



UNIVERSIDAD CATÓLICA
SILVA HENRÍQUEZ

Facultad de Educación

Escuela de Educación en Inglés

SEMINARIO DE TÍTULO

**USING METAPHORS TO UNCOVER AND IDENTIFY BELIEF SYSTEMS IN
FIRST AND FIFTH YEAR STUDENTS OF ENGLISH TEACHING
EDUCATION PROGRAMME AT A PRIVATE UNIVERSITY.**

Seminario para optar al Grado de Licenciado en Educación y al Título de
Profesor de Educación Media en Inglés.

Seminar Director: Mauricio Enrique Véliz Campos

Authors: Camila Fernanda Contreras León

Camila Ariana Gómez Herrera

Yessenia Alejandra Mena Fuenzalida

Nathalie Verónica Moraga Rodríguez

Javiera Constanza Wechsler Vásquez

Jenifer Leslie Zúñiga Paredes

SANTIAGO DE CHILE

2013

Acknowledgements

First and foremost, we would like to acknowledge all the people who supported us during this process. Special thanks to our thesis advisor, Mauricio Véliz, who guided and supported our thesis project providing us confidence, knowledge and ideas to make our research possible.

Secondly, our gratitude to Mr. Mauricio Cataldo and Mrs. Mireya Aguilera, who gave us their opinions and perspectives related to our investigation, in order to improve our research. Additionally, we would like to thank the participants who played an important role to carry out this investigation.

Finally, our appreciation to our families who always trusted and believed in us, giving us their support and motivation every time we needed it.

The Group.

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

First of all I want to thank God for giving me the opportunity to study what I always wanted, English Pedagogy.

Secondly, I would like to thank my family, for their unconditional love and support, especially to my mother, Marta, who always gave me the strength and encouraged confronting the adversities until the end of this important process.

I want to thank my dear grandfather, Juan, for all the love and advice that he gave me. To my siblings Diana and Valeria, for the support and joy that they gave me every day.

To my boyfriend Eduardo, who was beside me during this hard and difficult year, for his patience, support and infinite love.

I want to express my gratitude to my seminar classmates, for sharing with me the final process of my career, for the stressing and funny moments that we lived, especially to my friend, Camila, for being with me since the first year of my career.

Finally, I would thank my teachers of UCSH University, who formed me as a teacher of English and gave me all the necessary tools to be a great professional.

Camila Fernanda Contreras León.

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

At the end of the seminar, I would like to thank all these people who made my teacher training process possible and an unforgettable experience.

First of all, I would like to thank god, for all the blessings he has given me during these five years, and for gave me the encouragement of having studied what I really wish to do.

I would like to express my enormous gratitude and unconditional love to my parents, Luis and Tania, for their sacrifice of paying my studies. I know it was sometimes a difficult road but they put all their effort. I know that without their supporting and motivation I would not be achieving this stage. Thank you mommy, for your care and your deeper trust in my abilities, and thank you daddy for your enriching advice. I want you to know, how grateful and proud I am to be your daughter.

Besides, I would like to thank my loved soul mate, Fabian, who has been my partner in this process and in life as well. Thank you for your love, support and being with me all the times I need it.

I also would like to thank and say that I am grateful of all my seminar fellow members, with whom I have worked during these last months. I am very glad to have met them and so pleased with the work done; thank you girls for your dedication and responsibility. I also would like to give special thanks to my friends at university, those who were by my side; all together for one same goal, I know that without them this would not be the same.

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

I want to express my special respect and appreciation to Mr. Mauricio Véliz, who has been our guide during the seminar process. I also would like to thank him for his dedication, and for encouraging us to get an excellent seminar project done.

Last but not least, my sincere gratitude to all the teachers I have met during these years, those who have taught me how to be a good English teacher.

Camila Ariana Gómez Herrera.

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

First of all, I would like to thank my family for the unconditional love and support that they have been providing me during all these years; thanks for supporting my decisions and always putting your trust in my skills; without your support and encouragement I would not be achieving this main goal in my life. I know all the sacrifices you have had to make, you have postponed your needs so that I can become the first professional in our family, thus, I will be eternally grateful.

Thanks to my seminar fellow students, whom I will miss after this process is complete, thank you girls for the effort made and the shared mirth.

My gratitude to my boyfriend, who has been with me during all this process, thank you for your support and for always believing in me and in my capacities.

Finally, I would like to thank my thesis advisor, who guided us in this project also, my appreciation to the UCSH's teachers who provided me with the knowledge and tools to be a good English teacher.

Yessenia Alejandra Mena Fuenzalida.

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

First of all, I would like to thank my parents for their unconditional support, confidence, and love all these five years. They taught me values, which make me the person that I am today. I am conscious about the sacrifice of paying for my studies; they always trusted in my abilities and gave me motivation every moment that I needed it. They have been fundamental in each stage of my life and I am completely sure that they will continue encouraging me to achieve all my goals. Thanks to my parents, I am becoming a professional.

Moreover, I would like to thank my boyfriend for always encouraging me and motivating me to do my best every day. He advised me and guided me with patience, especially in my practicum period, with his love and support during this challenging time.

Finally, I am grateful to my thesis group, because they showed responsibility and commitment with this project, working hard and doing a good job.

Nathalie Verónica Moraga Rodríguez

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

First of all, I would like to thank my family for their unconditional support. To my father, who had the responsibility of paying my studies during these five years; to my mother, who was always motivating me to do my best; to my siblings, who were always by my side without complaining about anything. Thanks to my grandparents who have enjoyed all my accomplishments and to my aunt María José, who was always there, telling me how happy and proud of me she felt.

In addition, I would also like to thank the classmates I worked with during the last five months; I truly believe we made a good group; we supported each other every time we needed it and now, after all this time, I consider them friends. Also to all the people I met at university, every single one contributed in my training progress and, I am pretty sure that without them, this experience would not be the same. All my gratitude to the teachers I had during these five years, every single one, in particular, taught me something important for my life. I will never forget the patience and encouragement that characterized the most significant teachers for me during my stay at university.

Special thanks to my boyfriend for being by my side all these years, for supporting me, for cheering me up every time I wanted to give up and, for trusting in my abilities. And last but not least, I would like to thank God for all the experiences I have lived so far, for instance, studying and living abroad, since I feel very privileged about it and, also, having the possibility to study what I love.

Javiera Constanza Wechsler Vásquez

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

There are no words to express how I feel at the moment; I cannot say as much as I want to all the people who contributed to this work; nevertheless, thank you all for being with me in this process.

First and foremost, I would like express my deep gratitude to my parents, Marta and Miguel; I know that they are not used to expressing their feelings but I know that inside they feel really proud of our goal. I say our because without all of their dedication, hard work and effort that they have provided me during my entire life, I could not have become in the person who I am today, Thank you so much, Mom and Dad, for believing and for being proud of me, I love you both. Moreover, I would like to thank my beloved Cristian, who has always been supporting and motivating me during this whole process.

Also, I deeply thank my dear fellow students; this process has been amazing. I appreciate every moment that we have shared, even when we argued, I will not forget all these afternoons when we laughed so much that all the other groups at the study room stared at us as we were crazy. I could not have better partners to work with. I will miss you so much and sincerely I wish keep communication with you girls.

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

I cannot finish without acknowledging our supervisor, Professor Mauricio Véliz who has always been providing us with all the intellectual support to develop our work; he has shared a lot of his expertise and research insights which have helped us in all moments of our process, and even more when we felt lost and we could not continue working. I am deeply grateful for his valuable guidance and directives.

Jenifer Leslie Zúñiga Paredes

Abstract

Teacher cognition refers to teachers' belief, what they think and do in any aspect of their profession. The present study seeks to uncover and identify the belief systems of first and fifth year students of an English teaching education programme at a Chilean private university by using metaphors. The study of teachers' cognitions can absolutely contribute to the teaching and learning process and can also help as a basis for professional development in higher Education. The study has a quantitative nature because it is objective, and statistics were used to analyse the data collected. The data gathered was obtained by applying a questionnaire to 46 students and contained a set of 26 metaphors. These metaphors were divided into three dimensions concerning the learning-teaching process, namely role of the teacher, role of the learner, and didactic process. The results suggest for the most part students' cognitions are permanent over time, and that such cognitions become stronger after having been trained in a teacher education programme.

Keywords: teacher cognition, belief, metaphor, role of the teacher, role of the learner, didactic process.

Table of Contents

Chapter 1	15
Introduction of the Study	16
1.0 Introduction.....	16
1.1 Rationale of the Study	20
1.2 Significance of the Study	21
1.3 Organization of the Study	22
Chapter 2.....	23
Contextual Framework.....	24
2.0 Context.....	24
2.1 Teacher Education	25
2.2 Chilean Teacher Education	27
2.3 English Teacher Education.....	31
Chapter 3.....	35
Theoretical Framework	36
3.0 Introduction.....	36
3.1 Teacher Cognition	37
3.2 Instruments Used to Study Teachers' Beliefs	46

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

3.3 Relevant Research	53
3.4 Dimensions Related to the Role of the Teacher, the Role of the Learner and Didactic Process	60
Chapter 4	65
Methodological Framework	66
4.0 Introduction	66
4.1 The Methodology	66
4.2 The Instrument	67
4.3 The Sample and Sampling Procedure	69
4.4 Data Analysis	70
4.5 Objectives of the Study and Research Questions	70
4.6 Limitations of the Study	72
Chapter 5	73
Findings and Discussions	74
5.0 Introduction	74
5.1 Research Question One:	74
5.2 Research Question Two:	89
5.3 Research Question Three:	101

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

5.4 Final Remarks	109
References	112
Appendices.....	123
Appendix I	124
Appendix II	129
Appendix III	133
Appendix IV	137
Appendix V.....	138

Chapter 1

Introduction of the Study

1.0 Introduction

English language teaching or English language learning has become a major concern in Chile over the last ten years or so, due to the demands the globalization process in our country imposes. The Chilean Ministry of Education has encouraged a number of initiatives conducive to the improvement of English language learning at school level. One of the initiatives implemented by the Ministry of Education has involved teacher education; such initiative has made it possible for hundreds and hundreds of pre-service English language teachers to spend a semester abroad in an English speaking country. Another initiative involving teacher education has also meant re-designing the curriculum of teacher education programmes. However, no public policy has been implemented to address an area which seems to have attracted a good deal of attention in the literature involving teaching education: Teacher Cognition.

Throughout the history of TESOL, which spans approximately one hundred years of research, a number of attempts have been made to improve teaching practices inside the English language classroom. Perhaps, more than two thirds of this time-frame have been devoted to how to better teach the language, with a focus on methodological issues, usually derived from theoretical principles. Nevertheless, it is only recently that scholars have

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

taken an interest in examining something that is not necessarily observable: teachers' thoughts, beliefs, attitudes, and representations, which surely inform the teachers' actual teaching practice in the classroom.

The origins of teacher cognition research come from the sixties and its primary concerns were centred upon behaviourism in the field of teacher's mental life (Borg, 2009). Similarly, in 1975 there was an emergence of teacher cognition research when some academics explained that the relationship between thought and action was crucial, emphasizing the teachers' psychological and cognitive processes (ibid.).

There have been a number of studies that have demonstrated that beliefs of an individual affect directly people's behaviour (Chan & Elliot; Cho, Lee & Jonassen; Hofer; Jervis; Pieschl, Stahl & Bromme; as cited in García & Sebastián, 2011, pp. 29-30). These studies show how beliefs are the best indicators of individual decisions that people make throughout their lives (Bandura; Dweck; as cited in García & Sebastián, 2011, p. 30). This also happens in the pedagogical context, where teachers' belief systems influence strongly their teaching practices; so much so, that these beliefs determine the actions and decisions implemented in the teaching/learning process.

It has been recognized that teacher cognition has an impact on teachers' beliefs, thus, on their decision making and on any aspect of their career or work (Borg, 2003). Furthermore, trainees are influenced by training

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

programmes in different and distinctive ways establishing that behavioural change does not imply and guarantee cognitive change (ibid.).

The findings and claims exposed earlier, give us reasons to further investigate this area. We believe that one of the main driving forces to examine teachers' belief systems is that teachers make use of them to interpret a teaching/learning-related phenomenon, make interferences about teaching practices and the most important; they implement teaching practices in their own settings (Andrews; Crookes; Graves; as cited in Arancibia, Díaz, & Tapia, 2011). Similarly, teachers' beliefs are, for the most part, different from declarative knowledge received in teacher educational programmes. Such beliefs or, following Johnstone "practical knowledge", recycle some of the previous conceptual knowledge and turn into more personalized, dynamic knowledge (as cited in Arancibia et al., 2011). As pointed out earlier, it is noteworthy to state that beliefs tend to be rather constant and resistant to change (Pajares, as cited in Arancibia et al., 2011).

In order to make sense of teachers' teaching current practices, be they successful or ineffective, we must inevitably dig into the unobservable nature of cognition. One of the ways that has been proven successfully is the use of metaphors, which allows for the identification of what, in this case, English language teachers think of the role of the teacher, the role of the learner, and the didactic process. As noted earlier on, such beliefs largely form their

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

practices. Therefore, teachers' identities can be reflected through the discourse which shows teachers beliefs and attitudes. Likewise, according to Nagamine (2012) teachers' metaphors, function as a means to verbalize their professional identities, and by analysing this process through metaphors may help teachers to become aware of whom they are as teachers.

The aim of this study is to uncover belief systems regarding to first and fifth year students from an English teacher education programme of a private teacher education university, by expressing their beliefs, conceptions and thoughts through the use of metaphors. This exercise can provide us the insights regarding to each group of students, that is to say, the way they perceive and think about the role of the teacher, the role of the student and the didactic process. What is more, this exercise is going to allow us to contrast their thoughts and, to obtain evidence about all sorts of similarities and differences amongst those groups of students, one group influenced by the teacher education programme and the other one which has not been influenced. The idea is to determinate the level of variability between them and the extent to which the teacher education programme has shaped the students' beliefs system.

1.1 Rationale of the Study

The importance of the teacher in the teaching/learning process is a well-established principle, even though little attention has been paid to teacher' sets of beliefs and how these can have an impact in teacher's decision-making. We trust we can fill this gap in the Chilean educational literature about teacher cognition, by studying belief systems of students of an English teacher education programme. Besides, as future teachers of English, we wish to indirectly explore what kind of beliefs and thoughts we have subconsciously about our own profession. Moreover, we are confident that various policies and studies have been designed and implemented concerning how to improve education in Chile, yet none of them has taken the cognitions of teachers as an important factor in the educational process.

Finally, we wish to find out if there are any differences or similarities in the cognitions of first year students who begin their teacher education programme to become teachers of English and fifth year students who are already doing their professional practicum at schools. This will also shed light on whether an English teacher education programme has an effect on students' cognitions.

1.2 Significance of the Study

This research will help future teachers and in-service teachers to understand their own set of beliefs and thoughts related to their own role as teachers, the role of the learner and what they think about the didactic process.

Teacher education programmes can also be benefited by knowing and understanding students' cognitions. If teachers' cognitions are not taken for granted in 'teaching education', the educational process and its changes will be hampered, thus, if these policies are not taken into account, there will be no impact afterwards of pre-service teachers or in their future classroom performance (Díaz & Solar, 2009).

In conclusion, understanding teacher cognition is crucial to the process of understanding teaching, consequently, the importance of understanding the role of the teacher and their cognitions is fundamental for the implementation of educational innovations, giving the opportunity to the educational system to have more chances to improve (Borg, 2006).

1.3 Organization of the Study

This study is organized as follows: Chapter 1 provides a general view of the study and its main issues; it discusses the rationale for and significance of the study. Chapter 2 discusses the referential framework in which the study is conducted, which in this case corresponds to the educational context in which study is immersed. Chapter 3 reviews the theoretical framework around the fundamental concepts dealing with the study, namely teacher cognition including its origins and its relation with teacher education, the use of metaphors, together with previous research done into this area. Besides, there are presented the different dimensions related to the role of the teacher, the role of the learner and the didactic process, which were considered to create the metaphors suggested in the questionnaire. Chapter 4 provides the methodological framework where we discuss the research methodology used in this study, the data gathering instrument, the participants, the data analysis process and limitations of the study. Finally, Chapter 5 deals with the findings and discussions of the study, besides, the final remarks.

Chapter 2

Contextual Framework

2.0 Context

The referential context where this study takes place is second language teacher education. Yet, second language teacher education is part of a much broader concept which is teacher education and its development in Chile. We discuss these three topics: teacher education, Chilean teacher education, and second language teacher education in Chile. The present study employs participants being trained to become English language teachers. We focus our investigation on the beliefs that future teachers of English have about the role of the teacher, the role of learner and the didactic process.

The first section in this chapter deals with teacher education, its importance inside the educational system and also what is involved in it. The second section makes a close connection with the context of Chilean teacher education which provides a general review of the historical development of Chilean teacher education institutions and their programmes, furthermore, besides the current challenges that teacher education is facing and the solutions that the government is promoting to improve the Chilean teacher education' weaknesses. Finally, the third section that takes part of the context of this research, is called second language teacher education, which deals with its origins, how it has been implemented in our country and the importance of the second language education in Chile.

2.1 Teacher Education

Teacher education refers to all the procedures designed for future professionals which include knowledge, behaviours, skills and even attitudes that teacher should acquire during their process of training to develop their tasks effectively in the classroom, schools and educational communities (Teacher Leadership Exploratory Consortium, 2009). Similarly, Carr and Kemmis state that teacher education refers to “all the methods and procedures employed by members of a profession are based on a body of theoretical knowledge and research” (as cited in Richards, & Nunan, 1990, p.12).

All in all, there are a number of scholars who decided to investigate about teacher education, providing such good contributions to this area, where some of them postulate that Teacher Education is a process which is based on the development of certain teaching skills, pedagogical theories and, professional skills.

Teacher education is based on the development of a set of skills which include all sorts of different techniques, approaches and strategies that could help teachers to plan and to give a proper reinforcement and effective assessment. Amongst these skills it can be mentioned the effective classroom management skills, preparation and the appropriate use of instructional materials and communication skills (Arora, 2002).

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

In addition to this, the pedagogical theory refers to all sorts of philosophical, sociological and psychological considerations that would enable teachers to have a basis for practicing the teaching skills in the classroom (Arora, 2002).

