UNIVERSITÉ DU QUÉBEC À MONTRÉAL

PRE-SERVICE TEACHERS' BELIEFS REGARDING FORM-FOCUSED INSTRUCTION OVER A FOUR-YEAR TEACHER EDUCATION PROGRAMME

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> BY NATHALIE WLODARSKI

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LES ENSEIGNANTS EN FORMATION : L'ÉVOLUTION DE LEURS CROYANCES À L'ÉGARD DE L'ENSEIGNEMENT DE LA GRAMMAIRE

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PAR NATHALIE WLODARSKI

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TABLE OF CONTENTS

LIST	OF TABLES AND CHARTS	V
LIST	of ABBREVIATIONS and ACRONYMS	.vii
ABS	ΓRACT	ix
RÉSU	J MÉ	. 10
INTR	ODUCTION	. 11
СНА	PTER I MOTIVATION FOR THE thesis	. 13
1.1	Introduction	. 13
1.2	Teachers' Beliefs and Decision-Making	. 14
1.3	Relationship Between Prior Experiences as a Learner and Teaching Practices	s 14
1.4	Teacher Education and Grammar Teaching	. 16
1.4.1	Form-Focused Instruction and Grammatical Development	. 17
	How FFI is Provided in Reality	
1.4.3 Unan	The Development of Beliefs in Teacher Education: Questions Remain swered	. 18
	Research Objectives.	
	.5.1 Scientific and Social Pertinence	
СНА	PTER II THEORETICAL FRAMEWORK	.21
2.1	The Influence of Instruction on L2 Learning	.21
2.2	Implicit and Explicit Knowledge Development	. 23
2.2.1	Relationship Between IK and EK: The Interface Debate	. 24

	2.2.2	The Noninterface Position	
	2.2.3	The Strong Interface Position	
	2.2.4	The Weak Interface Position	
2.3	What	Is Form-Focused Instruction?	26
	2.3.1	Focus on Form versus Focus on Forms: Emergence of Terminology	
	2.3.2 Literati	Conceptualisation of Focus on Form and Focus on Forms in Reure	
	2.3.3	FFI: Implicit or Explicit?	29
	2.3.4	Explicit and Implicit Teaching and Knowledge	31
2.4	Teach	ner Education and Teacher Cognition	32
	2.4.1	Belief Versus Knowledge	34
2.4.	2 The F	Formation of Beliefs About Teaching	35
2.5	Teach	ners' Beliefs About Grammar Teaching	36
	2.5.1	Contextual Factors Influencing Beliefs	38
2.6		Effects of Teacher Education on Pre-Service Teachers' Beliefs on	
Lan	guage I	earning	39
2.7	What	Do Language Teachers Believe About FFI?	42
2.8	Resea	arch Questions	47
CH	APTER	III METHODology	48
3.1	Resea	arch Design and Variables	48
3.2	Partic	pants	49
3.2.	1 Recru	iitment	51
3.3	Instru	ment	52
3.3.	1 Section	on A: Consent Form	54
3.3.	2 Section	on B: Sociodemographic Information	54
3.3.	3 Section	on C: Multiple-Choice Questions	54
3.3.	4 Section	on D: Open-Ended Questions	58
3.4	Piloti	ng	59
3.5		Collection	
3.6	Data 1	Preparation	62

CHA	PTER IV RESULTS	63
4.1	Pre-Service Teachers' Beliefs About Grammar Teaching	64
4.2	Beliefs over Time	65
4.3	Differences Between ESL and FSL	67
4.4	Elements Influencing Reported Beliefs	68
СНА	PTER V DISCUSSION	72
5.1	Pre-Service Teachers' Declared Beliefs Concerning Form-Focused Instruction 73	on
5.1.2	Instruction Focused on Meaning Versus Instruction Focused on Form	73
5.1.3	Focus on Form Versus Focus on Forms	75
5.1.4	Implicit Versus Explicit Instruction	77
5.1.5	Deductive Versus Inductive Instruction	79
5.2 Prog	The Evolution of Beliefs over a Four-Year Teacher Teacher Education ramme	81
5.3	Different Language, Different Visions about Grammar Teaching?	84
5.4	The Origins of Pre-Service Teachers Beliefs	87
5.5	Limitations	91
5.6	Future Research	93
CON	ICLUSION	96
ANN	JEX A	99
ANN	JEX B	107
REF	ERENCES	115

LIST OF TABLES AND CHARTS

Table/Chart	Page
3.1 Ordinal Numbers of Participants	50
3.2 Questionnaire Items	55
4.1 Descriptive Statistics	64
4.2 Reported Origins of Pre-Service Teachers' Beliefs	69

LIST OF ABBREVIATIONS AND ACRONYMS

BA Bachelor of Arts

B.Ed. Bachelor of Education

BALLI Beliefs About Language Learning Inventory

CLT Communicative Language Teaching

EFL English as a Foreign Language

EK Explicit Knowledge

ESL English as a Second Language

FFI Form-Focused Instruction

FonF Focus on Form

FonFs Focus on Forms

FSL French as a Second Language

IK Implicit knowledge

ISLA Instructed Second Language Acquisition

- L1 First Language
- L2 Second Language
- MEES Ministère de l'Éducation et de l'Enseignement supérieur
- QEP Quebec Education Programme
- SLA Second Language Acquisition

ABSTRACT

A strong relationship exists between teachers' beliefs concerning how grammar is learnt and taught and how they then teach grammar in the classroom (Phipps & Borg, 2009; Sanchez & Borg, 2014). Research investigating the evolution of pre-service teachers' beliefs is in its infancy with little known about its influence compared to prior learner experiences, with a focus mainly on English as a language of instruction (Borg, 2015). Nevertheless, results suggest experiences as learners are stronger in shaping beliefs than teacher education. Thus, the aims of this cross-sectional study were to identify English as a Second Language (ESL) and French as a Second Language (FSL) pre-service teachers' beliefs concerning form-focused instruction (FFI), to determine whether beliefs differ based on year of study and the language to be taught, and to further understand the origins of reported beliefs. Fifty-four ESL and ninety-nine FSL pre-service teachers completed a questionnaire based on four construct pairs: instruction focused on meaning versus instruction focused on form, focus on form (FonF) versus focus on formS (FonFs), implicit versus explicit instruction, and inductive versus deductive instruction. Overall, pre-service teachers preferred instruction focused on form and inductive instruction, but reported no preference between implicit versus explicit, or FonF versus FonFs. Based on year of study, preservice teachers significantly favour FFI that is more FonF as opposed to FonFs as they progress through the programme. ESL pre-service teachers were significantly more inclined towards instruction focused on form than the FSL cohort, who tended to prefer instruction focused on meaning. Pre-service teachers reported elementary/high school teachers and university courses as being the most influential sources contributing to their declared beliefs. The results obtained provide little evidence for change in beliefs over time or based on language. Reported beliefs about FFI demonstrate preferences for traditional FFI and support the importance of prior experiences as learners. Further research is needed to understand how pre-service teachers can use their understanding of their knowledge and beliefs learned through teacher education to teach grammar effectively.

Keywords: Teacher beliefs, grammar teaching, English and French as a second language

RÉSUMÉ

Il existe un lien entre les croyances des enseignants sur la façon dont la grammaire est apprise et enseignée, et les pratiques dans la salle de classe. (Phipps & Borg, 2009; Sanchez & Borg, 2014). La recherche examinant l'évolution des croyances des futurs enseignants de langues durant la formation universitaire est émergente. Peu d'études ont tenté de comparer l'influence de la formation avec les expériences antérieures d'apprenant et portent principalement sur les enseignants d'anglais (Borg, 2015). Néanmoins, la littérature existante suggère que les expériences antérieures d'apprenant sont plus déterminantes dans la construction des croyances que la formation universitaire. Les objectifs de cette étude transversale consistaient à identifier les croyances des futurs enseignants d'anglais (ALS) et du français langue seconde (FLS) envers l'enseignement de la grammaire, déterminer si les croyances différaient selon l'année et la langue d'enseignement, et d'approfondir les connaissances sur les origines des croyances. Cinquante-quatre futurs enseignants d'ALS et quatre-vingt-dix-neuf en FLS ont complété un questionnaire reposant sur quatre continuums : une approche axée sur le sens contre la forme, un enseignement de la forme (FonF) contre des formes (FonFs), un enseignement implicite contre explicite, et un enseignement inductif contre déductif. Les résultats ont démontré que les futurs enseignants ont une préférence pour une approche axée sur la forme ainsi qu'un enseignement inductif, et n'ont aucune préférence entre un enseignement implicite et explicite, et un enseignement FonF et FonFs. Au fil de leur formation, les futurs enseignants penchent davantage pour l'enseignement FonF plutôt que FonFs. Les enseignants d'ALS sont considérablement plus enclins à une approche axée sur la forme, alors que les enseignants du FLS tendent vers une approche axée sur le sens. Les futurs enseignants ont identifié leurs enseignants de l'école primaire/secondaire et les cours universitaires comme les sources les plus influentes de leurs croyances. Les résultats indiquent peu de changements dans les croyances selon l'année de formation temps ou la langue d'enseignement. Les croyances démontrent une préférence pour un enseignement de la grammaire traditionnelle. Plus d'études sont nécessaires pour mieux comprendre comment les futurs enseignants utilisent les croyances et connaissances apprises durant la formation universitaire dans leur enseignement de la grammaire.

Mots clés : Croyances, enseignement de la grammaire, anglais et français langue seconde

INTRODUCTION

Beliefs and knowledge teachers hold about teaching and learning structure the decisions they make regarding their actions, and thus, their pedagogical practices in the classroom (Borg, 2015). Until recently, the field of education viewed teaching as observable behaviours; however, it is now established that beliefs and knowledge are intertwined, and cannot necessarily be accessed directly from teachers' actions. Beliefs and knowledge are influenced by a range of elements, which make them difficult to be measured. This is also true in Instructed Second Language Acquisition (ISLA) concerning pre- and in-service language teachers, reporting decisions made in the classroom to be influenced by various elements, especially in grammar instruction. Research tends to indicate language teachers provide grammar instruction that is "traditional" and that aligns with the practices from their previous teachers from elementary and high school (Borg, 2015; Simard & Jean, 2011). It can be questioned, thus, the way and the extent to which teacher education contributes to building preservice teachers' knowledge about grammar instruction that is transferred into their practices when they enter the job market.

There has been a surge of interest in teacher cognitions over the last two decades in the field of ISLA with the acknowledgement of complexity regarding instructors development of beliefs of knowledge, especially with regards to teacher beliefs. As the field is recent, little is known about the role of teacher education programmes in shaping pre-service teachers' beliefs and how the new knowledge from training is incorporated into their belief system. It is, therefore, imperative to investigate how teacher education contributes to pre-service teachers' belief development about grammar teaching and learning.

Based on the results from the literature providing little evidence for change in beliefs in general, it was decided to deepen the scientific community's understanding about the way beliefs evolve for pre-service teachers enrolled in a teacher education programme. This cross-sectional study's objectives are multiple: identify English and French as a second language (ESL and FSL) pre-service teachers' beliefs about form-focused instruction (FFI); determine whether there is a significant difference in beliefs between the beginning and late pre-service teachers in their programme of study; measure whether these beliefs diverge with the language of instruction; and label pre-service teachers beliefs' origins.

The present study is divided into five distinct chapters. The first chapter exposes the motivation for conducting a study on pre-service teachers' beliefs about FFI as well as this research objectives. The second chapter aims to define the main concepts that are referred to throughout the thesis, as well as provide an overview of the existing literature on teachers' beliefs about language teaching and learning. The methodology employed to respond to the research questions, including information about the participants and the questionnaire used, is also described in the third chapter. The fourth chapter provides the results for each research question by describing the analyses performed. A discussion is followed to compare the results in this study with the ones from current literature available, highlights the limitations, and gives suggestions for further research.

CHAPTER I

MOTIVATION FOR THE THESIS

1.1 Introduction

The act of teaching used to be studied from observable behaviours, what language practitioners do in the classroom, when the field of language teacher cognitions emerged more than 30 years ago. However, this view was found to be reductive as the teaching act is based on teachers' decisions, which are reflected through what they think, know and believe (Borg, 2015). The field of education and psychology have demonstrated that beliefs and knowledge impact human actions. A rapid growth in the field of teacher cognition has occurred over the last two decades, and now acknowledges the complexity of teachers' cognitive processes regarding the decisions they make in the classroom. It is accepted that observing behaviours is not sufficient to have a deep understanding of rationales behind language teachers' practices. Teachers are considered to be active, reflective practitioners and decision makers. Little is still known about the way beliefs and knowledge shape teachers' practices, especially during teacher education. This chapter motivates the importance of better understanding the development of pre-service language teachers' beliefs concerning the teaching and learning of grammar.

1.2 Teachers' Beliefs and Decision-Making

Classroom teachers are constantly making decisions concerning their pedagogical practices, but as their mind is not directly accessible, it is difficult to determine what motivates these decisions. Recent research into teachers' beliefs, the "evaluative propositions that individuals regard as true and that have a strong affective component" (Graus & Coppen, 2016, p.573), has demonstrated there is a strong relationship between teachers' beliefs and their classroom practices (Borg, 2003; Phipps and Borg, 2009; Sanchez and Borg, 2014). The origins of these beliefs are numerous and complex, and uncovering teachers' beliefs, their origins and their relationship to teaching is in its infancy.

1.3 Relationship Between Prior Experiences as a Learner and Teaching Practices

Prior experiences as a learner that are obtained through exposure to previous language teachers appear to be the most powerful variable shaping how teachers teach (Borg, 2015). Prior experiences have also been shown to exert an influence on decisions teachers make while teaching throughout their career (Johnson, 1994). By the time students graduate from high school, they have spent approximately 13,000 hours in a classroom and observed many teachers (Lortie, 1975). When they begin their teacher education, novice teachers have had twelve or thirteen years to observe and learn from teacher models. This informal apprenticeship has consequences on pre-service teachers' views about teaching; they bring preconceptions of teaching and learning into their teacher education, and these beliefs can be "inappropriate, unrealistic and naïve" (Borg, 2015, p.63) as they are built only on an outsider's observation of the act of teaching. Lortie uses the terminology "apprenticeship-of-observation" to designate this active observation, which results in memorable teachers becoming possible role models for the pre-service teacher. What students, in this case pre-service teachers, learn from this

apprenticeship-of-observation appears to be mainly intuitive and imitative. Thus, even though students can learn certain things, many other aspects, such as planning, reflection, and intention, remain inaccessible to the students as they occur outside the sphere of student observation. Students draw upon these incomplete observations of their teachers to create their own perspective on teaching, which has not been influenced by the invisible dimensions involved in teaching.

Pre-service teachers begin teacher education with preconceptions about the profession that are based on incomplete experiences of the teaching act, and these preconceptions may persist throughout their studies. Beliefs formed before entering university appear to be relatively stable, even when empirical evidence is presented to pre-service teachers to demonstrate that their teaching practices are known to be less efficient for student learning than other recommended practices (Johnson, 1994; Guénette, 2010). The literature on pre-service teachers' beliefs has shown that preconceptions acquired from student teachers' prior 'apprenticeship-of-observation' seem to have a stronger effect on their pedagogical practices than teacher education programmes (Borg, 2015; M. Borg, 2004). Even though some research has found teacher education to exert a relatively small impact on student teachers' beliefs, research on the effects of teacher education on teachers' beliefs remains scant and unexplored (Borg, 2015).

This limited understanding of the teaching act and the preconceptions future teachers develop about teaching during their experiences as students and teacher education are reflected when novice teachers enter the job market and face difficulties in their teaching. Research has demonstrated that novice teachers commonly return to their old beliefs about how to teach, which they acquired through their apprenticeship-of-observation (Lortie, 1975; Mattheoudakis, 2007). The tendency to revert to familiar teaching practices learned through the apprenticeship of observation may partially explain the reason practices are not necessarily congruent with their declared beliefs

about teaching (Guénette, 2010; Montgomery and Baker, 2007). Furthermore, constraints novice teachers face from their environment, such as imposed curriculum, classroom management and time restrictions, may also partially explain why they do not necessarily adopt teaching practices that research recommends for their students' learning (Borg, 2015).

Researchers in the field of Instructed Second Language Acquisition (ISLA) have found ample evidence for the influence of beliefs acquired during the 'apprenticeship-of-observation' on language teachers' practices. The current literature available on teachers' beliefs has focused mainly on first (L1) and second language (L2) literacy instruction and grammar teaching, the latter having received the most attention (Borg, 2015). Most teachers justify their teaching practices based on experience, rather than research - their beliefs about effective teaching practices stem from their time observing their primary and secondary school teachers giving lessons. This long period of observation provides a model for grammar teaching, which pre-service teachers likely use as they begin their teacher education.

1.4 Teacher Education and Grammar Teaching

Research into teachers' beliefs about grammar pedagogy has revealed that teachers consider the teaching of grammar to be necessary for students' language learning (Andrews, 2003; Borg and Burns, 2008; Jean & Simard, 2011). Despite the emphasis in teacher education programmes on more meaning-focused approaches in language instruction, many teachers prefer a traditional approach to grammar teaching when entering the job market (MEES, 2002; Borg, 2015). As mentioned previously, prior experiences exert a considerable influence on practices that teachers adopt. However, little is known about what pre-service teachers learn during teacher education about grammar teaching, how this knowledge is transposed into pedagogical practices, and

the extent to which teacher education exerts an influence on pre-service teachers' beliefs. Research in the area of pre-service teacher beliefs about grammar teaching remains in its infancy, and thus, further investigation is needed to understand how teacher education can help pre-service teachers modify pre-existing beliefs about grammar teaching, as "analyses of the impact of teacher education continues to be a central concern in educational research" (Borg, 2015, p.71).

