reported he does not focus on suprasegmental features since the module specification emphasizes segmental features as was following the module's specification and must complete the course in time. He stated:

...focus should be on everything but...we are following the course guideline, course description in the university, so we also have to complete the course (Shareef, Initial Interview).

Saleh reported that he manages to teach all segmental features, but he struggles to cover all suprasegmental features due to time constraints. He stated the following:

We want to focus on both but given the level of the students and the time it takes to cover the segmental level, starting with, we are left with very little time to cover the other aspects of the course (Saleh, Initial Interview).

The challenge of teaching intonation has been recognized in previous research, where teachers reported having trouble accurately describing stress and intonation to students (Couper, 2017). In the current research, although few teachers reported or observed teaching suprasegmental features, those who did teach it also found it to be challenging. For example, Abdulmajeed reported using videos of native speakers to teach students about intonation. He explained that he did not feel confident in using his pronunciation of intonation as a model. He stated:

to be honest, sometimes I myself feel that because I'm not a native speaker, myself, I'm not perfect. I'm not a model probably for

them, for intonation. This is one of the most grey areas. That's why, to give them the real understanding of these features, I show them, I have some videos, some short clips of the movies...I would say the pronunciation is a concern and accent and intonation kind of things are a concern. I'm a non-native speaker and I understand my weaknesses but...I'm a teacher (Abdulmajeed, Initial Interview).

During the study, while observing Mahmood's class, he did appear to struggle when explaining rising and falling intonation. He then played a recording recommended in, and supported by, the textbook *Interactions Two: Listening and Speaking* (Tanka and Baker, 2012), so that students know when to use a rising intonation and when to use a falling intonation, and the intended meaning for each one. The following is an excerpt from the recording Mahmood played in the classroom:

[Recording in an American accent] When people need information or they don't know something, they usually ask a question. For example, "are you from China?" And where English speakers think they know the answer to a question, but they're not sure, they often form tag questions with rising intonation. "You're from China, aren't you?" [different speaker] "You speak Chinese, don't you?" [original speaker]. The rising intonation means the person is asking for more information. In contrast, it is also possible to form tag questions with falling intonation, like this. [different speaker] "It's nice weather today, isn't it?" [different speaker] "That test was hard, wasn't it?" [original speaker]. Tag questions with falling intonations are not real questions, but people ask these kinds of questions when they expect agreement. The tag is a way of making conversation, or small talk (Mahmood, Classroom observation).

Mahmood then formed several questions, some with rising intonation and others with falling intonation. He asked students to respond to each question in light of what had been mentioned in the recording. Students still appeared

to find difficulty with recognizing the difference between rising and falling intonation. It seemed, then, that despite Mahmood's use of recommended module material, the students did not appear to perceive intonation.

The challenge with teaching intonation was also recognized by Saleh. He reported that intonation requires a lot of practice so that students are able to perceive and produce it. He mentioned that this is due to the different uses of intonation in the students' first language and the target language. He stated:

You know intonation level, it has different patterns and it needs lots of practice because we are not just talking about comprehension, we are talking about production. So, it needs lots of practice, given the differences between the intonation usages of English and Arabic (Saleh, Initial Interview).

Several teachers in the study reported that the learning of English vowels could be viewed as a challenge to students in the Saudi context. Waleed, for example, explained that this is a common problem among Arab students learning to pronounce English vowels. He stated that:

I think consonants are not that big of an issue to Saudi students or any Arab students because most of the consonants are already there. However, the vowels is the bigger issue. I think it's more for most students, the vowels are the bigger issue (Waleed, Initial Interview).

For Omer, however, vowels were not only considered more difficult for students to learn, but he also felt that vowels were more difficult to teach. He stated:

vowel sounds are a bit tougher than the consonant sounds. Teaching consonant sounds is much more easier than vowel sounds... So this is what I found, students are really in their hard times to understand the vowels ... this is what I found when I tested them (Omer, Stimulated Recall Interview).

Ali explained that the difficulty here relates to the complexity of vowels. He stated that “the use of vowels is very complex” (Ali, Initial Interview), since “there are different categories, short vowel, long vowel, diphthongs, triphthongs” (Ali, Stimulated Recall Interview). Moreover, Saleh mentioned that the reason for this difficulty is the gap between the Arabic sound system and the English sound system. He explained that:

when it comes to vowels, there is a huge gap between the vowel system between the two languages... So we’re talking about a huge gap for students to grasp the difference and be able to both comprehend and produce the English vowels correctly, we need lots of time (Saleh, Initial Interview).

Such findings are in line with previous research which has recognized the challenge Arab students face with learning English vowels (see, for instance, Ababneh, 2018; Al-Busaidi and Al-Saqqaf, 2015; Al-Saqqaf and Vaddapalli, 2012; Ali, 2015).

It was therefore evident that for the majority of participants segmental features were emphasized more than suprasegmentals within classroom practice. It was also noted that vowels seemed to be difficult for Saudi students to acquire and therefore requires time. It is also worth drawing attention here to the interconnection between themes within pronunciation instruction. There seemed to be an association, for instance, between listening and speaking skills with prioritization of suprasegmental features. This was evidenced for Khalid, but also for Ahmed, who taught a Listening and Speaking module, who stated that he tends focus on “stress, intonation, rising and falling” (Ahmed, Initial Interview). The common pattern among these cases is the aim to improve listening and speaking skills. Participants who teach Listening and Speaking modules seemed to believe that suprasegmental features are more important than segmental features. It is worth noting that Khalid reported that teachers should focus on segmental features in early stages. He also mentioned that prioritization of features should take into account students’ needs. He stated, “for spoken, it is just that

you will focus on the suprasegmental ...if we focus on conversation in general then suprasegmental features...we say that if we just focus on words, this is segmental” (Khalid, Initial Interview). It is also worth mentioning that teachers’ beliefs regarding prioritization sometimes overlap, one teacher would belong to the first group in one position, and also belongs to the second group with another position. Prioritization could be influenced, then, not only by teachers’ beliefs but also other factors such as students’ levels and needs, or the focus of the module could play a role in shaping classroom practices in relation to prioritization.

6.2.5 Variation of approaches to feedback

It was shown in Chapter Five that teachers believed in the significance of providing feedback to students’ pronunciation but varied in how and when feedback should be provided. In regard to relationships between teachers’ knowledge and beliefs, and practices in relation to providing feedback to pronunciation errors, there seemed to be an overall agreement. Teachers appeared to apply their stated beliefs in regard to feedback during classroom observation. For example, Suliman reported (as mentioned in Chapter Four) that students’ pronunciation errors should be corrected on the spot. During observation, he appeared to do exactly that. He appeared to correct students’ pronunciation whenever he heard a mispronunciation of a word.

findings in this research show that there was an emphasis on motivational and psychological aspects related to providing feedback to pronunciation errors amongst the teachers. For example, Ibrahim reported that if the error was made by one student and it was not common among students, it should be addressed privately to the student. He commented:

...sometimes feedback is general if the problem is general...if you have like particular problems you can give you know confidential or you know personal feedback, if the problem is not common. You needn’t say if the problem is specific to one or two students. So, you can go and give personal feedback (Ibrahim, Initial Interview).

In addition, Taha explained that he encourages students to speak rather than think of pronunciation errors. He stated, “I always tell my students to not worry about making mistakes when they are pronouncing” (Taha, Initial Interview). Similarly, Ibrahim reported that he tends to remind students that making them that errors is part of the learning process. He said:

I usually tell them that I myself make a lot of mistakes, intentionally or not intentionally. The mistakes are there, and from mistakes we learn. This is what I tell my students. Mistakes are the key to learning. If you are not making mistakes you cannot learn because you make mistakes then you know what's correct, then you change. You will learn in this way” (Ibrahim, Initial Interview).