Nowadays, the role of the teacher has been gradually asked to change, due to the requirements of the globalization process, in relation to this, Hargreaves (as cited in Furlong, Barton, Miles, Whiting, & Whitty, 2000) postulates the following:

People want teachers to change. Rarely has this been truer than in recent years. These times of global competitiveness, like all moments of economic crisis, are producing immense moral panics about how we are preparing the generations of the future in our respective nations . . . Few people want to do much about the economy, but everyone – politicians, the media and the public alike – wants to do something about education. (p. 1)

It is true that teacher education is considered as one of the most important roles of the education in the entire world, due to the fact that education is practically the unique tool which has helped people to overcome all sorts of barriers, and to be prepared to manage the nations. For the reasons mentioned above, teachers' professionalism has become the base of

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

teacher education, with a focus on the three key issues relating to the classic conception of professionalism: knowledge, autonomy and responsibility (Hoyle & John; as cited in Furlong et al., 2000) where teacher's quality is the keyword to ensure the quality of education. Qualified competent teachers will not be able to carry out their task professionally without the conditions that support them (Arora, 2002).

2.2 Chilean Teacher Education

Chilean teacher education has its roots in 1842 with the inauguration of the first institution in charge of the teacher education, *Escuela Normal de Preceptores* under the government of Manuel Bulnes (Chilevisión & Fundación Futuro, 2008). *Escuelas Normales* were the first effort to generate a solid teacher education in Chile; nevertheless, in 1929 these schools began to disappear due to the necessities of more economic resources and the lack of *Escuelas Normales* to cover the demands of teachers in the labour market. As a consequence, teacher education programmes were reduced from six to two years and in 1973 *Escuelas Normales* completely disappeared (Núñez, 2010, p. 39), transferring teacher education to the universities which were closer to the city such as *Instituto Pedagógico de la Universidad de Chile* inaugurated in 1889 (Archivo Nacional, n.d.), which was one of the best institutions which offered teacher education programmes (Ávalos, 2004).

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

After the closure of *Escuelas normales*, Chilean teacher education was unstable, essentially between 1980 and 1981 during the military government where under the new education policy, teacher educational careers were called “non- university”. Besides, the government ordered the restructuring of teacher education academies or institutes, where some of them were divided such as the *Instituto Pedagógico de la Universidad de Chile*, which became *Academia Superior de Ciencias Pedagógicas* (Ávalos, 2004). Professors that were able to continue working were those who were considered inoffensive to the government. Teacher education was called unstable because the changes of these years were not permanent. For instance, in 1987, there were two *Academias Superiores de Ciencias Pedagógicas*, which were reincorporated to the category of *Universidades de Ciencias de la Educación*. Finally on March 10th of 1990, the military government promulgated the *Ley Orgánica Constitucional de Enseñanza*, returning all teacher education institutions to the university category, by adding teacher education programmes as those which require a degree before the university qualification (Ávalos, 2004). After the promulgation of the *Ley Orgánica Constitucional de Enseñanza*, Chilean teacher education remained static until 2009 with the promulgation of *Ley General de Educación*, which considers the teacher as a knowledge generator and also as a technician; thus, teacher education programmes are able to choose between those profiles. In addition to this, in-service teachers are obliged to

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

be evaluated through a complete evaluation of their work during the year which includes the evaluations of the material, test forms, lessons planning and finally a lesson which is recorded to be analysed. Once teachers have finished their training they take a test designed to measure their quality as teachers. Those two evaluations are called *Evaluación Docente* and *Prueba Inicia* (Manzo, 2011).

According to Ingvarson et al. (2013), currently, Chilean teacher education has been entirely delegated to universities, as well as to a few tertiary-level professional institutes. During the 1990s, much of teacher education in Chile took place in public funded universities. More recently, however, a growing number of private universities started to provide teacher education, reaching in 2006, 16 public universities, 22 private universities, and five professional institutes offering teacher education programmes-types of basic education teachers. These numbers evidence the large amount of places that provide teaching programmes where most of them offered as a concurrent program-type, lasting from eight to ten semesters. The majority of these institutions have similar program-types: subject- matter knowledge, pedagogy, general education and field experience. This field experiences requires a semester long practicum. Also a written thesis is necessary that can be written individually or collectively in the last semester of the teaching education programme.

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

Nowadays, Chilean teacher education has faced a number of critics based on the low scores of newly graduated teachers' on *Prueba Inicia*. Thus, the Chilean government has been trying to promote a new view of teacher education, first of all by promoting the entry of better graduated secondary students to teacher education programmes by launching, in 2010, *Beca Vocación de Profesor* scheme, by which students with higher scores on the PSU are able to study without paying any kind of universities fees either in public or private universities. Besides, the Chilean government seeks a restructuring of the current teacher education programmes by establishing the *Política Nacional de Inducción a Profesores en sus Primeros años de Experiencia*, according to which, students who are doing their internship will be accompanied in order to help them in the whole adaptation process. In addition to this, students of teacher education programmes will be evaluated every year as of the second year of studies. The results of the evaluation range from incompetent to competent, where only students with a basic level of knowledge will be able to continue their training as teachers. Finally, another important factor is that teachers who obtain good scores will be able to earn a higher salary and also get possibilities to continue their teacher training by post graduate degrees (Bitar, 2011).

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

Factors that affect the quality of the teacher education in Chile are the following: teacher and educators, opportunities to learn, standards and evaluation, structures and careers, and institutional management (Ávalos, 2009). These factors have been affected by various situations such as the lack of policies regarding the quality and quantity of teacher education in Chile, quality control; mandatory accreditation ineffective in the short term, partial information and weak regulation devices; teacher education programmes vacancies, minimum entry requirements, minimum conditions to carry out teacher education programmes and enabling system (Ávalos, 2009).

In order to improve Chilean teacher education Ávalos (2009), proposes some measures, such as a coordinated system to assure the quality of teacher education programmes, a link-up between initial training and entrance into the labour market, regulation and support through the government and institutions (p.10).

2.3 English Teacher Education

English as a second language in education programmes was implemented in 1890 by *Instituto Pedagógico de la Universidad de Chile*. Later, other institutes and universities began to offer that programme. According to Vivanco (2012), currently 36 universities offer an English teaching programme, out of which include the education for different levels, namely pre-school education, elementary and secondary level.

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

These programmes can be developed in a span that could be of eight, nine or ten semesters (As cited in British Council, 2012).

Due to the globalization and economic increase that have affected Chile over the last years, the development of English language in education has become a pressing issue. As consequence, English has become a need that Chilean people have to achieve, in order to carry out the challenges proposed by this emerging reality. Thus, the ministry of education has implemented several initiatives and public policies to progress in second language teacher education along a continuous improvement process. Some examples of this are the initiatives called *Pingüinos Sin Fronteras* that offers forty scholarships for high school students to go to study one semester of their educational programme in New Zealand. There are winter and summer camps that give the opportunity to secondary school students to share and speak in English on a camp with the participation of native speakers and students of pedagogy (Ministerio de Economía, Fomento y Turismo, 2013). Besides, there is the *Semestre en el Extranjero* scheme for English pedagogy students, which gives the opportunity to live and study abroad for a semester, amongst others (Mineduc, 2013). Moreover, during the last years the government has been very interested in the knowledge, methodologies and abilities that future teachers possess. Thus, it was created a diagnostic evaluation called *Prueba Inicia* which is a system created by the Ministry of

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

education with the purpose of providing information about the quality of initial teacher training and on the learning that can be demonstrated by graduated students of Chilean universities programmes. The focus of *Prueba Inicia* is to updated information about the level of achievement of their graduated students, in key aspects of their future roles as teachers to teacher education institutions, public opinion and graduated students of these institutions, (Evaluación Inicia, n.d.). It is expected that in 2014 a *Prueba Inicia* for English language teachers will be administered for the first time ever, which will be an important step to improve the development of the second language teacher education in our country.

As we can observe, there has been a continuous concern with English language teacher education in order to progress, consequently, there have been important initiatives that contribute to increase the quantity of education and ultimately, the students' learning process. Similarly, the emerging reality of the English domain has revealed how significant the study programmes are for teachers' trainees. That is to say, if teacher education programmes emphasized teacher cognitions, trainees would be conscious of their beliefs and other unobservable, yet important teachers' features.

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

This investigation is an attempt to uncover and identify teacher cognitions. Thus, this study could provide insights to Chilean educational programmes to investigate unknown and unobservable aspects that students of English teacher education programmes have about their career and how these can influence their life directly.

Chapter 3

Theoretical Framework

3.0 Introduction

This chapter provides a review of the relevant literature around the main issues that our study comprises, namely (i) teacher cognition, (ii) instruments used to study teacher's beliefs and finally (iii) the relevant investigations that are related to our study. As it has been discussed in the present research, teacher cognition has taken a key role. Thus, the first part of this chapter is devoted to provide an overview to this concern, focusing on the meaning of teacher cognition, its significance and components. In addition, the section presents the origins of teacher cognition, how this process has developed lately and the relationship between teacher cognition and teacher education.

The second part of this chapter provides a description of some instruments that are used to study teacher's beliefs, namely: interviews, observations, stimulated recalls, but most of all, the use of metaphors, which is the tool used in this research. In addition, this segment establishes a connection between metaphor advantages and the relevance of the instrument to the development of our study.

The third part of the review is focused on the relevant investigations that have been conducted during the last years. This section shows the main topics related to teacher cognition, teacher beliefs and the use of metaphors

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

reporting on their principal issues, how the studies are articulated and the different results that each of them provides.

The last section deals with the different dimensions related to the role of the teacher, the role of the learner and the didactic process that this investigation consider to carry out the present study.

3.1 Teacher Cognition

Teacher cognition has been a fascinating issue over the last years. A good deal of research has focused on the powerful impact that teacher cognition produces on teaching practices. As claimed by Díaz & Solar (2009), the main interest of the relevant research has been to get to know which the mental reasoning processes of teachers are during their professional life.

Authors like Borg; Levin; Goodson & Numan (as cited in Díaz & Solar, 2009) have argued that teacher cognition is an unobservable dimension related to a set of psychological constructs about what teachers think, do and believe in any aspect of their career. Besides, according to Borg (2009), it has been demonstrated in diverse studies that teacher experiences as learners create several prior beliefs, knowledge or metaphors about teaching and learning, and that can influence conscious or unconscious reflection on teacher's decisions during their practices as teachers. That is to say, schooling and professional education can shape learners' cognitions. Additionally, there is evidence that teacher cognition and practices are

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

reciprocally informing, as teachers can be able to connect their cognitions with their lessons.

3.1.1 Teacher beliefs. According to the Oxford Dictionary (2013), beliefs are an opinion about something or something that people think is true. Authors such as Kagan, and Pajares (as cited Chong, Wong, & Choon Lang, 2005) have explained that “beliefs have been discussed as opinions, attitudes, preconceptions, personal epistemologies, perspectives, conceptions, principles of practice, orientations” (pp. 1-2) and these have been discussed among different disciplines, as well as teaching, and how teachers conceptualize their work, that is to say, teachers have opinions, attitudes or conceptions related to different aspects of their career or life.

According to Johnstone; Muchmore; Stephens et al. (as cited in Díaz & Solar, 2009), teacher beliefs are highly subjective and vaguely defined. However, these beliefs offer the proper sense of teachers' actions in the classrooms. According to Harste and Burke (as cited in Kuzborska, 2011) “teachers make decisions about their instructions based on the theoretical beliefs they hold about teaching and learning” (p.102). Notwithstanding, one of the main difficulties at the moment of examining teacher's beliefs is that they are not observable at all. In the same way, authors such as Gónzales et al.; Stephens et al. (as cited in Díaz & Solar, 2009), explain that teacher beliefs are constructed by personal and daily experiences and it is true that

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

these beliefs are highly subjective. These beliefs are based on internal organization, structure and consistency.

Scholars such as Andrews; Crookes; Johnson & Golombek (as cited in Díaz & Solar, 2009), have explained that teachers make use of their cognitions to interpret all sorts of situations, make decisions, make practical inferences, predict and plan actions. However, teachers' beliefs are part of their own pragmatic demand and, they express a personal and deep view point of the entire world. From a constructivist perspective, teachers are seen as individuals capable to produce knowledge and learning, which influence their own pedagogical action.

Finally, Borg (as cited in Birello, 2012) states two types of beliefs, namely: core beliefs and peripheral beliefs:

The basic distinction between core and peripheral beliefs is in simple terms one of strength. Or core beliefs are the ones that are more stable a powerful in what we do. Or peripheral beliefs are in contrast; less stable, perhaps issues that we are less committed to and which we might compromise (p.90).

3.1.2 Origins of teacher cognition. There have been over thirty years of investigation related to this issue, where researchers have attempted to describe, explain and come up with new aspects related to the field. In its earliest years, in the sixties, the studies were focused on the effective behaviours that could be applied by teachers around the world. In the seventies, the behaviourism was questioned and the psychological attested an impact on teachers' mental life perspective, and on how this could interact with the decisions in their instructions. At that time, the behaviourism aspect was criticized, since teachers are human beings that can make decisions before and during a class, explaining they do not just implement what the curricula impart (Borg, 2009).

According to Borg (ibid.), in 1975 there was an emergence of teacher cognition. Consequently, a group of scholars began to investigate, explaining in one of their reports called "Teaching as clinical information processing", the importance of the psychological issues of teachers and its repercussions in their instructions. Therefore, there was a major concern with teaching, which was considered as a thoughtful behaviour, and teachers were viewed as active decision-makers.

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

Afterwards, the psychological process came to be called “teacher thinking” and one of the works focused on this matter exposes the following:

A relatively new approach to the study of teaching assumes that what teachers do is affected by what they think. This cognitive information processing approach is concerned with the teacher judgment, decision making, and planning. The study of the thinking processes of teachers how teachers gather, organize, interpret and evaluate information is expected to lead the understandings of the uniquely human processes that guide and determine teacher behaviour (Clark & Yinger; as cited in Borg, 2006, p. 8)

As exposed earlier, it is clear that the idea of a new approach was emerging. Moreover, academics started to give more importance to teachers’ thinking in the process of teaching-learning and their practices. Besides, at that time they had already expected that this approach would help future studies to understand what teachers had in their minds and, therefore define the behaviour that this human process provides.

In the eighties, the examination of teacher cognition expanded and became more popular exploring different features of the psychological dimension of teaching. There were two concepts that became relevant and dominant in investigations related to the issue: beliefs and knowledge. Hence,

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

the study of mental life or what a teacher thinks was notable in the investigation of teaching. As well, the interest in teacher cognition in pre and in-service teacher education was significant to develop comprehension of the teacher learning process (Borg, 2009).

It was in the nineties, when plentiful literature was generated in the field of language teaching, providing insights into the connection between teacher cognition and their practices. Thus, Borg (ibid.) explained what is generally accepted nowadays about the connection between teacher cognition and what they do in their practices in a classroom:

Teacher's cognitions can be powerfully influenced by their own experiences as learners; these cognitions influence what and how teachers learn during teacher education; they act as a filter through which teachers interpret new information and experience; they may outweigh the effects of teacher education in influencing what teachers do in the classroom; they can exert a persistent long-term influence on teachers' instructional practices; they are, at the same time, not always reflected in what teachers do in the classroom; they interact bi-directionally with experience (Borg, 2009, p. 3).

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

At that time, scholars focused their studies on different aspects of L2 teachers as well, where studies on teaching grammar and writing were emphasized (Borg, 2009).

Due to the importance bestowed to teacher cognition nowadays, a number of investigations have emerged from different places around the world. The studies come from different countries, where many of them come from Europe. Similarly, the investigations from eastern and middle-east researchers have taken a fundamental role in this issue. One example of this, is the study by Han & Song (2011), who conducted the investigation called “Teacher cognition of intercultural competence in their Chinese context”, giving evidence that the importance of this topic has increased and become more massive. This study looks to find out how important is teacher cognition as an intercultural communicative competence in the Chinese education. Another study is: “Language teaching beliefs, problems and solutions: reflecting and growing together” (Yesilbursa, n.d.), in which the author presents the findings related to beliefs, the problems that comes out and some possible solutions that have emerged from the study.

According to the exposed earlier, teacher cognition establishes the relationship between what teachers do, think and believe related to their teaching practices. Currently, teachers have become decision-makers,

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

thoughtful and participatory agents, they have started to reflect on their own work and, thus, they are becoming reflexive professionals.

3.1.3 Teacher cognition and teacher education. Teacher cognition is an important aspect in teacher education, Borg (2011) states the following in relation with this topic “It is widely recognized that teacher education is more likely to impact on what teachers do if it also impacts on their beliefs (e.g. Feiman-Nemser and Remillard, 1996; Phipps and Borg, 2007; Wideen et al., 1998)” (p. 370). Moreover, it is well-known that the beliefs of the students that enter a teacher education programme affect powerfully how and what they learn and ultimately their teaching in a classroom, and those beliefs come from their personal experience as students in formal education (Raths & McAninch, 2003).

A number of studies have been conducted about the impact of teacher education on teacher cognition and those investigations have generated diverse findings:

Studies such as Borg (2005), Peacock (2001), Urmston (2003), Pennington and Urmston (1998) report stability in the pre- and post-course beliefs of studentteachers. In contrast, Cabaroglu and Roberts (2000), Clarke (2008), MacDonald et al. (2001), Mattheoudakis (2007) and Busch (2010) all provide evidence of change in student teachers' beliefs during

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

language teacher education. Other studies (Liu and Fisher, 2006; Murray, 2003; Richards et al., 1996) report that belief change was promoted by preservice language teacher education in variable ways across individuals and areas of belief (Borg, 2011, p. 371).

The literature suggests that beliefs that students with 12 or more years as students are difficult to change in pre-service teacher education programme, the reasons of this are the following:

The very short time- period in which students are actually engaged in pre- service teacher education; the disconnect between the academic program of teacher education and practice in the field; the lack of time and experience in which students can develop a sense of “need to know” such that they realize the importance of the academic and skill preparation material in their academic classes (Raths & McAninch, 2003, p. 16).

Despite the reasons mentioned above, it is important to mention that “the more consensus on existing or constructed norms, the more teacher education may influence teachers’ beliefs” (Tatto, 1998, p. 67). Thus, for teacher education programmes the positive change in cognition “depends on attention to teachers’ previous beliefs, attitudes, and experiences and that meaningful change in instruction entails fundamental change in what teachers know and do” (Tatto, 1998, p. 67).

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

As a summary, one can state that teacher cognition is an important aspect for teacher education programmes, because one of its goal is to shape students' prior beliefs according to what they, as institutions, consider as correct and appropriate for their students to learn, based on the idea that these beliefs have an impact in their later classroom performance.

