UNIVERSIDAD DE CONCEPCIÓN FACULTAD DE EDUCACIÓN PEDAGOGÍA EN INGLÉS



"THE ROLE OF CRITICAL THINKING IN THE TEACHING OF ENGLISH IN A SECOND YEAR OF HIGH SCHOOL CLASS IN CHILE"

TESIS PARA OPTAR AL GRADO DE LICENCIADO EN EDUCACIÓN

Prof. guia: Jaime Gómez Romero

Seminarista: Valentina Guzmán Polanco

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Valentina Guzmán Polanco

ABSTRACT

With the growing challenges of the 21st century, the development of critical thinking skills has become crucial (Diamond, 2002; Ord, 2007). However, according to Tsui (2008) little is known about how to develop critical thinking among students. The purpose of this study is to examine the use that teachers of English give to critical thinking in order to plan, deliver and evaluate classes in a second year of high school class from both a municipal and a private Chilean High school. For this, a comparative case study was conducted, for which 2 different educational establishments, one private another municipal, were observed for a period of 8 pedagogical hours. To guide the data gathering process 4 different instruments were used, these being: observation, checklist, interviews and journals. The data gathered is separately presented for each educational setting. For that matter observed classes were described and narrated for both educational establishments individually. Moreover, the data was analysed regarding two main aspects: techniques and assessment of critical thinking in the classroom. As an overview, the analysis shows that the implementation of critical thinking is weak in both educational establishments, however, it was in the private school in which efforts to include critical thinking were observed.

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CHAPTER 1: INTRODUCTION

Worldwide, critical thinking has gradually become an essential skill to develop in the classroom. Nowadays, Chile has also encouraged the importance of including the teaching of critical thinking in schools by making it part of the national framework. Although the importance of critical thinking is acknowledged in order to achieve higher learning, little research has been done on the topic. Therefore, this study examines the use that teachers of English give to critical thinking in order to plan, deliver and evaluate classes in a second year of high school class from both a municipal and a private Chilean high schools.

This initial chapter aims at giving an overall understanding of the study, for that matter, the context, the rationale of the study, the scope, the approach and the overview of this research are going to be described and analysed.

1.1 Context of the study

The current trend in educational research recognizes the necessity to integrate the so called "21st century skills" into the school curriculum. One of the most important skills, in this sense, is critical thinking, which is recognized by the ministry of education of Chile. In fact, the former institution, establishes that critical thinking has gained more importance than ever before (Mineduc, & SIMCE, 2011). Although it has been considered important by the Ministry of Education of Chile and incorporated in the plans and programs of the English subject, Remers (2016) says that critical thinking has not been put consistently into practise in Chilean public schools. In his study he claims that, due to the growing importance put on the scores achieved on standardized tests, as a response to the low performance from students

in previous years, there has been more emphasis on the acquisition of basic abilities, limiting the development of higher learning competences, such as critical thinking.

Moreover, the teaching of critical thinking in Chile is limited by "testing". Tests and evaluations are a priority in the Chilean educational system (Remers & Chung, 2016). Currently in Chile, we have what Dochy (2001) calls a "testing culture", meaning that students are imagined as passive learners who have to memorise the class content narrated by the teacher. As a consequence many students are leaving the system lacking critical thinking skills which are necessary to succeed in higher education or in the workplace (Smith & Szymansk, 2013). Flores (2016) points out that academic benefits of reading, as well as critical thinking are crucial in higher education, especially for the optimal professional development of students.

Furthermore, Reimers & Chung (2016) believe that because the Chilean educational system is business oriented, the institutional links established between the educational authorities, who are in charge of building and creating reforms, and the school authorities, who are responsible for putting them into practice, are extremely weak. They believe that this issue makes it difficult for curricula innovation and general improvements in education to happen.

Moreover, the development of cognitive skills in the Chilean education is predominant. However, abilities such as problem solving and critical thinking are barely developed (Reimers & Chung, 2016). In this aspect Mahyuddin et al (2004) state that language development and thinking are closely related and the teaching of higher order thinking skills should be an integrated part of an L2 classroom. As this way of teaching is not being implemented in the public English Chilean classroom, the SIMCE results from 2013 reveal that students are graduating from high school without being able to achieve a B1 level of English from the common European Framework. Nevertheless, this is not the case of students in private schools who do achieve a B1 level and higher (SIMCE, 2013).

As it has been mentioned before, even though critical thinking has gained importance over the years there is little evidence of its impact and way of being applied in the Chilean context. For that reason, this study focuses on the role that critical thinking plays nowadays on the Chilean English classroom.

1.2 Motivation for the study

Although critical thinking is a skill whose relevance is growing in the teaching environment, studies regarding this issue are scarce in Chile. Regarding this matter, it is unknown how critical thinking is being evaluated or classes are being planned in order to develop sub-skills such as analysis, inference, comprehension and evaluation, which are asked for in the educational framework for high school grades.

Moreover, with the growing challenges of the 21st century, the development of critical thinking skills is even more crucial (Diamond, 2002; Ord, 2007). In fact, the importance of the development of critical thinking skills in high school students is directly related to their ability to successfully participate in the 21st century community (Paul, 1993). However, according to Tsui (2008), little is known about how to develop critical thinking among students. She believes that in order to become better equipped to teach critical thinking, more must be learned about how it is developed.

The final reason which motivated me into carrying out this study is the relation that critical thinking and language learning have. If critical thinking is well implemented it can have an impact on the way students in the Chilean context learn the language. Thinking skills can facilitate language learning, as in the case of drawing inferences from unfamiliar language items and reflecting on links between languages (Lin & Mackay, 2005).

1.3 Aim and scope

Taking into consideration the context and motivation for this study, the aim of the present investigation is to examine the use that teachers of English give to critical thinking in order to plan, deliver and evaluate classes in a second year of high school class from both a municipal and a private Chilean high school. To achieve this aim, I conducted a qualitative investigation, as I wanted to observe small groups of people and events in their natural settings. To focus this study, I examined the development of eight hours of English lessons in a second year high school class from both a public school and a private bilingual school in the city of Concepción. Moreover, in order to gather trustworthy information from both educational environments I used four different instruments, these being: observation, checklists, interviews and journals.

1.4 Approach

The investigation conducted used a qualitative multiple-case study approach as it included more than one single case and it explored real-life multiple bounded cases over a period of time, through detailed, in-depth data collection as suggested by Creswell (2013). Furthermore, the main instrument used in order to generate data was observation. Through the development of 8 pedagogical hours, I observed two second year high school English classrooms from different educational backgrounds. One group of students belonged to a public high school from Concepcion, in which the plans and objectives for the year are set by the Ministry of Education. However, the other group of students belonged to a private bilingual school from Concepcion, where the curriculum is designed by a designated staff in order to meet objectives based on the framework given by the Ministry of Education.