1.4.1 Form-Focused Instruction and Grammatical Development

Studies investigating the learning and teaching of grammar have demonstrated that second language (L2) grammatical development can be helped through teaching. Grammar teaching today is often conceptualised as form-focused instruction (FFI) (Ellis, 2006; Spada, 1997), which can be defined as "any planned or incidental instructional activity that is intended to induce language learners to pay attention to linguistic form" (Ellis, 2001, p.1-2). The incorporation of FFI should ideally occur within a curriculum that focuses overall on meaningful, communicative activities (Ellis, 2006, p.86). There is ample evidence to show that teaching that is exclusively meaning-focused does not lead to a high degree of accuracy. On the other hand, FFI that is decontextualized and in which attention is directed exclusively to language form (focus on forms) in isolation is also insufficient to make competent users of an L2/foreign language (Ellis, 2016) (to be further developed in the framework).

1.4.2 How FFI is Provided in Reality

Although researchers in Second Language Acquisition (SLA) recognize the importance of FFI for the development of interlanguage, grammar instruction for most teachers in different contexts appears to remain quite traditional (Jean & Simard, 2011; Larsen-Freeman, 2015). Grammar is not always taught in an integrated fashion within

meaning-focused approaches such as task-based language teaching (TBLT) or communicative language teaching (CLT) as research suggests it should be (Loewen & Sato, 2017). In spite of the fact current education programmes recommend contextualized grammar teaching that is based on learners' communicative needs (MEES, 2002), literature suggests language teachers' beliefs about traditional grammar pedagogy that were learned by observation appear to be robust and resilient to change (e.g., Peacock, 2001). Therefore, the grammar pedagogy language teachers have learned during their teacher education may not always be reflected in their practices as "grammar is still being taught traditionally in most classrooms in a non-integrative manner" (Larsen-Freeman, 2015, p.264).

1.4.3 The Development of Beliefs in Teacher Education: Questions Remain Unanswered

Contrary to some research demonstrating teacher education has little effect on preservice teacher beliefs, other researchers have argued that pre-service teachers' beliefs during teacher education evolve. Research into teachers' beliefs about FFI suggests that trainees' beliefs about language teaching and learning evolve during teacher education, especially with regards to grammar and vocabulary (Mattheoudakis, 2007; Moodie, 2016). Teachers also report the importance of not teaching grammar in isolation (Borg & Burns, 2008), suggesting their awareness concerning sound practices is being raised during teacher education. Considering that the number of studies on language teacher beliefs about FFI is still quite limited and tends to provide contradictory results (see section 2.5), it is imperative to deepen our understanding on how teacher beliefs develop in order to be able to improve teacher education programmes.

Ample evidence is provided that a vast majority of teachers value grammar in their work (Borg & Burns, 2008; Borg, 2015). It is thus relevant to continue investigating the effects of teacher education on the development of teachers' beliefs concerning FFI. Little research has verified whether teacher education impacts teachers' beliefs on grammar instruction over time (Birello, 2012; Borg, 2011; Larsen-Freeman, 2015). Moreover, studies examining the development of beliefs throughout education programmes are quite recent, and the ones comparing more than one language of instruction are scant, and thus, further investigation is needed to observe if they are also in line with SLA theory (Borg, 2011; Jean & Simard, 2011). Teachers often need a teaching permit to be able to teach, and in order to do so, they are required to complete an undergraduate degree that takes three or four years depending on the country. Knowing that practising teachers tend to return to their old models in terms of their teaching practices, it is important to conduct further research on the development of pre-service teachers' beliefs about FFI throughout an education programme to understand whether they teach grammar based on the scientific literature and any curriculum's recommendations. Furthermore, as the majority of the research has been conducted with English as the target language, it is important to broaden the research agenda by looking at other target languages as social, cultural, educational and political issues could mean there are differences in beliefs that are language-dependent.

1.5 Research Objectives

The present study aims to examine English and French as a second language (ESL and FSL) pre-service teachers' beliefs across an education programme in Quebec, Canada. In order to adapt teacher education programmes so language teachers teach according to recommended practices from SLA theory and research, it is important to investigate how teachers' beliefs about FFI change over time in teacher education through a cross-

sectional study, and to gain a deeper understanding about pre-service teachers beliefs' origins.

1.5.1 Scientific and Social Pertinence

Considering that little research has attempted to investigate how teachers' beliefs evolve in terms of FFI during their teacher education and how two language cohorts' beliefs develop, it is relevant to observe what changes occur throughout an education programme. Not only will this research enable a deepening of knowledge concerning the ways teacher education influences teachers' beliefs depending on the programme, but will also provide information that could be used to improve teacher education programmes. This study will also provide insights into whether beliefs developed about FFI throughout a teacher education programme reflect the Quebec Education Programme (QEP), which recommends FFI being integrated in a communicative syllabus for language teachers (MEES, 2002). The results will certainly provide new avenues for research to help pre-service teachers develop grammar teaching practices based on the recommendations from research and the QEP. Finally, most studies that have been conducted on teacher beliefs are case studies, but it is time for research to move beyond exploratory research (Basturkmen, 2012).

CHAPTER II

THEORETICAL FRAMEWORK

The present study's objective being to examine ESL and FSL pre-service teachers' beliefs on grammar teaching throughout a four-year education programme, this chapter introduces the important theoretical concepts informing this study. Clarifications are presented concerning the different definitions surrounding the teaching of grammar in L2 contexts with a focus on form-focused instruction (2.1 to 2.3). The concept of teacher's beliefs is also defined (2.4 to 2.5), and an overview of extant research in language teacher beliefs is reported (2.6). Finally, a review of teachers' beliefs about form-focused instruction (2.7) is presented as well as the research questions (2.8).

2.1 The Influence of Instruction on L2 Learning

The literature on the role of instruction has evolved considerably in the last four decades (Nassaji, 2016). Early research investigated whether formal instruction can impact learners' language development. There is now a consensus that instruction has a positive effect on L2 learning compared to no instruction, regardless of learners' age and level (Loewen & Sato, 2017). However, researchers' opinions about the amount of formal instruction needed to most efficiently push language development range from minimal to significant. Research conducted today investigates optimal ways to learn and teach a language.

Most language teachers report that instruction should aim at having learners "use the L2 for communicative purposes" (Loewen & Sato, 2017, p.3). Based on research

findings demonstrating the developmental nature of the second language acquisition of grammatical morphemes (Dulay & Burt, 1973), the 1970s and part of the 1980s saw the development of a belief that the L2 was acquired like the L1 through naturalistic exposure, and thus, learners needed to be exposed to meaning-focused communication without formal instruction (Krashen, 1983; Nassaji, 2016). However, non-interventionist perspectives were questioned as naturalistic exposure was found to be insufficient for L2 learning: research into content-based instruction, where language instruction is minimal, demonstrated that learners could reach a high level of fluency, but accuracy could remain challenging (Harley, 1998; Lyster, 2004). Further research demonstrating the importance of noticing (Schmidt, 2001), interaction (Long, 1991) and output opportunities (Swain, 1993) also demonstrated that input alone through naturalistic exposure was insufficient. Hence, some focus on grammatical form is crucial for the development of accuracy. This focus in terms of teaching is known as FFI (Spada, 1997). The debate on the effects of FFI shifted from whether it has an effect on L2 accuracy to what type of FFI is most effective.

In order for additional language development to occur, learners need to develop linguistic knowledge of and about the language to become competent users of a target language. However, not all researchers have the same conceptualization of learners' L2 knowledge. Most researchers agree that learners' linguistic knowledge is not unitary with a distinction frequently being made between knowledge that learners know that they have, explicit knowledge or declarative knowledge, and knowledge that leaners do not know they have but is apparent based on their language behaviour, implicit knowledge (Ellis et al., 2009). The relationship between instruction and knowledge is explored briefly in the next sub-section.

2.2 Implicit and Explicit Knowledge Development

Two types of knowledge have received long-standing research attention in Instructed Second Language Acquisition (ISLA): implicit and explicit knowledge. Learners develop explicit knowledge (EK), which consists of the knowledge learners have about language (Loewen & Sato, 2017), through different teaching and learning experiences involving intentional thinking. Learners are (or can be made) aware they possess knowledge about language and this can be verbalized and reflected upon. This type of knowledge is manifested in the use of lay terminology (e.g.: Add -ed) or metalinguistic explanations (e.g.: when you conjugate a regular verb in the past, you add the inflectional morpheme -ed.). EK can be described as easy to teach in the same way that it is easy for teachers to tell students about mathematical equations. Language teachers present learners with a rule or generalization about a language feature, which learners are supposed to store in their memory with practice. An important characteristic of EK is that language instructors can test it easily, and determine if learners have retained a specific rule or not. However, the inconvenience that EK presents is that this cannot always be accessed instantly for "spontaneous, real-time conversation" (Loewen & Sato, 2017, p.4). For this to be achieved, L2 learners need to develop another type of knowledge, known as implicit knowledge.

Implicit knowledge (IK), also referred to as knowledge of language and sometimes used synonymously with procedural knowledge (Loewen & Sato, 2017), is knowledge learners possess that is demonstrated through their language behaviour only. IK cannot be verbalized although a learner may be able to create EK about grammar that they use spontaneously. Contrary to EK, IK is accessed quickly for spontaneous language use.

Learners can possess both IK and EK of a language feature. In order to help learners become competent users of an L2, research recommends that language teachers should

help learners to develop IK so they can use language accurately and fluently to communicate spontaneously. However, the development of EK can help push learners to be more accurate with grammar and is likely necessary for certain language features due to their inherent properties or their relationship to the learner's other languages and developmental level (DeKeyser, 2005; Loewen, 2015; White, 1991). Questions that remain are: what is the relationship between IK and EK? Can EK turn into IK and vice versa? These questions are still controversial in ISLA. Three main positions about the relationship between IK and EK are explained below.

2.2.1 Relationship Between IK and EK: The Interface Debate

Despite diverging views among educational researchers on how implicit and explicit knowledge develop, and whether explicit knowledge can turn into implicit knowledge and vice versa (Hulstijn & DeGraaff, 1994), researchers recognize the importance of understanding the relationship between implicit and explicit knowledge in order to deepen understanding about how learners process language. Answers to questions about the extent to which explicit knowledge can be converted to implicit knowledge will provide valuable information for teachers about how to teach language and particularly grammar. To date, there are three main schools of thought on the role of explicit instruction for interlanguage development: noninterface position, the strong interface position, and the weak interface position. Each is outlined below.

2.2.2 The Noninterface Position

The noninterface position posits that explicit FFI has no impact on linguistic competence as implicit knowledge and explicit knowledge are distinct (Loewen & Sato, 2017; Krashen, 1983). Thus, according to this theory, explicit knowledge cannot be transformed into implicit knowledge and vice versa (Ellis, 2005). Krashen's (1983) position about the influence of instruction on language acquisition is considered to be

close to the innatist spectrum and a strong view of communicative language teaching (CLT). Krashen posits that explicit instruction has little or no effect on language acquisition (Loewen & Sato, 2017; Krashen, 1983). He argues that the only element learners need to acquire a language is rich comprehensible input that is of a little higher level than their current level (referred to as i + 1, where 'i' consists of learners' interlanguage and '1' the subsequent level of acquisition). Researchers who hold this point of view regarding the role of instruction are in the minority among the scientific community. Krashen is known for his distinction between language "acquisition" and "learning", the former consisting of unconscious learning and the latter of conscious knowledge that is learned from instruction. He states that explicit knowledge involves two divergent and independent systems, which is the reason why conversion would be impossible (Nassaji, 2017). Krashen argues that grammar instruction results in the development of conscious knowledge, and this cannot turn into subconscious acquired knowledge. Therefore, FFI has minimal impact on language acquisition. The pedagogical approaches linked to this view are exclusively meaning-focused ones.

2.2.3 The Strong Interface Position

The strong interface position posits that learning a language can be learned like any other skill (DeKeyser, 1998). The Skill Acquisition Theory can be used to explain this position. Through sustained practice, declarative knowledge can become procedural knowledge through automatisation. When the knowledge is automatized, explicit knowledge is converted into implicit knowledge, which can then be accessed during spontaneous L2 use. Language competence is developed with conscious and declarative knowledge (Loewen & Sato, 2017). The pedagogical implications for this position are explicit teaching through the Presentation-Practice-Production model (PPP).

2.2.4 The Weak Interface Position

The weak interface position holds that the development of implicit knowledge can be facilitated by having explicit knowledge, the latter helping learners notice language features. The theory behind the weak interface position posits that if learners are developmentally ready to acquire a targeted feature, explicit knowledge can contribute to having learners notice language features in a language, and then facilitate implicit knowledge development and integration in learners' interlanguage (Ellis, 2006; Loewen & Sato, 2017). This position favours teaching approaches that are mainly meaning-focused, but with some incorporated techniques that aim to attract learners' attention to form during meaningful and communicative activities, such as consciousness-raising activities.

As mentioned previously, researchers in ISLA tend to agree that competence in an L2 is mainly developed through implicit knowledge as it leads to fast and fluent communication (Ellis, 2006). Thus, teachers should encourage learners to develop IK through meaning-focused instruction. Taken to the extreme, a meaning-focused instructional approach promotes the incidental and/or implicit learning of the L2 in contexts where the emphasis is exclusively on meaning. Content-based instruction such as immersion is an example of a meaning-focused instructional approach, although it is important to note that even in this context, it is now widely accepted that focusing on some grammar is required (Lyster, 2019). As it is widely accepted that EK can be helpful and sometimes necessary in an overall meaning-focused approach, instruction that focuses on form needs to be integrated in some way.

2.3 What Is Form-Focused Instruction?

The term FFI has been employed with different definitions when referring to grammar teaching (see Spada, 1997; Collins, 2012). However, it is frequently used to refer to

"any planned or incidental instructional activity that is intended to induce language learners to pay attention to linguistic forms" (Ellis, 2001, p.1-2). FFI is the term frequently used to refer to the teaching of grammar within an overall meaning-focused approach, but it can also refer to any type of grammar teaching, and thus, can encompass traditional approaches that rely on a structural syllabus.

2.3.1 Focus on Form versus Focus on Forms: Emergence of Terminology

The terms focus on form (FonF) and focus on forms (FonFs) were first contrasted by Long (1991), who has contributed to the scientific community's understanding of grammar instruction (Nassaji, 2017). Long (1991) describes both FonF and FonFs as "any attention to language as object" (p.45). The content of teaching that is considered to be a FonFs consists of the linguistic features themselves. This approach to teaching language is influenced by behaviourist psychology and is associated with the Audio-Lingual Method, which answered a need to train fluent language speakers during the 1940s (Long, 1991). Linguistic features are taught in isolation and tested one at a time. On the other hand, a syllabus following a FonF approach should teach language based on its use. A FonF should direct learners' attention to linguistic features as they arise incidentally during lessons that are focused on meaning or communication. Furthermore, during FonF, the intervention should be brief and target students' errors that are systematic, pervasive and remediable. A focus on meaning and a FonF are not exclusive during a task; teachers can raise students' attention to form while they are focusing on communication (Long, 1991).

In his review, Long (1991) argues that a syllabus which takes a FonFs approach is ineffective as it goes against interlanguage development; no naturalistic language learners reach proficiency by learning one linguistic feature at a time. Interlanguage development is illustrated as being complex, gradual and does not evolve in a linear way. Teaching linguistic forms one at a time is useless unless the learner is

psycholinguistically ready to acquire them. Although a FonFs provides "structural knowledge of a language", this does not enable learners to use this knowledge to communicate (p.45). A FonF leads to faster language learning and "higher levels of ultimate SL attainment" than instruction that does not include any focus on form (p.47). A focus on form is not exclusive to a focus on meaning while learners are engaged in a task. A FonF increases learners' accuracy with time as they are provided with negative evidence, which refers to attention being drawn to constructions that are not acceptable in the target language.

2.3.2 Conceptualisation of Focus on Form and Focus on Forms in Recent Literature

The definitions that Long (1991) has provided to distinguish the two types of instruction have evolved over time, and other scholars have attempted to deepen our understanding about their effects on language proficiency. FonF refers to learners paying attention to linguistic forms when engaged in a task where meaning is the central focus (Ellis, 2016). Therefore, language instruction that is considered to be FonF needs to take place within communicative contexts in which emphasis is on communicating and understanding messages. (Ellis, 2016; Collins, 2012). Ellis' conception of FonF includes planned and incidental FonF (Ellis, 2001). Planned FonF takes place when the language teacher preselects a grammatical feature that is considered to be difficult for learners. It is then taught by integrating it in the input to make it salient or it is taught after the creation of pedagogical activities in which learners are likely to produce it (Ellis, 2006). Incidental FonF involves no predetermined language features to be taught by the teacher, and occurs spontaneously according to learners' linguistic needs while engaged in a communicative activity. These definitions appear to be the most widespread at present although Long has always maintained that FonF must be reactive.

FonFs, on the other hand, is characterized as traditional FFI that follows a structure-based approach that consists of presenting and practising forms (Collins, 2012; Ellis, 2016). Specific linguistic forms are predetermined, segmented into discrete items and are "taught directly and explicitly" to learners in a decontextualized fashion (Ellis, 2016, p.405; Nassaji, 2017). A teaching model that is associated with this traditional approach to teaching grammar is Presentation-Practice-Production (PPP), in which grammar structures are taught in isolation and sequentially (Graus & Coppen, 2018). One problem with this teaching approach that has been highlighted by researchers is that transfer to more communicative activities or use outside the instructional setting does not always occur (Graus & Coppen, 2018).