3.2 Instruments Used to Study Teachers' Beliefs

Beliefs are part of our nature as humans; they are extremely difficult to understand because they change permanently from individual to individual. Nevertheless, there is a set of instruments used by researchers to investigate behaviours in different environments and situations. Some of the most prevalent instruments used for this purpose are the following: interviews, observations, stimulated recall, questionnaires (Barnard & Burns, 2012), and finally metaphors, which happens to be the instrument to be used of in the present study.

3.2.1 Interviews. They are considered to be the basic fact-finding interactions in which one single person asks questions and another responds. The information collected through interview reveals the respondent's background and experiences; this data helps the researcher to understand the responder' behaviour and their decision-making. Depending on the information required, interviews can be informal or formal. Informal interviews are set up on unplanned environments. Formal interviews are prepared and

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

based on the general rules trying to maintain objectivity as much as possible. Formal interviews are easier to analyse because questions are the same and in the same order; besides, the analysis of responses is not always needed. In informal interviews, the interviewers may interpret or modify questions (McClure, 2002, p. 3). Interviews are mainly used in descriptive research where opinions and attitudes are necessary (Khan, 2008). According to Driscoll (2011), interviews are useful when you wish to find detailed information from a few specific people (p. 163). For this purpose, the researcher has to create appropriate questions which have to be clear and unbiased (ibid.). Another important issue is that close questions or yes/no questions should be avoided in order to allow the participants to expand on their responses; also, too long questions and questions with unfamiliar vocabulary should not be used so the interviewee will not be confused (Driscoll, 2011, p. 164).

Besides the above, there are other types of interview techniques used to collect data, namely focused group interviews, conducted on small groups of discussions that are concentrated on specific topics. According to Arhar, Holly, & Kasten, 2001; Patton, 1987, “these small groups promote collaboration among the participants, increase the participation, and limit anxiety. Unfortunately, participants may reveal information that they believe as socially acceptable rather than a true representation of their experience”

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

(As cited in McClure, 2002, p. 3). Another technique to collect data is in-depth interviews, usually composed by three series of interviews. The first interview is focused on life history where the participants reconstruct how their experiences have affected their decisions on specific situations. The second interview is focused on specific details that surround the investigation area. These details may involve day-to-day operations, specific procedures, or recent related experiences. Finally, in the last interview, participants reflect on the relation between their experiences that have had an impact on their lives (ibid.).

3.2.2 Observations. Observation is a process that collects information about others by viewing their actions and behaviours in their natural backgrounds (McClure, 2002, p. 5). There are two ways to carry out an investigation with observations as the instrument to collect data: participant observation and unobtrusive observation. Participant observation is mainly used in investigations related to sociology and anthropology. In this type of research, the researcher may interact with the participants and what is more, try to be part of their community. On the other hand, in unobtrusive observation it is not allowed to interact with the participants: the researcher may record their behaviour actions (Driscoll, 2011, p. 160). Instruments used to collect information vary depending on the type of information required. Informal observational tools may include writing field notes, which are notes

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

from direct observations about what is happening; detailed information that creates the basis for the study. Logs which record situations identify responders; and detailed events; diaries containing unedited accounts of events that also include personal thoughts and feelings; and finally journals, which relate specific events answers questions, or analyses information. Regarding to formal tools, there are tools such as checklists which enclose specific and predictable results; those are focused on key points by asking for the frequency, absence, or presence of specific events. Also, there are rating scales which record information; this information can be numeric, graphic, or pictorial. Besides, the use of audiotapes and videotapes are a formal observation tool (McClure, 2002). Another important aspect to be aware of is that these types of instruments “are most reliable when they are conducted over a period of time to minimize the chances of the observation day(s) being atypical.” (Harvard Family Research Project Harvard Graduate School of Education, 2004, p. 3)

3.2.3 Stimulated Recall. Stimulated recall is used to uncover cognitive processes by allowing participants to recall their current thinking during an event by watching a video or other visual tool (Fox-Turnbull, 2009). “Stimulated Recall usually uses video and audio recordings of the participant in action, which they are later shown to use as a prompt and asked to reflect on” (Fox-Turnbull, 2009, p. 204)

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

3.2.4 Questionnaires. A questionnaire is a set of questions, which is designed to gather specific information. Questionnaires can be divided into two types of common formats, namely, close form type where the answers are restricted and the open form type, in which answers are more descriptive and usually longer. Both formats are useful because they are not time consuming. Nevertheless, the open format type is more difficult to analyse than the close format (Khan, 2008). Questionnaires are used to measure facts, values or attitudes (McClure, 2002). Another characteristic of questionnaires is that they allow anonymity, which is very helpful when the research is about sensitive matters or illegal activities (ibid.). Unfortunately, participants' responses give a limited picture of the situation investigated and, it is frequent that participants respond according to social desirable answers and not according to the truth (McClure, 2002). Many questionnaires used as an instrument to collect data apply Likert scales in the options of the questionnaire; these "scales range from three to seven levels such as 1 (very strongly agree), 2 (strongly agree), 3 (agree), 4 (neutral), 5 (disagree), 6 (strongly disagree), and 7 (very strongly disagree)." (McClure, 2002, p. 7)

3.2.5 Metaphors. Metaphors are commonly associated to the literary figure of speech usually used in poems. According to the Cambridge Dictionary, a metaphor is defined as "an expression, often found in literature that describes a person or object by referring to something that is considered

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

to have similar characteristics to that person or object". (Cambridge Dictionaries Online, n.d). Etymologically, this word comes from the Greek language, "*methapherein*", which means "to transfer". This Greek word has two roots "*meta*" which means "among" and "*pherein*", which means "to bear or to carry". (Nikitina & Furuoka, 2008)

In addition "the concept of metaphor given by the authors is the following: "mental constructs that shape human thinking about the world and reality" (Saban, Kocbeker, & Saban, 2006, p. 511). Consequently, a metaphor means "a transfer of meaning from one thing to another" (Nikitina & Furuoka, 2008).

According to the contemporary metaphor theory, a metaphor is based on the assumption of two kinds of language: literal and figurative language, in which it is considered as part of the figurative language and literal language is considered as not metaphorical. (Lakoff, 1992).

In addition, metaphors can be divided into two distinct conceptual domains; the source domain and the target domain. The source domain shows metaphor users' literal use of language while the target domain, topic which signifies metaphor users' underlying thoughts or ideas of the metaphors used (ibid.).

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

Lakoff & Johnson are considered as the promoters of the use of metaphors in research. In their work they investigated the importance of the role of metaphors in human cognitions. By examining metaphors to describe cognitions, people can uncover meanings beneath their experiences and beliefs (Zheng & Song, 2010, p. 42). The use of metaphors is helpful to clarify our relationships to the people with whom we work and to the teachers we were, are, and want to be. (Gillis & Johnson, 2002)

Metaphors which have been used in educational research can be classified into three main categories: “studies which deal with the interactions between learners and institutions (Hoffman & Kretovics, 2004), studies which consider teachers’ attitudes towards or perceptions of teaching (Oxford, et al., 1998) and studies about the learners’ beliefs of learning (Bozlk, 2002)”. (Zheng & Song, 2010, p. 43)

Some characteristics of metaphors and why scholars make use of them in their investigations are the following: they are useful tools to make teachers talk about their beliefs. Metaphors are used as stimuli to teachers in the interviews; besides, metaphors are compact and people can use few words to talk about a complex or extended concept. Finally, metaphors are vivid: it is more useful to talk about people’s experiences (Oolbekkink-Marchand, H.W., Van Driel, J., & Verloop, N., 2006).

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

Metaphor analysis in education has been used “to encourage learners” insight and understanding. “Metaphors are created to illuminate and solidify their understandings” (Zheng & Song, 2010, p. 42). Furthermore, these are useful to expose educational values, beliefs and principles that contain essential information to teachers’ growth as professionals.

In this study, we opted for the use of metaphors precisely because of the reasons exposed earlier.

3.3 Relevant Research

During the last years there has been an increase in the number of studies that have focused their interest on teacher cognition. Some of the most important investigations have examined teachers’ beliefs and identities by applying different types of instruments and methodologies that have revealed remarkable findings in this area. Besides, there are a number of studies which make use of metaphors to develop and uncover different characteristics about teacher cognition. Some of the most relevant research in relation to this area is presented as follows:

3.3.1 Relevant research: teacher cognition. As pointed out earlier, teacher cognition refers to the unobservable cognitive dimension of teaching related to what teachers know, believe, and think (Borg, 2003). This research area has been investigated in the field of language education for more than 30 years, obtaining a set of important findings studied from different perspectives and educational contexts, which allow people to understand and gain an insight in teachers' mental lives and to understand the psychological bases of their professional practice (Sanchez, 2007). Teachers' cognitions and beliefs come from previous experiences as learners, as pointed out by Johnson (1994), whose findings revealed that pre-service teachers make their own decisions during a practicum and, most of them were based on images of teachers, materials, activities, and classroom organization generated by their own experiences as second language learners. The result of the research pointed out that "pre service ESL teachers' beliefs may be based largely on images from their formal language learning experiences, and in all likelihood, will represent their dominant model of action during the practicum teaching experience" (Johnson as cited in Borg, 2003, p.88). Similarly, Numrich (1996) found out that teachers decided to avoid specific instructional strategies based on their own positive or negative experiences, as learners. In her study she discovered that the 27% of the teachers described in their diaries that they tried to integrate a cultural component into their work, because they found out that learning about the L2 culture seems

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

to be a pleasant and enjoyable part of their L2 learning experiences. Besides, teachers realized that they avoided teaching grammar or correcting errors, because of their own experiences related to L2 instruction being negative (Numrich as cited in Borg, 2003, p.88).

Consequently, teacher cognition has a direct impact on teachers' practices, due to the fact that teachers' decision making is based on their cognitions, beliefs and experiences. As stated by Zheng (2009) in the paper "a review of research on EFL pre-Service teachers' beliefs and practices", there are three perspectives by which teachers' beliefs form teacher education: EFL pre-service teachers bring beliefs acquired from many years learning experience to a teacher education programme that strongly influences what and how they learn to teach: the other perspective is that EFL pre-service teachers' beliefs are the focus of change in the process of education. Finally, EFL pre-service teachers' beliefs influence what they say and do in the classroom. An important aspect that teacher education programmes should take into account is that EFL pre-service teachers hold certain beliefs while learning to teach, some of them may be detrimental to their own language learning or to their future students' learning. For that reason a teacher education programme should attempt to eradicate them before teachers start to teach.

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

Teacher cognition became an important area to consider in the teaching and learning process, due to the fact that teachers' beliefs and cognitions regarding to teaching practices are already set on their minds, and these beliefs act as a pivotal point for their future role as teacher because these cognitions have a direct effect on the classroom practices and the professional development (Cabaroglu and Roberts, Calderhead, Deng, as cited in Chong, Wong & Choon Lang, 2005). Besides, the nature of these beliefs are constructed based on cultural and personal beliefs, and some of them may be long standing (Holt-Reynolds as cited in Chong et al., 2005), stable, deeply entrenched and resistant or difficult to change (Joram & Gabriele; Kagan; Marso & Pigge; Mertz; Clark as cited in Chong et al., 2005). Consequently, it has been demonstrated that instead of changing their beliefs during their college education programs, students tend to increase comfort with their pre-existing beliefs (Kagan as cited in Chong et al., 2005). As demonstrated in a research written by Karavas & Drossou (2010), which attempts to establish how amenable are student teachers' beliefs to change, by investigating the impact of teacher education courses on altering student teachers' pre-existing beliefs, through examining their beliefs before and after doing their internship. This study reveals that future teachers' conceptions do not change before and after the practicum period. Teachers' beliefs definitely remain stable in an unconsciousness process, in which they do not realize about its persistency. (Karavas, & Drossou, 2010).

3.3.2 Relevant research: use of metaphors. Teachers' beliefs are a complex phenomenon to understand, mainly because these are unobservable these can be divided into contextualized and abstract beliefs. These beliefs have a direct impact on teachers' responses, because to a direct question teachers may answer using the theoretical basis, or the abstract idea regarding to the question, therefore, it may cause interference in the answer. Consequently, researchers look for indirect ways to find out these conceptions such as diaries, drawings and metaphors, which happens to be the instrument used in this study (Birello, 2012)

The use of metaphors to analyse beliefs is not recent. The last 15 years have seen the publication of a set of studies that examine teachers and students' understanding of teaching and/or learning. Metaphors usage can bring implicit assumptions into awareness, or encourage personal reflection, and as a result they provide some insights related to individuals' perspectives on given topics (Wan, Low, & Li, 2011).

As stated by Zheng & Song, (2010) metaphor analysis is used to discover how students think. The use of it provides an alternative to conservative and conventional perspectives. In academic settings metaphors are used to promote learners' insight and to solidify their understandings; in other words, the analysis and reflections of the metaphors give a voice to their silent assumptions. In this investigation there were three main categories

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

that were examined, namely, studies with interactions between learner and institutions, studies regarding teachers' attitudes or perceptions towards teaching and studies about the learners' beliefs of learning. In addition, this study examines the application of metaphors in the classroom for instance: in vocabulary teaching, the researches propound the inclusion of metaphors in teaching, making the memorization process much easier and this can be applied also in the teaching of idioms and proverbs. It is also helpful with L2 students because they can make their own view of language learning explicit, especially with learners with a lack of meta-language in explaining their own theories of language learning.

Furthermore, the research states that "teachers' teaching behaviours are guided by cognitive psychological processes that construct theories, beliefs, metaphors and mental models" (Zhen & Song, 2010, p 44). Teachers' cognitions deal with the unobservable cognitive dimensions in terms of what they know, believe and think. Through metaphors, teachers can express their professional identity and can understand their role as teachers. Besides, teachers practice "are consistent with the metaphors they use about teaching" (Zhen & Song, 2010, p 46). In addition, there are many metaphors used to describe teachers, such as "teacher as manufacturer, teacher as repeater, teacher as entertainer, teacher as learning partner, teacher as coach, teacher

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

as consultant, teacher as performer, teacher as orchestra conductor” (Zhen & Song, 2010, p 45).

Finally, they concluded that “language and thought are correlated and indispensable” (Zhen & Song, 2010, p 48). They also state that we have to be careful because metaphors do not describe all the phenomena by themselves; they just represent a part of it (ibid.).

Metaphor analysis is used for educational purposes, due to the fact that it helps teachers to be aware of their own reflections, helping them to verbalize hidden and complex beliefs. Furthermore, metaphors reflect teaching styles and teachers’ identities, as stated by the results, participants had already possessed strong beliefs about English teaching and learning, even before their teaching practicum. This holds true their belief, regarding their professional identity as well as about education, learning, teaching practice, and teacher-student relationship (Nagamine, 2012).

In addition, Eren, & Tekingnarlan (2013), examine prospective teachers’ metaphors related to the concepts of teacher, teaching, learning, instructional material and evaluation, based on a questionnaire with some prompts as “a teacher is like... because ...?” This study also provides an example of a metaphor for each concept. The results of the study were: teacher concept was defined under three categories: teachers as a loving and caring person, teacher as a source of knowledge, and teacher as a guide.

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

The teaching concept was defined through three categories: teaching as an art, teaching as a constructive process, and teaching as a joyful process. Besides, the concept of learning was described through two categories, learning as a challenging and explorative process, and learning as a basic human need. The instructional material concept was described through two categories, instructional material as a tool and instructional material as a motivational tool. Finally, the evaluation concept was described through three categories: evaluation as a summative process, evaluations as a competitive process, and evaluation as fearful process.

3.4 Dimensions Related to the Role of the Teacher, the Role of the Learner and Didactic Process

According to the Oxford Dictionaries (2013), a role can be defined as follows: “the function assumed or part played by a person or thing in a particular situation” (para. 1). Apart from this, there are different roles as part of the society, “some roles are hard to avoid (e.g. father); some roles may be thrust upon us by circumstances (e.g. school pupil); on the other hand, we choose for ourselves many of the roles we fulfil (e.g. teacher)” (Vilar, n.d., p. 2).

3.4.1 Dimension 1: role of the teacher. The first dimension that this research addresses falls into the role of the teacher. This study classifies the metaphors according three different aspects:

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

3.4.1.1 Teacher as a knowledge provider. This aspect considers the teacher as a person who brings all the information to the students. The teacher works as a transmitter of his/her knowledge, and teaching is considered as a simply process of delivering knowledge and skills (Saban, Kocbeker, & Saban, 2006). Moreover, the whole attention of the lesson is on the teacher.

One example of this aspect can be illustrated using the following metaphor: *the teacher is like an encyclopaedia.*

3.4.1.2 Teacher as a nurturer o cultivator. In this aspect, the teacher is considered an educator who attends to the individual needs and interests of the students and, at the same time, is be able to support them in their growth process. Another important aspect related to this role, is that teachers are in charge of facilitating the learning process, by providing a suitable learning environment without show prejudice in terms of learners and their background characteristics (Saban, Kocbeker, & Saban, 2006).

One example of this aspect can be illustrated using the following metaphor: *the teacher is like a gardener.*

3.4.1.3 Teacher as a guide. In this role, the teachers are considered as a guide, who facilitates the learning process of their students and, at the same time, they encourage students to be active constructors of their own knowledge (ibid.).

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

One example of this aspect can be illustrated using the following metaphor: *the teacher is like a map*.

3.4.2 Dimension 2: role of the learner. The role of the learner is another aspect included in our investigation. This dimension classifies the student into four different perspectives:

3.4.2.1 Learner as a questioner. In this aspect, the learner asks questions regularly to the teacher and obtains the responsibility for their own learning to some extent and they are not a passive recipient of what teacher provides (Roles of teachers and learners, n.d.) .

One sample of this aspect can be illustrated using the following metaphor: *the learner is like a journalist*.

3.4.2.2 Learner as a recorder of information. This perspective is directly connected with the idea that the learner records all the information that they cannot easily remember. They write down words, phrases and grammar issues to help them remember what they learn in the lesson. Besides, they are very independent students who can use this method to study outside the classroom (ibid.).

One example of this aspect can be illustrated using the following metaphor: *the learner is like a pendrive*.

3.4.2.3 Learner as a conformist. This type of learner presents a very dependent student; they do not feel uncomfortable to work in non-communicative contexts and they do what others tell them to do. Moreover, they “prefer to emphasise learning about language over learning to use it” (Harmer, 2001, p. 43)

One example of this aspect can be illustrated using the following metaphor: *the learner is like a railway train.*

3.4.2.4 Learner as compliant or docile. This type of learner considers a set of power relationships between the teacher and the students, in which the teacher has more authority than the students. According to the Merriam- Webster dictionary (2009), this type of students “can make teaching a lot easier. Nowadays, calling students "docile" indicates they aren't trouble-makers. But there's more than just good behaviour connecting docility to teachability. The original meaning of "docile" is more to the point: "readily absorbing something taught.””(para. 3)

One example of this aspect can be illustrated using the following metaphor: *the learner is like a sheep.*

3.4.3 Dimension three: didactic process. This dimension is focused on the view that the first and fifth year students have about the environment of the classroom, and also the pedagogical content knowledge that a teacher possesses.