In order to collect the data, I used a structured observation method combined with audio recording and note-taking which allowed me to analyse language use and situations in greater depth. Additionally, by the end of the observation period, I conducted a semi-structured interview to the teachers in charge of each English class observed, in order to obtain information regarding their perception of critical thinking through the development of their lessons.

1.5 Overview

This study is divided into six chapters, each one designated to develop relevant information for each stage of the investigation. Following this chapter this study is organized as follows: In Chapter 2 I provide the theoretical foundations regarding critical thinking in order to have a clearer understanding of the topic. For that matter, it includes the explanation of key concepts, and background knowledge on the subject of: critical thinking in the English classroom, assessment of critical thinking, benefits of developing higher thinking skills in the classroom, as well as techniques in order to implement it. In Chapter 3, I present the methodology, which describes and explains the research procedures in depth. That is, the instruments used in order to gather objective and trustworthy information as well as making reference to the data collection process. In chapter 4, the data gathered is presented in form of a narrative. Furthermore, in chapter 5, the information gathered is then analysed and discussed regarding the aim and specific objectives of the investigation, supported by the literature review. Finally, in chapter 6 implications and limitations of the present study as well as suggestions for future studies on the topic will be presented, together with a summary of main findings.

CHAPTER 2: LITERATURE REVIEW

Previously, the study was presented by talking about the context and reasons that moved me to take action and develop an investigation on critical thinking with the aim of examining the use that English teachers give to it. In order to understand the importance of the present study, in this chapter I now explain what critical thinking is and how it can be included in the learning process by teachers implementing specific techniques as well as adequately adapting evaluations in order to correctly assess students' critical thinking skills. Moreover, the importance of including critical thinking in second language lessons is discussed as well as the benefits it has for learners. Furthermore, I present the current view and use of critical thinking in the Chilean classroom. Finally an overall idea of the study and the research question used to guide the study are presented.

2.1 What is critical thinking?

Although critical thinking is a complex concept to define, over the years there have been many definitions of critical thinking which complement each other. Norris (1985) for instance, claimed that critical thinking is deciding rationally what to or what not to believe. Moreover, a couple of years later, Elder and Paul (1994) suggested that critical thinking is best understood as the ability of thinkers to take charge of their own thinking.

The theory of critical thinking, nevertheless, began primarily with the works of Bloom back in 1956, who identified six levels within the cognitive domain, each of which related to a different level of cognitive ability: *knowledge* focused on remembering and reciting information; *comprehension* focused on relating and organizing previously learned information; *application* focused on applying information according to a rule or principle in a specific situation; *analysis* was defined as critical

thinking focused on parts and their functionality in the whole; *synthesis* was defined as critical thinking focused on putting parts together to form a new and original whole; *evaluation* was defined as critical thinking focused upon valuing and making judgments based upon information. In other words, the last three domains of Bloom's taxonomy are considered to develop higher thinking skill, this being critical thinking.

Moreover, when describing critical thinking it is also important to take into consideration its benefits and main characteristics. Experts on the topic suggest that critical thinking allows us to think better as we are able to gather, interpret, evaluate and select information in order to solve problems, formulate inferences, calculate likelihoods and make decisions (Perkins, 2001; Bruning et al., 2004; Halpern, 1998). Additionally, critical thinking is characterized by being the kind of thinking that is purposeful, reasoned, and goal directed (Bruning et al., 2004). For that matter, critical thinking is an important and necessary skill, in fact, nowadays it is required in the workplace and higher education as it can help us deal with mental and spiritual questions as well as it can be used to evaluate people, policies and institutions in an objective manner, thereby avoiding social problems (Hatcher and Spencer, 2005).

Therefore, I will develop this study taking as reference the definition by Dwyer, Hogan & Stewart (2014) that based the concept of critical thinking on not only the sub-skills which conform it but also on the metacognitive aspect. They established that critical thinking is a metacognitive process consisting of a number of sub-skills that, when used appropriately in the classroom, increase the chances of producing a logical conclusion, higher learning outcomes or solutions to a problem.

2.1.1 Characteristics of a critical thinker

Duron, Limbach & Waugh (2006) describe critical thinkers as people who are able to raise vital questions and problems, formulate them clearly, gather and assess relevant information, use abstract ideas, think open-mindedly, and communicate effectively with others. In addition, they set forth that critical and passive thinkers differentiate from one another in that passive thinkers suffer a limited and ego-centric view of the world; they answer questions with yes or no and view their perspective as the only sensible one as well as they perceive their facts as the only ones relevant. Moreover, the critical thinker is able to demonstrate high-quality judgment or reasoning skills which lead to the ability to interpret, comprehend and effectively argue a point (Lipman, 1988).

Paul and Elder (2008) revealed a list of characteristics of critical thinkers, with which they describe a critical thinker as able to raise vital questions and problems, formulating them clearly and precisely; gather and asses relevant information, using abstract ideas to interpret it effectively; come to well-reasoned conclusions and solutions, testing them against relevant criteria and standards; thinks open-mindedly within alternative systems of thought, recognizing and assessing as need be, their assumptions, implications, and practical consequences; communicates effectively with others in figuring out solutions to complex problems.

As you can see by the characteristics previously mentioned, it is essential for students to be taught how to develop critical thinking skills in order to enhance their learning process and acquisition of knowledge.

2.2 Critical Thinking in learning

Critical thinking is not a skill that we, humans, are able to put into practice spontaneously, we must be taught how to develop it and use it correctly. In fact, Scriven and Paul (2004) stated that thinking is a natural process, but left to itself it is often biased, distorted, partial, uninformed and potentially prejudiced. Nevertheless, excellence in thought must be cultivated in order to become a critical thinker. For that reason, excellent critical thinking skills and disposition, must be gradually developed (Paul & Elder, 2002). In fact, critical thinking cannot be taught in a conventional way, by memorizing or learning concepts. Critical thinking is an ability which is beyond memorization, it requires deliberate practice (Roberts and Billings, 2008) for that matter it must be developed by thinking critically, by putting the subskills, which the concept is made-up of, into action (Paul & Elder, 2003). For instance, Miri, David and Uri (2007) found that when teachers persistently and purposely practice thinking strategies such as encouraging inquiry-based and open-ended discussions, students develop critical thinking. Moreover, when students think critically, they are encouraged to think for themselves, to question hypotheses, to analyse and synthesize the events, to go one step further by developing new hypotheses and test them against facts (Emir, 2009).