Majid explained that teachers should be careful when it comes to providing students with feedback. He stated:

I believe teachers should... consider the psychological status of students when they give them feedback. Because motivation is one of most important things for students to inform their language... students could be laughed at in class. Even let's say not for very bad reasons but for a situation that happens. Some students laugh at these situations... this would result just like let's say the shock for the student or it will be a de-motivated situation for them. So, they will avoid participating in class next time for example (Majid, Initial Interview).

Majid added that he went through an experience where feedback had some negative impact on the student. He said:

I've done this one time and I notice that the student tries to avoid me. Avoid yes, he avoids eye contact with me, he avoids me in college, he used to come in my office and ask me some questions but after I told him that 'Well this sound cannot be pronounced this way, this word is not pronounced in this way' he started to

think that I judge him. Not that I am trying to correct him or give him the correct way of pronouncing these words.” (Majid, Final Interview).

Likewise, Suliman reported that teachers should provide feedback to students in a motivational and encouraging manner. He stated:

the role of the teacher should be really professional and effective and not de-motivating the students who are already de-motivated. So using encouraging kinds of phrases, terrific, amazing, good, although sometimes they are giving wrong answers but this is not a big deal. You can just correct the students using some sort of professionalism. Sparing their feelings without hurting them. And showing them that they are doing well, they are progressing (Suliman, Initial Interview).

The findings in the current study seem to line with previous literature in regard to delayed feedback (Krashen, 1982; Ancker, 2000). They also line with the argument that students might lose their confidence if provided feedback to their pronunciation errors continuously (Engwall & Balter, 2007). It is worth noting that providing feedback even when needed is not always possible. Abdulhameed, for instance, explained that providing students with feedback is sometimes hard. He stated that “if I have a large number of students in the class, I can’t give feedback” (Abdulhameed, Initial Interview). It seems that teachers views on feedback as well as classroom size are influential on classroom practice.

6.2.6 The dominance of British pronunciation as a model in classroom practice

Findings in this research show that British pronunciation seemed to be the dominant model in pronunciation instruction within this context. This was reported by several teachers during interviews and appeared in many of the observed lessons during the study.

Teachers seemed to have different reasons for using British pronunciation as a model. Some teachers reported that they actually prefer British pronunciation over other models. For example, Khalid explained that British English was the variety he was exposed to since childhood. He stated, “my preference and my focus on British pronunciation and British English is the reason that from the very childhood, my whole education took place in British curriculum” (Khalid, Initial interview). Mahmood reported that he finds British model to be easy to understand. He said, “I prefer British because when they speak, they speak slower than American... So most likely my students will understand” (Mahmood, Initial interview). Similarly, Taha reported that British English is clear. He stated, “I do prefer British because it is clear. It is more clear than American accent” (Taha, Initial Interview).

Some other teachers reported that using a British model was not a choice, but was imposed upon them. For example, Ibrahim reported that British pronunciation was used, because students were tested on this model. He stated, “we tend to use the British accent... for the purpose of our exam,” (Ibrahim, Initial Interview). Saleh explained that British model was more often used in his teaching of pronunciation since the textbook allocated for the module involved the use of this model. He said:

the book we are using is focusing on the British accent model or the RP, the received pronunciation. Or the BBC language. It's the English pronunciation in use which is focusing on this. But it's good in the sense that whenever there are main differences between the two accents, it will point that out very clearly with exercises (Saleh, Initial Interview).

In addition, findings show that teachers reported preference for other models, especially American. For example, Suliman explained that he preferred American English since British accent is spoken by fewer people. He stated:

Only a few number[s] of people even in the UK are using this variety of English. It is a type of English that is used like in BBC and things like that so it's not that common even on the streets of UK (Suliman, Final Interview).

He also reported that most students tend to like American pronunciation. He stated, “a very big number of students actually they do prefer the American style of pronunciation rather than the British” (Suliman, Final Interview). In line with this, Waleed explained that American model is more preferred because of the American culture influence. He stated, “because of the American influence, we see the American accent is more popular among the students” (Waleed, Initial Interview)

Findings also show that some teachers find authentic materials to be the most appropriate model for pronunciation instruction. Suliman explained that authentic materials refer to the language native speakers use. He stated that authentic materials are:

taken from the environment and culture of the language itself. I mean the target language, the language which is being taught and studied, learnt over there.... authentic materials from magazines, newspapers, audio, I mean materials taken from news, from movies, from whatever native speakers are involved in to be brought up and taught in classes (Suliman, Initial Interview).

He argued that authentic materials are more appropriate as a model in the teaching of pronunciation than unnatural language used in teaching materials. He stated:

instead of teaching materials which are adapted from other cultures which are not that effective actually. Because as we know culture and language are inseparable couple, we could not separate them apart... You are being exposed to something really authentic, something coming from a reliable source, as they say from the horse's mouth. So, it's a reliable source that that the

words and phrases and language and knowledge is coming from a native speaker (Suliman, Initial Interview).

Saleh reported that both authentic materials as well as language teaching materials should be used in the teaching of pronunciation. He said that teachers:

should aim for the materials that present a good model. Either authentic materials which are a good source of information. Or even language teaching materials which present a good model for the students. So, either authentic ones or language teaching it's okay. These materials could either be step by step description of the pronunciation process or recording, sound recordings or video recordings (Saleh, Initial Interview).

However, Ibrahim noted that students in initial stages should not be exposed to authentic spoken language. He stated:

we usually focus on native speakers but not in elementary levels or basic levels. So, they are not exposed right away. Because their level is a little bit you know low, so they may get frustrated if they're exposed natural real-life language (Ibrahim, Initial Interview).

Findings also show that most teachers believe using a pronunciation model is important in pronunciation instruction. Ibrahim, for example, stated that using a model helps students to be more focused. He stated:

if you choose a model, this will help them concentrate more. I mean like a framework. If you picked a model and tried to find different ways to enhance the language via this model, this helps them concentrate more. If you are following a specific model in your teaching. That means students will concentrate, it's not distracting for them (Ibrahim, Initial Interview).

However, he opposed the idea of using a non-native model in pronunciation instruction. He reported that using non-native models could cause confusion to students. He stated:

the problem that non-native you know because I feel like L1 sometimes, interferes with the target language... they may mispronounce the word... so this may cause conflict in my students. Because non-native[s] are too many, but the native is one. So, if we follow like one system, one model, this probably could be accurate, easy and more in-depth for students (Ibrahim, Initial Interview).

In line with this, Suliman seemed to adhere to the notion that a language is owned by its native speakers. He stated, “language should be taught according to a way that natives speak it and use it. So, adopting any other styles of speech which are not native, to me I totally disagree with utilising or using them” (Suliman, Final Interview). The exception to this attitude towards non-native models was found in Saleh’s case, who reported that using non-native model can be advantageous. He stated:

I think it’s a very good idea to play it. To make students aware of the fact that there are good pronunciation that are not native-like... I think it’s a very good point to play some of the non-native models and use them in teaching. This will help students at least feel more comfortable with their own pronunciation (Saleh, Final Interview).

Furthermore, findings show that while some teachers reported that students should be exposed to a variety of models, others revealed students should be exposed to only one model. For example, Ali reported that students should be exposed to different accents of English. He stated:

this is the age of globalization in which people have to interact with different communities, different cultures...that is very important, that they should be exposed to various accents,

pronunciation, so that this makes them more competent, more practical and more professionally sound in the practical field today. If they are exposed to only to one thing, there will be confusion, ambiguity like this. So, in order to make them more competent listeners, more competent speakers, that's the reason that they should be exposed to different accents (Ali, Initial Interview).