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

3.4.3.1 *The classroom environment.* In this perspective, the different existing classroom environments can be identified. These may vary depending on the context, the time, the hour, etc. Even though there are several types of environments depending on the context of the classroom, *Marco para la Buena Enseñanza* (2008), proposes an ideal atmosphere to work, in which the creation of a proper learning environment is a must.

Some examples of this aspect can be illustrated using the following metaphors: *The classroom is like a cup of milk* or *The classroom is like a storm in the sea.*

3.4.3.2 *Pedagogical content knowledge.* This perspective looks to collect information of how easy or difficult teaching vocabulary, grammar and pronunciation are inside the classroom.

One example of this aspect can be illustrated using the following metaphor: *Teaching grammar is like a mathematics equation.*

Chapter 4

Methodological Framework

4.0 Introduction

In this chapter the methodological framework is presented. The first section introduces the methodological approach that is adopted in this investigation, making a direct connection with the present study. The second section discusses the instrument used in this inquiry and examines the internal makeup of the data gathering instrument. The third section presents the sampling procedure of this investigation. The fourth section presents the objectives of the study that are divided into general and specific objectives and the four research questions. Finally, the last section provides the limitations of the study that make reference to the problems or constraints that this investigation has been faced with.

4.1 The Methodology

The type of data collected in this investigation has a qualitative nature. This is because the inquiry is focused on gathering what the beliefs of two groups of students are. The methodology to analyse the data is quantitative, due to the fact that quantitative investigation is more objective, concrete and uses instruments that are proved in accuracy. Abeyasekera (n.d.) states the following in relation with quantitative analysis and qualitative data:

“quantitative methods of data analysis can be of great value to the researcher

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

who is attempting to draw meaningful results from a large body of qualitative data” (p. 1).

It is important to mention that this investigation can be classified as a “non-experimental study” due to we just analyse the phenomenon without manipulating it like in experimental or “cuasi-experimental” investigations. In addition, this is an exploratory research, due to the lack of studies and information in the field (Hernández, Fernández, & Baptista, 2010). Regarding the present study, teacher cognition practically has not been covered in the Chilean framework.

The present investigation looks to interpret what the perceptions, thoughts, feelings and mainly the beliefs of a group of students are, through the use of a particular instrument based on metaphors to subsequently interpret the results provided from the inquiry.

4.2 The Instrument

A questionnaire with a Likert scale containing a set of metaphors has been selected as the data gathering instrument in this study because of all the benefits that it presents, as claimed by Nagamine, 2012; Nikitina & Furuoka, 2008; Zheng & Song, 2010, among others. The potential for use of metaphors, as the literature suggests, is that it offers the possibility of convey subconscious assumptions into the consciousness; it promotes personal reflection and provides the opportunity to generate insights in the people who

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

use this tool (Cameron & Low; Cameron & Maslen, as cited in Wan, Low, & Li, 2011). In terms of educational use of metaphors, it is important to mention that:

Metaphor analysis has been used by teacher-educators and researchers to investigate, explore, and describe teachers' beliefs, values, and philosophies (e.g., Farrell, 2007). A metaphor analysis has also been used by preservice and inservice teachers as a medium of reflection or an instrument of discovery (Burns; Saban; as cited in Nagamine, 2012, p.145).

The most common ways of collecting data using metaphors in educational investigations can be described as follows:

Informants' metaphors are normally collected either from analogical statements that arise naturally in conversation or writing (e.g., interviews or personal narratives) or via completion of a prompt involving thinking of a metaphor or simile in what is often called an "A IS (like) B" structure (e.g., Learning is like, ...) (Wan, Low, & Li, 2011, p. 3).

In this investigation, we use metaphors dealing with three different domains: the role of teacher, the role of learner, and the didactic process; the instrument has been constructed considering those domains. The instrument is a questionnaire consisting of three main parts, prompts with metaphors

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

related to the role of teacher, another section with metaphors dealing with the role of the students and finally, the last section with metaphors related to the didactic process, which are separately presented into the classroom environment and the pedagogical content knowledge, respectively.

The instrument used in this study has been designed based on the English literature related to the use of metaphors in teacher cognition with the structure “*A is like B*”, for instance, “*El profesor es como una brújula*”. Even though the Spanish literature considers a sentence which includes the word “like” as a comparison, the instrument includes this word because the present questionnaire has been directly translated into Spanish from its English version (see Appendix I); due to the fact that language cannot be a barrier in our investigation. Another important feature is that the questionnaire is the same one for first year (see Appendix II) and fifth year students (see Appendix III), because we wish to compare the answers of both groups.

4.3 The Sample and Sampling Procedure

The sampling procedure of this study has been a non-probabilistic approach, where the researchers have selected one particular group of students in first and fifth year of a teacher education programme at a Chilean private university where each group is composed by 23 students. The type of sample corresponds to a convenience sample as Cohen, Manion, & Morrison (2007) suggest, where participants are easily accessed by the researchers.

4.4 Data Analysis

Notwithstanding the qualitative nature of the study in that it touches a part of peoples' beliefs and cognition, the instrument used in this investigation gathers this qualitative data in nature using an instrument whose analysis and interpretations will be of a quantitative type. In the questionnaire, a five-point Likert scale has been used where participants are asked to express the degree of agreement to a set of statements focused on the three domains under consideration. After analysing the results related to the level of agreement obtained in the data gathering process, the mean scores of the results are presented in tables and illustrated in graphs, respectively.

4.5 Objectives of the Study and Research Questions

4.5.1 General objective. The general objective of the present study can be phrased as follows:

To uncover beliefs systems of first and fifth year students from an English teacher education programme by using metaphors based on the role of the teacher, the role of language learner, and the didactic process.

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

4.5.2 Specific objectives. The specific objectives that this work attempts to achieve are the following:

(i) To contrast the results obtained from each cohort and to establish the differences and similarities between both groups.

(ii) To determine the extent to which the teacher education programme has shaped the exit belief systems of students.

(iii) To determine the level of variability amongst first and fifth year students.

4.5.3 Research questions.

(i) What are the belief systems relating to the role of the teacher, the role of the language learner, and the didactic process that first year students hold?

(ii) What are the belief systems relating to the role of the teacher, the role of the language learner, and the didactic process that fifth year students hold?

(iii) How different/similar are those belief systems?

(iv) Are the beliefs systems uncovered in both types of language learners internally consistent within each group?

4.6 Limitations of the Study

One of the main limitations confronted during the development of the study, has to do with the lack of time to carry out our investigation. Due to this issue, the samples were just taken from two different cohorts of students, one from first year students and the other one, from fifth year students of the same university. Therefore, we could only do a cross-sectional study. Additionally, the study presents some restrictions related to the data gathering process. This is because fifth year students were immersed in their practicum period, and they did not have much time to attend a meeting with the purpose of applying the survey. Thus, the data gathered was partially taken. Finally, we had to face a number of limitations regarding to the lack of literature, because in educational research, this is quite a recent topic with over 30 years of study.

Chapter 5

Findings and Discussions

5.0 Introduction

This chapter presents the findings, together with the ensuing discussion of the results; both findings and discussions are structured around the research questions presented in Chapter 4. Put differently, quantitative data is provided after each research question, through tables and graphs, to finally present a discussion for each dimension.

5.1 Research Question One:

What are the belief systems relating to the role of the teacher, the role of the language learner and, the didactic process that year first students hold?

As stated earlier, a survey was administrated to first year students in order to gather information about the belief system that they hold with respect to three different domains, namely, the role of the teacher, the role of the language learner, and the didactic process. The participants were asked to express their degree of agreement or disagreement with the metaphors presented in the survey. We assigned different scores to the different options on the scale: 1 to the least agreement and 5 to the greatest type of agreement. Below are the quantitative data gathered where the mean scores are presented for the first dimension, the role of the teacher. The first

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

dimension, the role of the teacher, contains nine different metaphors, each of which denoted a slightly different role that the English language teacher can perform in the classroom. The second dimension, the role of the learner contains eight different metaphors, and the third dimension, that is divided into two categories, the environment of the classroom and the pedagogical content knowledge, contains four and five metaphors, respectively. In this analysis we shall focus primarily on the highest means and on the lowest means as the former indicated the greatest degree of agreement and the lower indicated the lowest degree of agreement. In the presentation of the findings below every time the metaphors are mentioned they are phrased in the original version, in English, as they were translated into Spanish when they were part of the instrument applied to the respondents.

5.1.1 Role of the teacher. In this dimension, first year students present the highest level of agreement in metaphor three, *the teacher of English is like a farmer*, with a mean score of 3.8. Likewise, metaphor five, *the teacher of English is like a compass* and metaphor nine, *the teacher is like a torch*, present a high level of agreement, with a mean score of 3.7 each. However, students present a low level of agreement for metaphor seven, *the teacher of English is like Google searcher*, with a mean score of 2.6.

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

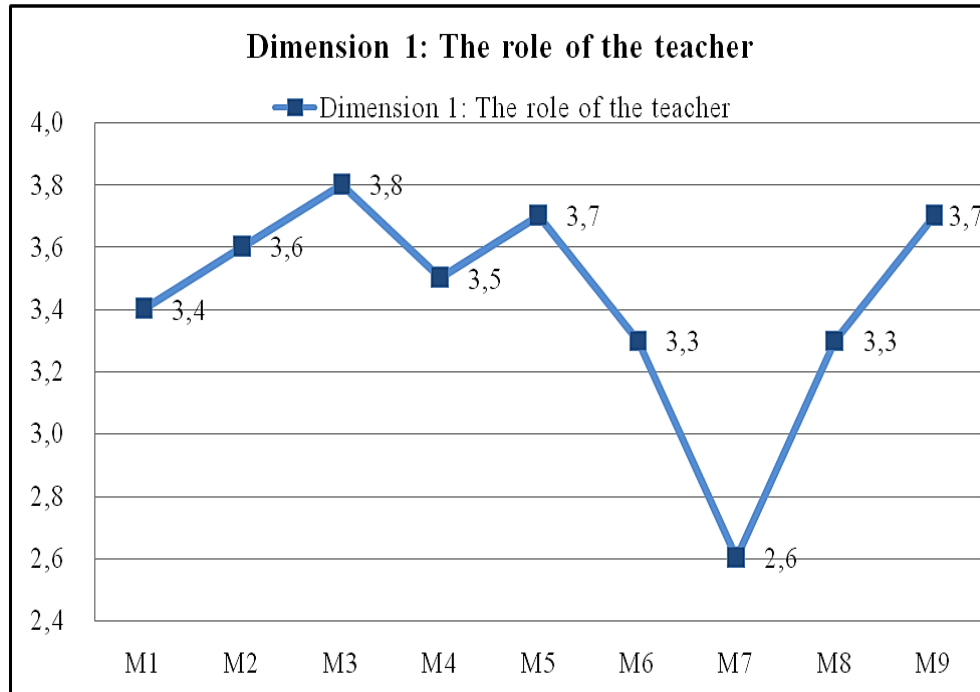
Table and graph 1 present all of metaphors that belong to the first dimension, the role of the teacher, with the mean scores obtained from the data gathering process in first year students.

Table 1

Dimension 1: The role of the teacher	Mean score
1. The teacher is like a map	3.4
2. The teacher is like an encyclopaedia	3.6
3. The teacher is like a farmer	3.8
4. The teacher is like a dictionary	3.5
5. The teacher is like a compass	3.7
6. The teacher is like a mother or father	3.3
7. The teacher is like a Google searcher	2.6
8. The teacher is like a gardener	3.3
9. The teacher is like a torch	3.7

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

Graph 1



5.1.1.1 Discussion. As can be observed, the metaphors that attract the highest degree of agreement are those which denote the role of the teacher as a farmer, a compass or a torch. Interestingly, two of these three metaphors that are top rated by the participants denote a notion of a teacher who guides the students; both metaphors five and nine do not only share the same high mean score, but also denote exactly the same notion, which is that of a guide a compass and a torch, respectively. Related to the notion of the guide and, the notion of the farmer, one can easily conclude that the most widespread and popular beliefs among first year students, are that the

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

teacher is somebody who, on the one hand, guides the students on a journey of learning and, somebody who over time helps and facilitate this learning process.

Metaphor seven is by far the metaphor with the lowest level of agreement, which signifies that students do not regard the teacher as a Google searcher; from this we can conclude that students do not necessarily see the teacher as an instantaneous information provider; rather, they seem to think of the teacher as somebody who guides and facilitates the process.

5.1.2 Role of the learner. In this dimension the students present a high level of agreement with metaphor 16, *the student is like a detective*, with a mean score of 3.7. The other metaphors that obtain a high level of agreement are 10, 11 and 17, *the learner is like a hard drive*, *the learner is like a journalist*, and *the learner is like a plant or flower*, with a mean score of 3.6 each. On the contrary, the metaphor that presents a low level of agreement is metaphor 15, *the learner is like a sheep*, with a mean score of 2.4. Besides, another metaphor with a low level of agreement is metaphor 13, *the learner is like an echo of the teacher*, with a mean of 2.7.

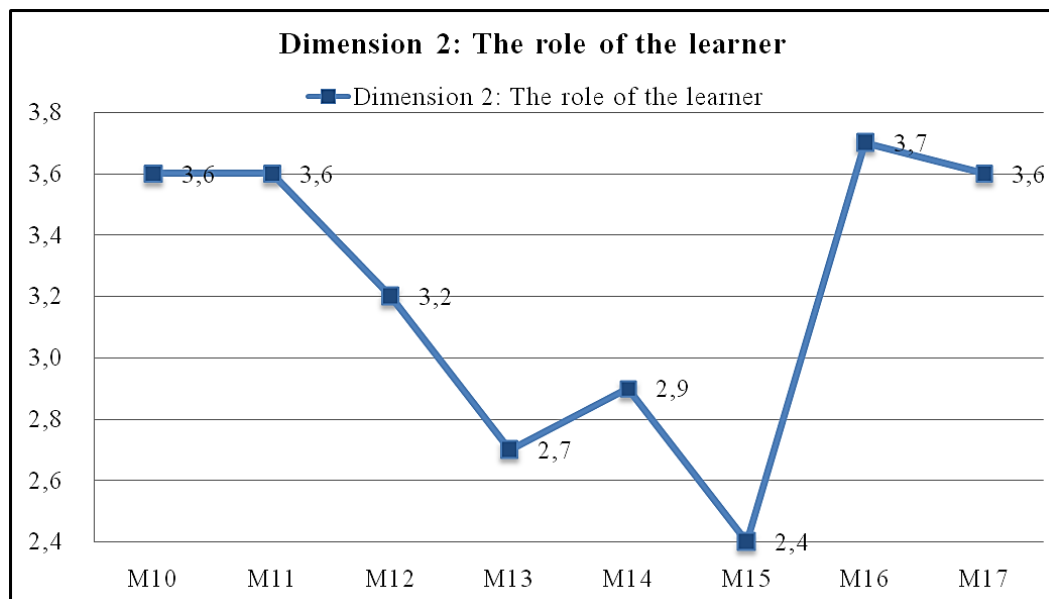
Table and graph 2 present all of metaphors that belong to dimension 2, the role of the learner, with the mean scores obtained from the data gathering in first year students.

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

Table 2

Dimension 2: The role of the learner	Mean score
10. The learner is like a hard drive	3.6
11. The learner is like a journalist	3.6
12. The learner is like a pendrive	3.2
13. The learner is like an echo of the teacher	2.7
14. The learner is like a railway car	2.9
15. The learner is like a sheep	2.4
16. The learner is like a detective	3.7
17. The learner is like a flower or plant	3.6

Graph 2



5.1.2.1 Discussion. The results above show the metaphor that attracts the highest level of agreement, which features the learner as a detective. Moreover, there are also three metaphors that have a high level of agreement as well, in which first year students think of the learner as a hard drive, as a journalist and as a plant or flower. Interestingly, two out of four metaphors denote the learner as a questioner; we can say that both metaphors 16 and 11, as stated earlier in the theoretical framework, denote that the learner is somebody who asks questions regularly to the teacher and takes responsibility for his/her own learning process to some extent. In other words, it is somebody who is an active learner and somebody who takes care of his/her own learning process. Even though both of the metaphors have practically the same mean score, they both portray the same role of the learner.

The other two metaphors with a high level of agreement are metaphors 10 and 17, respectively; the first one denotes the learner as a hard drive and the other one as a plant or flower. Even though, the two metaphors share the same mean score of 3.6, they do not share the same conception of the learner. Interestingly, metaphor 10 denotes a notion of a learner as a recorder of information, in which participants visualize the learner as hard drive; in other words, somebody who saves as much information as possible. On the contrary, participants who rated metaphor 17, denote the learner as a plant or

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

flower, that is to say, they truly believe the learner has a completely compliant role, because they are always standing there waiting for somebody to lead and nourish them.

Metaphors 13 and 15 have the lowest level of agreement, where the first one symbolizes the learner as the echo of the teacher and the other one as a sheep; both establish a notion of a learner with a docile role in the learning process; it signifies that students conceptualize the role of the learner as a totally compliant one, as somebody who repeats and performs everything they learn.

As shown in the results, it is fair to conclude that there are two main perspectives related to the English learner; even if they both have a high level of agreement, they do not share the same conceptions related to the learner, there is a conception according to which learners are inquisitive people and are always looking for information on their own, in order to improve their learning process, depicted as questioners. Interestingly, the other high level of agreement is totally opposed to the first one, since in this metaphor participants denote the learner as an inactive one.

According to what has been exposed earlier, first year students regard the language learner as somebody who is on a permanent search for something, somebody who discovers, and somebody who has a clearly established objective of finding out, which makes a good deal of sense if

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

contrasted with the metaphor that attracts the lowest level of agreement, where the language learner is regarded as a sheep that simply follows somebody in charge.

5.1.3 Didactic process. The didactic process is divided into two sub-dimensions: on the one hand, the environment of the classroom and on the other, the content. Thus, the data is presented separately for each.