For years, the educational system has focused on developing basic learning skills. The need for academic success has pushed away the chances to develop higher thinking abilities which include cognitive and attitudinal skills (Vagoot & Pareja, 2012). Students are frequently conditioned in their approach to learning by experiences in teacher centred, text book-driven classrooms (Sharma & Elbow, 2000). Although there has not yet been a complete agreement on which abilities and skills are needed to allow significant learning to occur, it has been possible to identify tendencies in investigations and educational agencies. Vagoot & Pareja, (2012), for example, developed a comparative analysis of different frameworks, from which they concluded that the main skills required to achieve significant learning are creativity,

problem solving and critical thinking. In fact, Yureitich (2004) claimed that one of the most relevant things a teacher can do in the contemporary classroom is to make students aware of the process involved in their own thinking and constantly engaging students in critical thinking processes which develop skills such as interpretation, analysis, inference, evaluation and reasoning (Facione, 2007).

There are several reasons that make it necessary to include critical thinking in the classroom. For instance, according to Lipman (1988), critical thinking moves learners from ordinary thinking to thinking on a more complex level and employs a vast array of cognitive skills. Students should be able to examine what they are learning about and raise questions, accept challenges, find solutions that are not immediately apparent, explain concepts, justify their reasoning and seek information (Costa & Kallick, 2009). Moreover, critical thinking is fundamental as it increases the quantity and quality of meaning that students derive from what they read and perceive due to the fact that it encourages students to identify and correct fallacies in their own thinking as well as make needed correction through inquiry (Costa & Kallick, 2009). In other words, students are able to face problems or difficulties in their learning in an unprogrammed or creative manner (Costa & Kallick, 2009) which according to Paul (2005), such creative thinking is the natural by-product of critical thought which enables one to raise it to a higher level, to recreate it with new and better thinking.

Additionally, Paul (1992) explains that the implementation of critical thinking sub skills in the school classroom allows students to comprehend the logic behind the content, and because of that, it makes it easier for them to adapt and transfer what has been learned, to new contexts. In addition, a more recent research declares that teaching critical thinking is fundamental in order for students to learn from each other and to also distinguish relevant from irrelevant and non-trustworthy information (Heyman, 2008).

As it can be seen by the previous information, the benefit of developing lessons in which students are encouraged to think critically is undoubtable, as learners who lack the ability to do so often engage in undisciplined reasoning. In fact, according to Paul and Elder (2009) their thinking often becomes biased, distorted, partial, uninformed or downright prejudiced. However, in order for students to develop critical thinking, it must be correctly incorporated into lessons by applying useful strategies, methods and techniques that encourage students to implement higher thinking.

2.3 Techniques that encourage critical thinking in the classroom

While most teachers believe that developing critical thinking in their students is of primary importance (Albrecht & Sack, 2000), few have an idea of exactly what it is, how it should be taught, or how it should be assessed (Paul, Elder, & Batell, 1997). Tsui (2008) says that little is known about how to develop critical thinking among students. She wrote that in order for faculty to become better equipped to teach critical thinking, more must be learned about how it is developed and what strategies and techniques are adequate to implement in the classroom setting. The appropriateness of a selected strategy depends in part upon the goals for learning and the learning needs of students in a particular class (McKeachie & Svinicki, 2006; Ornstein & Lasley, 2004). For this reason, if the goal for instruction is to stimulate students to think critically, teachers must be aware of effective strategies for teaching critical thinking and implement them in their teaching practices.

According to the literature, there are a number of strategies such as *active learning*, *collaborative learning*, *Socratic questions* and *reflective practices* that if implemented correctly in the classroom setting they can promote the development of critical thinking in learners.

2.3.1 Active learning

The active learning concept holds that knowledge is constructed by the learner through active interaction between the teacher, the learner and the environment (Clapp, 1996). This strategy places more importance upon how people learn rather than what they learn. It is based upon teaching students to become independent thinkers who can move beyond mere comprehension of concepts, toward critical thinking at the levels of application, analyses, evaluation and creativity (Huang, 2006). According to Marlow and Page, (2005) active learning is centred upon discovering, exploring, contemplating, analysing, and reflecting upon knowledge, rather than memorizing facts. In other words critical thinking involves constructing knowledge, rather than receiving it.

Moreover, in a similar aspect, Shepard (2000) claimed that learning is an active process in which sense making and mental construction take place. As students engage in active learning, they employ critical thinking skills to draw meaning from their experiences. Consequently, active learning is the diametric opposite of passive, teacher-centred methodologies which depend upon the teacher to impart knowledge to students. In contrast to the passive approach, an active or student-centred focus involves students in the development of knowledge and leads to a deeper understanding of content and retention of learning (Petress, 2008).

McCarthy and Anderson (2000) studied the effectiveness of active learning in comparison to passive methodologies such as the lecture. They conjectured that the traditional lecture prompts students to learn at surface levels while active learning is synonymous with deep learning. Unfortunately, it is very difficult to increase a student's critical thinking skills with the lecture format. According to Maiorana (1991) topics are discussed sequentially rather than critically, and students tend to memorize the material since the lecture method facilitates the delivery of large amounts of information. In that respect the student is placed in a passive rather than

an active role since the teacher does the talking, the questioning, and, thus, most of the thinking. In order to implement active learning to develop critical thinking educators must give up the belief that students cannot learn the subject at hand unless the teacher covers it, there must be a shift in emphasis from teaching to learning (Smart and Csapo, 2007).

Additionally, Dengler (2008) wrote that active learning can take place both within and beyond the classroom. Activities for the development of critical thinking through active learning within the classroom include, but are not limited to: role-playing, small-group work, integration of multimedia images and sounds, guided classroom discussion and writing exercises. Moreover, according to Fink (2003), there are two guiding principles that should be considered when choosing learning activities for active learning. First, activities should be chosen from each of the following three components of active learning: information and ideas, experience, and reflective dialog. Information and Ideas include primary and secondary sources accessed in class, outside class, or online; Experience includes doing, observing, and simulations; Reflective dialog includes papers, portfolios, and journaling. Second, whenever possible, direct kinds of learning activities should be used. Examples of direct activities include doing in an authentic setting, direct observation of a phenomenon, reflective thinking, service learning, journaling, and dialog in or outside of class.

2.3.2 Planning based on Bloom's Taxonomy

The Cognitive Domain identified six levels of thinking in hierarchical order of complexity: Knowledge, Comprehension, Application, Analysis, Synthesis, and Evaluation. The levels of Analysis, Synthesis and Evaluation were described as higher level thinking skills that require students to employ critical thinking (Bloom et al., 1956). However, the works of Bloom were revised by Lorin-Anderson in 1999 and as a result changes were made. It is worth mentioning that in this present

research the revised version of Bloom's taxonomy will be used as it is the updated version and for that reason the most commonly used.

Bloom's taxonomy stresses that thinking is an active process, for that matter in the revised taxonomy the levels of thinking in hierarchical order were changed to: remember, understand, apply, analyse, evaluate and create, in which the last three categories mentioned were still considered higher order thinking levels that when developed, critical thinking is employed (Anderson, 2001). This Taxonomy has influenced educators by providing a model for developing techniques and activities that encourage critical thinking (Bruning et al., 2004; Smith & Ragan, 2005).