Suliman reported that students should be exposed to different native accents of English because they do not know what accent people will use when they communicate with them in the future. He said, "by the end of the day the students should be familiarised with various accents in English. It's for their own good because we don't know to which country one day they will be" (Suliman, Initial Interview). In contrast, Ibrahim reported that students at early stages should be exposed to only one native model. He stated, "if they [teachers] teach one sort of pronunciation and then switch to another one...they [students] are confused...So, at this stage, this is the initial stage. Students should just focus on the standard one. This is the British one" (Khalid, Initial Interview).

6.3 Summary of discussion

Findings in the current research show that there is a connection between prior L2 experience and teacher cognition in relation to pronunciation instruction. this was evidenced in a number of cases where, for example, prior L2 experience had an impact on beliefs regarding the improvement of pronunciation and speaking skills and the use of native models in the classroom.

Furthermore, knowledge of L1 and L2 sound systems and theories about the acquisition of second language phonology were found to be valuable in the teaching of pronunciation. This was evidenced in Saleh's case whose knowledge stemmed from his teacher education. In his elaboration on his training to teach pronunciation, he mentioned that both his MA and PhD

qualifications involved studying and researching aspects related to the spoken aspect of language.

In contrast to previous research which suggested that CPD was significant in teacher cognition research, in the current study, this appeared to play a minor role in the experiences of the participants. This might be due to the lack of CPD offered by these institutions. In the case where participants attended CPD sessions, it seemed that CPD still played a minor role in these cases. In line with existing studies, however, contextual factors were found to influence classroom practice (e.g., Richards & Pennington, 1999; Rivera Cuayahuitl & Perez Carranza, 2015; Spada & Massey, 1992). In the current research, material and course specifications imposed by the universities were found to be particularly influential. For example, many of the participants have stated that they were following either the textbook or the course specification when prompted to explain their decisions in the classroom.

However, CPD was found to be influential in Ali's case only. Ali has been teaching pronunciation for twenty years and has taught pronunciation to EFL students in three English major programs at different institutions in Saudi Arabia and abroad. In the twenty years he has been teaching pronunciation, he has undergone several professional development trainings. This includes completing a CELTA qualification and an in-service training session on how to teach pronunciation to Saudi students. Yet, there was a discrepancy between Ali's beliefs and his classroom practice.

This may have an impact on his cognition regarding pronunciation instruction. He explained that the time he spent over the years preparing for the lessons involved researching and thinking about how to help students improve their pronunciation. He stated, "I make a lot of research...I keep thinking about my students and what will be more beneficial for them" (Ali, Initial Interview).

Moreover, findings in this research show that themes drawn on previous literature on pronunciation instruction (e.g., goals, methods, assessment) seemed to be interconnected. That is, a decision made by a teacher regarding

one theme can seemingly have an influence on decisions related to other themes. For example, it was found that there seemed to be a connection between goals of teaching pronunciation and how pronunciation was being assessed. This was evidenced in Saleh's case who reported that he tends to aim for intelligibility in his teaching of pronunciation. He stated, "the purpose of teaching this course is getting the students to be able to communicate effectively and intelligibly with either native speakers or other speakers of English as a second language" (Saleh, Initial Interview). Saleh's goal of teaching pronunciation seemed to be in parallel with his criterion of intelligibility in assessing students' oral production. He stated that "it [oral production] will have to be intelligible enough for me to give them the good or the final mark for each word" (Saleh, Initial Interview).

In addition, findings show that a connection existed between goals of teaching pronunciation and feedback to pronunciation errors. This was evidenced in Suliman's case where he reported that one of his goals of teaching pronunciation is the accuracy of producing sounds. He stated, "a student must be able to produce, to utter, to say, to pronounce the sounds of English correctly, properly" (Suliman, Initial Interview). Reported practices regarding feedback by Suliman seemed to indicate a focus on accuracy too. In his elaboration on how he tends to provide feedback, he reported that he does not take pronunciation errors lightly. He stated:

I'm kind of a strict person... and being strict [is] for the sake of the students themselves for their own good, I don't want them to go away from me with more like fossilised mistakes are the ones that they came in here with from high school. So, I do not tolerate any mispronunciation (Suliman, Initial Interview).

Overall, there appeared to be some instances of a correspondence between beliefs and practices in regard to teaching features of the L2 sound system. In relation to models, for example, beliefs and teaching practice, for the majority of teachers, seemed to be aligned with one another. To a lesser extent, however, whilst there was some evidence of a relationship between Ibrahim's beliefs and practices regarding feedback, the value he attached to

comprehensibility and fluency did not appear to be explicitly addressed in his teaching practice. Furthermore, despite being advocates of CLT methods, Suliman and Ibrahim, for instance, did not seem to adopt CLT methods, during the classroom observations conducted for this study at least. Moreover, although he explained that he believed that all features of language should be taught, there was a clear prioritization of segmentals within his teaching practice (although there was some suggestion that this related to the fact that other elements would be taught within different modules).

In the case of Suliman, for instance, it appeared that there were three main forces driving Suliman's practices. First, it seems that Suliman views pronunciation instruction through the lens of CLT methods. This was evident in his statements when he was prompted to talk about the goal of teaching this module. His advocacy for CLT can be felt when said "a student... [should be] able to communicate and interact with native speakers in a normal way (Suliman, initial Interview). This can be suggested from his statement, "I'm a big believer in communicative language teaching" (Suliman, Initial Interview). Second, looking closely at his practice may suggest that the allocated textbook has a major influence on Suliman's practice. This is evident in the activities he used in the classroom, which all were taken from the textbook. Third, it seemed that his schooling; namely, teacher education and L2 prior learning may somehow have influenced his practice. For instance, he seemed to favour native speakers to be the model for teaching pronunciation can be linked to the way had been learning English. Since he in high school, interacting with native speakers was his way to learn the language. He stated, "being a tour guide... I worked with a variety of nationalities but mainly Americans and British, some Australians and New Zealanders as well as. Canadian" (Suliman, Initial Interview).

There seems to be some connections then between Suliman's beliefs and practices in his teaching of pronunciation. On the one hand, a great extent of alignment seems to exist between beliefs and practices concerning goals, models and feedback. For example, a comparison between Suliman's beliefs and practices in regard to feedback suggests a strong match between them. To a lesser extent, there seems to be a correspondence between Suliman's

beliefs and practice regarding models. Though, the only mismatch is between his belief that students should be exposed to different accents of native speakers and his classroom practice. In the classroom, during observation, I had only heard British English being used. It could be that he has used other native models, but he did not do that during the study.

On the other hand, it looks like there is a little match between Suliman's beliefs and practices regarding prioritization, methods, and assessment. For example, although Suliman believes that both segmental and suprasegmental features should be all taught, he reported that more focus is drawn on segmentals and little attention is given to suprasegmentals. Likewise, Suliman believes that language should be approached through CLT methods; however, the techniques he used in the classroom, during observation, were textbook's based, and most of the activities in the textbook do not seem to correspond to CLT methods only

In Ibrahim's case, it appeared that there were three main forces driving his practices. First, his value of comprehensibility seemed to influence his views in regard to teaching features of the L2 sound system. This was evident in his statement about the goals of teaching aspects of the spoken language. He reported that he aims for a level where students are able to "express themselves...in a meaningful understandable way" (Ibrahim, II). Second, Ibrahim's regard for this module seemed to be shaped by his schooling; namely, teacher education. His conclusion that the module could help improve students' pronunciation seemed to stem from an early teacher education experience, where he revealed that a similar module he had completed during his BA qualification had a positive impact on his pronunciation skills. He stated, "I remember that this course helped me to pronounce. This course helped me to go to the dictionary and check. Because it's like lifelong learning and self-learning" (Ibrahim, II). He noted that he announced to his students the potential of this module to help them in their teaching, claiming that, "I say you can use this course later on when you are a teacher" (Ibrahim, Initial Interview). Third, his schooling, particularly his prior L2 experience, seemed to drive some of his classroom practice. This was evident in his view about fluency as well as his use of native models. His

prior L2 experience may also have shaped his view about speaking skills. He mentioned that he became a fluent speaker of English only when he spoke to native speakers. He stated:

It turned out that I cannot acquire fluency or speaking in a good way until I'm then exposed to the native English environment. I travelled to America four different times and I had a direct contact with American people (Ibrahim, Initial Interview).