5.1.3.1 *The classroom environment.* In this sub-dimension, there is an equal level of agreement amongst all the metaphors presented, where metaphor 18, *the classroom is like a storm in the sea*, metaphor 20, *the classroom is like travelling by Transantiago*, and metaphor 21, *the classroom is like a cup of milk*, obtained the same mean score of 2.7 each. Additionally, metaphor 19, *the classroom is like a polyphonic choir*, obtained a similar level of agreement with a mean score of 2.6.

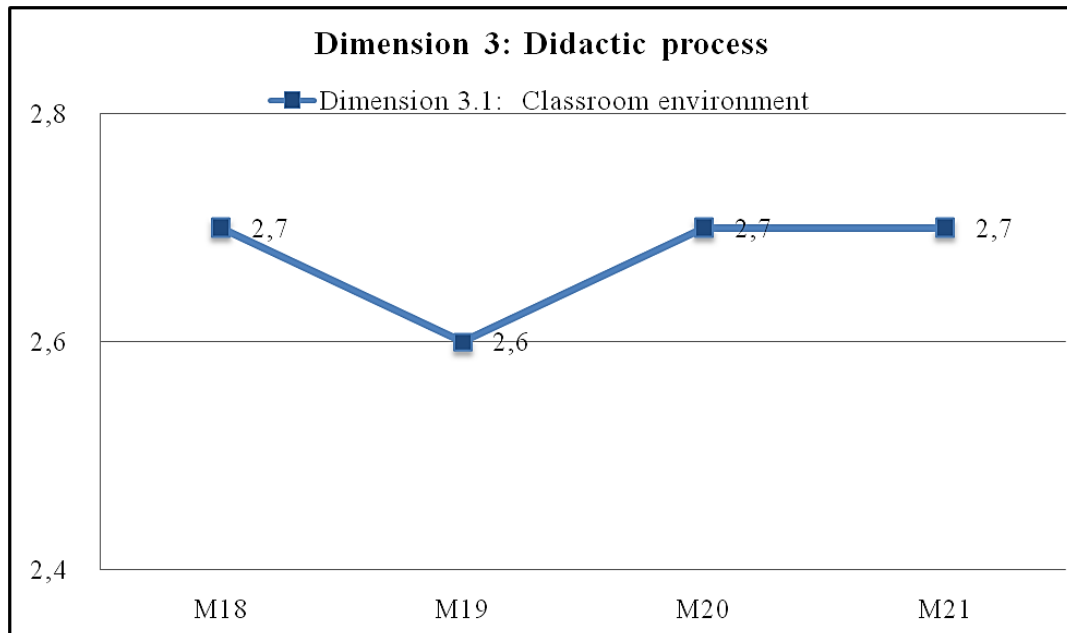
Table and graph 3 present the mean scores of metaphors obtained from the data gathering process in first year students

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

Table 3

Dimension 3: Didactic process	Mean score
a) Classroom environment	
18. The classroom is like a storm in the sea.	2.7
19. The classroom is like a polyphonic chorus.	2.6
20. The classroom is like travelling by <i>Transantiago</i> .	2.7
21. The classroom is like a cup of milk	2.7

Graph 3



USING METAPHORS TO UNCOVER BELIEF SYSTEMS

5.1.3.1.1 *Discussion.* As can be observed, there is a lower level of agreement with the metaphors presented. Interestingly, the mean scores go from 2.6 to 2.7, presenting a variation of only 0.1, which simply denotes the disagreement of the students with the different types of metaphors suggested in the survey. According to the results, one can infer that students do not agree with the notion of a classroom as a storm in the sea, which involves an environment with difficulties in terms of high and low levels, which represent the movement of a wave in the sea, taking into account the variability of situations that a teacher may confront in a lesson. Similarly, the notion of a classroom as travelling by *Transantiago* shows a low level of agreement emphasizing that participants do not conceive the environment as something humdrum, boring and time consuming. Interestingly, metaphor 21, *the classroom is like a cup of milk*, has the same low level of agreement, in spite of the fact that the cup of milk represents a calm and quiet environment, which is contrary to the metaphors presented previously. Curiously, metaphor 19, *the classroom is like a polyphonic choir*, has reached the lowest level of agreement of 2.6 points, which is extremely strange, due to the fact that this is precisely what *El Marco para la Buena Enseñanza* proposes where all students are integrated. Establishing an organized classroom environment to work and, displaying all sorts of spaces and resources related to the learning process as in a polyphonic choir, where all the participants are listened in their own tone, and in an organized way.

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

As pointed out earlier, one can infer that first year students have not constructed a notion of what the didactic process is, related to the classroom environment. Thus, first year students still have a learner vision of a classroom, due to the lack of experience as teachers, which is the reason why first year students could not agree with any of the metaphors presented in the survey.

5.1.3.2 Pedagogical content knowledge. In this sub-dimension, students express a mid-level type of agreement related to English content such as vocabulary, pronunciation and grammar. Even though metaphor 26, *learning English pronunciation is like climbing the Everest*, obtained a mid-level of agreement with a mean score of 3.4, metaphor 23, *teaching grammar is like a mathematics equation*, obtained the lowest level of agreement with a mean score of 3.1. However, metaphor 22, *teaching vocabulary is like a kayak in the river*, metaphor 24, *learning English pronunciation is like travelling to the moon*, and metaphor 25, *teaching grammar is like giving CPR*, demonstrate a slight variation, in comparison with the highest and lowest mean scores, as can be observed in the table below.

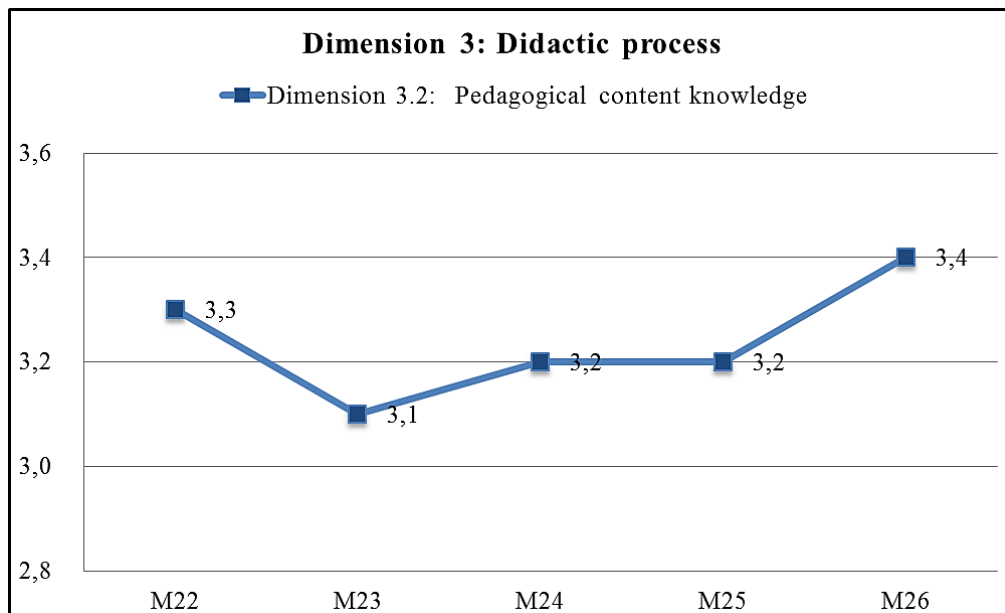
Table and Graph 4 present the findings with the mean scores obtained from the data gathering process related to the pedagogical content knowledge in first year students.

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

Table 4

Dimension 3: Didactic process	Mean score
b) Pedagogical content knowledge	
22. Teaching vocabulary is like a kayak in the river	3.3
23. Teaching grammar is like a mathematics equation	3.1
24. Learning English pronunciation is like travelling to the moon	3.2
25. Teaching grammar is like a giving CPR	3.2
26. Learning English pronunciation is like climbing the Everest	3.4

Graph 4



USING METAPHORS TO UNCOVER BELIEF SYSTEMS

5.1.3.2.1 *Discussion.* As shown in the results, students express a mid-level type of agreement amongst all the metaphors presented for this sub-dimension, in which the scores ranged from 3.1 to 3.4, which makes it difficult to establish predominant beliefs. However, there are two metaphors that stand out, one with a high and the other with a low level of agreement within the mean, but just with a variation of 0,3 between them. On the one hand, metaphor 26, *learning English pronunciation is like climbing the Everest*, presents the highest level of agreement with a mean score of 3.4, which conceptualizes the pedagogical content knowledge related to the learning pronunciation, as a difficult and almost impossible process, in which capable and prepared students are the ones who can only produce it. On the other hand, metaphor 23, *teaching grammar is like a mathematics equation*, presents the low level of agreement with a mean score of 3.1, featuring the teaching grammar process as a structured one, which requires a specific formula to be taught.

It is interesting to note that there are three out of five metaphors in the middle of the highest and lowest main scores, with little variation between them, where metaphor 22, *teaching vocabulary is like a kayak in the river*, presents a mean score of 3.3 and which features teaching vocabulary as a complicated trip, that presents all sorts of difficulties along its way, in this case the learning and/or teaching process. Moreover, metaphors 24, *learning*

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

English pronunciation is like travelling to the moon, and metaphor 25, *teaching grammar is like giving CPR*, present a mean score of 3.2 each.

Thus, according to metaphor 24, the notion of the difficult process of learning English pronunciation comes up again, giving even more evidence about how complex and hard the learning pronunciation process is. Finally, metaphor 25, portrays a set of rules and steps to take at the moment of teaching grammar, as it is a very organized and structured process, in which there is no room for mistakes.

In conclusion, one can infer the level of agreement of first year students is middle of the road as related to the metaphors suggested for the pedagogical content knowledge, namely, the vocabulary, pronunciation and grammar learning and/or teaching process. Hence, participants seem to have not constructed well-established conceptions related to the processes under consideration.

5.2 Research Question Two:

What are the belief systems relating to the role of the teacher, the role of the language learner and, the “didactic process” that year fifth students hold?

The same survey was applied to fifth year students, in order to uncover the beliefs systems they hold about three different domains, the role of the teacher, the role of the learner and the didactic process. The participants were asked to express their degree of agreement or disagreement with the metaphors presented in the survey. As we mentioned before we assigned different scores to the different options on the scale: 1 to the least agreement and 5 to the greatest type of agreement. Below are the quantitative data gathered where the mean scores are presented for the first dimension, the role of the teacher. The first dimension, the role of the teacher, contains nine different metaphors, each of which denoted a slightly different role that the English language teacher can perform in the classroom. The second dimension, the role of the learner, contains eight different metaphors and the third dimension, that is divided into two categories, the environment of the classroom and the pedagogical content, contains four and five metaphors, respectively. In this analysis, we shall focus primarily on the highest means and on the lowest means, as the former indicated the greatest degree of agreement, and the lower indicated the lowest degree of agreement. In the

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

presentation of the findings below, every time the metaphors are mentioned they are phrased in the original version, in English, as they were translated into Spanish when they were part of the instrument applied to the respondents.

5.2.1 Role of the teacher. In this dimension, fifth year students express a high level of agreement in relation to the teachers' role with metaphor five, *the teacher is like a compass*, with a mean score of 4.2. Likewise, metaphor three, *the teacher is like a farmer*, obtained a high score with a mean of 4.0. However, students present a low level of agreement in metaphor seven, *the teacher is like a Google searcher*, and metaphor four, *the teacher is like a dictionary*, each one with a mean score of 2.6 and 2.7, respectively.

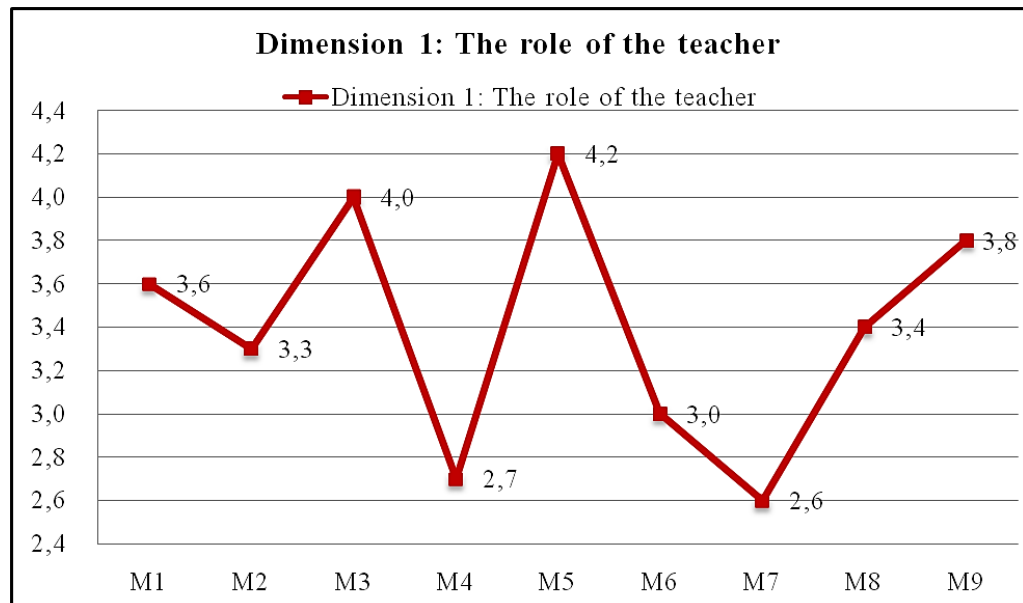
Table and Graph 5 present the findings with the mean scores from the data gathering process related to the role of the teacher in fifth year students.

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

Table 5

Dimension 1: The role of the teacher	Mean score
1. The teacher is like a map	3.6
2. The teacher is like an encyclopaedia	3.3
3. The teacher is like a farmer	4.0
4. The teacher is like a dictionary	2.7
5. The teacher is like a compass	4.2
6. The teacher is like a mother or father	3.0
7. The teacher is like a Google searcher	2.6
8. The teacher is like a gardener	3.4
9. The teacher is like a torch	3.8

Graph 5



USING METAPHORS TO UNCOVER BELIEF SYSTEMS

5.2.1.1 Discussion. Fifth year students present a high level of agreement with metaphors three, *teacher is like a farmer*, and metaphor five, *teacher is like a compass*, being the last metaphor the top rated one. Interestingly, the two metaphors do not portray the same notion related to the role of the teacher. On the one hand, there is a notion of a teacher as someone who guides and assists the students to achieve their goals in the learning process as a guide. On the other hand, there is a notion of a teacher as a cultivator, that is to say, as someone who assists students, in order to pay special attention to their needs, in the same way that a cultivator does.

One can observe that students present a low level of agreement with metaphors four, *teacher is like a dictionary*, and metaphor seven, *teacher is like a Google searcher*, showing that they do not share the idea that teacher is a knowledge provider, who gives all the information easily and just transmits the content.

According to the findings, one can conclude that fifth year students do not have the same beliefs with respect to the role of the teacher, but there are two highlighted perspectives, in which participants think of the teacher as a guide or cultivator and do not necessarily see the teacher as an instantaneous knowledge provider.

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

5.2.2 Role of the learner. In this dimension, students present a high level of agreement with metaphors 11, *the student is like a journalist*, and metaphor 17, *the student is like a plant or flower*, with a mean score of 3.9 each. The other metaphor with a high level of agreement is metaphor 16, *the student is like a detective*, with a mean score of 3.7. On the contrary, students present a low level of agreement for metaphor 13, *the student is like the echo of the teacher*, with a mean score of 2.2 and metaphor 15, *the student is like a sheep*, with a mean score of 2.5.

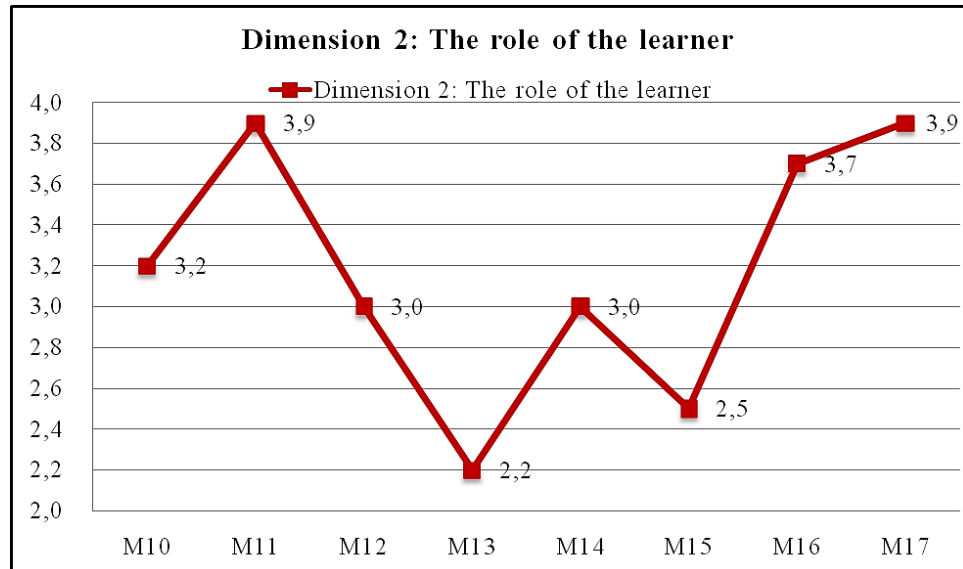
Table and graph 6 present the mean scores obtained from the data gathering related to the role of the learner in fifth year students.

Table 6

Dimension 2: The role of the learner	Mean score
10. The role of the learner is like a hard drive.	3.2
11. The role of the learner is like a journalist.	3.9
12. The role of the learner is like a pendrive.	3.0
13. The role of the learner is like the echo of the teacher.	2.2
14. The role of the learner is like a railway car.	3.0
15. The role of the learner is like a sheep.	2.5
16. The role of the learner is like a detective.	3.7
17. The role of the learner is like a flower or plant.	3.9

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

Graph 6



5.2.2.1 Discussion. As can be observed, fifth year students present a high level of agreement with metaphor 11, *the learner is like a journalist*, with a mean score of 3.9, and metaphor 16, *the learner is like a detective*, with a mean score of 3.7. Even though both metaphors do not share the same score, they both portray the same notion of a learner as a questioner, that is to say, someone who has the responsibility of its own learning process by making all sorts of questions to the teacher. Interestingly, metaphor 17, *the learner is like a flower or a plant*, which makes reference to a compliant and docile learner, presents a mean score of 3.9, which is completely opposed to the previous metaphors with a high level of agreement. Therefore, fifth year students conceive of two different conceptions about the role of the learner:

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

on the one hand, one notion indicates that students are conscious and responsible for their own learning process, and on the other one, participants perceive the learner as a dependent person, and also as someone who does not possess much initiative.