Moreover, Krathwohl (2002) wrote that the taxonomy provides a common organizational structure for the classification of learning goals, objectives, standards, or test items. Accordingly, the teacher who aspires to enhance critical thinking skills of students will focus planning, instruction and assessment upon the higher order thinking skills of analysing, evaluating and creating.

According to the Bloom's Taxonomy revised by Anderson (2001), analysing, evaluating and creating are considered the highest levels of thinking. Analysing requires an answer that demonstrates an ability to see patterns and classify information, concepts, and theories into component parts. Students at this level could be asked to organize, find coherence, attribute and differentiate. Moreover, evaluating consists in making judgements based on criteria and standards. Students in this level might be asked to check, detect, critique and judge. Finally, creating requires putting elements together to form a coherent or functional whole reorganizing elements into a new pattern or structure. In this level students have to be able to generate hypothesis, create new ideas, plan, design, produce and construct.

2.3.3 Socratic questioning

Clasen and Bonk (1990) claim that although there are many strategies that can impact student's thinking, it is questions that have the greatest impact. Likewise, Elder and Paul (1997) proposed that the art of questioning is essential to the art of learning, to the extent that if they fail to ask genuine questions and seek answers to those questions, students are not likely taking the content seriously.

Moreover, although as stated before, questions in general promote students to think on their learning and class content, Socratic questioning is arguably the most popular strategy of teaching for the purpose of developing critical thinking skills (Maiorana, 1990). Rather than providing students with direct answers, this technique encourages active interaction between teacher and students as they respond to probing questions. It is based upon the idea that answers should not be the end of inquiry; instead, answers should generate more questions. Furthermore, Socratic questions require learners to engage in systematic, deep investigation of their thoughts and thus explore their own metacognitive processes, as learners discover the limitations of their knowledge concerning a topic they develop a sense of intellectual humility and learn to value the role of introspection in learning (Paul & Elder, 2007). Accordingly, Socratic questioning is a tool for the development of critical thinking as the learner develops the ability to think deeply and reasonably. Additionally, as reported by Elder & Paul (2008) Socratic questioning can help instructors effectively approach an important issue. It can aid in integrating and expanding an insight, move a troubled discussion forward, clarify or sort through what appears confusing, and diffuse frustration or anger among students during the development of the class.

In addition, as claimed by Paul and Elder (2008) Socratic questioning is made up of three different types of questions, these being: spontaneous, exploratory, and focused. They describe each Socratic questioning as follows: Spontaneous questioning can be described as unplanned or ongoing questions asked as a response to statements made by students. The purpose of such questions is to prompt students to explore their beliefs and improve understanding of a topic or concept. Exploratory questioning, however, usually consists of questions that are planned ahead of time for multiple purposes including determining what students already know or believe about a topic; examining issues that spark student interest; identifying areas of disagreement between students; analysing an issue; and evaluating student understanding. For example, it can be used to assess student thinking on a subject at the beginning of a semester or unit or instructors can use exploratory Socratic questioning to discover areas or issues of interest or controversy or to find out where and how students have integrated academic material into their thinking. Moreover, Paul and Elder say that Focused questioning is used to bring about a deep understanding of a topic of study by engaging students in an extended, ordered, and integrated dialogue. Most of the time, instruction is focused on specific topics, specific issues, and specific content, all part of the curriculum. At any point in that curriculum, one might use focused Socratic questioning. Here are some possibilities: probe an issue or concept in depth; clarify, sort, analyse, and evaluate thoughts and perspectives; distinguish the known from the unknown; synthesize relevant factors; and construct knowledge. Focused Socratic discussion intellectually stimulates students to think through a variety of perspectives. It can stimulate them to explicitly express their most basic assumptions as it also can encourage them to consider implications and consequences.

2.3.4 Reflective Practices

Reflective practice is the ability to reflect on action in order to keep the learning process in cycle (Schon, 1983). Additionally, John Dewey (1993) recognised that an individual can reflect, particularly when there is a real problem or a sense of difficulty, by merely 'thinking' about them. Dewey suggested three steps for reflection

to occur: (1) problem definition, (2) analysis, and (3) generalisation. He emphasised the distinction between taking action based on reflection, as opposed to impulsive thinking. Furthermore, the reflective process includes; becoming aware of difficulty; identifying the problem; assembling and classifying data and formulating hypotheses; accepting or rejecting the hypothesis; and formulating and evaluating conclusions (Ornstein & Lasley, 2004). For that matter, according to Rogers (2002), reflection is a "rigorous and systematic" tool that can be used to transform an experience into meaning, meaning which is best developed in community with other learners.

Moreover, Costa and Kallick (2009) described reflection as the learners' ability to construct meaning from experiences and to link the meaning derived to past and future learning experiences. According to them, experience has variety in it. It can be reading a book, interacting with the environment or travelling from one place to another. It may also include physical participation or silent observation of an activity. Reflection requires an ability to actively evaluate and synthesize information so that it can be applied in contexts outside of the one in which it originated. This type of reflective action upon learning transforms the learner from one who simply receives knowledge to one who produces it.

The development of reflection in the students is a difficult and complicated process but it is so important that it is said that actual "learning" cannot occur without reflection (Clements, 2009). In this context, the role of the teacher is to facilitate the reflective process occurring within students. Costa and Kallick proposed several means for teachers to achieve this end including discussions, interviews, logs, and journals.

2.3.5 Cooperative Learning

Cooperative learning enhances the development of critical thinking as students process information collectively. In fact, Quarstein and Peterson (2001) reported that the abundant research on cooperative learning reveals significant benefits. Among those benefits listed were higher academic achievement, greater persistence through graduation, better high-level reasoning and critical thinking skills, deeper understanding of learned material and greater ability to view situations from others' perspectives. Moreover, According to Johnson, Johnson and Smith (1991), cooperative learning provides the opportunity for students to work together in small groups to optimize their own learning and that of other group members. As group members work together they benefit from mutual interdependence in the achievement of learning goals.

Proponents of collaborative learning claim that the active exchange of ideas within small groups not only increases interest among the participants but also promotes critical thinking. According to Johnson and Johnson (1986), there is persuasive evidence that cooperative teams achieve higher levels of thought and retain information longer than students who work quietly as individuals. The shared learning gives students an opportunity to engage in discussion, take responsibility for their own learning as well as become critical thinkers (Totten, Sills, Digby, & Russ, 1991).