A consensus appears to have been reached among researchers concerning the importance of complementing overall meaning-focused lessons with some FonF in order to ensure that fluency and accuracy develop simultaneously. Meta-analyses on the effects of grammar instruction have provided evidence in favour of the inclusion of FFI (Norris & Ortega, 2001; Tomita & Spada, 2010).

2.3.3 FFI: Implicit or Explicit?

When a teacher determines that learners need FFI, different teaching options are possible. Two dichotomies are highlighted and described that include various options for FFI, which are explicit and implicit instruction, and deductive and inductive instruction (Graus & Coppen, 2017). Explicit instruction consists of a teacher helping learners explicitly pay attention to form; grammatical features are taught during a lesson, and therefore, learners are conscious they are being taught grammar (Graus & Coppen, 2017). Explicit instruction is considered to be intrusive as an interruption in communication occurs, which obviously draws attention away from meaning whilst explicit attention is focused on form (Housen & Pierrard, 2006, in Ellis et al., 2009). The linguistic form targeted is predetermined and planned by the teacher, and then

incorporated in the lesson without it being the only learning objective. The target feature is presented in isolation during the lesson and likely involves the use of metalinguistic terminology.

In the case that language teachers choose to teach grammar explicitly, they can decide whether any metalanguage will be taught inductively or deductively (Graus & Coppen, 2017). Deductive teaching takes place when a grammatical rule is provided to learners. In inductive teaching, learners are exposed to some language with examplars of the targeted form and they are encouraged to induce the rule by themselves (Ellis, 2006, Graus & Coppen, 2017).

Implicit instruction involves the teacher providing opportunities that could lead learners to pay attention to form while they are focused on meaning (Ellis et al., 2009). Rules are not discussed and the task can be completed without any conscious attention being paid to the target form. The goal of implicit instruction is for learners to infer rules without consciousness (Ellis et al, 2009). Learners are exposed to exemplars of a targeted form predetermined by the language instructor with the goal being that they will acquire it as they are focusing on meaning. Implicit instruction can also be characterized as an absence of use of metalanguage and the language form is presented in context (Housen & Pierrard, 2006 in Ellis et al., 2009). Implicit instruction is provided as students' needs arise, and is unobtrusive as the focus remains on the message conveyed. For example, implicit instruction can take place by exposing learners to input that has been enhanced or enriched with the target feature.

Despite the common acceptance by ISLA theorists about the importance of learners attending to form, no consensus has been reached on the question of to what extent learners benefit from implicit and explicit instruction. Considering that the goal of learning an L2 for many learners is to communicate fluently, Ellis (2016) claims that

teachers' primary goal should be to provide implicit instruction. However, researchers are still debating the issue of how IK can be developed. Another question that remains controversial is whether EK can impact learners' L2 grammar development (Norris & Ortega, 2001; Ellis, 2005).

The number of studies aiming to measure the effects of implicit instruction on language development remains small, partly due to the difficulty of eliciting learners' IK with research instruments (Doughty, 2003; Tomita & Spada, 2010). Furthermore, one needs to be careful when interpreting the results from studies comparing the effects of implicit and explicit instruction as most tests employed to measure learning gains favour the use of EK, which explicit instruction is more likely to create (Norris & Ortega, 2001; Tomita & Spada, 2010).

2.3.4 Explicit and Implicit Teaching and Knowledge

One clarification that needs to be made is that implicit teaching does not necessarily lead to the development of IK and explicit teaching does not necessarily lead to the development of EK (Ellis et al., 2009). In other words, explicit teaching of a grammatical feature can result in implicit learning. For example, while the language teacher provides explicit instruction of a specific form, learners can learn implicitly and incidentally. On the other hand, learners can develop EK about lexis, phonology, pragmatics, or grammar or a combination of some of the four components from implicit teaching. Learners can pay conscious attention to a specific form in the input while the teacher gives instruction focused on meaning. Thus, in this case, learners may use metalanguage and develop EK though this was not the language teacher's intention. Therefore, it is important to bear in mind that implicit teaching does not imperatively lead to the development of IK and explicit teaching does not necessarily result in EK (Ellis et al., 2009).

Regardless of decisions language teachers make about whether or not to include FFI, and what type of FFI they judge to be most appropriate for L2 learners, declarative knowledge about grammar and grammar teaching is only one aspect of L2 teacher competence (Borg, 2015). The instructional decisions that language teachers make when providing FFI are influenced by their cognitions, which encompass their knowledge and beliefs they have acquired and learned as learners and student teachers. Thus, in order to gain a better understanding of the way declarative knowledge is transferred into effective pedagogical practices, it is primordial to look at how teachers' beliefs about FFI develop as this knowledge is not sufficient to best promote L2 language learning. The next section will provide an overview of research that has been conducted in the field of teacher education on language teachers' beliefs about FFI.

2.4 Teacher Education and Teacher Cognition

The previous sections presented the terms used about grammar teaching and learning in the field of SLA. Consensus in the scientific community has been reached that L2 instruction does have a positive effect on language development (Norris & Ortega, 2001). However, it is important to explore current literature on teacher education to verify what beliefs teachers have about language teaching and learning, and how this knowledge is transformed into teaching practices. Moreover, considering that FFI contributes to interlanguage development, it is pertinent to summarize literature on the way teachers learn and conceptualize FFI. Thus, this part of the framework aims to provide an overview of research on grammar teacher cognition. The way language teachers conceptualize FFI and how they translate its theory into pedagogical practices will be explored in depth.

Although language teachers value and incorporate FFI in their teaching, they are not always able to explain the rationale behind this decision (Borg, 2015; Guénette, 2010).

While most pre-service teachers have likely observed their language teachers providing L2 grammar teaching during their apprenticeship-of-observation, they may not have reflected on whether L2 grammar teaching is truly beneficial for L2 development. Teachers appear to base their instructional decisions mainly on what they believe worked for them as a student learner of a language and not on research, and therefore, continue to believe in the importance of more traditional L2 grammar teaching over an overall meaning-focused approach to teaching with some focus on form, which is likely advocated by their teacher education programme (Borg, 2015, Graus & Coppen, 2016; Jean & Simard, 2011). Terms are discussed below related to the field of teacher cognition. A distinction is especially drawn between knowledge and beliefs, as they have had received considerable attention in L2 education.

Teachers' pedagogical decisions regarding FFI are affected considerably by teacher cognitions (Borg, 2015). There is a consensus in the scientific literature that teacher cognitions play a preponderant role in the way instructors learn and make sense of teacher knowledge (Graus & Coppen, 2018). This broad term (teacher cognition) refers to a concept that includes beliefs, knowledge, thoughts and emotions (Borg, 2015; Graus & Coppen, 2018). Some authors have chosen to use the term teacher 'belief' (Basturkmen, Lowen & Ellis, 2004; Phipps and Borg, 2009) to refer to the more evaluative and affective components of teacher cognition, which are considered to be more subjective (Graus & Coppen, 2018; Pajares, 1992). Other researchers have selected the term teacher 'knowledge', which reflects "the personal and practical dimensions of more objective knowledge" (Graus & Coppen, 2018, p.695). Terms referring to knowledge in the specific context of cognitions are divergent in the literature, for instance 'case knowledge', 'general pedagogical knowledge', and 'personal practical knowledge' (Shulman, 1986; Wilson et al., 1987; Connelly & Clandinin, 1988, in Borg, 2015). A number of other terms have also been used in the literature to represent cognitions in some respect, for example images (Johnson, 1994),

personalized pedagogy (Kagan, 1992), and conceptions of subject matter (Thompson, 1992, in Borg, 2015).

2.4.1 Belief Versus Knowledge

As the field of teachers' cognitions is recent in education and attempting to describe this psychological construct is complex, no agreement appears to have been reached about the terminology to use and common definitions for consistency. Beliefs and knowledge have shown to be inseparable although attempts have been made from researchers to disentangle them (Borg, 2003). Furthermore, different terms have been used to express the same concept, and these same terms may also refer to different concepts (Borg, 2015). Researchers manifest confusion about terminology, which is likely due to beliefs and knowledge being intrinsically intertwined (Pajares, 1992; Borg, 2015). It has been discussed that the knowledge and belief systems differ in the way they are treated cognitively: "[...] knowledge system information is semantically stored, whereas beliefs reside in episodic memory with material drawn from experience or cultural sources of knowledge transmission [...]" (Nespor, 1987, in Pajares, 1992, p.310). The earlier the beliefs are incorporated into the belief system, the more difficult they are to change. This is reflected in the literature on L2 teacher cognition, as some research has demonstrated that teacher education has a relatively low impact on teachers' beliefs (Borg, 2015). Beliefs have a stronger affective and evaluative component than knowledge, and they act as a filter and enable individuals to make their own interpretation of phenomena, the world and themselves.

Contrary to beliefs, knowledge seems to be "open to evaluation and critical examination", and "receptive to reason" (Pajares, 1992, p.311). Beliefs tend to be associated with personal values, attitudes and ideologies, whereas knowledge appears to refer to teachers' factual propositions (Borg, 2015). Hence, due to the evaluative and affective aspects, beliefs exert more influence than knowledge on teachers' behaviour.

Instructors teach according to the value they hold about content itself, resulting in beliefs exerting a more powerful influence on teaching practices than knowledge (Pajares, 1992). The preponderant role knowledge and more notably beliefs has been highlighted regarding decisions individuals make throughout their life, and thus, inform pedagogical practices (Pajares, 1992).

Due to the confusion that still exists concerning whether there is a distinction between beliefs and knowledge, some authors choose to use cognition as an umbrella term (Borg, 2015; Graus & Coppen, 2018). However, as the present study is interested in participants' opinions and thus, participants' judgments and affective components, the term beliefs has been retained. This can be defined as "evaluative propositions that individuals regard as true and that have a strong affective component" (Graus & Coppen, 2016, p.573).

2.4.2 The Formation of Beliefs About Teaching

Beliefs are formed early and are learned through an apprenticeship-of-observation, which is said to be the most influential factor on teachers' decision-making (Lortie, 1975). The apprenticeship-of-observation can be described as the thousands of hours individuals spend in school as children observing and evaluating their teachers in action (M.Borg, 2004). During this observation, they appear to form their own ideas about what a 'good' and 'bad' teacher is (Guénette, 2010). It has been demonstrated that preservice teachers have memories from their teachers during their schooling, whether they are conscious or unconscious, and start their training with these (M.Borg, 2004; Guénette, 2010). Pre-service teachers then appear to transfer their experience as learners directly into their teaching practices (Guénette, 2010). Once beliefs are formed, they appear to be resistant to change, even when teachers are presented with empirical evidence against the value of their teaching practices (Borg, 2015; Pajares, 1992;

Guénette, 2010). The apprenticeship-of-observation appears to be partially responsible for the preconceptions pre-service teachers hold about the teaching profession when they start teacher education. The preconceptions pre-service teachers have about the profession are intuitive and imitative (M. Borg, 2004; Lortie, 1975). Pre-service teachers enter university with a limited understanding of the teaching profession as they have only observed their teachers in the classroom, which excludes all the decisions teachers take 'backstage' before and after the classroom (e.g.: planning, editing, revisions).

Experiences as learners and teachers appear to be particularly powerful in influencing teachers' beliefs and decision-making in the classroom, and this seems to be the case with regards to grammar instruction. Teachers' beliefs about FFI have attracted considerable attention from the scientific community (Borg, 2015). These experiences as learners result in teachers having the conception that FFI is important and necessary in a language course. However, when language teachers are asked to justify their beliefs about FFI, their rationales are not based on empirical studies from the scientific literature. These many hours spent observing their language teachers as learners may result in their beliefs being resistant to change, and hence, make it difficult for them to question their views on grammar teaching and learning. Beliefs teachers hold about FFI, which are strongly based on experience, appear to have precedence on knowledge acquired through formal research (Borg, 2015).

2.5 Teachers' Beliefs About Grammar Teaching

Research has shown that language teachers who receive FFI that is focus on forms (FonFs), not in accordance with communicative language teaching (CLT), are less likely to teach using FonF (Moodie, 2016). However, language teachers appear to develop new beliefs about FFI in their teacher education that are more in line with the

scientific literature. Moreover, not only should teacher education enable pre-service teachers to develop knowledge about sound FFI practices, it should also provide the opportunity for them to reflect critically about their prior experiences as learners.

In general, studies into teachers' beliefs about FFI reveal language teachers declare having a preference for an integrated FonF approach to grammar teaching (Borg, 2015; Borg & Burns, 2008). However, stated beliefs are not necessarily reflected in teaching practices (Phipps & Borg, 2009). In many studies where teachers made these claims about FFI, no observation was conducted to check how these beliefs translated into classroom teaching practices. Studies about declared beliefs do not demonstrate to what extent these are translated into teaching practices.

Having teachers develop explicit knowledge about grammar and grammar teaching through teacher education does not necessarily lead to more effective language instruction (Borg, 2015). Teachers' declarative knowledge does not appear to reflect their teaching practices, as this is only one part of a language teacher's competence. One challenge that pre-service teachers face consists of learning how to transform declarative knowledge about FFI and learning into effective teaching practices. Declarative knowledge, therefore, is not sufficient to develop sound pedagogical practices. The problem was raised about pre-service teachers claiming they struggle to transfer the declarative knowledge they have learned about grammar teaching and learning during teacher education into pedagogical context. This transferability issue may be explained by the wide range of contextual factors entering in interaction with language teachers' pedagogical practices with regards to FFI (Borg, 2003; 2015). These factors may lead language teachers to make decisions that are not congruent with what they state and what is suggested in the literature, for example their educational biographies, classroom management and students' expectations. Little attention has been paid to context in research on teachers' beliefs about FFI. Nonetheless, context is

fundamental in understanding teachers' cognitions about FFI and the decisions teachers make in the classroom.

2.5.1 Contextual Factors Influencing Beliefs

The interaction of contextual factors has a consequence on the decisions teachers make in the classroom with regards to FFI. With classroom observations and interviews, Borg (2001) compared the ways five teachers engaged in FFI and found that teachers invoked various reasons for teaching grammar. The reasons teachers engage in FFI were classified into five distinct categories: acquisition, awareness-raising, diagnostic, psychological, and classroom management. With regards to acquisition, teachers stated they thought FFI contributed to learners' accuracy with their communicative ability as well as fluency. Language teachers also mentioned FFI helps learners understand the rules of the language they use. Regarding diagnostic reasons, teachers declared FFI may help to provide cues about learners' linguistic needs, as well as raise learners' awareness on the language areas that need more work. Another justification for teaching grammar was meeting students' expectations and providing "concrete evidence of instruction" for both the teacher and learners (Borg, 2015, p.148). Classroom management arose as another element justifying teachers to provide FFI. Teachers affirmed FFI could give quiet time as learners would engage in reflection in the classroom. Teachers also asserted FFI by the means of drills could increase energy in the classroom. Although the five teachers expressed reasons to provide FFI, an important detail to mention is that they considered FFI to be important, but not sufficient in L2 teaching (Borg, 2001).

In summary, ample evidence exists demonstrating the impact of prior experiences as learners on teachers' beliefs about FFI and the decisions they make in the classroom. Contextual factors also play an essential role in what teachers do in the classroom and may show to be even more powerful than the cognitions that language teachers hold

about effective FFI. This can lead teachers to make decisions that are not based on current understandings of good practice; their rationales provided for their teaching practices are based mostly on contextual factors, which are determinant in teachers' decision-making as they are facing many constraints. Finally, reviews have shown that the transfer of theoretical knowledge pre-service teachers learn in teacher education into practices does not necessarily happen (Borg, 2015). Studies that are most relevant to our comprehension on how pre-service teachers' beliefs develop throughout teacher education will be synthesized below.

2.6 The Effects of Teacher Education on Pre-Service Teachers' Beliefs on Language Learning

Some longitudinal studies have focused on the effects of teacher education on teachers' beliefs. This is the case with Busch (2010), who attempted to investigate the effects of an introductory SLA course on pre-service teachers' beliefs on second language learning. The objectives were to determine whether a change occurred in pre-service teachers' beliefs and what contributed to these changes if applicable. 381 pre-service teachers from a Californian university participated in this study. A questionnaire containing twenty-three items with Likert scales and an open-ended question was administered on the first day of the SLA course (pre-course) as well as a take-home assignment during the last week of the course (post-course). A t-test was used to measure whether there were differences in beliefs between the pre- and post-course. In terms of grammar, the pre-service teachers' beliefs changed in terms of error correction. Overall, the results revealed significant changes in beliefs for 16 statements from preto post-course. At the outset of the course, many reported the importance of correcting students and this was crucial to language learning; however, the post-course results revealed a shift in their beliefs as they began to perceive errors as part of the learning process. The prominence of grammar teaching also decreased in the post-course's

results, going from agreement to disagreement. Some pre-service teachers indicated one can know the grammar of one's language without necessarily being able to communicate. The elements pre-service teachers reported to influence their beliefs in the pre-course was their experiences as language learners and their background, which confirm the strong impact of the apprenticeship-of-observation. Many aspects were elicited by pre-service teachers to justify their change in beliefs by the time they finished the SLA course, for example course material and content, and experience with ESL students. As a limitation, the need of conducting a similar study with other populations was raised as well as the relevance of focusing on non-native language teachers.