Conversely, participants express a low level of agreement with metaphor 13, *the learner is like the echo of the teacher*, with a mean score of 2.2, which denotes that participants do not conceive the learner as a conformist student. Similarly, metaphor 15, *the learner is like a sheep*, obtained a low mean score of 2.5, which interestingly features the same notion of the metaphor with one of the highest scores regarding the compliant learner. According to the findings, one can infer that participants' conceptions may vary after their educational process in initial teacher education.

5.2.3 Didactic process. The didactic process is divided into two sub-dimensions: on the one hand, the environment of the classroom and on the other, the content. Thus, the data is presented separately for each.

5.2.3.1 The classroom environment. In this sub-dimension, students present a mid-level of agreement with metaphor 20, *the classroom is like travelling by Transantiago*, with a mean score of 3.3. Metaphor 21, *the classroom is like a cup of milk*, presents the lowest level of agreement with a mean score of 2.3.

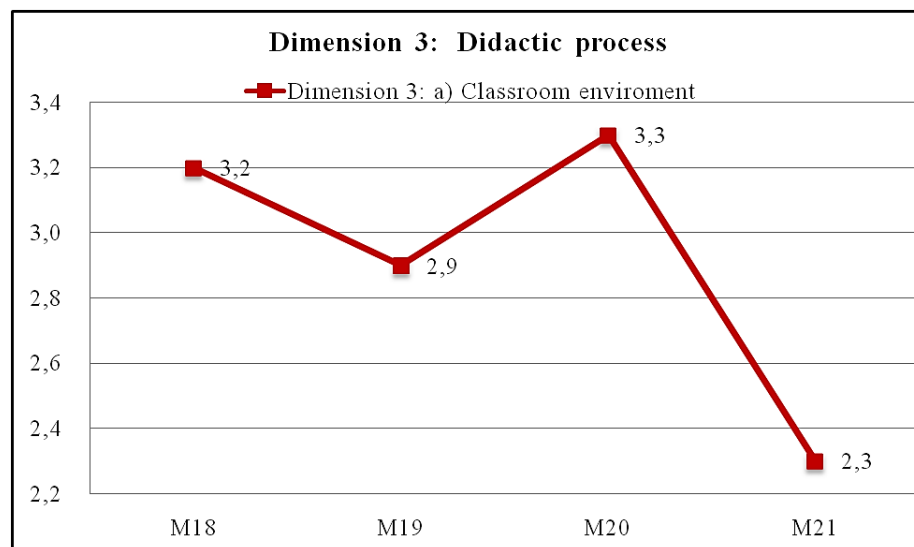
USING METAPHORS TO UNCOVER BELIEF SYSTEMS

Table and graph 7 present the mean scores of the results obtained from the data gathering process related to the environment of the classroom in fifth year students.

Table 7

Dimension 3: Didactic process	Mean score
a) Classroom environment	
18. The classroom is like a storm in the sea.	3.2
19. The classroom is like a polyphonic choir.	2.9
20. The classroom is like travelling by <i>Transantiago</i> .	3.3
21. The classroom is like a cup of milk.	2.3

Graph 7



USING METAPHORS TO UNCOVER BELIEF SYSTEMS

5.2.3.1.1 *Discussion.* As can be observed, metaphor 20, *the classroom is like travelling by Transantiago*, presents a mid-level type of agreement in relation to the other metaphors with a mean score of 3.3. This demonstrates that fifth year students do not have a clear conception of the classroom environment. On the contrary, metaphor 21, *the classroom is like a cup of milk*, obtained the lowest level of agreement with a mean score of 2.7. One can conclude, that students do not agree with the notion of a quiet and calm environment of the classroom.

As exposed earlier, one can speculate that fifth year students do not agree with the statements proposed, due to the fact that the classroom environment is different from day to day. In addition, metaphor 21, in which participants express a low level of agreement related to the classroom environment as a cup of milk, supports the previous idea, due to its low mean scores obtained in the results.

5.2.3.2 Pedagogical content. According to the results, all the metaphors presented receive scores right in the middle of the Likert scale, denoting neither strong agreement nor disagreement. On the one hand, students of fifth year present the highest level of agreement in metaphors 23 and 25, *teaching grammar is like a mathematics equation* and *teaching grammar is like giving CPR*, with a mean score of 3.4 each. On the other hand, students present the lowest level of agreement in metaphors 22, 24

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

and 26 that correspond to: *teaching vocabulary is like a kayak in a river*, *learning English pronunciation is like travelling to the moon* and *learning English pronunciation is like climbing the Everest*, with a mean score of 3.1 each.

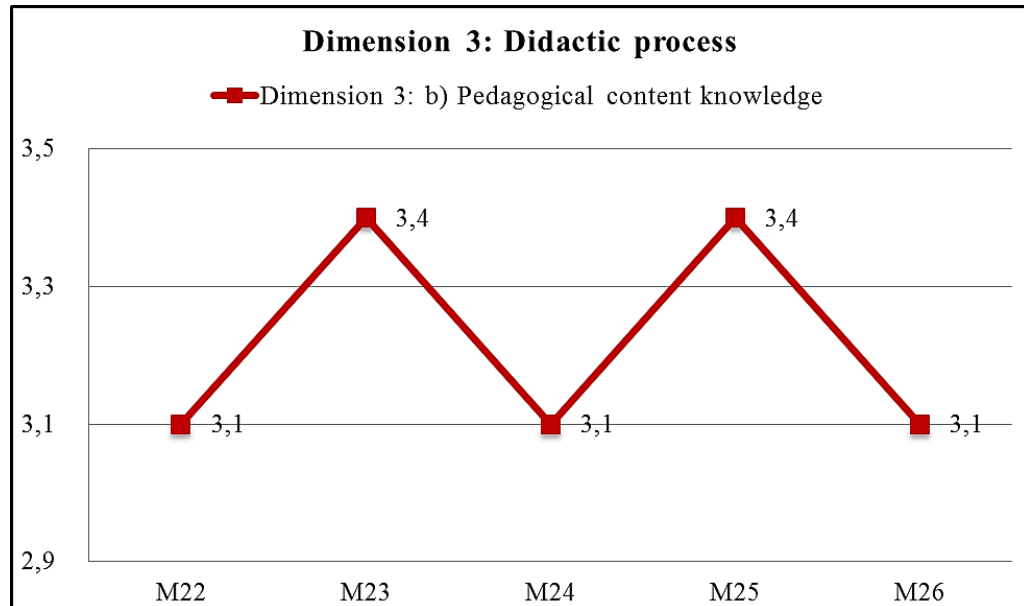
Table and Graph 8 present the mean scores of the data gathering process related to the content obtained from fifth year students.

Table 8

Dimension 3: Didactic process	Mean score
b) Pedagogical content knowledge	
22. Teaching vocabulary is like a kayak in the river.	3.1
23. Teaching grammar is like a mathematics equation.	3.4
24. Learning English pronunciation is like travelling to the moon.	3.1
25. Teaching grammar is like a giving CPR.	3.4
26. Learning English pronunciation is like climbing the Everest.	3.1

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

Graph 8



5.2.3.2.1 *Discussion.* In this sub-dimension, one can infer there are no scores presenting a high or low level of agreement. All the metaphors are middle of the road relating to the pedagogical content knowledge, with just a variation of 0.3 amongst the metaphors. According to the results, there are two metaphors that present a relatively high level of agreement of 3.4 within the mid-score of 3 points; these are metaphor 23, *teaching grammar is like a mathematics equation*, and metaphor 25, *teaching grammar is like giving CPR*. Both metaphors convey the same meaning of the grammar teaching process, in which people have to follow a set of structured steps to reach an

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

objective, in this case the grammar learning process. Additionally, there are three other metaphors that have obtained a low level of agreement of 3.1, respectively, within the mid-score of 3 points. Two out of three metaphors correspond to the English pronunciation learning, where metaphor 24, *learning English pronunciation is like travelling to the moon*, and metaphor 26, *learning English pronunciation is like climbing the Everest*, assume that learning English pronunciation is a long and difficult process that needs time, dedication and training.

Similarly, metaphor 22, *teaching vocabulary is like a kayak in the river*, presents a low level of agreement of 3.1, within the mid-score of 3 points. Nevertheless, it assumes teaching vocabulary process as a complex trip, which requires some sort of skills to achieve the main goal.

Consequently, one can conclude that fifth year students do not express a level of agreement with respect to the pedagogical content, namely, grammar, pronunciation and vocabulary. Thus, students do not agree with any of the metaphors, what is more, all the mean scores belong to the mid-level type of the Likert scale.

5.3 Research Question Three:

How different/ similar are those belief systems?

In this sub-section, the main aim is to briefly report on the results stemming from the comparison between the scores from both groups of participants, by dimension. Thus the first comparative analysis and presentation of results concerns the role of the teacher; the second discusses the results, from a comparative viewpoint, the role of the learner; lastly, the third section presents the comparative analysis around the didactic process.

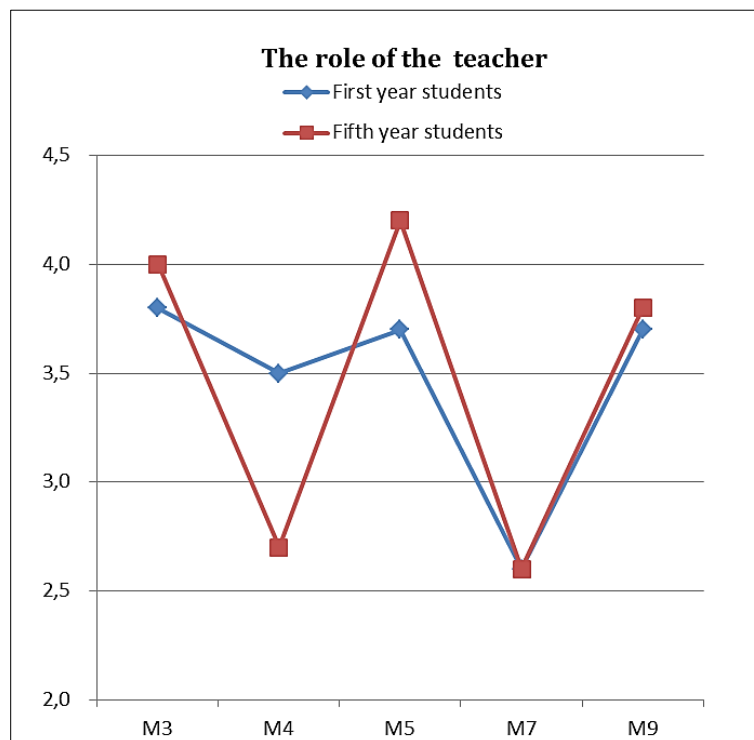
5.3.1 Role of the teacher. Table and Graph 9 presents the mean scores of the data gathering process, evidencing the differences/similarities related to the role of the teacher in first and fifth year students. It is important to mention that a range of 0,5 has been established as an indicator of difference amongst the metaphors.

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

Table 9

The role of the teacher Metaphor	First year students	Fifth year students
Similarities		
3. The teacher is like a farmer	3.8	4.0
7. The teacher is like a Google searcher	2.6	2.6
9. The teacher is like a torch	3.7	3.8
Differences		
4. The teacher is like a dictionary	3.5	2.7
5. The teacher is like a compass	3.7	4.2

Graph 9



USING METAPHORS TO UNCOVER BELIEF SYSTEMS

As can be observed in Table 9, first and fifth year students present similar conceptions related to the role of the teacher, where each cohort of students states a high level of agreement with metaphors which feature the teacher as a guide and as a cultivator. On the one hand, participants have a similar conceptualization of metaphor nine, *the teacher is like a torch*, which portrays the same perspective. On the other hand, participants express a similar level of accord with metaphor three, *the teacher is like a farmer*, which denotes the teacher as a cultivator. Similarly, but with a low level of agreement, participants express the same level of adherence to metaphor seven, *the teacher is like a Google searcher*, which implies that they do not consider the teacher as an instantaneous provider of information.

Interestingly, metaphor four, *the teacher is like a dictionary* and metaphor five, *the teacher is like a compass*, feature a consistent difference between first year students with a range of 0.9 and 0.5, respectively. Therefore, one can deduce that students' cognitions have been shaped over time.

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

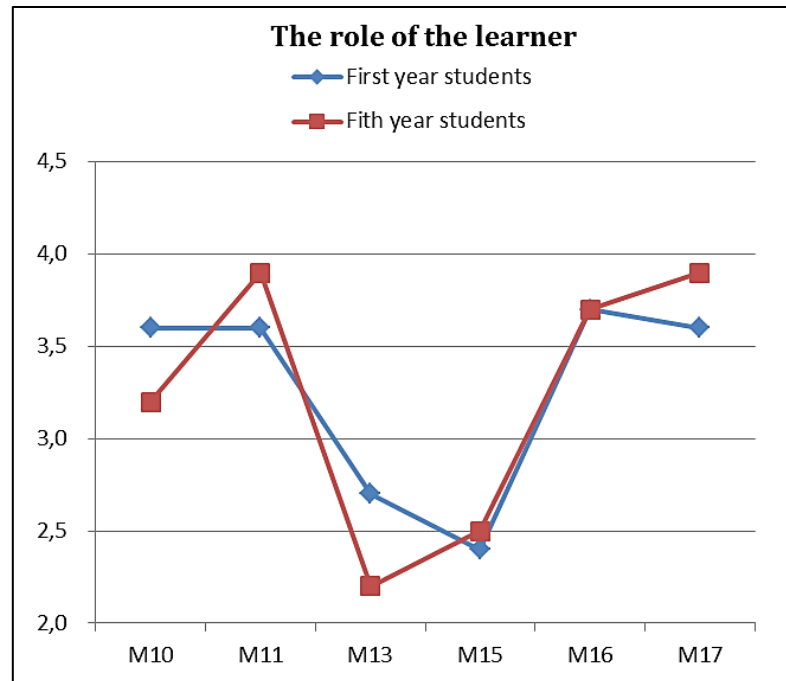
5.3.2 The role of the learner. Table and Graph 10 presents the mean scores of the data gathering process, evidencing the differences/similarities related to the role of the learner in first and fifth year students.

Table 10

The role the learner	First year students	Fifth year students
Similarities		
11. The learner is like a journalist	3.6	3.9
16. The learner is like a detective	3.7	3.7
17. The learner is like a flower or plant	3.6	3.9
14. The learner is like a sheep	2.4	2.5
10. The learner is like a hard drive	3.6	3.2
Differences		
13. The learner is like the echo of the teacher	2.7	2.2

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

Graph 10



As exposed earlier in Table and Graph 10, first and fifth year students present similar conceptions regarding to the role of the learner. The differences can be seen in metaphor 13, where fifth-year students present a lower mean for a teacher as the echo of the teacher; seemingly, one could speculate that the initial training process, together with their practical training in classrooms have made them aware of the multifaceted role of the teacher, placing much less stress on a dependent learner.

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

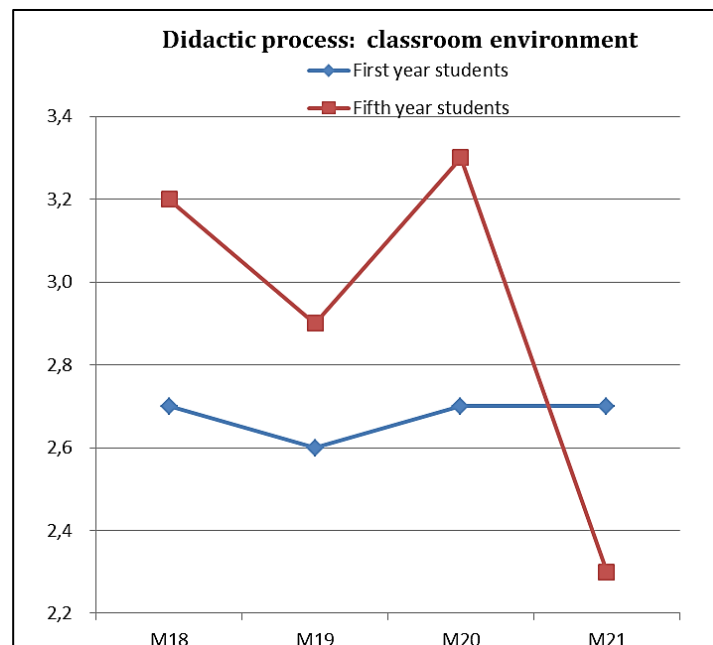
5.3.3 The classroom environment. Table and Graph 11 and 12 present the mean scores of the data gathering process, evidencing the similarities related to the didactic process, which is divided into classroom environment and Pedagogical content knowledge in first and fifth year students.

Table 11

a) Classroom environment	First year students	Fifth year students
Similarities		
19. The classroom is like a polyphonic choir	2.6	2.9
21. The classroom is like a cup of milk	2.7	2.3
Differences		
18. The classroom is like a storm in the sea	2.7	3.2
20. The classroom is like travelling by <i>Transantiago</i>	2.7	3.3

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

Graph 11



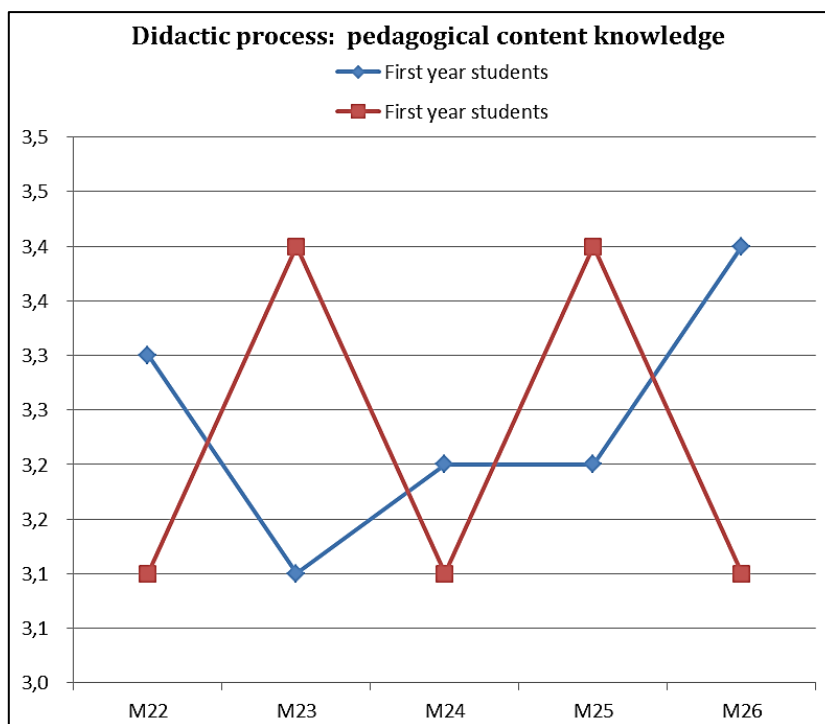
As can be observed in Table and Graph 11, first and fifth year students present similar conceptions on metaphors 19, *the classroom is like a polyphonic choir*, and metaphor 21, *the classroom is like a cup of milk*, where they do not agree with the metaphors exposed. And, on the one hand, the differences can be noted in metaphors 18 and 19, where fifth year students present a lower mean for a classroom environment as a storm in the sea and travelling by *Transantiago*. Thus, one can speculate that fifth year students do not consider the classroom as a quiet and calm place where all the students participate in the lessons, which may result from their experience in the professional practicum.