2.4 Assessing critical thinking

Although being a complex concept, a large body of literature has shown that critical thinking can be assessed in the classroom (Cronwell 1992, Fisher and Scriven 1997). However, many teachers lack the time and resources to design assessment that accurately measure the ability to think critically (Facinone 1990, Paul et al. 1997,

Aviles 1999). Also, for teachers factual assessments, where multiple choice items are usually implemented, are much easier than performing a critical thinking assessment tool (Haynes et al., 2016). Nevertheless, researchers have suggested that multiple-choice assessment tools are not valid indicators of critical thinking ability because test takers are not free to determine their own questions or apply their own evaluative criteria (Keeley & Brown, 1986). Moreover, assessment tools allow the educator to prioritize the important information while pushing the students to learn that specific detail (Haynes et. al., 2016). If the assessment tool emphasizes retention of factual information, then the students will just memorize the information for that assessment instead of exercising and developing higher order thinking skills such as critical thinking (Haynes et. al., 2016).

According to Saiz & Rivas (2012) in order to asses critical thinking there are three aspects to consider when designing an assessment, these being: 1) Items must include questions about everyday situations in which students can put the content into action. 2) The test must include different domains, with the intention of integrating all the sub skills of critical thinking. 3) Open questions must be asked in order to leave space for students to think and organise their own ideas and knowledge.

Moreover, Gipps and Stibart (2003) emphasize the use of assessment for learning opposed to the idea of assessment of learning in order to promote critical thinking skills. Assessment for learning involves learners receiving a considerable amount of descriptive feedback during their learning to help them improve. In fact, frequent opportunities for providing feedback give students insight into their own learning and current level of understanding (Angelo & Cross,1993). Assessment of learning, on the other hand, emphasizes on evaluative feedback to learners so that they can compare their performance to others or to some standards (Airsaisian, 1997; Davies & Hill, 2009; Gipps & Stobart, 2003). According to Angelo & Cross (1993), the key is to select assessment methods that are learner-centered, teacher directed, mutually

beneficial to teachers and students, context specific, and ongoing. Classroom assessment should be a regular activity, as it offers students the opportunity to reflect on and engage in course content. It also allows instructors to determine quickly if instruction has been effective.

Additionally, in order to develop and include critical thinking in assessment it is relevant to incorporate the three higher levels of thinking from Bloom's taxonomy. Krathwohl (2001) wrote that the taxonomy provides a common organizational structure for the classification of learning goals, objectives, standards, or test items. As such, it serves as a tool for curriculum development, instruction, and assessment. Accordingly, the teacher who aspires to enhance the critical thinking skills of students will focus planning, instruction and assessment upon the higher order thinking skills of Analysing, Evaluating, and Creating.

2.5 Critical thinking in the EFL classroom

Language development and thinking are closely related. Different studies have confirmed the role of critical thinking in improving ESL and EFL writing abilities (Rafi, n.d); language proficiency (Liaw, 2007) and oral communication ability (Kusak & Robertson, n.d). Due to the former, the teaching of higher-order thinking skills should be an integral part of an L2 curriculum.

Language learners who have developed critical thinking skills are capable of doing activities of which other students may not be capable. Implied in the study by Mahyuddin (2004), is that language learners with critical thinking ability are able to thinking critically and creatively in order to achieve the goal of the curriculum; capable of making decisions and solving problems; capable of using their thinking

skills and of understanding language or its contents; capable of treating thinking skills as lifelong learning, and finally they become intellectually, physically, and emotionally well-balanced. If language learners can take charge of their own learning, they can monitor and evaluate their own ways of learning more successfully, in fact critical thinking has a high degree of correlation with the learners' achievements (Mahyuddin 2004).

Moreover, teaching students to think, can help them to communicate in the new language, to produce various types of spoken and written language and to demonstrate creativity in using the foreign language. In addition it has been found that thinking skills can facilitate language learning, as in the case of drawing inferences from unfamiliar language items and reflecting on links between languages. Such incorporation of thinking skills, could develop learner's awareness on their progress and develop language autonomy (Lin & Mackay, 2004). In addition, research has found that the most successful classrooms are those that encourage students to think for themselves and engage in critical thinking (Halpern, 1996).

Nonetheless, in order for a classroom to encourage critical thinking, the teacher must provide language learners with different opportunities to share ideas, reflect on their learning, and engage in extended communication with peers, teachers and others, both outside and inside the classroom (Kusaka & Robertson, n.d). The Qualifications and Curriculum Authority (2001-2002), an organization sponsored by the Department of Education and Skills in the U.K., states that certain activities must be incorporated in second language classrooms in order for learners to reflect on their own language learning strategies. Some of the activities recommended are: identifying and understanding the relations between the foreign language and first language in terms of lexis, syntax and grammar; drawing inferences from unfamiliar language and unexpected responses and using their grammatical knowledge to guess the meaning of new words and structure.

Furthermore, James E. Zull (2006) believes that such activities that promote critical thinking encourage whole-brain language learning. Whole-brain learning means that all four parts of the brain are needed in order for meaningful learning to take place. For example, when we read a text containing facts, the information arrives in the back of our brains (sensory and post sensory). If we start to reflect on what we have read, the lower part of our brain is used. Based on our observations and perhaps also on reading other texts, we start to develop our own view or new hypotheses in the frontal cortex, until having come up with a new point of view. Finally, we test our new hypothesis or view point by presenting to and testing our views in others (premotor and motor cortex). Based on this, the role of critical thinking in the learning process is crucial. In an English classroom it would be as following: A student reads a text in English and the information is then gathered at the back of the brain. It is likely that the student will memorise some of the new language but for whole-brain learning we need the student to take that newly gathered language and reflect upon, to be creative with it, and finally to test it or try it out. Only then, after a follow up of activities which put into action critical thinking sub skills, meaningful language learning occurs.

2.6 Critical thinking in the Chilean classroom

The Chilean context, as Mora (2013) points out, is a case where enormous theoretical and curricular efforts to deal with the teaching and learning of critical thinking skills have been made, but, as a result of a number of socio-political factors that have shaped the current educational system, fail to materialize in teachers' actual pedagogical practices in the classroom. As mentioned previously, the Chilean educational system does acknowledge the importance of critical thinking in order to achieve higher learning outcomes. As a result, the Ministry of Education has made an effort to include critical thinking in the educational framework, however, the implementation of it has been inconsistent as textbooks are not adequate and

teachers are not given the necessary tools to develop critical thinking sub-skills (Reimers & Chung, 2016). Reimers & Chung (2016) believe that because the Chilean educational system is business oriented, the institutional links established between the educational authorities, who are in charge of building and creating reforms, and the school authorities, who are responsible for putting them into practice, are extremely weak. The former has as a consequence making it difficult for curricular innovation and general improvements in education to happen.