Other contextual factors which seemed to influence classroom practice included module specification, time constraints, size of students, and the opportunity to bring extra materials. Khalid reported that teachers within his context must adhere to the module specification. He stated that:

there [are] administrative obstacles in the sense that you cannot change, you cannot deviate from the course book. The course specification you will follow topic-wise and you cannot switch to other books, so you will follow strictly the course specification (Khalid, Final Interview).

In addition, the choice to bring extra materials to the classroom is not always an option to teachers. For example, Suliman explained that he cannot bring extra material to the classroom. He stated that:

no professor is allowed to bring extra materials, so it's like totally our hands are tied in this matter. So even the distribution of the marks, everything... It's like a lot of strings attached. It's really constraining, and this is not the way that college teaching and learning should be. Because there should be room for the professor to think out of the box. To bring in creativity and innovation. But this part is ignored, so when you are imposing a material on the professor. So, they are restricted onto to within the boundaries of this material. So I totally disagree with that (Suliman, Initial Interview).

Furthermore, Khalid explained that he prefers to use a British model in his teaching of his Phonology module is his prior L2 experience with British English. He stated that:

my preference and my focus on British pronunciation and British English is the reason that from the very childhood, my whole education took place in British curriculum (Khalid, Initial interview).

In addition, Ahmed justified using an American model in the Listening and Speaking module he taught by stating, “I follow the textbook” (Ahmed, Initial Interview). Likewise, Ali explained that he used British pronunciation as a model because it is the model used in the allocated textbooks. He stated, “we have to follow the books... restriction is with the selection of the books... they shift to British pronunciation” (Ali, Initial Interview). In addition, he reported using an American model in the Listening and Speaking module he taught because the textbook required in that module was an American textbook. He said:

Whenever they shift to listening, speaking, then they have an American book that is called Interactions. That comes from America. So, American accents, they are more focused in listening and speaking (Ali, Initial Interview).

From the summary discussion, it can be concluded that Borg’s model (2015) could adopted (see below) as a framework for teacher cognition research in relation to pronunciation instruction.

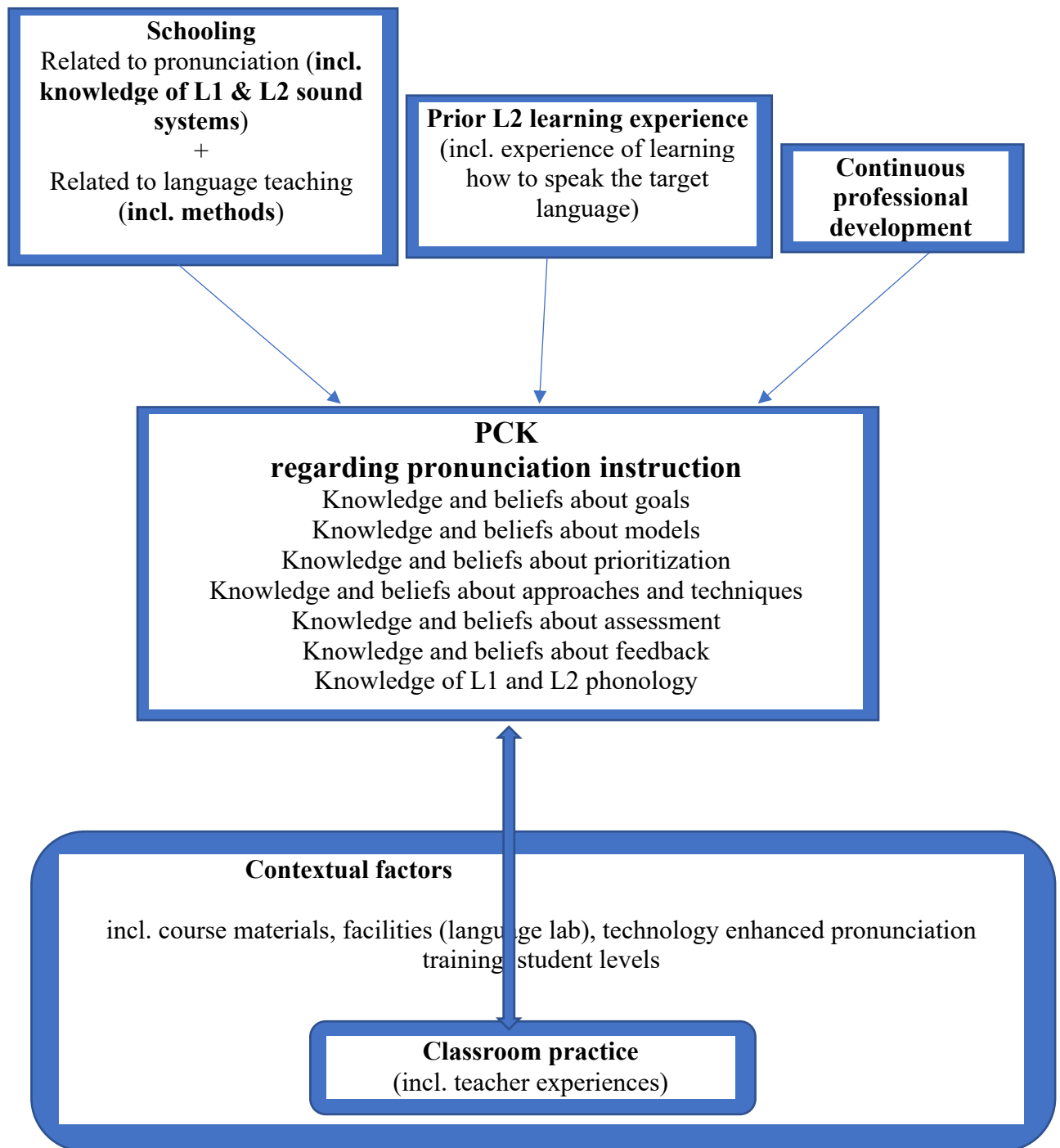


Figure 3: Revised model of Borg's (2015) 'Elements and processes in language teacher cognition in relation to pronunciation instruction'

Chapter Seven: Conclusion

This research aimed to examine EFL teachers' knowledge, beliefs and practices in relation to pronunciation instruction in Saudi English Major programs. In order to achieve this aim, the research used multiple case studies, adopting a qualitative multiple method approach, which involved initial interviews, classroom observation, stimulated recall interviews and final interviews. It was hoped that the findings could be used to both improve understanding and inform practice, with regard to teaching pronunciation instruction. This chapter provides an overview of the results, the limitations and the implications of the study.

7.1 Findings highlights

The findings from the current research explored teachers' knowledge and beliefs in regard to pronunciation instruction in the Saudi English Major programs context. It provided an insight into teachers' classroom practices in relation to pronunciation instruction. It highlighted the gaps between knowledge and beliefs on the one hand, and practices on the other hand. The research also examined factors underlying knowledge, beliefs and practices. The key findings from the study indicated that:

- Knowledge and beliefs in regard to pronunciation instruction varied amongst participants, in relation to different themes. For example, some participants believed that intelligibility should be the aim for pronunciation instruction, whilst others thought nativeness should be the goal when teaching pronunciation. Some teachers, however, talked about a professional level appropriate for someone who is going to teach a language. There were some points of commonality amongst the teachers worth noting. For example, their beliefs in regard to models. Most teachers reported that native models are the most appropriate to be used in the teaching of pronunciation.
- Teachers in the study adopted different practices in regard to pronunciation instruction. These seemed to be affected by their goals,

for example, for a teacher who reported native-like pronunciation to be the aim; most of his practice appeared to be reflecting this goal. However, there are some exceptions where practices are not representing aims of teaching, as has been illustrated in relation to the theme of pronunciation assessment. It seemed that classroom practice is influenced by contextual factors, as well as teaching experience.