Other studies have investigated the effects of a three-year education programme on the development of pre-service teachers' beliefs. This was the case for Peacock (2001) in an Asian context, in which 146 ESL undergraduate students were trained to teach in high schools in Hong Kong. The three main objectives were to: determine whether the TESL trainees had beliefs about language learning that differed from experienced ESL teachers; observe whether trainees experienced changes in their beliefs over the threeyear education programme; and whether differences in beliefs between trainees and experienced teachers impacted negatively the formers' language learning. The data compared with experienced teachers were taken from another research published by the same author (Peacock, 1999). Four instruments were employed to answer these research questions. The participants were asked to take a self-report questionnaire at different moments in their training. The questionnaire, named Beliefs About Language Learning Inventory (BALLI), contained 34 items with a Likert-scale format to measure beliefs about language learning. Results on four compulsory courses taken in the first year in the programme were gathered to measure trainees' ESL proficiency scores. After having collected data from the BALLI and proficiency scores, the researcher had built an 'instruction package' in which he aimed to correct "trainee beliefs that were

detrimental to their own language learning or their future students' learning" (Peacock, 2001, p.183). Finally, the trainees' reactions as well as potential changes in beliefs to the input provided by the instruction package were observed. The results indicated little change about two core beliefs on the primacy of vocabulary and grammar over the three-year programme, suggesting that trainees kept holding views on language teaching and learning that is 'traditional'. No statistically significant differences were revealed between years. A positive association was found between the ESL proficiency scores on the two core beliefs. In other words, the most proficient trainees were more likely to disagree on the statement that 'Learning a foreign language is mostly a matter of learning a lot of grammar rules' (p.186).

The effect of an education programme on the development of English as a foreign language (EFL) pre-service teachers' beliefs was also examined in Greece (Mattheoudakis, 2007). This research aimed to: identify EFL pre-service teachers' beliefs about language teaching and learning when they started the programme; observe their beliefs development as they were progressing in their study programme (except the internship); and investigate the effects of the internship taking place at the end of the programme on their beliefs. The sample consisted of two groups; 36 participants who were followed from the first to the last year before having completed their internship, and thus labelled as the 'non-practice group', and 30 participants who completed the internship at the end of the four-year programme that were named the 'practice group'. The BALLI was used to measure student teachers' beliefs at different stages in their programme of study, as well as a short questionnaire to identify the participants' background. The results suggested 'a gradual and sometimes significant development' (p.1272) in the pre-service teachers' beliefs as they progressed through the teaching programme. However, a low impact of the internship on the development of pre-service teachers' beliefs was also highlighted. It was also revealed that preservice teachers started the programme with misconceptions about language learning

and teaching, especially the primacy of grammar study and vocabulary, which was also the case for trainees in Hong Kong (Peacock, 2001). Nevertheless, as trainees were exposed to courses on language teaching and learning, their support for these traditional views on language learning and teaching decreased.

2.7 What Do Language Teachers Believe About FFI?

Grammar teaching and literacy have received the most considerable attention from researchers in the field of teacher cognition. Before providing an overview of studies relating to pre- and in-service teachers' beliefs about FFI, trends will be identified about what results have suggested so far.

Overall, language teachers value and promote FFI, and formal instruction still appears to prevail in language classrooms (Borg, 2015). However, there is evidence that teachers' knowledge about grammar is in general inadequate and minimal. Literature on language teachers' beliefs about FFI also highlights the prominence of past experiences as learners as being the most influential variable shaping their views. Research has shown that these prior experiences are more powerful than the education programme that is based on formal research in SLA. However, little evidence supports this claim and more research is needed.

Among the literature available, in-service teachers' beliefs about FFI have been examined in the same context as the present study. ESL and FSL (French as a second language) teachers' and learners' beliefs, as well as the formers' pedagogical interventions aiming at drawing learners' attention to form were investigated in Montreal, Quebec (Jean & Simard, 2011; Simard & Jean, 2011). The research reported below is unique as two languages of instruction were studied. Because the present study focuses on language teachers, learners' beliefs will not be presented.

In-service teachers and learners' views about grammar teaching and learning were examined through a descriptive inquiry-based study seeking quantitative and qualitative data (Jean & Simard, 2011). 19 ESL and 26 FSL high-school in-service teachers completed a two-part questionnaire asking their beliefs on five aspects related to FFI. Part A consisted of 14 Likert-scale questions eliciting beliefs about FFI. Part B asked participants' opinions on two types of exercises: exercises focusing on both meaning and form simultaneously, and exercises aiming to attend exclusively to form. In-service teachers reported FFI to benefit learners' L2 development, but also considered it as a boring necessity. Most FSL and some ESL teachers believed strongly in the importance of accuracy when communicating in the L2. In general, ESL and FSL in-service teachers believed that only errors impeding comprehension in oral and written production or errors based on knowledge the students had covered in class should be addressed. ESL and FSL teachers perceive learning grammar rules to be important and consider giving specific grammar exercises useful to practise grammar rather than through language use. The majority of teachers declared they used an inductive approach in their teaching.

Another perspective was provided about decisions language teachers make in the classroom context with regard to grammar teaching. Eight high-school ESL (n = 4) and FSL (n = 4) teachers from the same sample were observed using form-focused interventions in their classroom (Simard & Jean, 2011). The research objectives consisted of determining whether these teachers tried to draw learners' attention to form during lessons, and if so, the type of form-focused interventions used and the characteristics that described these interventions. They used the term 'form-focused interventions' to refer to any explicit teaching that drew learners' attention to form, whether these occur incidentally based on learners' production errors or planned based on the language teacher's perceptions of where learners need help. The form-focused interventions were investigated through field notes as well as 60 hours of video

recordings from the participating teachers' lessons over a period of three months. The interventions were coded based on the type of form-focused instruction used and its characteristics that were determined previously by the researchers. The three types of FFI interventions observed were: "intervention-on-form techniques (IFT), formoriented exercises (FOE), and textual grammar interventions (TGI)" (p.767). The characteristics were coded according to the language focus, the initiator of the interventions and the language used. The findings suggested the form-focused interventions differed in terms of 'type' used in the two contexts. The results revealed that most interventions were IFT (91.6%), and these consisted mainly of corrective feedback (44%) and explanation (33%) for both languages. Corrective feedback was used by ESL teachers a lot more often, with a strong preference for recasts. FSL teachers, on the other hand, used rule presentation as this type was inexistent in ESL teachers' interventions. Regarding interventions' characteristics, vocabulary, derivational morphology and syntactic structures were the object of most linguistic focus in the interventions, ESL teachers were found to focus more on the first and the third. The initiator of the interventions consisted of the teacher the majority of time, and these were done in the language taught. Furthermore, the interventions were found to be higher in number for the ESL teachers but longer for the FSL ones.

Undergraduate and postgraduate student teachers' beliefs about FFI have recently been investigated in the Netherlands (Graus & Coppen, 2015, 2016, 2017, 2018). This has contributed to a deeper understanding of how teacher education affects beliefs preservice teachers hold about FFI. The trainees' beliefs were studied from both quantitative and qualitative perspectives. Only the most relevant information for the present study will be summarized below.

A cross-sectional and quantitative approach was used to focus on student teachers' beliefs about FFI (Graus & Coppen, 2016). The objective was to gain a deeper

understanding of student teachers' beliefs about FFI at different stages of their teacher education programme, as well as where these beliefs originated. The 832 participants were enrolled in an undergraduate (four years) or postgraduate (three years) teacher education programme in nine universities from the Netherlands. A questionnaire was written and validated based on four variables presented as construct pairs translated into eight scales: instruction focused on meaning versus instruction focused on form¹, focus on form (FonF) versus focus on forms (FonFs), implicit versus explicit instruction, and inductive versus deductive instruction. The results indicated student teachers' preference overall for FFI that is instruction focused on form, FonFs, explicit and inductive. When examining the variable time, higher-undergraduate and postgraduate students, compared to lower-undergraduate students, showed a preference towards a more instruction focused on meaning, implicit instruction, and FonF. Significant changes in beliefs with time were found for the four construct pairs. The origins undergraduate student teachers labelled as exerting an influence on their beliefs were 'undergraduate course', 'own teachers in secondary school', 'teaching practice' and 'student expectations'. The authors concluded this study provided indirect evidence of change in beliefs as student teachers progress in their training.

Student teachers' cognitions about FFI were examined from a different perspective as these were compared with 'learner-orientated cognitions', more specifically what student teachers know, think and believe about their learners (Graus & Coppen, 2017). 74 Dutch EFL student teachers took part in the study, 57 of them being undergraduates and 17 postgraduates. The data were collected through focus group interviews of ten

¹ In the original study, this construct pair was labelled as meaning-focused instruction (FonM) versus form-focused instruction (FFI) (Graus & Coppen, 2016). However, for the present study, it was decided to use instruction focused on meaning and instruction focused on form for this construct pair as FFI is employed to refer to general grammar teaching. This decision was made to avoid confusion.

people; participants were assigned in groups so they were at different stages of their teacher education programme. The task in the interview required participants to comment 8 vignettes that contained quotes about how language teachers were giving grammar instruction. Questions were presented to participants to elicit their beliefs. The findings revealed student teachers considered "explicit, systematic and isolated grammar instruction" (p.643) as imperative not only for learners to develop accuracy, but also their ability to communicate in the target language. Participants rejected an integrated approach to grammar instruction like FonF and were shown to be doubtful about implicit instruction. Moreover, student teachers' cognitions about their approach to FFI were influenced by perceptions of learners' characteristics, such as autonomy, needs, motivation and teaching style preferences.

The question of whether student teacher cognitions about FFI were amenable to change during teacher education was also investigated through an instrumental case study (Graus & Coppen, 2018). The sample consisted of 16 EFL pre-service teachers from their first to last year in their education programme, 10 teacher educators and 6 school placement mentors. Semi-structured interviews as well as classroom observation were the methods used to respond to the research objective. The results revealed that teacher education exerted a limited influence on pre-service teachers' cognitions about FFI, and these cognitions remained essentially 'traditional'. Teacher educators expressed frustration regarding their lack of power to change pre-service teachers' cognitions. The term the researchers used to qualify the results is 'incongruence' (p.706), as student teachers clearly expressed the view that grammar instruction should be a means and not the goal of a lesson. However, when pre-service teachers were asked how they would translate grammar instruction into pedagogical practices, a dichotomy was shown between their disciplinary and practical knowledge. Their statement that grammar should be taught within a communicative curriculum did not match the activities they proposed, which were translated as being traditional, isolated, and

structure based. Overall, the cognitions pre-service teachers held were not only maintained, but consolidated and reinforced through teacher education.

2.8 Research Questions

Literature on the effect of teacher education on pre-service teachers' beliefs on FFI has provided contradicting results. Furthermore, most research conducted to measure the effect of teacher education on beliefs about grammar teaching has been based on one course, usually an SLA class (Busch, 2010), or measure beliefs about language learning and teaching in general (Mattheoudakis, 2007; Peacock, 2001). This tells us little concerning the impact on pre-service teachers across a whole programme with regards to FFI, a consistently important part of curricula. Thus, this cross-sectional study investigates the evolution of pre-service teachers' beliefs with regard to FFI.

To achieve this objective, the following research questions are addressed in this study:

- 1. What are pre-service teachers' declared beliefs regarding FFI at each year of their teacher education programme?
- 2. How do pre-service teachers' declared beliefs evolve over their teacher education programme?
- 3. In what way do ESL and FSL pre-service teachers' beliefs regarding FFI differ over the four-year programme?
- 4. Where do pre-service teachers' beliefs about FFI originate?

In the next chapter, the methodology used to address the research questions is detailed.

CHAPTER III

METHODOLOGY

In this chapter, information about the methodology employed to answer the research questions is detailed. First, the type of research that was conducted to respond to the objectives is presented (3.1). Information is also provided about the participants (3.2), the instrument that was used to collect data (3.3), piloting (3.4) and data collection procedures (3.5) as well as data preparation (3.6).

3.1 Research Design and Variables

In order to investigate FSL and ESL pre-service teachers' beliefs regarding FFI and how they evolve over their teacher education programme, a descriptive cross-sectional design was used with a quantitative approach.

The two dependent variables in the present study were measured using a questionnaire. The first variable measured the beliefs of the ESL and FSL pre-service teachers concerning FFI. This continuous variable was measured using multiple-choice questions with five-point Likert scales. The second dependent variable corresponded to the origins of pre-service teachers' beliefs about FFI. This categorical variable was operationalised by having participants indicate what influenced their beliefs about FFI the most among choices provided for them.

Before being allowed to recruit participants to complete the questionnaire, the researcher was required by her university to follow an online class on the Government of Canada's website about ethics in research entitled *The TCPS 2 Tutorial: Course on Research Ethics* (2018). This training included important information on conducting research with human participants with specific details relating to respect and treatment. This permitted the development of a better understanding regarding participant's decision-making autonomy to ensure their decisions are "free, informed, and ongoing" (TCPS 2, 2018, Article 1.1).

Afterwards, university ethics approval was sought and obtained through the *Comité d'éthique de la recherche pour les projets étudiants* (CERPE) at the researcher's university. This procedure was mandatory prior to recruiting participants and data collection as the present study involved human beings. The researcher was asked to explain the research project in detail, the data collection procedure and storage, and how the participants' autonomy to give informed and free consent would be respected. The researcher was also required to attach the consent form, the e-mails used to contact the participants, the questionnaire, and the certificate confirming the completion of TCPS online tutorial on ethics. The form was evaluated by two anonymous people from the committee and the certificate of ethics approval was delivered when the researcher had met the criteria.

3.2 Participants

Participant recruitment occurred using non-probability sampling, which does not provide equal opportunities to a population of being selected (Fortin & Gagnon, 2016). Participants were recruited based on accessibility to the researcher.

The participants were undergraduate students from a university based in a city in the province of Quebec, Canada. A total number of 153 pre-service teachers took part in this study. The sample was composed of two sub-groups according to the language teaching programme they were enrolled, which corresponded to English (n = 54) and French (n = 99). The participants were at different stages in their four-year teacher education programmes. Table 3.1 provides information on the spread in terms of language of instruction and their current year of study in the programme.

Table 3.1 Ordinal numbers of participants

		Langu		
_		English	French	Total
Year	1	27	43	70
	2	0	2	2
	3	14	26	40
	4	13	28	41
Total		54	99	153

The participants were completing an undergraduate programme in FSL or ESL that leads to the acquisition of a bachelor's degree and a teacher's licence from the Government of Quebec. In order to obtain a teaching licence in the province of Quebec, people are required to enroll in a four-year Bachelor of Education degree approved by the *Ministère de l'Éducation et de l'Enseignement supérieur* (MEES). Pre-service teachers in Quebec are required to complete one internship per year. At the university where the research was conducted, the four internships allow student teachers to progressively take on more responsibility over the four-year period and involve work in both primary and secondary schools, with the option to work in adult education for

the last internship. With their teaching licence, language teachers have the possibility of working in the public primary and secondary school system in Quebec.

3.2.1 Recruitment

To recruit participants, the director of a Montreal-based university offering a Bachelor of Education (B.Ed) in teaching ESL and FSL was contacted by e-mail. After having outlined the goals of the research, permission was given to write a detailed recruitment e-mail that was sent to all ESL and FSL pre-service teachers. The e-mail described the study's aims and the requirements of participants, which included information on consent, the questionnaire and its duration. Contact details were also provided.

Two e-mails were sent to ESL and FSL pre-service teachers in September and October 2019 to invite them to complete the survey. However, this procedure was not successful and led to less than 10 questionnaires being completed. As such, the researcher directly contacted professors and adjunct lecturers to explain the research project and request permission to recruit pre-service teachers during class time. Through this means of recruitment, the researcher went into six classrooms. At each time, the study's objectives were explained to the pre-service teachers in class, which were to identify what their beliefs about FFI were, how they evolved throughout the programme by comparing the four cohorts, how FSL and ESL pre-service teachers' beliefs differed, and the origins reported for their beliefs. The students were also informed of the task's duration. The researcher emphasised that their participation in this study was voluntary and that their data would be anonymized.

3.3 Instrument

A four-part questionnaire adapted from Graus and Coppen (2016) was used to collect data to answer the four research questions. Brown (2001) defines questionnaires as "[...] any written instruments that present respondents with a series of questions or statements to which they are to react either by writing out their answers or selecting from among existing answers" (p. 6). Questionnaires are one of the most common methods for collecting data in L2 research (Dörnyei, 2003). As beliefs are not accessible directly and need to be elicited from individuals, this instrument enables to collect information about pre-service teachers' attitudes, opinions, and knowledge about grammar teaching (Fortin & Gagnon, 2016).

The choice of using a pre-existing questionnaire is justified in terms of psychometric reliability and validity (Dörnyei, 2003). Furthermore, as the present study and Graus and Coppen had similar research objectives, the questionnaire corresponded to the research needs. Graus and Coppen (2016) had checked for unidimensionality using exploratory and confirmatory factor analyses. The authors also tested the internal consistency of the scales by conducting Cronbach's Alphas. Hence, items with low factor loading had already been deleted.

The questionnaire that participants completed consists of four sections—the consent form, sociodemograhic information, multiple-choice questions, and open-ended questions. Each part of the questionnaire is described in detail below. The questionnaire was administered using LimeSurvey, an open source online survey web application that enables researchers to create questionnaires in order to collect data and export them to other programmes.

Two versions of the questionnaire were created according to the language the participants were being trained to teach. An English version was given to the participants who were in the Bachelor of Education (B.Ed.) in teaching ESL, whereas a French version was provided for the participants enrolled in the B.Ed. in teaching FSL. Despite the majority of the participants being francophone and some of the ESL courses being taught in French (the FSL cohort does not follow courses given in English), it was decided that an English version of the questionnaire was more appropriate for the future ESL teachers as all pedagogy courses are given in English. Terms that are used in the French classes may not have been familiar to the ESL teachers. The two versions of the questionnaire are available in Annex A (English) and Annex B (French).