Moreover, Chile has put emphasise on standardized testing and students achievements for years. Because of the pressure to acquire higher scores, teachers are forced to focus on the acquisition of basic abilities, instead of higher thinking skills such as critical thinking (Reimers & Chung, 2016). The teaching of critical thinking in Chile is limited by "testing". In fact, tests and evaluations are the priority in the Chilean educational system. Currently in Chile, we have what Dochy (2001) calls a "testing culture", meaning that students are imagined as passive learner who have to memorise the class content narrated by the teacher. Also, in this culture teaching and learning are considered an individual process. However, we should seek to acquire an "assessment culture" which is different to the previous one mentioned that focuses on memorisation of the content. The "assessment culture" aims for the student to acquire cognitive, metacognitive and social skills. What the student retains are not isolated contents but a network of concepts from which the student interprets his/her reality. The student is no longer a passive learner but active and participative along the learning process (Dochy, 2001).

Furthermore, as mentioned previously, in Chile critical thinking is far from being adequately assessed in the classroom. Conley (2015) says that the use of tests, such as multiple choice tests which contribute with barely any information on the students learning process, are frequently used in Chile due to the pressure to show results in public forums. Conley believes that this issue has had, as a result, for institutions to adapt their assessments to the former type of test in order to acquire

the Ministry's goals. However, Chile has been unable to obtain average scores on PISA evaluations. As a matter of fact, Chilean students have one of the lowest scores from the OCDE countries (Mora, 2013).

2.6.1 English national framework

As mentioned previously, the Ministry of Education in Chile is making an effort in order to incorporate critical thinking in the classroom. For that matter, in the National framework for the English subject, information is provided on how to develop higher thinking and guide teachers towards promoting the use of critical thinking in the class. For that reason the following information is based on and retrieved from the National Framework for the English subject from 2016 by the Ministry of Education.

It is important to mention that the national framework for the English subject uses the definition on critical thinking elaborated by Paul and Scriven who identify critical thinking as an intellectual process which involves the application, analysis, synthesis and evaluation of information obtained through observation, experience, reflection and reasoning, processes which are developed through metacognition, which means through reflection of thoughts.

Moreover, the national framework highlights the importance of critical thinking in language learning as it allows students to infer, think, question their learning and look for ways to solve problems when they are unable to understand, by using their previous knowledge and experiences of the world. It is also put forward that a second language would be learned more successfully through induction, discovery and hypothesis creation to explain the language and its functions.

Furthermore, the national framework makes references to techniques and aspects in order for teachers to implement critical thinking in the classroom. For instance it mentions as key the ability for students and teacher to formulate questions, as studies have revealed that 70% to 80% of the questions made in class by teachers correspond to the lowest levels of metacognition which would be: memorize and comprehend information. Because of the former, the Ministry of Education invites teachers to challenge students to use their higher thinking skills by creating activities, assessments and questions that demand the use of it, as they establish that critical thinking is fundamental in an English class in order to achieve deep and significant learning. In order to guide teachers in this process the National Framework includes the following table with examples on how to encourage critical thinking in an English lesson based on the six cognitive levels of the new Bloom taxonomy (Anderson, et

Figure 1

Guidance for teachers to incorporate critical thinking

English national framework for 2nd year of high school

Based on Anderson 2001

HABILIDAD	PALABRAS CLAVE	PREGUNTAS	EJEMPLOS DE TAREAS O PREGUNTAS
Recordar	Recordar, repetir, hacer una lista, identificar, parear, nombrar, reproducir.	What/How/Where is? When/How did happen? How would you explain/ describe? What do you recall? How would you show? Who/what were the main? What are three? What is the definition of?	Recuerde algunas actividades llevadas a cabo el verano pasado. Señale los personajes involucrados en la historia. Defina conceptos relacionados con la unidad.
Comprender	Describir, explicar, parafrasear, defender, dar ejemplos, inferir, interpretar, predecir, resumir.	How would you classify? How would you compare/ contrast? How would you rephrase the meaning of? What facts or ideas show? What is the main idea of? Which statements support? What can you say about? Which is the best answer? How would you summarize?	Describa como funciona un instrumento musical. Elabore una lista de las ideas clave de un artículo. Describa dos personajes de un cuento.

HABILIDAD	PALABRAS CLAVE	PREGUNTAS	EJEMPLOS DE TAREAS O PREGUNTAS
Aplicar	Demostrar, dramatizar, ilustrar, cambiar, producir, mostrar, resolver, usar.	How would you use? What examples can you find to? How would you solveusing what you have learned? How would you organize to show? What would result if? What elements would you choose to change?	Use vocabulario específico para producir un texto breve. Utilice información para resolver un problema. Grabe un video con el tema de la unidad.
Analizar	Comparar, contrastar, criticar, discriminar, ilustrar en diagramas, seleccionar.	Why do you think? What is the theme? What conclusions can you draw? How would you classify?	Discutan los puntos de vista de los autores sobre problemas globales. Determine cuál es la motivación de un personaje en un cuento. Concluya las consecuencias del artículo leído.
Evaluar	Discutir, justificar, evaluar, monitorear, comprobar.	evaluate:	Evalúe y justifique los argumentos y contraargumentos de la globalización. Justifique con evidencia la corrección de un escrito.
Crear	Diseñar, crear, construir, generar, producir, planear.	How would you improve? What would happen if? What alternative can you propose? How could you change the plot/plan? What would you predict as the outcome of?	Genere un nuevo final de cuento. Escriba un cuento o una poesía con palabras clave. Diseñe artefactos para apoyar el aprendizaje del inglés en la sala de clases.

2.7 This study

As mentioned previously, although critical thinking is a skill which relevance is growing in the teaching environment, studies regarding this issue are scarce in Chile. Due to the former, it is unknown how critical thinking is being evaluated or classes are being planned in order to develop sub-skills such as analysis, inference, comprehension and evaluation which are asked for in the educational framework.

For that matter, in this study I will examine the use that teachers of English give to critical thinking in order to plan, deliver and evaluate classes in a second year of high school class from both a municipal and a private Chilean High school.

2.8 research question

To what extent is critical thinking incorporated in the teaching of English in a second year of high school class from a municipal and private establishment in Chile?

2.9 Specific objectives

- **2.9.1** To understand how critical thinking is incorporated and applied in English lessons at a municipal high schools in Chile.
- 2.9.2 To understand how critical thinking is incorporated and applied in English lessons at a private bilingual schools in Chile.
- 2.9.3 To determine how critical thinking is assessed in a municipal school in Chile.
- **2.9.4** To determine how critical thinking is assessed in a private school.

To compare the use of critical thinking strategies between a municipal and a private educational establishment.

CHAPTER 3: METHODOLOGY AND DATA ANALYSIS

In the previous chapter, relevant information on the topic of critical thinking was presented in order to understand and get an overall idea of not only the importance of implementing critical thinking in the classroom setting but also on how teachers can include it adequately to promote higher thinking. Moreover, the aim of the study was reminded, this being to examine the use that teachers of English give to critical thinking in order to plan, deliver and evaluate classes in a second year of high school class from both a municipal and a private Chilean High school. In order to achieve the previously mentioned aim, a specific methodology and data collection procedure was followed. In this chapter both former aspects will be thoroughly described as well as the instruments used and participants that were needed for the investigation to take place.