- There seemed to be a connection between knowledge and beliefs, with classroom practices. However, it appeared that there were also gaps between the two. This depends, for the most part, on issues such as contextual factors, for example, a teacher may believe that using technology in the teaching of pronunciation is important, however, he may not have access to technology within his context.
- It appeared that knowledge and beliefs and practices are affected by underlying factors such as teacher education, prior L2 experience, CPD, teaching experience and contextual factors. It also appeared that teacher education as well as prior L2 experience played a significant role in shaping teachers' knowledge and beliefs in regard to pronunciation instruction.

7.2 Contributions of the research

7.3.1 A holistic study

One of the most significant contributions of the research is the holistic approach taken to carry out the study. This has been important in bringing together the most common themes identified in the literature on pronunciation instruction and viewed in light of teacher cognition research. The themes in pronunciation instruction include goals, models, prioritization, methods and techniques, feedback and assessment, and these were brought together, and explored in depth, within one study. Furthermore, the current study highlighted the connections between different elements within teacher cognition which usually have an impact on teaching and learning. Such insights are of great value to teacher education research.

7.3.2 Interconnections of themes within pronunciation instruction

It was found that goals of teaching pronunciation seemed to provide a compass for models, prioritization, methods and techniques, feedback and assessment. For example, those who adopt native-like pronunciation as a goal of their teaching seemed to focus on a set of specific types of knowledge, beliefs and practices which seemed to facilitate the achievement of their goal of teaching. Also, those who focused on native-like pronunciation as a goal tended to adopt native models (GA and RP) in the classroom. On the other hand, those who take intelligibility as a goal of their teaching tend to utilise different types of knowledge, beliefs and practices in accordance to intelligibility. Those teachers would tolerate, for example, some pronunciation errors as long as they do not change the meaning of a spoken word. Goals of teaching pronunciation therefore appeared to have the greatest impact on the direction of pronunciation of instruction and subsequently, it is important to recognise the central role played by goals.

Although goals play a significant role in the teaching of pronunciation, assessment of students' pronunciation also appeared to be important. This is because even when a goal is adopted, there must be a proper evaluation so that teachers know that their goals of teaching have been achieved. In most settings, there is a huge gap between goals and assessment of teaching. For example, when it comes to assessment of students' pronunciation, there seemed to be an emphasis on assessing perception and with less attention given to production of utterances. This would have students' pronunciation insufficiently checked. Within the fifteen cases in the current study, only one teacher paid attention to this issue, and added a production assessment of his students' pronunciation.

7.3.3 Underlying factors

Teacher cognition research tends to identify knowledge, beliefs and practices. It also commonly differentiates between beliefs and practices. Very few studies, however, investigate the underlying factors of teachers' knowledge, beliefs and practices. The current study identified teachers' knowledge,

beliefs and practices, in light of the literature on pronunciation instruction, through narratives of the most telling cases. It went further, however, by looking in detail at the relationship between knowledge, beliefs and practice, before gaining more in-depth insights into the factors that may have influenced teachers' knowledge, beliefs and practice. The findings therefore go beyond description, to provide practical benefit, which will prove important for teaching practice.

7.3.4 Methods and conceptual framework

The combination of the range of methods included initial interviews, classroom observation, stimulated recall interviews and final interviews not only strengthened the reliability and validity of the research findings, but also helped to provide a model for future teacher cognition research as well as assisting in the development of a conceptual framework for pronunciation instruction. Such a multiple method approach, which included narrative inquiry, facilitated in eliciting appropriate data; enabling the researcher to go below the surface and develop a deeper understanding of the processes at work. Thus, rather than simply asking questions in the initial interviews, the researcher generated further data through watching participants' actions in the classroom, allowing them to elaborate on their performance in stimulated recall interviews, before then expanding on valued data in the final interviews. The combination of methods complemented one another, and used alongside researcher notes and reflections, provided thorough, in-depth insights that would not have been achieved with a less developed methodological approach. It is hoped that this research has underlined the value of such a strategy, which may then be adopted in future research related to teacher cognition. This multiple method approach and the data it generated provided in-depth understanding which allowed the researcher to expand on Borg's model of teacher cognition and develop it into a conceptual framework for pronunciation instruction.

7.3 Research challenges

Whilst this research aimed to address the challenges encountered throughout the study as they arose, as with all research, there were inevitable limitations which were specific to this particular study, and it is important to acknowledge these. At times during the research, for instance, it was found that teachers used terms to mean different things. For example, some teachers would use ‘fluency’ to mean native-like pronunciation. This was one of the issues that the researcher found challenging during the analysis stages and therefore had to go through the participants’ accounts in detail, numerous times, to decide what the teachers meant in their use of these terms. Thus, some element of interpretation may have impacted on the findings in such cases. Such detailed reading and re-reading of the transcripts, however, was also regarded as beneficial in improving familiarity with – and understanding of – each participants’ accounts.

Another potential limitation was that not all participants were able to participate in the four stages of the study, although all took part in the initial interviews. Although five participants did not complete all stages, it was deemed necessary to include the findings from their interviews as they introduced important insights in regard to, at the very least, their knowledge and beliefs. These participants’ practices, then, were not explored in as much detail as those who participated in the four stages. It is important to note, however, that the majority of participants were able to participate in all four stages, and the findings from these ten participants contributed important understandings in relation to the connections and underlying factors between knowledge, beliefs and practices within pronunciation instruction. Whilst it has been important to recognize these issues as potential limitations of the study, therefore, it is also felt that these limitations are minimal in comparison to the contribution made.

7.4 Future research

Whilst the current thesis has provided analysis of the current data to the extent that was possible in the time available and the word count, because of the

wealth of data that was generated by the study, future publications from the author will draw on additional data that was not utilized in the current thesis and develop analysis of particular material further. These include, for instance, the anxiety of teaching pronunciation, lack of resources for training and professional development, lack of exposure to the language in general within this context, the significance of textbooks and the lack of empirical evidence which these textbooks are based on. Furthermore, whilst the current study has underlined important issues and contributed significant insights into teacher cognition in relation to pronunciation instruction, the study also identified further areas which would benefit from further research. CPD, for instance, did not emerge as a salient issue in the current study and remains under-researched and would benefit from further investigation in order to develop insights in the field.

7.5 Personal reflections

This has been a journey of a lifetime where I have gained knowledge and skills related to research methods as well as in depth reading of both teacher cognition and pronunciation instruction. On a personal level, research methodology and methods have changed my perspective in regard to fundamental issues related to life in general. For example, I now tend to look at things more deeply and do not take phenomena at face value. Seeking reality and truth is a complex endeavor which requires both persistence and patience. Despite all the circumstances that people across the world have faced during the difficult times posed by the COVID-19 pandemic, my time at the University of York, as well as the United Kingdom has helped to shape my perspective, not only in my field of study, but also on my life as a whole.

Appendices

Appendix 1: Course outline for Sounds of English

Qassim University

English Language & Translation

Study Program

COURSE OUTLINE

1. Course and Instructor Information

Course Title	Sounds of English	Course code	ENG 152
Course Instructor	Name		
	College		
	Office Number		
	Email		
	Office Hours		

2. Course Objective

The main purpose of the course is to enable the students to produce and perceived English utterances well.