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

Table 12

b) Pedagogical content knowledge	First year students	Fifth year students
Similarities		
22. Teaching vocabulary is like a kayak in the river	3.3	3.1
23. Teaching grammar is like mathematics equation	3.1	3.4
24. Learning English pronunciation is like travelling to the moon	3.2	3.1
25. Teaching grammar is like giving CPR	3.2	3.4
26. Learning English pronunciation is like climbing the Everest	3.4	3.1

Graph 12



USING METAPHORS TO UNCOVER BELIEF SYSTEMS

As can be observed in Table and Graph 12, first and fifth year students present similar perceptions related to the pedagogical content knowledge. Where the mean scores of the metaphors are located in the middle of the scale and, consequently, there was not a consistent change of the student's cognitions over time.

Due to the fact that research question number 4 relates to a more analytical examination of the consistency of the belief system within each group, such analysis is included in the section final remarks below.

5.4 Final Remarks

The present study is an attempt to examine the teacher cognition field in the Chilean framework, which is focused on uncovering and identifying the belief systems regarding first and fifth year students of an English teaching education programme at a private university in Santiago by using metaphors. The information gathered was obtained by applying a questionnaire based on a set of metaphors related to three dimensions regarding to the learning-teaching process. These dimensions correspond to the role of the teacher, the role of the learner and, the didactic process.

Even though the findings obtained in the data gathering process reveal that the participants, from both levels, mainly express a similar level of agreement in relation with the metaphors suggested, there is still little variation amongst them. Thus, one can conclude that the students tend to

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

maintain their conceptions over time. This idea is supported by Borg, who states that there are core beliefs which are “the ones that are more stable in what we do” (Birello, 2012, p 90). In addition, there are some researches mentioned in the theoretical framework that support this idea, such as Cabaroglu; Calderhead; Deng; Holt-Reynolds; Joarm & Gabriele; Kagan; Marso & Plgge; amongst others (as cited in Chong, Won & Choong Lang, 2005). Moreover, the study of Karavas & Drowsou, also attests to the same idea. In relation to those metaphors which obtained a slight variation, one can say that these were shaped by the teacher education programme. This is supported by Borg, who states that there is a peripheral belief, which is less stable and amenable to change (Birello, 2012).

As a general view, one can conclude that first and fifth year students have some similar conceptions about the role of the teacher, considering him/her as a guide or cultivator, presenting only one dramatic difference where first year students consider the teacher as an instantaneous provider of information, and fifth year students disagree with that. According to the role of the learner, students present similar conceptions; there is just a difference in which first year students consider the learner as an information-storage person. As for the didactic process, first and fifth year students show similar results in terms of classroom environment and pedagogical content knowledge, presenting little variations where there is not a general

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

consensus. Thus, one can conclude that there is not a major change of students' cognitions over time, as stated by the authors above mentioned.

Consequently, teacher education must consider teacher cognition in their training programmes, because teacher cognition affects the process of teaching-learning directly, influencing teacher's decision making, their behaviours and performances in the classroom. Besides, the study of teacher's cognitions can absolutely contribute to the teaching and learning process, making changes and innovations in Education, helping as a base for the professional development in higher Education.

In conclusion, most students' cognitions are permanent over time, and become stronger after having been trained in a teacher education programme.

Finally, after analysing the results of the study, we would like to suggest some future investigations related to the field of teacher cognition, for instance, a longitudinal study in order to gather information regarding to beliefs system of a same group of students from first to fifth year over their educational process. In addition, an investigation focused on how the English professional practicum influences on students' beliefs. Lastly, a research focused on the influence of early practicum in students from an English teaching programme. All in all, in order to promote the development of teacher cognition in the Chilean Context.

References

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

Abeyasekera, S. (n.d.). *Quantitative analysis approaches to qualitative data:*

why, when and how. Retrieved October 3, 2013, from University of

Reading:

[http://www.reading.ac.uk/ssc/n/resources/Docs/Quantitative_analysis_](http://www.reading.ac.uk/ssc/n/resources/Docs/Quantitative_analysis_approaches_to_qualitative_data.pdf)

[approaches_to_qualitative_data.pdf](http://www.reading.ac.uk/ssc/n/resources/Docs/Quantitative_analysis_approaches_to_qualitative_data.pdf)

Arancibia, B., Díaz, C., & Tapia, M. (2011). *Enseñanza y aprendizaje del inglés como lengua extranjera. Aproximaciones desde la investigación.*

Santiago, Chile: Masters Ril.

Archivo Nacional. (n.d.). *Creación del instituto pedagógico.* Retrieved

September 02, 2013, from Archivo Nacional:

[http://www.archivonacional.cl/Vistas_Publicas/publicContenido/conteni](http://www.archivonacional.cl/Vistas_Publicas/publicContenido/contenidoPublicDetalle.aspx?folio=7187&pagina=1)

[doPublicDetalle.aspx?folio=7187&pagina=1](http://www.archivonacional.cl/Vistas_Publicas/publicContenido/contenidoPublicDetalle.aspx?folio=7187&pagina=1)

Arora, G. (2002). *Teachers and their teaching.* Delhi: Ravi Books.

Ávalos, B. (2004, August). *La formación docente inicial en Chile.* Retrieved

August 28, 2013, from Unap:

<http://www.unap.cl/~jsalgado/subir/formaciondocentechile.pdf>

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

- Ávalos, B. (2009). *Políticas para una mejor profesion docente*. Retrieved September 4, 2013, from Centro de Investigación Avanzada en Educación:
http://www.ciae.uchile.cl/documentos/presentacion_seminarios_ciae_unicef_2009/Avalos%20-%20Formacion%20Inicial%20Docente%2005.10.09.pdf
- Barnard, R., & Burns, A. (2012). *Researching languages teacher cognition and practice*. Bristol: Viv Edwards.
- Belief. (2013). In *Oxford Dictionaries*. Retrieved October 10, 2013, from <http://www.oxforddictionaries.com/es/definicion/ingles/belief>
- Birello, M. (2012). Teacher cognition and language teacher education: beliefs and practice. A conversation with Simon Borg. *Bellaterra Journal of Teaching & Learning Language & Literature*, 5 (2), 88-94.
- Bitar, S. (2011). Formación docente en Chile. *Preal* (57), 1-18.
- Borg, S. (2003). Teacher cognition in language teaching: A review of research on what language teachers think, know, believe and do. *Language teaching*, 36 (2), 81-109.
- Borg, S. (2006). *Teacher cognition and language education: research and practice*. London: Continuum.

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

Borg, S. (2009). *Introducing language teacher cognition*. Retrieved August 23, 2013, from University of Leeds. Faculty of education, social sciences and law:

<http://www.education.leeds.ac.uk/assets/files/staff/borg/Introducing-language-teacher-cognition.pdf>

Borg, S. (2011). The impact of in-service teacher education on language. *System*, 39 (3), 370-380.

British Council (2012). La formación de docentes de inglés en Chile: el desafío de la calidad y la pertinencia ¿Qué aspectos deben ser cautelados? Registro de Seminario, Santiago-Chile. Retrieved from http://www.britishcouncil.cl/files/2013/01/publicación_seminario_formacion_docente_2012.pdf

Chilevisión & Fundación Futuro. (2008, June 24). *Escuela normal de preceptores*. Retrieved August 29, 2013, from <http://www.educarchile.cl/ech/pro/app/detalle?ID=185381>

Chong, S., Wong, I., & Choon Lang, Q. (2005). *Pre-service teachers' beliefs, attitudes and expectations: a review of the literature*. Retrieved October 7, 2013, from <http://conference.nie.edu.sg/paper/covert/ab00613.pdf>

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

- Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education*. London; New York: Routledge.
- Díaz, C., & Solar, M. I. (2009). Los procesos de cognición como herramienta de conocimiento de la cultura docente. *Theoria*, 18 (2), 43-54.
- Docile. (2009). In *Merriam-Webster's online dictionary*. Retrieved October 28, 2013, from docile: <http://www.merriam-webster.com/word/word.php?date=Nov-09-2009>
- Driscoll, D. L. (2011). Introduction to primary research: observations, surveys and interviews. In C. Lowe, & P. Zemliansky (Eds.), *Writing Spaces: Readings on Writing* (pp. 153-170). Anderson: Parlor Press.
- Eren, A., & Tekinarslan, E. (2013). Prospective teachers' metaphors: teacher, teaching, learning, instructional material and evaluation concepts. *International Journal of Social Sciences and Education*, 3 (2), 435-445.
- Evaluación Inicia. (n.d.). *Evaluación Inicia*. Retrieved September 16, 2013, from http://www.evaluacioninicia.cl/index2.php?id_seccion=4245&id_portal=79&id_contenido=20559

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

Fox-Turnbull, W. (2009). Stimulated recall using autophotography - a method for investigating technology education. In P. P.-2. Conference, *Strengthening the Position of Technology Education* (pp. 204 - 217). Christchurch.

Furlong, J., Barton, L., Miles, S., Whiting, C., & Whitty, G. (2000). *Teacher education in transition. Reforming professionalism?* Buckingham: Open University Press.

García, M. R., & Sebastián, C. (2011). Creencias epistemológicas de estudiantes de pedagogía en educación parvularia, básica y media: ¿Diferencias en la formación inicial docente?. *Psykhé*, 20 (1), 29-43.

Gillis, C., & Johnson, C. (2002). Metaphor as renewal: re-imagining our professional selves. *English Journal*, 91 (6), 37-43.

Han, X., & Song, L. (2011). Teacher cognition of the intercultural communicative competence in the Chinese ELT context. *Intercultural communication studies XX* (1), 175-192.

Harmer, J. (2001). *The practice of English Language learning*. Essex, England: Longman.

Harvard Family Research Project's series (2004). *Detangling data collection: methods for gathering data*. Cambridge: Harvard School of Education.

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

- Hernández, R., Fernández, C., & Baptista, P. (2010). *Metodología de la Investigación*. México D.F: McGraw-Hil
- Ingvarson, L., Schwille, J., Tatto, M. T., Rowley, G., Peck, R., & Senk, S. L. (2013). *An analisis of teacher education context, structure, and quality-assurance arrangement in TEDS-M countries*. Amsterdam: IEA.
- Karavas, E., & Drossou, M. (2010). How amenable are student teacher beliefs to change? A study of EFL student teacher beliefs before and after teaching practice. Retrieved from <http://www.enl.auth.gr/gala/14th/Papers/English%20papers/Karavas&Drossou.pdf>
- Khan, J. (2008). *Research Methodology*. New Delhi: APH Publishing Corporation.
- Kuzborska, I. (2011). Links between teachers' beliefs and practices and research on reading. *Reading in a Foreign Language*, 23 (1), 102-128.
- Lakoff, G. (1992). The contemporary theory of metaphor. In A. Ortony (Ed.), *Metaphor and Thought* (pp. 202-251). Cambridge: Cambridge University Pres.
- Manzo, L. (2011). Algunos aspectos a evaluar sobre la evaluación docente. *Revista docencia*, 43, 86-88.

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

Marco para la Buena Enseñanza. (2008). Retrieved November 09, 2013,
from Docente Más: <http://www.docentemas.cl/docs/MBE2008.pdf>

McClure, R. D. (2002, September). *Common data collection strategies effective in qualitative studies using action research in technical/operational training programs* . Retrieved September 30, 2013, from Evoke Development:
<http://evokedevelopment.com/uploads/blog/commonData.pdf>

Metaphor. (n.d). In *Cambridge Dictionaries Online*. Retrieved September 24, 2013, from Cambridge Dictionaries Online:
<http://dictionary.cambridge.org/dictionary/british/metaphor?q=metaphor>

Mineduc. (2013, April 24). *Ministerio de Educación*. Retrieved September 03, 2013, from Mineduc:
http://www.mineduc.cl/index2.php?id_contenido=23589&id_seccion=10&id_portal=1

Ministerio de Economía, Fomento y Turismo. (2013). *Pingüinos sin frontera*. Retrieved September 04, 2013, from Ministerio de Economía, Fomento y Turismo: <http://www.economia.gob.cl/pinguinos-sin-fronteras/>

Nagamine, T. (2012). A metaphor analysis of preservice EFL teachers' beliefs. *Asian EFL Journal*, 14 (2), 141-171.

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

- Nikitina, L., & Furuoka, F. (2008). Measuring metaphors: A factor analysis of students' conceptions of language teachers. *Metaphor.De* (15), 161-180.
- Núñez, I. (2010). Las escuelas normales: una historia de fortalezas y debilidades 1842-1973. *Revista Docencia*, 40, 32-39.
- Oolbekkink-Marchand, H.W., Van Driel, J., Verloop, N. (2006). Secondary and university Teachers' perspectives on self-regulated learning. In F. Oser, F. Achtenhagen, & U. Renold (Eds.), *Competence Oriented teacher training: old research demands and new pathways* (pp. 219-236). Rotterdam: Sense Publishers.
- Pajares, F. (1992). Teachers' beliefs and educational research: cleaning up a messy construct. *American Educational Research Association*, 62 (3), 307-332.
- Raths, J., & McAninch, A. C. (Eds.). (2003). *Teacher beliefs and classroom performance: the impact of teacher education*. Greenwich: IAP.
- Richards, J. C., & Nunan, D. (1990). *Second language teacher education*. Cambridge: Cambridge University Press.
- Role. (2013). In *Oxford Dictionaries*. Retrieved November 15, 2013, from <http://www.oxforddictionaries.com/definition/english/role?q=role>

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

- Roles of teachers and learners. (n.d.). Retrieved November 09, 2013, from Delta publishing: http://www.deltapublishing.co.uk/content/pdf/learning-to-teach-english/LTE_p07_19.pdf
- Saban, A., Kocbeker, B. N., & Saban, A. (2006). An investigation of the concept of teacher among prospective teachers through metaphor analysis. *Educational Sciences: Theory & Practice*, 6 (2), 509-522.
- Sanchez, H. S. (2007). Book review: teacher cognition and language education: research and practice by Simon Borg. *English Language Teacher Education and Development*, 10, 69-71.
- Tatto, M. T. (1998). The influence of teacher education on teachers' beliefs about purposes of education, roles, and practice. *Journal of teacher education*, 49 (1), 66-78.
- Teacher Leadership Exploratory Consortium. (2009). *Teacher leader model standards*. Retrieved September 12, 2013, from http://www.teacherleaderstandards.org/downloads/TLS_Brochure.pdf
- Vilar, E. (n.d.). *Roles of teachers a case study based on: diary of a language teacher (Joachim Appel 1995)* . Retrieved November 09, 2013, from Universitat Jaume I: <http://www.uji.es/bin/publ/edicions/jfi6/teachers.pdf>

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

- Wan, W., Low, G. D., & Li, M. (2011). From students' and teachers' perspectives: metaphor analysis of beliefs about EFL teachers' role. *System*, *XX*, 1-13.
- Yesilbursa, A. (n.d.). Language teaching beliefs, problems and solutions: reflecting and growing together. *Proceedings of the 10th METU ELT Convention*, (pp. 1-12).
- Zheng, H. (2009). A review of research on EFL pre-service teachers' beliefs and practices. *Journal of Cambridge Studies*, *4* (1), 73-81.
- Zheng, H.-b., & Song, W.-j. (2010). Metaphor analysis in the educational discourse: A critical review. *US-China Foreign Language*, *8* (9), 42-49.

Appendices

Appendix IYear of study: **Questionnaire**

The present questionnaire is a data gathering instrument which corresponds to the research framework, which is, an important requirement for the completion of the bachelor's degree by a group of students, who are doing their last semester of their programme, English teaching. The aim of the study is to uncover the belief systems of certain students of the English teaching programme at this university in relation with three different dimensions that are proposed: the role of the teacher, the role of the student and, finally, the didactic process, in other words, how to teach and how to learn

The information gathered will be exclusively used for research purposes, that is to say, it guarantees confidentiality in relation with treatment of the gathered information. Additionally, we make sure that the results of this study do not have any impact on their academic work.

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

Coming up and in relation to what has been exposed earlier, you are welcome to answer the following questionnaire carefully and honestly. The following questionnaire contains all sorts of metaphors in relation with the three domains mentioned earlier.

Instructions:

Express your level of agreement or disagreement in relation with the metaphors below:

1: Totally disagree

2: Disagree

3: Neither agree nor disagree

4: Agree

5 Totally agree

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

Make an "X" in the corresponding boxes below.

1) Dimension 1: The teacher

	1	2	3	4	5
A. The teacher is like a map					
B. The teacher is like an encyclopaedia					
C. The teacher is like a farmer					
D. The teacher is like a dictionary					
E. The teacher is like a compass					
F. The teacher is like a mother/father					
G. The teacher is like a Google searcher					
H. The teacher is like a gardener					
I. The teacher is like a torch					

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

2) Dimension 2: The student

	1	2	3	4	5
A. The student of English is like a hard drive					
B. The student of English is like a journalist					
C. The student of English is like a pendrive					
D. The student of English is like the echo of the teacher					
E. The student of English is like a railway car					
F. The student of English is like a sheep					
G. The student of English is like a detective					
H. The student of English is like a flower or plant					

3) Dimension 3: Didactic Process (how to teach and how to learn)

a) The classroom environment:

	1	2	3	4	5
A. The classroom is like a storm in the sea					
B. The classroom is like a polyphonic choir					
C. The classroom is like travelling in <i>Transantiago</i>					
D. The classroom is like a cup of milk					

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

b) Pedagogical Content Knowledge:

	1	2	3	4	5
A. Teaching vocabulary is like a kayak in the river					
B. Teaching grammar is like a math equation					
C. Learning English pronunciation is like travelling to the moon					
D. Teaching grammar is like giving CPR					
E. Learning English pronunciation is like climbing the Everest					

Appendix II



UNIVERSIDAD CATÓLICA
SILVA HENRÍQUEZ

Folio:

1

1er Año

Cuestionario

El presente cuestionario es un instrumento de recogida de datos que se encuentra dentro del marco de una investigación conducente a la obtención del grado de licenciado por parte de un grupo de estudiantes que están cursando el último semestre de la carrera profesional de pedagogía en inglés. El propósito del estudio es saber el tipo de creencias que tienen los estudiantes de la misma carrera acerca de tres dimensiones distintas las cuales son: el rol del profesor, el rol del estudiante y finalmente el proceso didáctico, es decir, cómo se aprende y cómo se enseña.