3.1 Methodology

For the development of the present study a qualitative research approach was chosen as it studies individuals and events in their natural settings (Tetnowski & Damico, 2010) having as a consequence the ability to provide a rich and complete picture with many kinds of insights coming from different angles and different sources of information (Thomas, 2011). In addition, the former approach was chosen as this study pursuits to present a natural and holistic picture of the phenomena being studied, for that matter the settings in which the study took place were not manipulated nor interfered by the researcher.

Furthermore, a comparative case study methodology was used as it allows to observe as well as examine in rich detail the context and features of two or more

instances of specific phenomena (Mackey & Gass, 2005). In fact, one of the main advantages of using case study research is that more can be learned about individual language learners, teachers or a class.

3.2 Instruments

In order to collect trustworthy data, a methodological triangulation was used. For that matter, different measures to investigate a particular phenomenon were applied. The importance of using triangulation in this study is that it reduces observer or interviewer bias and enhances the validity and reliability of the information (Johnson, 1992). The instruments used were the following: observation, checklist, note-taking and interviews. It is worth mentioning that these instruments were piloted and validated by experts.

3.2.1 Observation

The observation process consisted in immersing myself in two different educational settings in Concepcion, one being a public high school and the other a private bilingual school. Observation took place for a total of eight teaching hours of the English subject in a second year of high school class in each school, with the objective of systematically and carefully providing descriptions of learners' and teachers' activities without influencing the events in which learners and teachers were engaged in. In order for the latter to be achieved I took the role of a non-participant observer, meaning that I did not interfere in the development of the lesson by neither designing material nor by taking part of the planning of the class.

Moreover, each lesson was audio recorded to later facilitate the analysis of information. Finally a highly structured observation was implemented. For that matter

a detailed checklist was designed to complement and facilitate the observation process.

3.2.2 Checklist

The checklist implemented (refer to appendix N°2) was designed in order to focus the observation process on the main objective of the research, this being to identify the role that critical thinking plays in the English class. For the previous reason the instrument was created based on techniques that were formerly presented and developed in the literature review of the present study. As mentioned in chapter 2, specific criteria must be met for these techniques to be correctly implemented in the classroom and for higher order thinking to be promoted. Taking the latter into consideration, a column dedicated to criteria was added for each technique. Moreover, in order to keep track of the number of times a technique was applied during a lesson, a column was assigned to tally. Finally, to include detailed information on how and when was a specific technique implemented as well as to make any other relevant specifications related to the implementation of it, a space for comments was included next to each criteria.

3.2.3 Journal

Observation was also complemented with note taking. Throughout the observation process a journal was kept in which notes were written for each observed class. The Journal consisted in keeping record of information which was not included in the checklist, for instance: how the class was structured, types of activities executed, student's engagement, materials used and any other aspect which was considered relevant for the research.

3.2.4 Semi structured interview

Semi structured interviews create a liberal atmosphere in which participants feel free to express their viewpoints. As a result, the researcher is able to obtain rich and insightful data by asking more questions to explore (Yin, 2009). For that matter, a semi structured interview was designed (refer to appendix N°3) to be applied by the end of the observation period to the English teachers whose classes had been observed. The aim of developing an interview was to seek for the teachers' perspective on how they believe critical thinking is being promoted in their lessons and what efforts are being made to develop higher order thinking. The interview consisted of five questions to guide the conversation. However, questions were added to narrow down the teachers' answers, elicit or clarify any ambiguous information if needed. Furthermore, because the interview was being applied to teachers of English, it was conducted in English, although, whenever the teacher felt more comfortable expressing an idea in Spanish they could make use of their mother tongue so there would not be any language obstacles. Finally, the interview was audibly recorded for it to be analysed in more detail.

3.3 Participants

Two groups from different educational settings were used to develop this investigation. One group belonged to a class of second year of high school students which attended a private-bilingual educational establishment in Concepcion. This group consisted of 27 students in total between the age of 15 and 17, in which 10 of them were girls and 17 were boys. Moreover, the majority of the students from this first group had been exposed to the English language since a very young age, for that matter they can comfortably communicate and understand their L2.

The second group which was observed was composed by 27 girls from a public high school in Concepcion, which by the time the observation took place were on their second year of high school. The age in this group of students fluctuated between 15 and 18.

Furthermore, the teachers who were in charge of developing the English lessons for each group of students also were considered in this research. Both teachers were graduated from an English teaching program and had more than 3 years of teaching experience.

3.4 Site of the study

The study was conducted in two different educational settings. One of the settings was an emblematic municipal high school located in the city centre of Concepcion. This school has a large number of students, for that reason, it has two different schedules, one in the morning and another in the afternoon. Additionally, as it is a municipal school it uses the national framework as well as the plans and programs given by the Ministry of Education to plan and develop their lessons.

The other educational establishment which was used for the investigation to take place was a private-bilingual school located in the outskirts of the city of Concepción. Due to being a private school, it has an independent framework as well as plans and programs designed by a designated staff in order to meet the academic objectives that they set on students. Moreover, as it is a bilingual-English school, the establishment's strength is to prepare pupils to be able to communicate fluently in their second language and to understand it.

Regarding the English subject in the private-bilingual educational establishment, high school students have a total of six hours assigned to the English subject. However, 4 hours are dedicated to traditional English lessons dictated by their English teacher, and for the remaining hours students are divided and mixed into groups to prepare for international exams, classes which are not necessarily developed by the same English teacher. For that matter, for this research, only the lessons dictated to the class as a whole were considered.

However, the municipal school only has three hours of English lessons a week and the exposure they have to using the foreign language is minimum, as classes in their majority have to be developed in Spanish in order to facilitate students' comprehension and participation.

3.5 Data Collection Procedure

The data collection process lasted nearly three months as a whole and it took place in the following steps.

Firstly, the instruments used to collect data were created. The checklist applied to guide the observation process was designed first in order to narrow down the aspects in which I would be focusing on to collect data. To validate that the checklist would be effective, it was examined and approved by two English professors. Later, the interview was created. This instrument was proof read and checked by three professors of the English teaching department of the University of Concepcion. In this instance feedback was given and taken into consideration to improve the instruments.

After having designed the instruments schools were contacted to ask for their consent to participate in the research. Detailed explanation about the aim of the project and in what it consisted in was provided to the heads of each school, who were contacted through a formal letter. In both educational establishments, once the administration team or the principal of the school had agreed to participate and supported the cause of the study I was put in contact with a teacher of the English department who was willing to help. It is important to mention that teachers were not informed of the main purpose of the observation in order not to manipulate the results, however, the authorities were aware and allowed to proceed. Also, teachers were asked for permission to audio record the lessons and take notes.

The third step was to start the observation process. The first school observed was the private establishment, not because of any specific reason, only authorization to observe was given there first.