Although the study took place in a francophone university, the decision was made to have the participants fill in the questionnaire in the language they would teach. One concern that was raised during the instrument's conception related to the terminology about grammar teaching in SLA; French and English languages have different terms to describe the same concepts. In order to ensure that the questionnaire used terminology the participants were familiar with and that refers to the accurate concepts seen in their theory courses, a decision was made to have participants complete the questionnaire in the language taught was done to avoid misinterpretation of questions so the answers provided by participants really reflected their views. Another issue was that students in the TESL programme may have French as a second or even a foreign language. Therefore, to avoid confusion and making pre-service teachers feel constrained by language, it was decided to have ESL participants complete the questionnaire in the language they were being trained to teach: English for TESL participants, French for TFSL participants.

3.3.1 Section A: Consent Form

Before participants expressed their beliefs about grammar teaching, they were required to read the consent form and agree to participate in this research. The consent form provided information about the nature and duration of the study, the advantages and risks related to their participation, and the confidentiality of participants' data. At the end of the section, the participants had to check a box attesting they had given their consent. They also had the option to check whether they agreed their data could be used for subsequent studies within five years. The participants who did not check to give their consent were excluded for the data as it was taken for granted they refused to participate even though all four sections were filled.

3.3.2 Section B: Sociodemographic Information

The second section collected participants' demographic characteristics like the participants' full name and gender, their programme and year of study, level of education, language(s) spoken to them by the parents, and any relevant information about pre-service teachers' experiences with the target language and teaching. Ultimately, some questions in this section were not used for the purpose of this study.

3.3.3 Section C: Multiple-Choice Questions

The goal of this section was to collect quantitative data concerning pre-service teachers' beliefs about FFI. The third section was translated into 24 statements about grammar teaching that were taken directly from Graus & Coppen (2016). Participants were required to indicate the extent to which they agree or disagree with the statements using a five-point Likert scale (strongly agree to strongly disagree). Examples of items in English are provided below (Table 3.2). The statements were categorized into four

scales. Each scale was translated into two poles, which were labelled as four construct pairs in the original study. Six statements were associated with each scale, and these were attributed a code. The scales were verified for internal consistency with Cronbach's alpha in Graus and Coppen (2016). It should be noted that the terms for the first pair, 'instruction focused on meaning' and 'instruction focused on form', differ from in Graus and Coppen (2016), which were labelled as meaning-focused instruction and form-focused instruction. As the term FFI is used in the present study for any grammar instruction, these terms have been changed.

Table 3.2 Questionnaire Items

Instruction Focused on Meaning versus Instruction Focused on Form Scale

- 1. Grammar should be part of English class.
- 2. English grammar should be addressed in coursebooks.
- 3. Teachers should pay attention to grammar in English class.
- 4. In English class, it is not necessary to discuss grammar; the focus should only be on learning how to communicate.
- 5. The focus of English lessons should lie solely on learning how to communicate (without grammar teaching).
- 6. English grammar should not be discussed in coursebooks.

Focus on Form versus Focus on Forms Scale

7. Grammar should occupy a central position in English class.

- 8. Coursebooks should systematically deal with all grammar features.
- 9. Teachers should deal with grammar as a separate part of the lesson.
- 10. Teachers should only pay attention to a grammar feature if students are having difficulties with it.
- 11. If students do not make any mistakes in a particular grammar feature, teachers should not explain the underlying rule.
- 12. Teaching a grammatical item is only useful if students make mistakes with it.

Implicit versus Explicit Instruction Scale

- 13. When teaching grammar, a teacher must discuss grammar rules.
- 14. Clearly defined grammar rules are a necessity for mastering grammar.
- 15. Explicit grammar rules are of crucial importance for students to learn grammar.
- 16. The best type of grammar instruction is presenting learners with many examples of the structure in question without discussing the underlying rule.
- 17. The best way for students to master grammar is by studying sample sentences (without the rule).
- 18. Students acquire grammar automatically by processing many examples of a grammatical structure (without the rule).

Inductive versus Deductive Instruction Scale

- 19. A teacher should present a grammar rule instead of having students discover it for themselves.
- 20. It is better for teachers to explain a grammar rule than to let students derive it from examples.

- 21. It is more effective to give students a rule than to have them discover it from examples.
- 22. It is better to let students derive a rule from a set of examples than to give them the rule up front.
- 23. Having students discover a rule from examples is a better way of teaching grammar than presenting a rule.
- 24. Asking students to discover a rule is a better way of teaching grammar than when teachers present rules themselves.

The first construct pair, *Instruction focused on meaning* versus *Instruction focused on form*, is linked to the Second Language Acquisition literature, and these terms are used to describe whether language teachers' primary focus is on form or meaning (Ellis, 2001). Instruction focused on meaning is premised on the idea that language learning occurs through communicating. Grammar teaching, thus, has a reduced role in this approach. Instruction focused on form, on the other hand, aims to attract learners' attention to a grammatical structure during a lesson, whether it is planned or unintentional (Graus & Coppen, 2016).

The second construct pair related to whether pre-service teachers believe in an approach that is *Focus on form* (FonF) or *Focus on formS* (FonFs). FonFs is characterized as an orientation to the teaching of grammar that is traditional—grammar is taught in isolated exercises with no need to demonstrate how it is used in communication (Graus & Coppen, 2016). FonF instruction is described as an approach

to grammar teaching that asks teachers to draw learners' attention to grammatical structures as they arise incidentally during a lesson (Long, 1991).

The third construct pair consisted of *Implicit* versus *Explicit* instruction. Explicit instruction involves learners being aware that they are being taught a grammatical rule or structure. Implicit instruction encourages learners to interact with the grammar without becoming aware that they are potentially learning grammar. Thus, it attempts to encourage unconscious learning, meaning that it is taking place without "intentionality or awareness" (Ellis, 2008, p.965).

The last construct pair corresponded to *Inductive* versus *Deductive* instruction. A language teacher is said to use a deductive approach to grammar instruction when presenting a rule/grammatical structure first, and then having learners practise the targeted structure. Inductive instruction requires learners to make generalizations or generate a rule from exemplars.

This section was mandatory; participants needed to express their view on the 24 items before moving to the last part of the questionnaire. As the questionnaire for the present study was administered to ESL and FSL pre-service teachers, questions and scales were translated into French for the population doing the B.Ed in teaching FSL. Also, some items in English were slightly modified from the original study to adapt it to this study's context. For example, the words "pupils" and "learners" in the original questionnaire were replaced for the single term "students".

3.3.4 Section D: Open-Ended Questions

The fourth section asked the participants to select the aspects they believed had contributed the most to their beliefs about FFI. Participants were required to check at

least one aspect they thought had exerted an influence on their grammar teaching practices. A non-exhaustive list was provided for them as elements to choose (e.g.: university courses, student expectations, conferences, etc.). The options were taken largely from Graus and Coppen's (2016) study. Participants also had the possibility of naming another aspect that was not listed by checking "other", which provided them with a space to write other influences.

3.4 Piloting

In this section, information about the procedures for piloting is provided, which led to the final version of the questionnaire for data collection.

As mentioned previously, the multiple-choice questions using scales and the part in which participants had to check what factors had contributed the most to their beliefs on FFI were tested and validated in Graus and Coppen (2016). Nevertheless, some items were slightly changed, as well as some factors that influenced pre-service teachers' beliefs on grammar teaching. Moreover, the questions in the *Sociodemographic Information* section were created as well as the open-ended questions.

It should be noted that the English version of the questionnaire from the original study was used, which had been translated from Dutch initially (Graus & Coppen, 2016). The researcher verified that the English version of the questionnaire was linguistically suitable for the context. After this linguistic verification, the questionnaire was translated into French. To make sure items were translated appropriately and before piloting, a student in the ESL programme who had previously completed a bachelor's degree in translation reviewed the 24 items in French and English. The statements were

verified in both languages for each scale to ensure the items referred to the same concepts.

In order to test the two versions of the questionnaire, four L2 language teachers were recruited: two people who completed a B.Ed. in teaching ESL and two who completed a B.Ed. in teaching FSL. Having ESL and FSL teachers filling the questionnaire ensured concepts were accurate and understood in both languages. The questionnaire in a Word document was sent to the sample by e-mail according to their language taught. The participants were told to pretend they were completing the questionnaire as if they were taking part in the research. They were asked to pay specific attention to the wording of questions and provide comments about whether they considered some questions to be unclear. Participants were invited to insert comments in the Word document and send the feedback to the researcher by e-mail as soon as possible. The researcher asked the participants to mention the duration of its completion to evaluate if the length was appropriate. It was aimed to have participants complete it in approximately 15 to 20 minutes.

One of the comments was that the questionnaire took too long to complete. It was decided one section would be deleted as it lengthened the questionnaire considerably and its content did not answer the research questions. The section deleted asked participants to express their opinion on statements according to the Quebec programme taught (e.g.: core, enriched, immersion, etc.). The comments and feedback from participants enabled the researcher to make minor and major changes to the questionnaire before creating the final version online using LimeSurvey. Few changes were made concerning language form.

One participant highlighted that some questions were difficult to answer because the questionnaire did not allow the respondents to express contextual factors that they may

take into account when deciding how to teach grammar. Examples of mentioned contextual factors were the grammatical structure targeted in teaching, students' needs, L1s, and the motivation for learning the language. To rectify this issue, three more open-ended questions were included to provide participants with the opportunity to express their own voice with a particular emphasis on parts of the questionnaire that they may have found insufficiently contextualised or nuanced. Ultimately, this section was not analysed.

3.5 Data Collection

The researcher contacted several professors and course lecturers to ask permission to recruit participants for the study during their class time. Participants were informed that their decision to complete the questionnaire was on a voluntary basis and they could withdraw their consent at any moment. An initial e-mail was sent to ESL and FSL preservice teachers from year 1 to year 4 in September 2019 after being approved by the programme director. The message informed them of the research goals and provided the link to the questionnaire. A second e-mail was forwarded to participants as a reminder in October 2019.

Some lecturers and professors accepted to speak about the research project during their classes, and gave participants some time to complete the questionnaire. Participants were told the survey would take between 15 to 20 minutes to complete. The lecturers and professors emphasized that the questionnaire did not consist of an evaluation in their respective class and that their data would be anonymised.

3.6 Data Preparation

When data collection was complete, all data were transferred from LimeSurvey to SPSS 26. Before conducting the analyses, a number of steps were undertaken to the database to ensure a true representation of the data and to allow the research questions to be answered. These steps are described in this section.

Data from 22 participants had to be excluded. Seven participants who were doing a certificate in teaching French or English as a second language or a Bachelor of Arts (BA) in linguistics were excluded from the dataset. Individuals who are enrolled in a 30-credit certificate in teaching ESL or FSL are usually in-service teachers who are doing continuing education, which did not consist of the population targeted for this study. Thus, this population did not enable us to answer the research questions. Four participants who did not check the box to give their consent to participate were also excluded from the database. Finally, 11 participants who did not complete the main part of the questionnaire concerning the 24 statements were excluded. It was considered that their questionnaire was incomplete and therefore could not be used for analyses.

When completing the questionnaire, participants were asked to write their name. However, measures were taken to anonymise the participants' data. Each participant's name was erased when the data was merged, and was attributed a code depending on their programme of study. The codes given for each participant did not permit any identification.

The next chapter presents the analyses that were conducted and presents the results to answer the four research questions.

CHAPTER IV

RESULTS

In this chapter, the research questions are answered. This cross-sectional study was designed to investigate what pre-service teachers' declared beliefs are about FFI, how they evolve over time, and whether there are differences in beliefs based on the programme of study, ESL or FSL. The perceived origins of these beliefs were also investigated.

The sections of this chapter are divided based on the order of the research questions with each section including a description of the analyses used. The first section provides a portrait of pre-service teachers' beliefs about FFI by presenting descriptive statistics (4.1). Statistical analyses enable to determine whether an interaction exists between pre-service teachers' beliefs and year (4.2), as well as the language of instruction (4.3). To this end, the results from two-way ANOVAs are presented to determine whether there are differences between beliefs based on number of years in the programme and the language the participants are being formed to teach (English or French). Finally, ordinal descriptive statistics are also provided in order to present a clearer picture about elements that pre-service teachers believe exert an influence on their own beliefs (4.4).

4.1 Pre-Service Teachers' Beliefs About Grammar Teaching

This section answers the first research question, which is *What are pre-service teachers'* declared beliefs on grammar teaching at each year of their teacher education programme?. A summary of the results of pre-service teachers' beliefs on the four construct pairs (see section 3.3.3) are reported below. Descriptive statistics based on the 24 questionnaire items were employed to answer the first research question.

On the construct pairs, a low mean indicates pre-service teachers' preference for meaning-focused, FonF, implicit and inductive instruction. A high mean corresponds to a preference for form-focused, FonFs, explicit and deductive instruction. The maximum score on the Likert scale was 5 and the minimum was 1. The data were normally distributed and met the assumptions for the two-way ANOVAs presented in the next sections. The results regarding the four construct pairs are reported in Table 4.1.

Table 4.1 Descriptive Statistics

Construct Pair	Statistics	English	French	Total
Instruction	Mean	3.66	3.45	3.52
Focused on	Standard	.47	.54	.53
Meaning vs.	Deviation			
Form	Minimum	2.50	1.83	1.83
	Maximum	5.00	4.67	5.00
FonF vs.	Mean	2.96	3.15	3.08
FonFs	Standard	.73	.59	.65
	Deviation			
	Minimum	1.00	1.83	1.00
	Maximum	4.50	4.67	4.67
	Mean	3.09	3.11	3.11

Implicit vs. Explicit	Standard Deviation	.54	.54	.54	
	Minimum	1.67	1.50	1.50	
	Maximum	4.17	4.67	4.67	
Inductive vs.	Mean	2.69	2.47	2.55	
Deductive	Standard	.63	.67	.66	
	Deviation				
	Minimum	1.00	1.00	1.00	
	Maximum	4.00	4.00	4.00	

The data from Table 4.1 demonstrate that, in general, pre-service teachers believe instruction focused on form to be more effective than instruction focused on meaning $(\bar{X}=3.52)$. They also reveal a general preference for inductive instruction $(\bar{X}=2.55)$. The total means for the second and third construct pairs suggest an absence of obvious preference.

4.2 Beliefs over Time

The second research question, *How do pre-service teachers' declared beliefs evolve over their teacher education programme?*, was answered by examining whether a relationship exists between pre-service teachers' beliefs and the years of study. To this end, a two-way factorial analysis of variance (ANOVA) was conducted. Participants were divided into two respective groups, namely years 1-2 for those at the beginning of the programme and years 3-4 for those at the end of the programme. This methodological choice was made as the sample for year 2 was considerably smaller than the other years.

The two-way ANOVA was conducted to determine whether there were significant differences of beliefs with time by comparing years 1-2 and years 3-4. The results for the first pair, instruction focused on meaning versus instruction focused on form, reveal

no significant differences ($F_{1,149} = 1.103$, p = .295, partial eta-squared = .007). The results highlight the following trend: pre-service teachers are more in favour of FFI, and this preference is maintained throughout their programme of study.

Regarding the second construct pair, FonF versus FonFs, the two-way ANOVA revealed statistical significance for the variable years ($F_{1,149} = 27.977$, p = < .0005, partial eta-squared = .158). The analyses suggest that, as they are progressing in their teacher education programme, pre-service teachers' beliefs about grammar instruction tend to go from a more FonFs approach to one that is more FonF.

When looking at the third construct pair, implicit versus explicit instruction, the analyses show that pre-service teachers' preference for implicit or explicit instruction appears to change very little as they progress in their teacher education, leaning towards no preference ($\bar{X} = 3.05$). The two-way ANOVA confirmed the absence of interaction with the variable earlier and later years ($F_{1,149} = 1.701$, p = .194, partial eta-squared = .011). Overall, no significant change was reported for this construct pair from the beginning to the end of teacher education programme, and thus, tends to indicate no preference for implicit or explicit instruction.

The analyses for the last construct pair, inductive versus deductive instruction, revealed no significance for the variable year ($F_{1,149} = 2.305$, p = .131, partial eta-squared = .015), suggesting that pre-service teachers' beliefs about their preference for inductive teaching does not change significantly with time. Hence, pre-service teachers' preference towards inductive instruction is maintained with time, but its progression was not found to be significant.

Overall, the answer to the second research question revealed an interaction with the dependent variable FonF and FonFs. Pre-service teachers tended to shift towards teaching that is more oriented to FonF with time, and this was considered to be

significant. The other three construct pairs revealed no significant change in beliefs as pre-service teachers progress in their programme of study.

4.3 Differences Between ESL and FSL

For the third research question, *In what way do ESL and FSL pre-service teachers'* beliefs about FFI differ over the four-year programme?, a two-way factorial analysis of variance (ANOVA) was conducted to describe the relationship between beliefs and the language taught in the bachelor's degree, ESL and FSL.

Concerning the first construct pair, Instruction focused on meaning versus Instruction focused on form, The statistical analyses reveal significant results for the language taught ($F_{1,147} = 3.525$, p = .019*, partial eta-squared = .023), which demonstrates that pre-service ESL teachers' preference for instruction focused on form is significantly more accentuated than FSL pre-service teachers, who tend to be more in favour of instruction focused on meaning.

For the second construct pair, FonF versus FonFs, the two-way ANOVA indicates neared significance between the ESL and FSL cohorts ($F_{1,147}$ = 3.843, p = .052, partial eta-squared = .025).