3. Topics to be covered

No.	Topic	Week No.	Contact Hours
1	Introduction: Letters and sounds.	1	3
2	English Sounds.	2-11	30
3	English Syllables.	12-13	6
4	Introducing English Stress and Intonation.	14	3

4. Prescribed textbook

Hancock, M. (2003). *English Pronunciation in Use*.

5. Assessment

No.	Assessment task	Week due	Proportion of total assessment
1	Mid-Term Exam.	9	30%
2	Homework and Class Participation.	All Along	10 %
3	Final Exam.	16-18	60%

Appendix 2: Course outline for Listening and speaking

COURSE OUTLINE

1. Course and Instructor Information

Course Title	Listening and Speaking I		Course code	ENG 126
Course Instructor	Name			
	College			
	Office Number			
	Email			
	Office Hours			

2. Course Objective

This course integrates listening, vocabulary and speaking. The purpose of this course is to help build strategy-awareness of predicting language for different academic and social contexts.

3. Topics to be covered

No.	Topic	Week No.	Contact Hours
1	Academic Life Around the World	1-2	6
2	Experiencing Nature	3-4	6
3	In the Community	5-6	6
4	Cultures of the World	7-8	6
5	Health	9-10	6
6	Social Life	11-12	6
7	Sports	13-14	6

4. Prescribed textbook

5. Assessment

No.	Assessment task	Week due	Proportion of total assessment
1	Speaking Skill: In-class activities (Group discussion, giving presentations, storytelling, etc.)	All along	25 %
2	Midterm	10	15%
3	Final Exam	16	60%

Appendix 3: Course outline for King Saud University

A. Course Identification

1. Credit hours: 3 hours			
2. Course type			
a.	University ☐	College ☐	Department ☒ Others ☐
b.	Required ☐	Elective ☐	
3. Level/year at which this course is offered: Level 2			
4. Pre-requisites for this course (if any): none			
5. Co-requisites for this course (if any): none			

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom		
2	Blended	45	100%
3	E-learning		
4	Correspondence		
5	Other		

comments: As smart boards, Blackboard platforms, and personal websites are used, blended teaching is in place.

7. Actual Learning Hours (based on academic semester)

No	Activity	Learning Hours
Contact Hours		
1	Lecture	45
2	Laboratory/Studio	
3	Tutorial	
4	Others (specify)	
	Total	45
Other Learning Hours*		
1	Study	4
2	Assignments	4
3	Library	
4	Projects/Research Essays/Theses	4
5	Others (specify)	
	Total	12

* The length of time that a learner takes to complete learning activities that lead to achievement of course learning outcomes, such as study time, homework assignments, projects, preparing presentations, library times

B. Course Objectives and Learning Outcomes

1. Course Description

This course aims to train students to listen and understand recorded materials that contain conversations and interviews. It also aims to train them to speak and communicate accurately and fluently, develop their ability to build sentences, pose questions, use new vocabulary, conduct a presentation & debate, and improve their language and linguistic outcome. It also trains them to interpret simple sentences and questions, using new vocabulary, from Arabic to English.

The listening component of the course is designed to teach students supra-segmental units such as stress, intonation, tone, rhythm, and rate, and their importance in meaning assignment. Since listening is meant for prospective interpreters and translators, students are trained to pay attention to what they listen to, to practice quick storage of language and content in memory, and to exhibit speed in message retrieval. The speaking component is designed to get students to develop their ability to speak fluently and pay special attention to improving their pronunciation and to expanding their active vocabulary through use.

2. Course Main Objective

Again, this course aims to train students to listen and understand recorded materials that contain conversations and interviews. It also aims to train them to speak and communicate accurately and fluently, develop their ability to build sentences, pose questions, use new vocabulary, conduct a presentation & debate, and improve their language and linguistic outcome. It also trains them to interpret simple sentences and questions, using new vocabulary, from Arabic to English.

3. Course Learning Outcomes

CLOs		Aligned-PLOs
1	Knowledge:	
1.1	Arrange the main points and the specific details of audio information in formal or informal contexts	
1.2	Specify the exact vocab, expressions and tense/s needed to communicate confidently and fluently	
2	Skills :	
2.1	Create an outline for audio information, distinguish main points from specific details, compare formal and informal audio information	
2.2	Communicate confidently using a wide range of vocab, expressions, right intonation and tenses	
3	Competence:	
3.1	Demonstrate interpersonal skills & responsibility in a professional context	
3.2	Apply different communication skills while working in a group as a team member	

C. Course Content

No	List of Topics	Contact Hours
1	CHAPTER ONE: New Challenges	6
2	CHAPTER TWO: Cooperation and Competition	6
3	CHAPTER THREE: Relationships	6
4	CHAPTER FOUR: Health and Leisure	6
5	CHAPTER SIX: Money Matters	6
6	CHAPTER SEVEN: Remarkable Individuals	6
7	Revision	3
Total		45

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	Knowledge		
1.1	Arrange the main points and the specific details of audio information in formal or informal contexts	Listening to audios, student practice, and feedback	1st In-term Exam, 2nd In-term Exam, Final Exam, and on-going indirect assessment
1.2	Specify the exact vocab, expressions and tense/s needed to communicate confidently and fluently	Whole group & small group discussions, and feedback	1st In-term Exam, 2nd In-term Exam, Final Exam, and on-going indirect assessment
2.0	Skills		
2.1	Create an outline for audio information, distinguish main points from specific details, compare formal and informal audio information	Listening to audios, student practice, and feedback	1st In-term Exam, 2nd In-term Exam, Final Exam, and on-going indirect assessment
2.2	Communicate confidently using a wide range of vocab, expressions, right intonation and tenses	Listening to audios, student practice, and feedback	1st In-term Exam, 2nd In-term Exam, Final Exam, and on-going indirect assessment
3.0	Competence		
3.1	Demonstrate interpersonal skills & responsibility in a professional context	Sample presentations /feedback in class	Presentation
3.2	Apply different communication skills while working in a group as a team member	Continuous practical practice/feedback in class	On-going indirect assessment

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	1st In-term Exam	8	30%
2	2nd In-term Exam + Presentation	12	30%
3	Final Exam	17	40%
4			
5			
6			
7			
8			

*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

Office hours

F. Learning Resources and Facilities

1. Learning Resources

Required Textbooks	<i>Mosaic 1 – Listening/Speaking (Sixth Edition) 2012</i> – Author: Jami Hanreddy and Elizabeth Whalley
Essential References Materials	<i>Skills for Success: Listening and Speaking 3</i> , 2010, by Miles Craven <i>Unlock Level 4 Listening and Speaking Skills Student's Book and Online Workbook</i> , 2014, by Sabina Ostrowska <i>Unlock Level 4 Listening and Speaking Skills Student's Book and Online Workbook</i> , 2014, by Lewis Lansford
Electronic Materials	Websites such as http://englishlistening.com/ielts-listening-tests & https://www.esl-lab.com/index.htm Smartphone applications such as ESL Listening Quizzes https://itunes.apple.com/us/app/esl-english-listening-test/id1124843826?mt=8
Other Learning Materials	Extra downloaded audios from various resources

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Classroom equipped with an e-podium, smart board, a projector, internet connection, and good quality speakers.
Technology Resources (AV, data show, Smart Board, software, etc.)	Classroom equipped with an e-podium, smart board, a projector, internet connection, and good quality speakers.
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	-Number of seats should match number of registered students. - The grouping of students for instruction is influenced by class size and number of students.