La información recogida será utilizada estrictamente para el propósito investigativo, por lo tanto, se garantiza confidencialidad en el tratamiento de la información. Adicionalmente se les asegura que los resultados del estudio no tienen ningún impacto dentro en su desempeño académico.

A continuación y ante lo expuesto previamente, se le invita a responder desde una postura muy honesta el siguiente cuestionario que contiene metáforas respecto a los tres dominios mencionados con anterioridad.

Instrucciones:

Expresar su grado de acuerdo o desacuerdo respecto de las siguientes afirmaciones según la siguiente codificación:

- 1: Totalmente en desacuerdo
- 2: En desacuerdo
- 3: Ni en desacuerdo ni de acuerdo

USING METAPHORS TO UNCOVER BELIEF SYSTEMS



UNIVERSIDAD CATÓLICA
SILVA HENRÍQUEZ

4: De acuerdo

5: Totalmente de acuerdo

Marque con una cruz en el espacio correspondiente a su respuesta.

1) Dimensión 1: El/La profesor (a)

	1 Totalmente en desacuerdo	2 En desacuerdo	3 Ni en desacuerdo ni de acuerdo	4 De acuerdo	5 Totalmente de acuerdo
1. El rol del profesor de inglés dentro de la sala de clases es como el de un mapa			X		
2. El rol del profesor de inglés dentro de la sala de clases es como el de una enciclopedia		X			
3. El rol del profesor de inglés dentro de la sala de clase es como el de un agricultor					X
4. El rol del profesor de inglés dentro de la sala de clases es como el de un diccionario		X			
5. El rol del profesor de inglés dentro de la sala de clases es como el de una brújula				X	
6. El rol del profesor de inglés dentro de la sala de clases es como el de una madre o padre				X	
7. El rol del profesor de inglés dentro de la sala de clases es como el del buscador Google			X		
8. El rol del profesor de inglés dentro de la sala de clases es como el de un jardinero				X	
9. El rol del profesor de inglés dentro de la sala de clases es como el de una linterna				X	

USING METAPHORS TO UNCOVER BELIEF SYSTEMS



UNIVERSIDAD CATÓLICA
SILVA HENRÍQUEZ

2) Dimensión 2: El/ La estudiante

	1 Totalmente en desacuerdo	2 En desacuerdo	3 Ni en desacuerdo ni de acuerdo	4 De acuerdo	5 Totalmente de acuerdo
10. El estudiante de inglés es como un disco duro		X			
11. El estudiante de inglés es como un periodista				X	
12. El estudiante de inglés es como un pendrive		X			
13. El estudiante de inglés es como el eco del profesor	X				
14. El estudiante de inglés es como un vagón de un tren			X		
15. El estudiante de inglés es como una oveja	X				
16. El estudiante de inglés es como un detective				X	
17. El estudiante de inglés es como una flor o planta				X	

USING METAPHORS TO UNCOVER BELIEF SYSTEMS



UNIVERSIDAD CATÓLICA
SILVA HENRÍQUEZ

3) Dimensión 3: Procesos didácticos (cómo se enseña, cómo se aprende)

i) Ambiente de la sala de clase:

	1 Totalmente en desacuerdo	2 En desacuerdo	3 Ni en desacuerdo ni de acuerdo	4 De acuerdo	5 Totalmente de acuerdo
18. La sala de clases es como una tormenta en el mar			X		
19. La sala de clases es como un coro polifónico		X			
20. La sala de clases es como un viaje en transantiago/bus		X			
21. La sala de clases es como una taza de leche			X		

ii) Contenido y conocimiento pedagógico del contenido:

	1 Totalmente en desacuerdo	2 En desacuerdo	3 Ni en desacuerdo ni de acuerdo	4 De acuerdo	5 Totalmente de acuerdo
22. La enseñanza del vocabulario es como un kayak en el río			X		
23. La enseñanza de la gramática es como una ecuación matemática		X			
24. Aprender la pronunciación de inglés es como un viaje a la luna		X			
25. La enseñanza de la gramática es como dar primeros auxilios				X	
26. Aprender la pronunciación del inglés es como subir el Everest		X			

Appendix III



UNIVERSIDAD CATÓLICA
SILVA HENRÍQUEZ

Folio:

1

5^{to} Año

Cuestionario

El presente cuestionario es un instrumento de recogida de datos que se encuentra dentro del marco de una investigación conducente a la obtención del grado de licenciado por parte de un grupo de estudiantes que están cursando el último semestre de la carrera profesional de pedagogía en inglés. El propósito del estudio es saber el tipo de creencias que tienen los estudiantes de la misma carrera acerca de tres dimensiones distintas las cuales son: el rol del profesor, el rol del estudiante y finalmente el proceso didáctico, es decir, cómo se aprende y cómo se enseña.

La información recogida será utilizada estrictamente para el propósito investigativo, por lo tanto, se garantiza confidencialidad en el tratamiento de la información. Adicionalmente se les asegura que los resultados del estudio no tienen ningún impacto dentro en su desempeño académico.

A continuación y ante lo expuesto previamente, se le invita a responder desde una postura muy honesta el siguiente cuestionario que contiene metáforas respecto a los tres dominios mencionados con anterioridad.

Instrucciones:

Expresé su grado de acuerdo o desacuerdo respecto de las siguientes afirmaciones según la siguiente codificación:

1: Totalmente en desacuerdo

2: En desacuerdo

3: Ni en desacuerdo ni de acuerdo

USING METAPHORS TO UNCOVER BELIEF SYSTEMS



UNIVERSIDAD CATÓLICA
SILVA HENRÍQUEZ

4: De acuerdo

5: Totalmente de acuerdo

Marque con una cruz en el espacio correspondiente a su respuesta.

1) Dimensión 1: El/La profesor (a)

	1 Totalmente en desacuerdo	2 En desacuerdo	3 Ni en desacuerdo ni de acuerdo	4 De acuerdo	5 Totalmente de acuerdo
1. El rol del profesor de inglés dentro de la sala de clases es como el de un mapa			X		
2. El rol del profesor de inglés dentro de la sala de clases es como el de una enciclopedia			X		
3. El rol del profesor de inglés dentro de la sala de clase es como el de un agricultor		X			
4. El rol del profesor de inglés dentro de la sala de clases es como el de un diccionario		X			
5. El rol del profesor de inglés dentro de la sala de clases es como el de una brújula				X	
6. El rol del profesor de inglés dentro de la sala de clases es como el de una madre o padre				X	
7. El rol del profesor de inglés dentro de la sala de clases es como el del buscador Google	X				
8. El rol del profesor de inglés dentro de la sala de clases es como el de un jardinero	X				
9. El rol del profesor de inglés dentro de la sala de clases es como el de una linterna				X	

USING METAPHORS TO UNCOVER BELIEF SYSTEMS

UNIVERSIDAD CATÓLICA
SILVA HENRÍQUEZ

2) Dimensión 2: El/ La estudiante

	1 Totalmente en desacuerdo	2 En desacuerdo	3 Ni en desacuerdo ni de acuerdo	4 De acuerdo	5 Totalmente de acuerdo
10. El estudiante de inglés es como un disco duro			X		
11. El estudiante de inglés es como un periodista		X			
12. El estudiante de inglés es como un pendrive				X	
13. El estudiante de inglés es como el eco del profesor		X			
14. El estudiante de inglés es como un vagón de un tren		X			
15. El estudiante de inglés es como una oveja		X			
16. El estudiante de inglés es como un detective		X			
17. El estudiante de inglés es como una flor o planta				X	

USING METAPHORS TO UNCOVER BELIEF SYSTEMS



UNIVERSIDAD CATÓLICA
SILVA HENRÍQUEZ

3) Dimensión 3: Procesos didácticos (cómo se enseña, cómo se aprende)

i) Ambiente de la sala de clase:

	1 Totalmente en desacuerdo	2 En desacuerdo	3 Ni en desacuerdo ni de acuerdo	4 De acuerdo	5 Totalmente de acuerdo
18. La sala de clases es como una tormenta en el mar			X		
19. La sala de clases es como un coro polifónico				X	
20. La sala de clases es como un viaje en transantiago/bus				X	
21. La sala de clases es como una taza de leche	X				

ii) Contenido y conocimiento pedagógico del contenido:

	1 Totalmente en desacuerdo	2 En desacuerdo	3 Ni en desacuerdo ni de acuerdo	4 De acuerdo	5 Totalmente de acuerdo
22. La enseñanza del vocabulario es como un kayak en el río	X				
23. La enseñanza de la gramática es como una ecuación matemática	X				
24. Aprender la pronunciación de inglés es como un viaje a la luna	X				
25. La enseñanza de la gramática es como dar primeros auxilios				X	
26. Aprender la pronunciación del inglés es como subir el Everest			X		

Appendix IV

First year students		P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16	P17	P18	P19	P20	P21	P22	P23	Mean score	
1) Dimension 1: The role of the teacher																										
1	The teacher is like a map	3	4	3	4	3	4	3	4	3	3	3	3	3	3	5	4	4	3	3	1	5	2	4	3.4	
2	The teacher is like an encyclopedia	2	4	2	3	3	4	4	5	3	4	4	4	4	5	5	4	3	4	3	1	5	2	3	3.6	
3	The teacher is like a farmer	5	4	4	4	3	4	5	4	4	2	4	4	3	4	4	3	4	4	4	4	4	4	5	3.8	
4	The teacher is like a dictionary	2	3	4	3	4	5	4	4	4	4	3	5	4	4	4	3	3	4	4	2	1	2	4	3.5	
5	The teacher is like a compass	4	4	4	4	2	4	4	3	4	3	4	4	5	5	5	4	4	2	4	2	4	3	4	3.7	
6	The teacher is like a mother or father	4	5	4	2	4	4	3	3	3	4	2	2	4	4	4	5	1	5	3	3	1	3	4	3.3	
7	The teacher is like a Google searcher	3	3	3	2	1	3	4	2	2	3	3	2	5	4	3	3	1	1	3	2	1	4	2	2.6	
8	The teacher is like a gardener	4	4	4	3	1	3	5	3	2	2	1	4	4	3	3	4	3	3	3	4	4	4	4	3.3	
9	The teacher is like a torch	4	4	3	5	5	3	4	5	4	2	4	3	3	3	3	4	3	2	4	4	5	4	4	3.7	
2) Dimension 2: The role of the learner																										
10	The learner is like a hard drive	2	4	2	3	4	4	5	3	4	3	3	4	4	5	5	3	2	4	4	4	3	4	4	3	3.6
11	The learner is like a journalist	4	4	4	2	4	4	4	4	4	3	1	4	5	4	4	3	3	3	3	3	5	4	3	3	3.6
12	The learner is like a pendrive	2	3	2	4	3	4	4	3	2	3	2	3	5	4	4	3	2	4	4	3	4	3	2	3.2	
13	The learner is like the echo of a teacher	1	4	3	4	1	3	3	3	3	3	2	2	5	2	2	4	2	1	4	3	4	2	1	2.7	
14	The learner is like a railway car	3	3	4	5	1	3	3	4	3	2	2	3	3	3	3	3	3	1	2	4	4	2	2	2	2.9
15	The learner is like a sheep	1	2	3	1	1	3	3	2	2	2	4	3	3	3	3	4	3	3	2	3	1	2	2	2	2.4
16	The learner is like a detective	4	4	4	3	4	4	5	4	4	2	3	4	5	4	4	4	3	4	2	3	4	4	3	3	3.7
17	The learner is like a flower or plant	4	4	4	4	4	3	5	3	2	2	5	4	1	5	4	4	4	3	2	4	4	4	3	3	3.6
3) Dimension 3: Didactic process																										
a) Classroom environment																										
18	The classroom is like storm in the sea	3	4	4	3	1	3	3	1	2	3	1	3	1	2	2	5	3	2	3	4	2	2	4	4	2.7
19	The classroom is like polyphonic chorus	2	3	4	2	1	2	2	4	3	3	1	3	1	3	3	3	3	1	2	4	4	4	2	4	2.6
20	The classroom is like travelling by Transantiago	2	4	3	4	1	2	3	2	3	5	4	3	3	2	2	3	2	1	1	3	2	2	4	2	2.7
21	The classroom is like a cup of milk	3	3	2	3	2	2	3	5	2	3	3	4	5	3	3	3	3	1	1	2	2	2	2	2	2.7
b) Pedagogical content knowledge																										
22	Teaching vocabulary is like a kayak in the river	3	2	2	4	5	3	3	3	4	3	1	4	5	4	4	3	3	4	3	2	4	4	4	4	3.3
23	Teaching grammar is like a mathematical equation	2	3	2	5	5	2	5	1	5	3	1	2	2	4	4	4	4	5	1	1	2	4	4	4	3.1
24	Learning English pronunciation is like travelling to the moon	2	4	2	2	5	4	3	2	3	3	1	4	4	5	4	4	2	2	4	4	4	2	4	3	3.2
25	Teaching grammar is like giving CPR	4	2	3	5	5	3	2	4	4	3	4	2	3	3	3	3	4	2	3	2	2	4	3	3	3.2
26	Learning English pronunciation is like climbing the Everest	2	2	3	1	5	3	5	4	3	5	5	5	4	4	4	3	4	1	3	3	5	1	4	4	3.4

Appendix V

Fifth year students		P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16	P17	P18	P19	P20	P21	P22	P23	Mean score	
1) Dimension 1: The role of the teacher																										
1	The teacher is like a map	3	3	2	4	3	3	4	5	5	5	5	5	4	2	3	3	4	3	1	3	5	4	4	3.6	
2	The teacher is like an encyclopedia	3	4	5	3	3	2	2	4	4	2	5	5	2	4	4	4	4	5	1	3	4	5	2	3.3	
3	The teacher is like a farmer	2	4	4	4	4	4	4	4	4	4	4	4	5	5	5	3	4	4	1	4	5	5	4	4.0	
4	The teacher is like a dictionary	2	2	2	3	2	2	2	2	2	2	3	3	1	1	4	3	5	1	3	3	5	3	4	2.7	
5	The teacher is like a compass	4	4	5	4	5	4	4	4	1	4	5	4	4	4	5	4	5	4	2	4	5	5	5	4.2	
6	The teacher is like a mother or father	4	1	1	4	4	2	3	4	3	4	3	1	3	4	3	2	5	3	4	2	4	3	2	3.0	
7	The teacher is like a Google searcher	1	5	4	3	1	4	2	2	1	1	2	2	2	3	4	2	5	1	3	2	4	3	2	2.6	
8	The teacher is like a gardener	1	4	2	4	5	4	4	4	4	1	4	4	5	5	5	2	4	2	1	3	4	4	3	3.4	
9	The teacher is like a torch	4	3	1	3	5	1	4	4	4	5	4	5	5	5	4	2	5	4	1	4	4	5	4	3.8	
2) Dimension 2: The role of the learner																										
10	The learner is like a hard drive	3	4	2	3	4	5	2	1	3	4	4	4	2	4	3	2	4	1	5	2	5	5	3	3.2	
11	The learner is like a journalist	2	4	5	4	5	2	4	4	5	4	5	5	4	5	4	3	5	4	2	2	4	4	4	3.9	
12	The learner is like a pendive	4	4	2	3	4	4	2	1	3	3	4	2	2	3	3	2	4	1	5	2	4	5	2	3.0	
13	The learner is like the echo of a teacher	2	5	1	3	1	2	2	1	2	1	4	3	1	1	1	1	5	1	2	1	4	5	2	2.2	
14	The learner is like a rally car	2	2	1	3	3	3	4	3	1	3	3	3	4	5	2	1	4	3	1	3	5	4	5	3.0	
15	The learner is like a sheep	2	3	1	4	3	1	4	4	2	1	4	3	1	3	2	1	3	1	1	3	5	4	2	2.5	
16	The learner is like a detective	2	4	4	3	4	2	4	4	5	5	4	5	3	4	4	1	4	4	2	4	4	4	5	3.7	
17	The learner is like a flower or plant	4	5	5	4	3	5	4	4	4	4	4	4	4	5	5	4	3	5	4	1	2	4	5	3.9	
3) Dimension 3: Didactic process																										
a) Classroom environment																										
18	The classroom is like a storm in the sea	3	5	5	3	1	3	4	3	4	4	2	2	2	2	3	3	3	5	1	5	3	4	3	3	3.2
19	The classroom is like polyphonic chorus	4	4	1	2	3	2	2	3	2	3	3	2	4	4	4	2	4	4	4	4	2	5	1	1	2.9
20	The classroom is like travelling by Transantiago	4	5	1	2	1	4	4	4	4	5	3	5	1	2	5	4	4	3	2	4	4	3	1	3.3	
21	The classroom is like a cup of milk	1	1	1	3	1	1	3	3	1	1	4	2	2	2	3	4	3	3	1	1	2	5	4	2.3	
b) Pedagogical content knowledge																										
22	Teaching vocabulary is like a kayak in the river	1	4	4	3	1	1	3	4	3	4	4	5	4	3	4	3	4	1	2	3	4	3	3	3.1	
23	Teaching grammar is like a mathematical equation	1	5	1	3	4	5	2	3	2	2	3	3	2	3	4	4	4	5	3	5	4	4	5	4	3.4
24	Learning English pronunciation is like travelling to the moon	1	2	1	4	1	5	4	4	3	5	3	3	2	2	4	3	4	5	2	4	3	4	2	3.1	
25	Teaching grammar is like giving CPR	4	5	4	3	1	3	4	3	2	5	4	4	4	2	5	2	5	1	1	4	4	5	3	3.4	
26	Learning English pronunciation is like climbing the Everest	3	3	1	4	3	5	2	4	1	5	3	4	4	2	5	3	4	1	1	2	4	5	2	3.1	

USING METAPHORS TO UNCOVER BELIEF SYSTEMS