When examining the third construct pair, Implicit versus Explicit instruction, preservice teachers from both cohorts showed a small preference for explicit instruction. The two-way ANOVA indicated no statistically significant difference between the two cohorts ($F_{1,147} = .088$, p = .768, partial eta-squared = .001). The results suggest that preservice teachers' beliefs are homogeneous.

The results for the last construct pair, Inductive versus Deductive instruction, revealed no significant difference between ESL and FSL pre-service teachers ($F_{1,147} = 3.525$, p

= .062, partial eta-squared = .023). Therefore, the two-way ANOVA demonstrated that FSL's preference for a more inductive approach is not statistically significant from the ESL cohort.

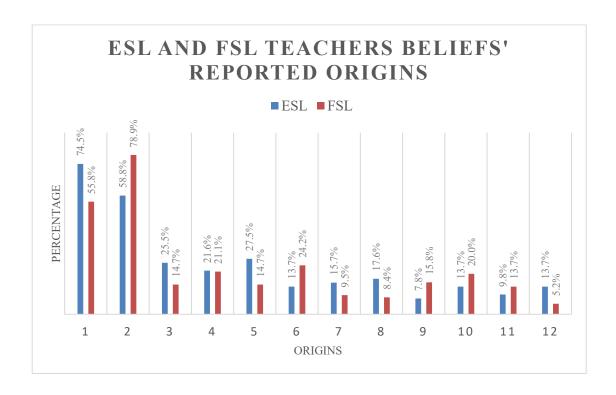
To summarize the findings regarding the third research question, an interaction was found for one pair, instruction focused on meaning versus instruction focused on form. The results reveal that ESL pre-service teachers are in favour for instruction focused on form, whereas the FSL also expressed a preference for instruction focused on form, but with a trend for instruction focused on meaning, and this difference between the two cohorts was found to be significant. The other three construct pairs had no significant interaction.

4.4 Elements Influencing Reported Beliefs

The last research question, Where do pre-service teachers' beliefs originate?, asked participants to select a maximum of three elements they considered to be the most influential about their beliefs on FFI. Ordinal descriptive statistics were chosen to address this research question.

As participants were not required to complete this part of the questionnaire, the sample size is smaller than for the other research questions. Thus, the total sample differs slightly from the previous research questions for ESL (N = 51) and FSL (N = 95) preservice teachers. Participants were also allowed to select less than three factors. The ordinal numbers for ESL and FSL pre-service teachers' origins are provided below (Chart 4.2).

Chart 4.2 Reported Origins of Pre-Service Teachers' Beliefs



Legend

- 1. My own teachers from elementary/secondary school
- 2. University courses (DDL courses and other courses aside DLS courses)
- 3. Internship courses (DLS courses)
- 4. Cooperating teacher(s)/supervisor(s) from internships
- 5. Fellow students
- 6. Student expectations
- 7. Professional publications (SPEAQ, AQEFLS, etc.)
- 8. Conferences
- 9. Work experience before starting undergraduate degree
- 10. Work experience during your undergraduate degree
- 11. Colleagues (teachers of English/French)
- 12. Other

One of the aspects that was reported to be the most influential was "My own teachers from elementary/secondary school". 74.5% of ESL and 55.8% of FSL pre-service teachers indicated that previous teachers contributed most to their beliefs on FFI. Although the sample was found to be smaller for ESL than FSL pre-service teachers, one general trend that can be mentioned is that this factor was more important for ESL pre-service teachers.

Another element that pre-service teachers noted had an influence on their beliefs on FFI was "*University courses*", in which internship courses were excluded with 58.8% of ESL and 78.9% of FSL pre-service teachers selecting this. It is interesting to observe the opposite trend for this influence; considerably more FSL pre-service teachers identified university courses as having an effect on their beliefs than ESL ones.

Other variables that were found to have an influence to a lesser extent on ESL preservice teachers were *Internship courses* (25.5%), *Cooperating teacher(s)/supervisor(s)* from internships (21.6%), and *Fellow students* (27.5%). On the other hand, FSL preservice teachers reported *Cooperating teacher(s)/supervisor(s)* from internships (21.1%), *Student expectations* (24.2%) and *Work experience during your undergraduate degree* (20%) to influence their beliefs.

The elements that appeared to have little influence according to both ESL and FSL preservice teachers were *Professional publications*, *Conferences*, *Work experience before starting undergraduate degree*, *Colleagues* and *Other*. Among participants who chose to indicate *Other*, *College teachers* (CEGEP in Quebec) (n = 4) and *My own personal experiences as a language learner* (n = 4) were found to be the most popular answers.

In general, the fourth research question indicates that the most influential aspects reported to influence pre-service teachers' beliefs were *own teachers from elementary/secondary school* and *university courses*. Other elements were identified as

exerting a smaller impact on pre-teachers' beliefs, such as *internship courses*, cooperating teacher(s)/supervisor(s) from internships, fellow students, student expectations and work experience during undergraduate degree.

In the next chapter, the results obtained in this study will be discussed with regard to existing literature.

CHAPTER V

DISCUSSION

In order to compare the results obtained in this study with previous research into preservice teachers' beliefs, each research question is addressed in order. The descriptive statistics from the four construct pairs investigating pre-service teachers' beliefs on FFI (answer to research question 1) are initially compared with those obtained by Graus and Coppen (2016), as this study employed their questionnaire and their construct pairs, as well as with other studies from the literature (5.1). The interpretation of the relationship between belief, time (5.2) and language of instruction (5.3) is also being discussed according to existing literature, as well as the origins of the participants' reported beliefs (5.4). Finally, the limitations of this research are identified (5.5) and suggestions for future research are provided (5.6).

5.1 Pre-Service Teachers' Declared Beliefs Concerning Form-Focused Instruction

Overall, the results of this study indicate the following trends in terms of pre-service teachers' declared beliefs concerning grammar teaching: Pre-service teachers demonstrate a tendency for instruction focused on form over meaning-focused instruction, FonFs rather than FonF, explicit over implicit instruction, and a preference for inductive over deductive instruction. The results from each construct in the subsequent paragraphs are compared with existing literature.

5.1.2 Instruction Focused on Meaning Versus Instruction Focused on Form

Based on Graus and Coppen's (2016) definitions, instruction focused on form aims to direct learners' attention to specific grammatical features, whereas instruction focused on meaning emphasizes communication and message comprehension. In the present study, pre-service teachers reported a preference for instruction focused on form over instruction focused on meaning.

Lower-year English as a foreign language (EFL) undergraduates from the Netherlands being trained to teach in lower secondary schools showed a trend towards a preference for instruction focused on form. Higher-year undergraduates and postgraduates, the latter completing their degree to teach in upper secondary school, also expressed a preference for instruction that is form-focused, but to a lesser extent (Graus & Coppen, 2016). Research from the same location, Quebec, has also found that ESL and FSL inservice teachers incorporate instruction focused on form in their classrooms and believe learners' ability to express themselves accurately to be 'important' or 'very important' and this was true for oral and written expression (Jean & Simard, 2011). In a different context, Japan, three high-school in-service teachers viewed knowledge about grammar as essential to L2 learning, and thus instruction focused on form was considered an

important component in teaching English (Nishimuro and Borg, 2013). These inservice teachers believed that before being able to use one form of grammar, learners had to master it. In-service adult language teachers from 18 countries also reported "high levels of integration of grammar in their practices" (Borg & Burns, 2008, p.456) and also strongly believed in grammar practice to develop fluency. However, no clear view about the role of instruction focused on form with regards to CLT was mentioned in these participants' answers.

This consistent result across countries and age groups in terms of the students who will be taught by these teachers can be explained by prior experiences as learners. It is known to be a strong contextual factor that impacts language teachers' belief systems (Borg, 2015). It may be that the 'apprenticeship of observation' (Lortie, 1975) has contributed to the belief of the importance of instruction focused on form. Pre- and inservice teachers report holding memories of their own language teachers giving grammar instruction (Lortie, 1975; Moodie, 2016). The exposure to numerous hours of explicit grammar teaching in language classes may partly explain language teachers' common agreement on the importance given to instruction focused on form in their teaching practices. Their rationale for incorporating instruction focused on form appears to be mainly experiential, as evidence from this study and other literature have shown teachers' beliefs are not based on the scientific literature available (Borg and Burns, 2008; Borg, 2015). The finding that language teachers value instruction focused on form overall is positive in terms of L2 learners' development as there is strong evidence that instruction focusing exclusively on meaning does not provide opportunities for learners to learn different types of grammar (Norris & Ortega, 2001). Overall, research supports the inclusion of instruction focused on form in an overall meaning-focused approach for language learning (Loewen, 2015). The present study does not, however, shed light on how pre-service teachers operationalise this

instruction focused on form in the classroom, which may not resemble the FFI in an overall meaning-based approach that is recommended in the scientific literature.

5.1.3 Focus on Form Versus Focus on Forms

The second construct pair looked at Focus on Form (FonF) and Focus on FormS (FonFs). FonF is described as having learners pay attention to linguistic forms while they are engaged in a task that focuses on meaning. FonFs commonly refers to traditional grammar teaching, in which grammatical structures are taught by presenting and practising forms explicitly and directly in a decontextualized way (Collins, 2012; Ellis, 2016). In the present study, pre-service teachers demonstrated a slight preference for FonFs.

Results from previous research has not been unanimous. On the one hand, literature has demonstrated a trend for language teachers to favour FonFs when teaching grammar (Simard & Jean, 2011; Nishimuro & Borg, 2013). Undergraduates and postgraduates from the Netherlands shared the same tendency regarding this construct (Graus & Coppen, 2016). EFL undergraduate and postgraduate student teachers in the Netherlands perceive "explicit, systematic and isolated" (p.656) grammar instruction as playing a preponderant role in language teaching (Graus & Coppen, 2017). Rule explanation and discussion appear to be seen as imperative not only for developing grammatical accuracy, but also for overall proficiency. Other research examining inservice teachers' beliefs also reported the belief that knowledge of grammar is primordial for L2 learning, and that decontextualized presentation of grammar contributes to student learning; grammar has to be mastered before the learners can use it (Nishimuro & Borg, 2013). This view on grammar teaching contradicts the content of many teacher education programmes worldwide, which recommend teaching grammar using FonF (Graus & Coppen, 2016, 2017; Moodie, 2016; Quebec Education

Programme, 2002). This vision also contradicts the scientific literature about ISLA, advocating FonF in an overall approach to instruction that is meaning-focused (Loewen & Sato, 2017). Nevertheless, grammar teaching that is considered more integrated, such as FonF, was rejected by pre- and in-service teachers in some of the current literature despite this aligning more closely with their training (Nishimuro & Borg, 2013; Graus & Coppen, 2017).

Other research on teacher beliefs about FFI is not in line with the results from this study. Adult English language teachers from 18 countries held the strong belief that grammar should not be taught in isolation (Borg & Burns, 2008). However, one needs to be careful when interpreting language teachers' beliefs about integrated grammar teaching like FonF as they do not appear to have the same understanding of 'integration' as researchers. This is reflected in beliefs about FFI reported by teachers in Borg and Burns (2008): although 84% of the participants disagreed that grammar should be taught in isolation, 40% agreed with the statement that grammar should be presented before learners use it. The latter statement is classified as isolated grammar practice according to the researchers. EFL and ESL teachers' stated beliefs from two different contexts, Canada and Brazil, also suggest that integrated teaching of grammar was preferred, though acknowledging the role of isolated FFI depending on groups and the context (Valeo & Spada, 2016). In-service teachers in New Zealand held the same view, claiming that one should not attend to form unless a problem with understanding occurs (Basturkmen, Loewen & Ellis, 2004).

Context has been suggested as a possible reason for the preference of FonFs in certain cultures. This idea that certain cultures are not compatible with CLT has been discussed especially for Asian cultures (Andrews, 2003; Sato & Oyandel, 2019). Reasons mentioned by teachers are diverse for not adopting teaching practices that employ FonF. In countries like Japan and China, curricula and examinations appear to offer little

flexibility to language teachers. Many have reported feeling constrained by state requirements which force them to adopt practices that do not necessarily align with their beliefs and the scientific literature (Andrews, 2003; Nishimuro & Borg, 2013). Some studies investigating teachers' beliefs in Asia have also demonstrated these teachers as perceiving grammar teaching as a necessity. The teaching practices in these contexts were described as 'conservative', 'mechanical', and 'teacher-fronted explanations of grammatical forms' (Nishimuro & Borg, 2013, p.29), which are compatible with FonFs. Student expectations was also reported by these authors as a reason for teachers to use a FonFs approach, even though they also believe in communicative language teaching. Even though Asia is well known for FFI that is more 'traditional', FonFs appears to be also preferred in other cultures as this study and other scholars have demonstrated (Jean & Simard, 2011; Graus & Coppen, 2016). Language teachers' preference for FonFs across different cultures could explain learners' belief in the usefulness of mechanical drills, as their learning experience seems to be metalinguistic in nature (Jean & Simard, 2011; Simard & Jean, 2011).

5.1.4 Implicit Versus Explicit Instruction

When a language teacher determines that a grammatical feature needs to be integrated in a lesson, this can be done in an explicit or implicit fashion. Explicit instruction refers to explicit attention drawn to form, which makes learners aware they are being taught grammar (Graus & Coppen, 2017). Implicit instruction involves attracting learners' attention to the targeted form without them being conscious their attention has been drawn to form, which implies that the targeted feature is presented with exemplars without any rule being explained or discussed (Ellis et al., 2009). Pre-service teachers in the present study indicated a slight preference for explicit instruction, which aligns with findings from other studies in the current literature.

In general, pre- and in-service teachers appear to favour explicit instruction. Undergraduates and postgraduate student teachers from the Netherlands reported the same belief, indicating a small preference towards explicit instruction (Graus & Coppen, 2016). These undergraduate and graduate student teachers considered explicit grammar to be imperative in developing linguistic accuracy as well as "for advanced communicative competence" (Graus & Coppen, 2017, p.643). This preference for explicit instruction is sometimes not directly expressed from language teachers, but inferred, as some adult EFL teachers agreed that explicit knowledge of grammar was considered to be "desirable and beneficial" (Borg & Burns, 2008, p.463). ESL and FSL in-service teachers in the same location as this study viewed learning grammar rules to be important or very important (Jean & Simard, 2011). This strong belief about the importance of learning rules was not only reflected in their beliefs, but also in their teaching practices (Simard and Jean, 2011), where numerous pedagogical interventions aiming to draw attention to form were observed. Grammar instruction provided by ESL and FSL teachers consisted mainly of corrective feedback (44%) and explanation (33%), which indicates that they used explicit instruction. Literature also revealed that student teachers showed skepticism about implicit ways to teach grammar, and believed that grammar rules need to be explicit for learning and acquisition to happen (Graus & Coppen, 2017).

Pre- and in-service teachers' preferences for explicit instruction may be explained by their experiences as learners based on the apprenticeship of observation in a similar fashion to their preference for an overall approach that focuses on form rather than meaning. Prior experiences were found to have a strong impact on teachers' beliefs and practices about FFI (Borg, 2015). When recalling their experience as learners, teachers evoke somewhat traditional grammar teaching, such as teacher presentation of rules, grammar drills used to practise forms, and metalinguistic explanations (Moodie, 2016, Nishimuro & Borg, 2013). As language teachers have mainly been exposed to explicit

grammar instruction, it is no surprise that reluctance remains about implicit instruction. As teachers' knowledge of the scientific literature has shown to be quite limited (Borg, 2015; Borg & Burns, 2008), they may have a misunderstanding of the concept of implicit instruction itself, and its role in learners' L2 development. Implicit instruction may not be considered to be grammar teaching to learners and pre- and in-service teachers as they may think grammar teaching necessarily involves some rules being discussed and explained. This reluctance for implicit instruction was reflected in one study, where one teacher claimed context-based grammar work was received negatively by the learners, as learners may expect to learn grammar in an explicit fashion (Phipps and Borg, 2009). Students' expectations may play a significant role as in shaping teachers' beliefs and decision-making as they also strongly value grammar teaching (Jean & Simard, 2011).

5.1.5 Deductive Versus Inductive Instruction

When language teachers make the pedagogical choice to teach grammar in an explicit fashion, they can do it deductively or inductively. Deductive teaching consists of explaining a targeted structure to learners and then practising it. Inductive teaching involves having learners induce a rule or generalization from exemplars of the language taught (Graus & Coppen, 2017). Pre-service teachers in the present study demonstrated a clear preference for inductive instruction.

Based on the current literature and these results, pre- and in-service teachers tend to have a preference for inductive instruction in general (Graus & Coppen, 2016, 2017; Jean & Simard, 2011). Language teachers appear to believe that having students induce the rules by themselves is more likely to lead to L2 learning. Three EFL in-service teachers interviewed believed in inductive instruction and in a contextualized presentation of grammar (Phipps & Borg, 2009). Studies using a quantitative approach

also highlighted ESL and FSL teachers' use of an inductive approach to grammar teaching (Jean & Simard, 2011). More FSL teachers considered inductive teaching to be "difficult" than ESL teachers, who rated the difficulty from "somewhat difficult" to "not very difficult". Adult in-service teachers from 18 countries also stated to hold a strong belief about inductive grammar learning and did not view their role as explaining rules in their responses to a questionnaire (Borg and Burns, 2008).