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Feedback on course and instructor	Students	Survey

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)

Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify))
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	
Reference No.	
Date	

Appendix 4: Key themes, topics and questions

Table 1: Key themes, topics and questions

PCK about pronunciation instruction	Potential themes					Broad potential questions about knowledge and beliefs	What underpins knowledge and beliefs	Broad potential questions about practice	What underpins practice
Knowledge and beliefs about goals	Native like		Intelligibility/comprehensibility			Tell me about your pronunciation teaching goal?	Why do you think so?	What goal do you select in your teaching of pronunciation?	why do you use this goal? What about the other goal?
Knowledge and beliefs about models	RP	GA	Nativized	Lingua Franca model	Non-native (e.g., Saudi)	What models do you find the most appropriate to teach pronunciation?	Why do you think this model is the most appropriate?	What models do you use?	Why do you use this model? Why not other models?
Knowledge and beliefs about prioritization	Segmentals		Prosodies			In your opinion, what are the most important pronunciation features to teach?	Why do you think... are more important?	On which pronunciation features do you focus on when teaching pronunciation?	Why can't you focus on the other features?
Knowledge and beliefs about approaches & techniques	approaches		Techniques			What approaches, techniques, tools and technology do you think are the most useful in teaching pronunciation?	Why do you think these techniques are the most useful?	In your teaching of pronunciation, which of these approaches/techniques do you use?	Why don't use other techniques such as..?
Knowledge and beliefs about feedback	Time	Type of corrected errors	Type		Strategy	How do you feel about feedback in pronunciation instruction?	Why do you think so?	How do you give feedback on students' pronunciation?	Why do you use this...?
Knowledge and beliefs about assessment	Techniques					What do you think about pronunciation assessment?	Why do you think...?	How do you assess students' pronunciation?	Why do us this? Why don't you use..?

Appendix 5: Revised interview guide used in the main study

Interview guide

Part one: Introduction:

1. Introducing myself.
2. Introducing the topic.
3. Introducing purpose of the study.
4. Discussing ethical considerations.
5. The use of a recording device.

Part Two: Pedagogical content knowledge (PCK):

a. General questions:

- What courses do you teach?

Depending on the course an interviewee teaches (whether listening and speaking, pronunciation, or phonetics and phonology), the follow up question is:

- What is it like to teach (name of the course)?

b. Goals:

- What level of speaking proficiency do you think teachers should aim for when teaching aspects of the spoken language?
 - e.g., native-like (errors must not happen), non-native (errors are ok).
 - Why do you think so?

- What do you see to be the purpose of teaching (name of the course)?
- e.g., native-like (errors are not permissible), non-native (errors are ok).
-

If beliefs and practices are different:

- Why do aim for (practices regarding goals) in your teaching of (name of the course) when you think teachers should (beliefs about goals)?
- Are there any reasons?

B. Models:

- What materials should teachers use when teaching the spoken aspect of language?
- e.g., recordings
- Tell me about the materials you use in your teaching of (name of the course)?
- e.g., recordings

If beliefs and practices are different:

- Why do you use (practices regarding models) in your teaching of (name of the course) only when you believe that teachers should (beliefs about models)?
- Are there any reasons?

C. Prioritization:

1. What features of the spoken language should teachers focus on the most?
- e.g., vowels & consonants, rhythm, stress intonation, etc.
- In your teaching of (name of the course), what linguistic features of the spoken language do you focus on the most?

- e.g., vowels & consonants, rhythm, stress, intonation etc.

If beliefs and practices are different:

- Why do you focus on (practices regarding prioritization) when believe that teachers should focus on (beliefs about prioritization)?
- Are there any reasons?

D. Approaches and techniques:

- Describe the most effective methods teachers should use when teaching the spoken aspect of language?
- Tell me about the methods you use when teaching aspects of the spoken language in (name of the course)?

If beliefs and practices are different:

- As you mentioned, there are many effective ways to teach aspects of the spoken language; however, you use (practices regarding approaches and techniques). Why?
- Are there any reasons?

E. Feedback:

- Explain how should teachers provide feedback to students' spoken language?
- Describe the ways you provide feedback to your students in (name of the course)?

If beliefs and practices are different:

- You mentioned that feedback should be (beliefs about feedback). However, you provide feedback differently in your teaching of (name of the course). Why?
- Are there any reasons?

F. Assessment:

- How do you think students' spoken language should be assessed?
- How do you assess your students' spoken language in (name of the course)?

If beliefs and practices are different:

- You think teachers should (beliefs about assessments) but you use different ways in assessing your students. Why?
- Are there any reasons?

Part Three: Background information:

A. L2 prior learning experiences:

- When you were a student, did you have a course like this?
- How did you find it?
- Tell me what did you do to learn to speak English?
- What methods have you used to improve your speaking?
- Can you give examples?

B. Teacher education:

- Have you had any training that prepared you for teaching (name of the course)?
- How did it prepare you?

- What things did you learn from that?
- What things have you used in your teaching of (name of the course)?
- Was there anything you did not use?
- Why?

C. Continuous professional development:

- Describe any professional training program you have had related to teaching aspects of the spoken language while you are a teacher?
- Workshops, conferences, publications?

D. Contextual factors: (If not discussed early in the interview)

- What are the key characteristics of students in your classes?
- What is the class size?
- Tell me about their learning goals?
- Describe their level of motivation?
- What resources are available to them?
- Tell me about their classroom environment?
- Describe your experience of teaching (your history of teaching)?

Ending question:

- Is there anything you find important to add we have not discussed?

Appendix 6: Initial interview guide used in the pilot study

Interview guide:

General questions:

- Introduction:
 1. Describing the purpose of the study and ethical considerations.
 2. General questions about courses that have been taught (e.g., what courses have you taught?)

Follow up questions:

- Please tell me about your teaching of speaking/pronunciation?
 1. Tell me more about that?
 2. Can you give examples?

Part One: Pedagogical content knowledge (PCK):

A. Goals:

- What goal do you believe is the most appropriate when teaching speaking/pronunciation?
 1. Prompts: (e.g., native like pronunciation, intelligibility)
 2. This is interesting, tell me why do you think so?
 3. How do you feel about native like pronunciation/intelligibility?
- Which pronunciation goal you adopt in your teaching?
 1. Can you explain more?
 2. This is interesting, can you tell me why?
- If beliefs and practices are different, why?

B. Models:

- What is your opinion about speaking models?
 - a. Prompts: (e.g., GA, RP, lingua franca core, nativized models, non-native models)
 - b. Can you elaborate more?
 - c. What do you mean by that?
 - d. Why do you think this/these is/are the most appropriate model(s)?
 - e. What is your view on non-native models (e.g., Saudi English)/ Lingua franca core/ nativized models (e.g., Indian English)?
- Which models do you actually use in your teaching?
 1. Why do you use this/these model(s)?
 2. Why not other models?
- If beliefs and practices are different, why?

C. Prioritization:

- What pronunciation features do you think are the most important to teach?
 2. Prompts: pronunciation features are segmentals (consonants and vowels) or prosodies (stress, intonation, rhythm)
 3. Can you elaborate more on this?
 4. Why do you see these as more important?
 5. what about: what may have been missed? segmentals: consonants and vowels/ prosodies (stress, intonation, rhythm etc.)
- On which of these features do you focus on in your teaching?
 1. Why?
 2. What about other features: what may have been missed? segmentals: consonants and vowels/ prosodies (stress, intonation, rhythm etc.)
- If beliefs and practices are different, why?

D. Approaches and techniques:

- What approaches/techniques in pronunciation instruction should be used?

1. Can you give examples?
2. Why these approaches/techniques?
3. What about:

Approaches: intuitive-imitative approach, analytic linguistic approach, integrative approach, prosodic based approach.

Techniques: phonetic training, CAPT, listening discrimination, minimal pairs, critical listening, imitation and mimicking, shadowing and mirroring, tongue twisters, reading aloud, recording of learners' production, silent articulation multi-sensory reinforcement, fluency building, decoding, color and sound association, drama, poetry, games, body movement.