Although the literature trends towards a preference for and the superiority of inductive instruction in terms of pedagogical value, some language teachers highlighted advantages with using a deductive approach to grammar teaching (Graus & Coppen, 2017). Undergraduate and postgraduate student teachers appeared to report different perspectives when asked whether they thought a deductive or inductive approach to FFI was most effective (Graus & Coppen, 2017). Deductive teaching was viewed as more efficient, less risky and a more straightforward approach to teaching grammar. However, pre-service teachers also acknowledged that inductive teaching could be more motivating for students and lead to more active learning, resulting in superior learning. 17 EFL in-service teachers from Hong Kong highlighted divergent teaching styles, ten of them advocating for deductive teaching, and seven espousing inductive teaching (Andrews, 2003). Another interesting finding from the Hong Kong EFL inservice teachers was the interaction between belief variable about inductive/deductive teaching and explicit grammar knowledge; the teachers who had the best scores on tests on explicit grammar knowledge and grammatical terminology were the ones who had the strongest belief in favour of inductive teaching.

Despite pre-service teachers in the present study and in the literature in general reporting to favour inductive over deductive teaching, tensions appear to exist between teachers' stated beliefs and their observed practices (Phipps & Borg, 2009). Although some language teachers doubt the value of controlled practice activities and

presentation of grammar in isolation in a deductive fashion, these same teachers still use these isolated grammar teaching practices. When they are observed teaching, language teachers often adopt deductive teaching of grammar even though they are suspicious about its value (Graus & Coppen, 2017). Their belief about promoting inductive teaching for L2 learners' development seems to contradict the classroom reality; classroom management and student expectations are provided as justifications for these teachers' decisions to teach grammar in a deductive fashion. Evidence also suggests that the more explicit knowledge language teachers have about grammatical terminology and grammar pedagogy, the more confident they feel about using inductive grammar teaching and its effects on learners' L2 development (Andrews, 2003). It may be possible that when language teachers do not feel confident about using inductive teaching, they revert back to their old beliefs (Lortie, 1975), and hence, use deductive instruction to feel secure and in control of their teaching.

5.2 The Evolution of Beliefs over a Four-Year Teacher Teacher Education Programme

In terms of how beliefs change over a four-year teacher education programme, the present study, which divided the participants into years 1 and 2, and years 3 and 4, found little evidence for a change in beliefs. The only significant difference was found in terms of FonF and FonFs, suggesting a shift for instruction that is more oriented to FonF as pre-service teachers move through the four-year programme.

The results obtained in this study make sense; at the outset of their training, student teachers' beliefs have been shaped by their learning experience (Borg, 2015; Lortie, 1975), which appears to more frequently involve FonFs. The published classroom materials that include a large number of decontextualized exercises on grammar suggest that Quebec learners experience mostly traditional grammar teaching in their

language classrooms. As a result, these early language learning experiences may exert a strong influence on language teachers' decisions in the classroom when they begin their teacher education. They may perceive language instruction in a simplistic manner, such as teaching separate linguistic structures in isolation. During their teacher education, pre-service teachers deepen their knowledge about sound grammar teaching practices, which should focus on the creation of form-meaning connections based on learner developmental readiness (Loewen, 2015; DeKeyser, 2005). This in turn should help them to conceptualise the teaching and practising of grammar using an FonF approach

Results from student undergraduate and graduate teachers from the Netherlands revealed a divergent trend, suggesting evidence of change over time for the four construct pairs (Graus & Coppen, 2016). Higher-year undergraduates were found to have a lower score for all pairs, indicating a shift towards meaning-focused, focus on form, implicit and inductive instruction over time. The difference in results between this study and Graus and Coppen (2016) is interesting, as the items for which the student teachers had to provide their opinion were the same. This divergence is difficult to understand as teacher education programmes and government programmes appear to share the similarity about prioritizing instruction focused on meaning and communicative goals. More research is needed to understand how teachers' beliefs develop with time across different contexts.

Other research has examined how pre-service teachers' beliefs about second language learning and teaching evolve throughout an education programme (Busch, 2010). Preservice teachers from the United States, for example, showed changes in beliefs with regard to many aspects in ISLA. Busch's (2010) longitudinal study found significant changes in pre-service teachers' beliefs regarding the role of error correction, grammar and vocabulary in learning a language after a 45-hour SLA course. By the end of the

course, pre-service teachers stated that one can know the grammar of a language without being able to communicate, which aligns more with CLT. Pre-service teachers also made a shift from agreement to disagreement about the efficacy of audio-lingual learning strategies. The results from Busch's (2010) research align with the findings from this study, in that pre-service teachers follow a trajectory: going from a belief in FonFs to one that favours more FonF. Pre-service teachers also seem to become more conscious about the complexity of language learning during the course of their teacher education programme, and demonstrate belief that language learning is more than repetition of linguistic structures in order to be able to interact with other speakers as they evolve.

Busch's (2010) study, however, stands alone as other scholars who have investigated the development of pre-service teachers' beliefs longitudinally have found little evidence of change. This was the case for pre-service teachers enrolled in a three-year teacher education programme in Greece, who showed little evidence of change in beliefs on second language teaching and learning after their practicum (Mattheoudakis, 2007). The education in Greece in schools was portrayed as "traditional" and focused on the transmission of knowledge and theory rather than practice. Pre-service teachers were described as starting their training with preconceptions about language learning that aligns with FonFs, more specifically the primacy of grammar and vocabulary study, and these preconceptions are formed during the apprenticeship of observation. As in the present study, their awareness about being able to communicate in the language increased with time, and their belief about the primacy of vocabulary and grammar study decreased, suggesting a trend towards FonF. In an Asian context, 146 ESL preservice teachers in Hong Kong also found little change in beliefs regarding the primacy of grammar and vocabulary study over their three-year programme, giving support that teacher education has a low impact on beliefs (Peacock, 2001). The results obtained in both studies may be partially explained by traditional language instruction received

during schooling in these contexts, and this conception about FFI was held with time, despite their education programme favouring CLT.

Overall, among the little research that has been conducted to observe the development of pre-service teachers' beliefs, little evidence of change has been reported, suggesting that a traditional view towards teaching is maintained during teacher education. Future research should be done to deepen our understanding on how pre-service teachers' beliefs, and theoretical and practical knowledge shape their views about FFI as they are trained to teach in accordance with a more integrated approach, such as FonF. Studies into teachers' beliefs should also include classroom observation to verify if their new beliefs about grammar teaching are reflected in their practices.

5.3 Different Language, Different Visions about Grammar Teaching?

In the present study, the results revealed an interaction with the variable language of instruction for one construct pair, which was instruction focused on meaning and instruction focused on form. Both cohorts favoured instruction focused on form over instruction focused on meaning, but when they were compared statistically, the FSL cohort were significantly more in favour of instruction focused on meaning than the ESL cohort. Although they did not reach statistical significance, two other construct pairs demonstrated different means. ESL pre-service teachers tended to favour FonF, whereas FSL ones were more inclined to FonFS. The FSL cohort's preference for inductive instruction was found to be more accentuated than the ESL cohort.

The reason for the FSL's preponderance for instruction focused on meaning could be related to the difference in content taught to pre-service teachers during teacher education programme that differs based on language of instruction. In Quebec, Frenchmedium schools predominantly teach English as an L2 (Quebec Education Programme,

2002). In English-medium schools, different programmes exist for teaching FSL but nearly all include some instruction based on the principles of immersion whereby other subjects are taught in the L2. This is the case, for example, with the English Montreal School Board (EMSB), where at least 50% of the school subjects are taught in learners' second language, French, which corresponds to an immersion programme in terms of research (EMSB, 2020). Due to the different approaches between second language education and immersion programmes, the FSL pre-service teachers need to be trained to teach certain school subjects in French to second language learners. The ESL cohorts are only trained to teach ESL. Thus, several courses future FSL teachers need to take in their programme are focused on teaching content, such as mathematics, science and history. However, because of Quebec's linguistic laws, namely *The Charter of the French Language*, immersion is prohibited in French-medium schools where English is taught as an L2 (Government of Quebec, 1977).

Few studies have compared teachers' beliefs and practices across two languages of instruction. Among the research available to date, two of them took place in Montreal, Quebec (Jean & Simard, 2011), in which the researchers compared in-service ESL and FSL teachers' beliefs. One of their striking findings was that ESL and FSL teachers see grammar as boring, but necessary and effective for language learning (Jean & Simard, 2011). This study indicates the same trend, both ESL and FSL pre-service teachers have a preference for instruction focused on form as well as focus on forms, though the FSL cohort answered more towards the mean on the construct pair asking whether they preferred instruction focused on form or meaning.

In their response to Likert scales, ESL and FSL in-service teachers also considered mechanical drills to be useful (Jean & Simard, 2011). This finding is supported by the data from ESL and FSL learners in the same study, claiming that mechanical drills constitute the most familiar type of exercises they are exposed to in the language

classrooms. This belief was confirmed in their complementary study involving a smaller sample of the same teachers, in which they examined pedagogical interventions that aimed to attract learners' attention to form (Simard & Jean, 2011). The data suggested that interventions from ESL and FSL in-service teachers were more FonFs than FonF. Their finding aligns in part with this study, which found that FSL preservice teachers' beliefs were more inclined to FonFs, whereas the ESL cohort had a little preference for FonF. Even though teaching programmes favour an integrated approach to FFI, like FonF, mechanical drills still appear to be the reality in language classrooms in Quebec. Student teachers may be exposed to traditional grammar teaching during their internships, which contradicts what their teacher education programme recommends. Thus, instruction pre-service teachers receive at university about how to teach grammar ends up as being not useful as they are exposed to FonFs in the field.

Both ESL and FSL in-service teachers considered learning grammar rules to be "important" or "very important" (Jean & Simard, 2011), which implies that they are in favour of explicit grammar teaching, as learners are conscious they are learning grammar. These results differ from the ones obtained in this study insofar as pre-service ESL and FSL teachers hold a neutral position with regard to explicit and implicit grammar teaching. However, this difference could be explained by the fact that the present study focused on beliefs rather than observed teacher practices. Including observations may reveal a disconnect between beliefs about how grammar should be taught and how teachers actually teach grammar, which has been demonstrated in previous research (Phipps & Borg, 2009).

Regarding inductive and deductive approaches to teaching, the vast majority of ESL and FSL in-service teachers reported using the inductive approach to FFI (Jean & Simard, 2011). Their results are in accordance with this study, as ESL and pre-service

teachers clearly expressed a preference for inductive instruction. The similarities may be explained in terms of the pedagogical value linked to inductive instruction. Compared to a deductive approach, learners are required to induce a rule by themselves from exemplars, which is in line with a socioconstructivist school of thought, where learners need to construct knowledge by interacting with peers.

In sum, FSL pre-service teachers in this study had a significant preference for instruction focused on meaning when compared with the ESL cohort. The hypothesis provided to explain this difference concerned the content taught during the teacher education programme; FSL pre-service teachers are trained to teach with the principles of immersion, which could have influenced their conceptions of language teaching. The results of the present study and from the literature also suggest that FFI appears to remain oriented to FonFs for ESL and FSL teachers. Pedagogical practices such as mechanical drills are still being observed in the language classrooms.

5.4 The Origins of Pre-Service Teachers Beliefs

It is imperative to understand the origins of teachers' beliefs as research has demonstrated there is a disconnect between theoretical principles and other factors known to exert an influence on their teaching practices (Borg, 2015). Pre-service teachers in this study were required to identify the elements they felt had most influenced their beliefs on grammar teaching. The majority labelled previous teachers from elementary and high school as contributing strongly to their beliefs. University courses (excluding internship courses), and the teachers with whom students do their internships (teachers in the classroom known as CTs) and the teachers who act as internship supervisors at the university were also prominent elements that contributed to shape their views on grammar teaching, especially in year 3/4. Other elements

selected by pre-service teachers exerting an influence on their beliefs were work experience during their undergraduate degree as well as student expectations.

Most undergraduate student teachers in the Netherlands also indicated previous teachers and undergraduate courses as contributing the most to their views on grammar teaching (Graus & Coppen, 2016). In Hong Kong, pre-service high school teachers reported their beliefs and knowledge to be affected by their experience as learners in the school education system and the time spent during their practicums (Urmston, 2003) However, teacher education from their BA courses was shown to have less of an impact on change in beliefs and knowledge.

Literature on in-service teachers reveals divergent elements causing a mismatch with their theoretical principles. Three EFL in-service university teachers from Turkey mentioned classroom management and students' expectations when justifying the incongruence between their beliefs and their observed practices of FFI (Phipps & Borg, 2009). Syllabus and public examinations appear to be important elements that influence in-service teachers' decisions in Asia. High-school teachers from Hong Kong identified public examinations imposed by school context, students' expectations of grammarfocused teaching, and the rigidity of syllabus as constraining their grammar teaching (Andrews, 2003). In Japan, high-school teachers also labelled test preparation as an important element influencing their decisions in grammar teaching although this was not found to be the most powerful element (Nishimuro & Borg, 2013). Learners' low proficiency, learners' motivation, lack of time to cover the syllabus and textbooks, and keeping the pace with other teachers were considered the most influential elements in the way they approached grammar. Despite valuing CLT, these reasons were provided for not integrating grammar practice in class, pair or group work and communicative activities.

Similar trends can be observed when comparing this study with the one investigating pre-service teachers from the Netherlands (Graus & Coppen, 2016). Prior teachers and undergraduate courses appear to be the most influential in pre-service teachers' beliefs development about FFI. Undergraduate student teachers from the Netherlands labelled previous teachers as the most important element contributing to their beliefs at the outset of their teacher education programme. As student teachers progressed in their training, university courses appeared to become the most prominent source for their beliefs. This appears to be logical as student teachers develop theoretical knowledge about sound practices during their training. This study also revealed one difference that is worth highlighting: internship courses in this research context seem to have impacted ESL and FSL pre-service teachers' beliefs to a lesser extent than in the Netherlands. Most undergraduate students from year 2 to year 4 in the study conducted in the Netherlands reported 'school placement' as an influence on their views on grammar teaching. The difference in wording may explain the difference in responses in both studies. 'Internship courses' was chosen instead of 'school placement' as a term to describe the field placement experience when designing the questionnaire for this study. Pre-service teachers in this study may have interpreted 'Internship courses' as the classes that were given exclusively at the university and did not include the internship itself. The length of internships in Quebec and Netherlands may also have differed and thus impact the results.

However, the results in the present study differ from those mentioned above concerning pre-service teachers in Hong Kong that showed beliefs and knowledge were affected by practicums (Urmston, 2003). Teacher education from their BA course has shown less evidence of change in pre-service teachers' beliefs and knowledge. The results are contradicting the ones from this study, as a high number of ESL and FSL pre-service teachers identified 'university courses' as a source of their beliefs for FFI. This difference may be explained in terms of the dependent variable, as the one taking place

in Hong Kong targeted beliefs on language teaching and learning, and thus, the five targeted areas were not specific to grammar teaching.

Distinctions can be drawn about the elements that influence beliefs and decision-making between pre-service and in-service teachers. It was expected that prior experience as learners would correspond to be one of the most powerful elements that impacts pre-service teachers' beliefs. It is well documented that prior experiences are known to be powerful in teachers' instructional decision-making (Johnson, 1994), and are thus strongly related to classroom practice (Borg, 2015). As pre-service teachers have little to no experience in teaching, their models may rely mostly on previous teachers they had in elementary and high school. It is no surprise they did not tend to pinpoint elements related to classroom.

In-service teachers were more inclined to identify elements related to their school as exerting a stronger influence on their beliefs about grammar teaching and learning. Their practices seemed to be especially affected by the learners. Students' expectations, students' motivation, time, the desire to help weaker students and public examinations appeared to be more decisive in decision-making than the ideal grammar teaching practices, such as CLT. It can be hypothesized that the more experience language teachers have in teaching, the more likely students and classroom context become more powerful elements shaping their beliefs. Language teachers' concerns for students may explain the reasons for the inconsistencies between their beliefs and practices. One trend can also be observed related to Asian context; public examinations and rigidity of syllabus were found to particularly constrain in-service teachers' decision-making.

The elements ESL and FSL pre-service teachers reported to affect their beliefs most strongly about FFI were 'my own teachers from elementary/secondary school' and 'university courses'. Note that this last item excludes internship courses. The results

obtained in this study are in line with the current literature, which shows that prior experiences as learners are shown to be powerful in shaping beliefs. Pre- and in-service teachers name different sources for their beliefs about FFI. As in-service teachers become more experienced, they seem to identify elements that are more closely related to the classroom to be more influential.

5.5 Limitations

The pre-service teachers' beliefs about FFI in the present study were measured by the means of a questionnaire using a quantitative approach with a five-point Likert scales. The use of a questionnaire enables the collection of a relatively large amount of data in a short period of time. Although this present study employed this instrument with its numerous advantages, several limitations can be highlighted about its use.

The most important limitation is the sample as few year-2 students completed the questionnaire. The sample representing year-2 students was too small to constitute a distinct group for statistical analyses. Hence, one methodological decision that had to be made was to compare year 1 and year 2 students to year 3 and year 4 students, rather than comparing over the 4 years. As a result, the present study does not provide an overview of pre-service teachers' beliefs based on year of study.

Another limitation relates to the dependent variable's complexity in this study, which corresponded to teachers' beliefs (Borg, 2015). As specified in the theoretical framework, beliefs are partly unconscious and not easily accessible with tools. As Borg raised, teacher cognition is multifaceted, encompassing beliefs and knowledge that are considered to be intertwined. Questionnaires only provide trends but do not provide any information on the cognitive processes involved in their reasoning, as well as the reasons why they responded as they did (Borg, 2015; Graus & Coppen, 2016).

Pre-service teachers' stated beliefs in the questionnaire may not reflect their current grammar teaching practices in the field (Graus & Coppen, 2016). The answers provided to the scales may illustrate what participants think they believe, not the decisions they would make in a classroom. One should be careful when interpreting the results as the answers provided could reflect pre-service teachers' ideals. Many factors may interfere with grammar teaching practices in the classroom context, and therefore necessarily impact the decisions made by language teachers (Borg, 2015). This is especially true for pre-service teachers, who are at the outset of their teacher education programme; they lack experience in the field and their professional identity is not formed.

Social desirability bias may have affected participants' responses to the questionnaire (Fortin & Gagnon, 2016). Recruitment occurred mainly in lecturers' and professors' classes. The social desirability bias might have been more powerful with year-3 ESL and FSL cohorts as the researcher was invited by the ESL and FSL professor or course lecturer in their class on grammar teaching. Hence, these participants may have responded to the questions in a way that would be favourably viewed by their professor or course lecturer. The answers may not have reflected what participants truly believe on grammar teaching, but rather what they think their professor or course lecturer would have responded. Nevertheless, the researcher did what was possible to control for social desirability bias, and reminded the participants that the answers provided would not be seen by the professor as they remain confidential.

The scales taken from the questionnaire created by Graus and Coppen (2016) had to be adapted to our context. The researcher was cautious the words used in the items would be understood by all the participants. However, pre-service teachers who had just begun their teacher education programme may have limited knowledge of grammar teaching terminology. These participants, for example, may not understand what the differences are between inductive and deductive instruction. Thus, the interpretation of different

items may have been affected by their lack of theoretical knowledge. Also, it was decided to keep the five-point Likert scale from the original study for the part with multiple-choice answers. Providing an uneven number of scales enabled participants not to take a position with regard to different statements (Fortin & Gagnon, 2016). The results provided for two construct pairs, FonF versus FonFs and implicit versus explicit, made them difficult to interpret as participants expressed a neutral position overall. It is therefore difficult to make any conclusions about what pre-teachers believe about some aspects of grammar teaching.

The interpretation of items by pre-service teachers may have been divergent due to cohort differences. The ESL and FSL cohorts received different amount of class time dedicated to grammar teaching. Moreover, it was not the same professor who taught the grammar teaching course to both cohorts. The interpretation of notions from participants may have differed due to divergent understanding of the concepts in grammar teaching. The knowledge provided on how to teach may also have been qualitatively different for the two languages. For example, the ESL cohort may have a different understanding of 'focus on meaning' than the FSL one.

5.6 Future Research

Despite teacher cognition being a well-established field in SLA research and the volume of work substantial, longitudinal and cross-sectional studies examining the development of language teachers' beliefs and the interaction with teaching practices are still scarce. This research has provided support for limited change in beliefs over time and between two cohorts of languages. These results shed light on possible avenues for future research.

In order to gain a better understanding of the influence of teacher education on belief development with cross-sectional studies, the sample should contain sufficient number of participants at each stage of their teacher education programme. To remedy this study's flaw, future research should include a sample with sufficient number of participants at each year of their training.

A questionnaire with Likert scales was used to measure pre-teachers' beliefs about grammar teaching. This methodological decision was partly made because most studies conducted in the field of teacher cognition in applied linguistics used qualitative methods. "Self-report instruments, semi-structured and stimulated recall interviews and unstructured observation" (Borg, 2015, p.328) are the preconized methods to measure teachers' beliefs. Nevertheless, pre-service teachers' responses to the scales elicited 'ideal instructional practices' and did not provide information about their instructional realities. Future research should include a method that elicits both teachers' ideals with concrete examples of their actual classroom practices. To this end, the use of mixed methods could be envisaged to have a deeper understanding on the way teacher education programmes can contribute to pre-teachers' belief and professional identity development.

Most studies on teachers' beliefs in SLA research involve ESL and EFL participants and are small in numbers; thus, the research available is not representative of different teaching language contexts and transferability can thus be questioned (Borg, 2015). One of the objectives of this study was to compare ESL and FSL teachers' beliefs to verify if language of instruction interacts with beliefs about grammar teaching. Future research on teachers' beliefs definitely needs to include other languages of instruction than English and needs to take place in other countries to expand our knowledge on language teacher cognition. Furthermore, due to the difference between ESL and FSL pre-service teachers in terms of FonF, which has been discussed here as being linked

to their teacher education programmes, it is important to understand the role of different types of courses may have on beliefs about grammar teaching.

The literature on the effects of teacher education on pre-service teachers' beliefs about grammar teaching has provided contradicting results. As the results of this present study suggest that pre-service teachers' beliefs evolve little throughout their teacher education programme, which contradicts and support previous research, further investigation is needed to have a better comprehension about the interaction between beliefs' development and time.

Despite language teachers teaching grammar, little evidence shows that their beliefs on grammar teaching are informed by empirical studies in the field of L2 teaching (Borg, 2015). Further research is needed to have a better comprehension of how teachers' knowledge about grammar teaching develops during teacher education and in their pedagogical practices.

CONCLUSION

The increase into research on teacher cognition has developed gradually over the past 50 years. We are now much more informed about what teachers learn in their training, what they do and the rationales behind the decisions they make (Borg, 2015), and this is especially true for grammar teaching. Nevertheless, many questions remain unanswered.

This cross-sectional study's goal was to examine ESL and FSL pre-service teachers' beliefs about grammar teaching. This research also aimed to determine whether an interaction existed between pre-service teacher beliefs based on their progression through the four-year programme of study, as well as the language of instruction. Preservice teachers were also asked to identify the origins of their beliefs. To respond to these objectives, the questionnaire created and validated by Graus and Coppen (2016) was adapted and used. Different analyses were conducted on the data collected from 54 ESL and 99 FSL pre-service teachers to answer the research questions.

Overall, the results showed little evidence for changes in pre-service ESL and FSL teachers' beliefs based on their progression in the teacher programme—year 1/year 2 teachers and year 3/year 4 teachers shared similar beliefs. In terms of language of instruction, no interaction was found though two variables were close to showing significant differences. These results suggest a similar school of thought between the ESL and the FSL cohorts with regards to grammar teaching. Regarding pre-service teachers beliefs' origins, prior elementary/high school teachers and university courses were identified as the two most powerful variables shaping their teaching practices.

However, one should be cautious when interpreting the results as relatively little data was collected from second-year students, which did not allow the data to be compared between individual years.

This research provides further information regarding teacher cognitions with regard to grammar instruction. Pre-service teachers held similar beliefs than the ones reported by undergraduates and graduates in Graus and Coppen (2016), albeit with the latter students having more dichotomous views for each construct pair. The participants in the two studies reported a preference for form-focused, focus on forms, explicit and inductive instruction.

Questions remain especially concerning the reasons prior learning experiences appear to be more powerful than the courses taken during teaching training programmes in which student teachers learn the theoretical and empirical bases for sound grammar teaching practices. As evidence has shown that grammar teaching contributes to learners' development of accuracy in a target language (Loewen, 2015) and teachers report integrating it in their practices (Borg, 2015), it is imperative to conduct further research to determine what motivates pre-service teachers' decisions when determining how to teach grammar in their classrooms.

Grammar teaching requires more than theoretical and declarative knowledge about language. Pre-service teachers also need to develop the ability to transfer the learned knowledge into pedagogically-sound grammar teaching in different contexts. In order to understand how this can be done, there needs to be a better understanding of the cognitive processes teachers use to make decisions regarding their pedagogical practices (Borg, 2015). The present research has provided more evidence of the powerfulness of prior experiences in shaping teachers' beliefs about teaching practices.

Tools can be provided to language teachers to become more aware of their beliefs and knowledge about grammar, and thus, adopt practices that are more congruent the recommendations from the scientific literature. Information regarding the importance of prior learning experiences in shaping beliefs could be provided, despite these experiences often contradicting knowledge on how to promote L2 development. Engaging in a reflective analysis through journals, videotaping, and group discussions could also provide opportunities for language teachers to question their own cognitions and practices (Johnson, 1994). As teachers' knowledge has shown to be particularly low on grammar and grammar pedagogy (Borg, 2015), continuing education could contribute to adopting sound teaching practices that promote L2 learners' development.

ANNEX A

QUESTIONNAIRE ON GRAMMAR TEACHING 2

SECTION A—SOCIODEMOGRAPHIC INFORMATION

1. Full name:			
2. Gender:	M	F	Other/do not wish to state
3. In what progra	mme are you c	urrently study	ing?
B.Ed. in teachi	ing English as	a second langu	age
B.Ed. in teachi	ing French as a	second langua	age
4. Which year are	e you currently	completing in	this programme?
Year: 1 2	3 4		

² Questionnaire adapted from Graus & Coppen (2016)

5. How many internships have you completed so far? What level(s) and programme(s) have you taught during your internship(s) (e.g.: intensive English, EESL, core programme secondary 3)?

Internship	Type of school (elementary/high school; private/public)	Type(s) of programme(s) and level(s)
1		
2		
3		
4		

6. If you have started subbing for a school board, please provide the following information:
a) Number of days you have subbed (approximately):
b) Programmes in which you have subbed (e.g. intensive English, core ESL, EESL, etc.):

7. Do you have any other relevant experience in teaching? If applicable, provide the following information:
a) Number of days worked (approximately):
b) Place worked (e.g.: private language school, Explore, etc.):
8. In what language did your mother/legal tutor speak to you during your childhood (0-12 years old)?
9. In what language did your father/legal tutor speak to you during your childhood (0-12 years old)?

SECTION B

Please indicate to what extent you agree or disagree with each of the following statements about grammar teaching.³

In my opinion,...

- 1. = strongly disagree
- 2. = disagree
- 3. = neither agree nor disagree
- 4. = agree
- 5. = strongly agree

e • e					
	1	2	3	4	5
1. Grammar should be part of English class.					
2. English grammar should be addressed in coursebooks.					
3. Teachers should pay attention to grammar in English class.					
4. In English class, it is not necessary to discuss grammar; the focus should only be on learning how to communicate.					
5. The focus of English lessons should lie solely on learning how to communicate (without grammar teaching).					
6. English grammar should not be discussed in coursebooks.					

 $^{^{\}rm 3}$ The items in Section B were randomized manually by the researcher in both languages when transferred to LimeSurvey.

22. It is better to let students derive a rule			
from a set of examples than to give them			
the rule up front.			
23. Having students discover a rule from			
examples is a better way of teaching			
grammar than presenting a rule.			
24. Asking students to discover a rule is a			
better way of teaching grammar than			
when teachers present rules themselves.			

SECTION C

1. Which factors have contributed most to your beliefs about grammar instruction? Choose the three most important factors (fewer than three is also allowed):
 My own teachers from elementary/secondary school University courses (DDL courses and other courses aside DLS courses) Internship courses (DLS courses) Cooperating teacher(s)/supervisor(s) from internships Fellow students Student expectations Professional publications (SPEAQ, AQEFLS, etc.) Conferences Work experience before starting undergraduate degree Work experience during your undergraduate degree Colleagues (teachers of English) Other:
2. In your opinion, how do you think grammar should be taught? Please explain.
3. In your opinion, are there any variables that may affect how grammar should be taught? Please explain.

4. In your opinion, what teaching methods do you think best promote the development of second language grammar?
5. In your opinion, what specific activities do you think best promote the development of second language grammar?
If you would like to receive a summary of the findings from this study, please leave your e-mail address. This information should be available in June 2020.

THANK YOU! YOUR HELP IS APPRECIATED!

ANNEX B

QUESTIONNAIRE SUR L'ENSEIGNEMENT DE LA GRAMMAIRE

PARTIE A – INFORMATIONS SOCIODÉMOGRAPHIQUES

1. Nom et pré	nom:				
2. Sexe : l'indiquer		N	1	F	Autre/ne souhaite pas
3. Dans quel j	progra	mme d	'études é	étudiez-vo	ous?
Baccalauré	at en e	enseign	ement d	e l'anglai	s, langue seconde
Baccalauré	at en e	enseign	ement d	u français	, langue seconde
4. Dans quello où vous en êto					z-vous? Encerclez l'année correspondant ent.
Année:	1	2	3	4	

5. Combien de stages avez-vous effectués jusqu'à maintenant? Dans quel(s) niveau(x) et programme(s) avez-vous enseigné lors de votre/vos stage(s) en enseignement (p.ex. : ILSS, immersion, secondaire 3)?

Stage	Type d'école (primaire/secondaire; privée/publique)	Type(s) de programme(s) et niveau(x)
1		
2		
3		
4		
dessous		de la suppléance, veuillez remplir les champs ci- (approximativement):
	ammes dans lesquels vous on, alphabétisation, etc.):	avez effectué de la suppléance (p. ex.: ILSS,

7. Avez-vous une autre expérience pertinente en enseignement? Si c'est le cas, veuillez fournir les informations suivantes:					
a) Nombre de jours travaillés (approximativement):					
b) Employeur (p. ex.: école privée, programme Explore, etc.):					
8. Dans quelle langue votre mère/tutrice légale communiquait-elle avec vous dans votre enfance? (0-12 ans)					
9. Dans quelle langue votre père/tuteur légal communiquait-il avec vous dans votre enfance? (0-12 ans)					

PARTIE B

Veuillez indiquer votre degré d'accord ou de désaccord pour les affirmations suivantes concernant l'enseignement de la grammaire.

Selon moi,...

- 1. = très en désaccord
- 2. = en désaccord
- 3. = ni en accord ni en désaccord
- 4. = en accord
- 5. = très en accord

	1	2	3	4	5
1. La grammaire devrait faire partie intégrante d'une classe de français langue seconde.					
2. La grammaire française devrait être enseignée à l'aide de cahiers d'exercices.					
3. Les enseignants devraient porter attention à la grammaire dans la classe de français langue					
seconde.					
4. Dans la classe de français, il n'est pas nécessaire de discuter de la grammaire. L'accent devrait être mis sur apprendre à communiquer.					
5. Les leçons de français devraient se centrer uniquement sur la communication (sans enseignement de la grammaire).					
6. La grammaire française ne devrait pas être traitée dans le matériel didactique.					
7. La grammaire devrait occuper une place prépondérante dans la classe de français.					
8. Le matériel didactique devrait systématiquement adresser les notions linguistiques.					

	T T	,	
9. Les enseignants devraient enseigner la			
grammaire séparément durant une leçon.			
10. Les enseignants devraient porter attention à			
une structure grammaticale seulement si les			
élèves semblent rencontrer des difficultés avec			
cette dernière.			
11. Si les élèves ne font pas de faute reliée à une			
structure grammaticale cible, les enseignants ne			
devraient pas donner d'explications de la règle			
sous-jacente.			
12. L'enseignement d'une règle grammaticale est			
utile seulement si les élèves font des fautes en			
utilisant la structure régie par ladite règle.			
13. Lorsque la grammaire est enseignée,			
l'enseignant devrait discuter des règles de			
grammaire.			
14. Pour que l'apprenant puisse maitriser la			
grammaire de la langue seconde, l'enseignant			
devrait fournir des règles grammaticales			
clairement définies.			
15. Des règles de grammaire explicites sont			
primordiales pour les élèves afin qu'ils			
apprennent la grammaire.			
16. Le meilleur type d'enseignement de la			
grammaire consiste en la présentation de			
plusieurs exemples d'une structure grammaticale			
cible sans discuter de la règle sous-jacente avec			
les élèves.			
17. La meilleure façon pour les élèves de			
maitriser la grammaire est en traitant des			
exemples de la grammaire en contexte sans			
présentation de règles.			
18. Les élèves acquièrent la grammaire en			
traitant plusieurs exemples de la structure			
grammaticale cible (sans la règle).			
19. L'enseignant(e) devrait présenter une règle			
de grammaire à la place que les élèves la			
découvrent par eux-mêmes.			
20. Il est mieux que les enseignants expliquent			
une règle de grammaire plutôt que de laisser les			
élèves l'inférer à l'aide d'exemples.			

21. Il est plus efficace de fournir une règle aux			
élèves que de leur demander de découvrir la			
règle à partir d'exemples.			
22. Il est mieux de laisser les élèves inférer une			
règle à partir d'exemples que de leur fournir une			
règle au préalable.			
23. Amener les élèves à découvrir une règle à			
partir d'exemples constitue une meilleure façon			
d'enseigner la grammaire que de présenter une			
règle.			
24. Demander aux élèves de découvrir une règle			
est une meilleure façon d'enseigner la grammaire			
que lorsque les enseignants présentent la règle			
par eux-mêmes.			

PARTIE C

1. Quels facteurs pensez-vous ont le plus influence vos croyances sur l'enseignement de la grammaire? Choisissez les trois facteurs les plus importants (moins de trois
facteurs sont également acceptés)
Enseignants de l'école primaire/secondaire Cours d'université (les cours siglés DDL ou autre mis à part les cours siglés DLS) Cours stage (cours siglés DLS) Enseignant(e)s associées/superviseur(e)s de stage Camarades de classe à l'université Attentes des élèves Publications professionnelles (SPEAQ, AQEFLS, etc.) Conférences Expérience de travail précédant le début de vos études dans le programme à l'UQAM Expérience de travail lors de vos études en enseignement dans le programme à l'UQAM Collègues (enseignants) Autre:
2. Selon vous, comment pensez-vous que la grammaire devrait être enseignée? Expliquez.

3. Selon vous, y a-t-il des variables qui pourraient affecter la façon dont la grammaire devrait être enseignée? Expliquez.
4. Selon vous, quelles méthodes d'enseignement sont les plus appropriées pour le développement de la grammaire en langue seconde?
5. Selon vous, quelles activités spécifiques sont les plus appropriées pour le développement de la grammaire en langue seconde?
Si vous souhaitez recevoir un résumé des résultats obtenus de cette étude, veuillez laisser votre adresse courriel. Cette information devrait être disponible en juin 2020.

MERCI! VOTRE AIDE EST GRANDEMENT APPRÉCIÉE!

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