- What approaches/techniques do you actually use when teaching pronunciation?
 1. Can you give examples?
 2. What about other approaches/techniques?
- If beliefs and practices are different, why?

E. Feedback:

- How do you feel about feedback in pronunciation instruction?
 1. Prompts: (e.g., time, type of corrected errors, type, strategy)
 2. Can you elaborate more?
 3. What about (list what may have been missed)?
 4. Why?
- How do you actually provide feedback on students' pronunciation?
 1. Prompts: (e.g., time, type of corrected errors, type, strategy)
 2. Can you elaborate more?
 3. What about (time, type of corrected errors, type, strategy)?
 4. Why?

- If beliefs and practices are different, why?

F. Assessment:

- How do think pronunciation should be assessed?
 1. (e.g., based on accuracy, intelligibility, comprehensibility)
 2. Can you elaborate more?
 3. Why?
 4. What techniques do you think should be used to assess students' pronunciation?
 5. Prompts: (techniques: e.g., use of pronunciation scales, CAPT, assessing perception and production)
- How do you actually assess your students' pronunciation?
 1. Prompts: e.g., techniques
 2. Why?
 3. What about (list what may have been missed)?
- If beliefs and practices are different, why?

Part two: Background information:

A. L2 prior learning experiences:

- Tell me about the way you had been taught pronunciation as a learner? What did your teachers teach you?
 1. What did you think of that?
 2. Do you think it was successful?
 2. Can you give examples.
- How did you approach pronunciation as a learner?
 1. What methods have you used as learner to improve your pronunciation?
 2. Can you give me examples?

B. Teacher education:

- Describe any training that you have relevant to pronunciation instruction?

B. What have you taken forward?

C. Why? Why not?

C. Continuous professional development:

- Describe any professional training programs/workshop/conference you have had while you are a teacher and is related to pronunciation instruction?
 1. Can you elaborate more?
 2. Can you give examples.

Ending question:

- Is there anything you find important to add we have not discussed?

Appendix 7: Unstructured classroom observation schedule used in the pilot study

Time (Minutes)	Theme	Comments

Appendix 8: Structured classroom observation schedule used in the main study

Classroom observation schedule

Information page

<i>Information about the teacher</i>			
Name of the teacher		Name of the institution	
Date of observation		Time of observation	
Duration of observation		Title of the course	
<i>Information about the classroom</i>			
Location		Students size	
Equipment			
<i>Information about the lesson & materials used</i>			
Method of delivery		Title of the lesson	
Textbook		Page number	
Other materials			

Observation schedule

Minutes	Themes							Evidence	Reference
	Goals	Models	Prioritization	Approaches	Feedback	Assessment	other		
2									
4									
6									
8									
10									
12									
14									
16									
18									
20									
22									
24									
26									
28									
30									
32									
34									

36									
38									
40									
42									
44									
46									
48									
50									

Appendix 9: Instructions for Stimulated Recall interviews

(Stimulated Recall)

(adapted from: Gass and Mackey, 2017)

Instructions for research participants

What we're going to do now is listen to the audio. I am interested in what you were thinking **at the time** you were..... I can hear what you were saying by listening to the audio, but I don't know what you were thinking. So, what I'd like you to do is tell me what you were thinking, what was in your mind **at that time** while you were.....

I'm going to play the audio to you. When I pause the audio, please tell me what you were thinking **at the time**. Then, I will ask you some follow up questions related to that part of the audio. Also, I will show you some parts of the material you used during class to help refreshing your memory about each part.

Appendix 10: Initial scheme of codes

Codes drawn on previous literature of pronunciation instruction		
	Codes	
Theme	Knowledge & beliefs	Practice
Goals of teaching pronunciation	G	G-P
Models in pronunciation instruction	M	M-P
Prioritization in pronunciation instruction	PRI	PRI-P
Techniques	TEC	TEC-P
Feedback	F	F-P
Assessment	AS	AS-P
Other	O	OG

Codes drawn on previous literature on teacher cognition		
Theme	Sub-theme	Code
Prior L2 learning experience	-	PRI
Teacher education	-	TE
Teacher experience (history of teaching)	-	TEX
Continuous Professional development	-	CPD
Contextual factors	-	CONTEXT
Resources available	-	RESO
Learners	Motivation	LM
	Learning goals	LG

Appendix 11: Information page and consent form

Teacher cognition in relation to speaking instruction in Saudi English major programs

Dear teacher/faculty member,

I, Hamad Allehidan, am a PhD student at the university of York and I am currently carrying out a research project investigating EFL teachers' beliefs and practices in relation to speaking instruction in Saudi English major programs. The findings of this study will contribute to understanding issues relevant to speaking instruction from the perspectives of EFL teachers in the Saudi context. I am writing to ask if you are able to take part in the study.

Taking part in the study would involve participating in two interviews and allowing three classes to be observed. This may involve a maximum of five hours of your time. One hour for the initial interview, three hours for classroom observation and one hour for an interview in which themes in the initial interview and observation are discussed.

The data that you provide (audio recordings of interviews and observation) will be stored by code number. Any information that identifies you will be stored separately from the data. No image or audio which may identify you or your students will be used in publications or presentations resulting from the research. Moreover, the focus of observation will be on you, the teacher, and no data about students will be collected. Additionally, you will be given the chance to review a transcript of the interview to verify its accuracy by sending me an email haha504@york.ac.uk within two weeks after the interview.

Data will be stored on a password protected computer. The identifiable data will be kept for three weeks after which time it will be anonymized.

Anonymous data, however, will be kept for seven years after which time it will be destroyed. The data may be used for future analysis and shared for research or training purposes, but participants will not be identified individually. If you do not want your data to be included in any information shared as a result of this research, please do not sign this consent form.

You are free to withdraw from the study at any time during data collection and up to two weeks after the data has been collected.

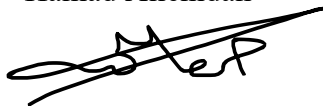
The data that we collect (audio) may be used in *anonymous* format in different ways. Please indicate on the consent form attached with a ☒ if you are happy for this anonymized data to be used in the ways listed.

I hope that you will agree to take part. This research has been approved by the Department of Education, University of York Ethics Committee. If you have any questions about the study that you would like to ask before giving consent or after the data collection, please feel free to contact my supervisor Dr. Zoe Handley by email zoe.handley@york.ac.uk or by telephone on +44(0)1904324501, or the Chair of Ethics Committee via email education-research-administrator@york.ac.uk

Thank you for taking the time to read this information.

Yours sincerely

Hamad Allehidan



PhD candidate

University of York

Email: haha504@york.ac.uk

Teacher cognition in relation to speaking instruction in Saudi English major programs

Consent Form

Please initial each box if you are happy to take part in this research.

I confirm that I have read and understood the information given to me about the above named research project and I understand that this will involve me taking part as described above.

☐

I understand that the purpose of the research is to elicit data in relation to EFL teacher cognition relevant to speaking instruction in Saudi English programs

☐

I understand that data will be stored securely in a password protected computer and only Hamad Allehidan will have access to any identifiable data. I understand that my identity will be protected by use of a code.

☐

I understand that my data will not be identifiable and the data may be used in publications that are mainly read by university academics, in presentations that are mainly attended by the public or freely available online.

☐

I understand that identifiable data will be kept for three weeks after which it will be anonymized, and anonymous data will be kept for seven years after which it will be destroyed.

☐

I understand that data could be used for future analysis or other purposes such as research and teaching purposes.

☐

I understand that I can withdraw my data at any point during data collection and up to two weeks after data is collected.

☐

I understand that I will be given the chance to review a transcript of the interview to verify its accuracy by contacting Hamad Allehidan via email haha504@york.ac.uk within two weeks after the interview.

☐

Name:

Signature:

Date:

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