During the observation period there was no interaction whatsoever with students or the teachers throughout the lessons so as not to interfere in relationships, actions, events or exchanges of opinions between students and their teacher. In addition, neither teachers nor students were informed of the main purpose of the research so as not to influence the results. Moreover, in each class a checklist was completed and notes were taken as well as the class was audio recorded. By the end of each class, notes and the recording were analysed to make sure nothing relevant was missing. Once the observation period had been completed, the interview to obtain the teacher's perspective on how critical thinking is developed in the lesson was applied to the teacher in a schedule and place arranged by the teacher. The interview was voiced recorded and lasted around 10 minutes.

Once the collection of data had been done in the private educational establishment the same procedure as described previously to collect data was applied in the municipal school. However, in the municipal school the observation process lasted three weeks, as they have three hours of English lessons a week, whereas in the private school it only lasted 4 classes of two hours each.



CHAPTER 4: RESULTS

In chapter number three the methodology as well as the procedure used in order to carry out the study and obtain the data required were analysed and described. Moreover, information regarding the participants' characteristics and the settings in which the study took place, was also incorporated. In the present chapter the data that was possible to gather through the use of observation, journals, checklist and a semi structured interview is presented through a narrative of events.

4.1 Results of the study

As mentioned previously, data will be presented separately for each setting. For that matter, each observed class will be described and narrated for both educational establishments individually. In addition, it is worth mentioning that from now on in this study the private school will be named as "case 1" and the municipal school as "case 2". Teachers in charge of each class will be referred to as "case 1 teacher" and "case 2 teacher" correspondingly. Moreover, by the end of the narration of the observed classes, a summary of the interviews carried out with the teachers will be presented in order to have an overview of the teachers' points of view regarding the role that critical thinking plays in their lessons.

4.1.1 Case 1: Private school

1st observed lesson (2 pedagogical hours)

The teacher greeted students and asked them to take out their materials (copybook and book) for the class to start. The teacher started the class by playing "pasa palabra", and said that if they won the whole class earned 1 point for the upcoming test. In order to play the teacher called out letters in alphabetical order and students had to say a word with the letter called out and use it in a sentence. The word students said had to be from the vocabulary seen in previous lessons related to natural disasters. The whole class participated and students helped each other in order to come up with a word. They went through the complete alphabet and won their point for the test.

After they had finished playing, the teacher reminded them that the following day they had the test of the unit. Students put their hands up to ask questions related to the content, so she proceeded to write it on the board: second conditional, natural disasters. The teacher gave the opportunity for students to make questions regarding the content. The teacher did not answer the questions immediately, however, she gave students time to think and discuss with their classmates until they came up with the correct answer. Fifteen minutes were given for students to go over the content, review and make questions. Although students discussed among them in Spanish, the teacher only used English and students responded to her in their L2 as well.

The teacher proceeded with the class and told students to imagine what they would do if there was an earthquake/ someone was shot/ the teacher had a heart attack and so on. They had to discuss as a class and come up with ideas using conditionals.

Then, the teacher told students to write down five hypothetical questions using "what would you do if....". The teacher monitored and checked students' questions. Five students were chosen to share their questions while the teacher and the rest of the

class interacted an exchanged ideas to answer. Then students had to get in pairs and they asked each other the five questions they had written down and wrote their partner's response. They then shared in front of the class.

The last 30 minutes of the class students were given time to start preparing their English fair which is on their trip to United Kingdom. Instructions had already been given out in previous classes. The teacher asked for students to get into their groups, they had already been divided into two groups, one represented Wales and the other France. By the end of the class they had to give in an outline of what they were planning to present.

Students worked in groups and made decisions regarding outfits, dances and roles.

The teacher kept track of students who were working and those who were not. By the end of the class group leaders reported back to the teacher.

2nd observed lesson (2 pedagogical hours)

This was the first class they had back from their holidays. The teacher started the lesson by giving them an overview of the tests and evaluations they had for the rest of the semester. Students are given the opportunity to decide forms of evaluations. They came to an agreement to have multiple quizzes instead of a test. Once the dates for the evaluations were sorted, the teacher set the objectives for the class which was to start the new unit and to work on the English fair. The teacher made clear that group work and their progress during classes was being evaluated, for that matter those who were not working would prejudice their group's marks.

The teacher begun the new unit about crime by activating students' previous knowledge on the topic. She asked students what crimes/criminals they were familiar with and did a brainstorm on the board with all the ideas that students thought of related to crime. She proceeded to make questions about crime, for instance: which are the most common crimes in the world/Chile? These questions started discussions among students and they interacted with the teacher.

Once the new unit had been introduced, the teacher asked for students to take out their class book. Students worked individually on an exercise from the book and then they shared and checked as a class. The exercise consisted in matching headlines of newspapers related to crime with the corresponding images. They continued working on their class book in an exercise in which they had to write the crime, the action and the person who does the crime. They checked as a class. Based on the activity form the book, the teacher asked students what is the difference between a thief, a burglar, a robber and a mugger? She gave them time to think, discuss and write it down on their copybooks. If they had it correct, points were given which motivated students and made them share ideas and thoughts among them.

After that, the teacher gave out the test from the previous unit. They did not check their answers all together, however, if students had questions regarding parts of the test, they approached their teacher to ask. The teacher gave the instruction to put away their tests and get into their groups to start working on the English fair. On the board the teacher wrote two things each group had to have done by the end of the lesson: choreography and the play written down. The teacher was constantly monitoring the groups and their progress.

Finally, the class finished with students showing what they had worked on during the class and receiving feedback from the teacher.

3rd observed lesson (2 pedagogical hours)

The class started by the teacher asking questions to students about their holidays. Then, on the board the teacher made a brainstorm with things related to her holidays, in order for students to understand the connection of the words they had to ask questions. Students only used their L2 to communicate during this activity.

After the speaking activity, the teacher showed a PowerPoint on past perfect, and asked students what they knew about past perfect. They called out ideas, and built up an answer from them. The PowerPoint showed the structure of past perfect and how it is used by showing examples and supporting them with images. Once the PowerPoint was over, the teacher asked for students to explain the use of past perfect in their own words and give examples. Then the teacher presented the following situation: "I am upset because I arrived home and I realised my house had been burgled. The burglars had broken down the door." Students had to complete the following sentence: when the teacher arrived home she realised the burglars had...." And write 5 things the burglars had done in her house using past perfect. In order to check their sentences, students shared with the class and read them out loud, this gave space for students to receive and give feedback.

Once all the students had shared, the teacher asked to take out their class book to work on one last activity which consisted in completing the sentences by using the word in brackets in past perfect. They were instructed to work individually, however, they would exchange opinions with their classmates and compare. Also, once they had finished students checked all together, whenever someone had a different answer the teacher gave the opportunity to discuss their answers and come to an agreement by asking "why is it incorrect? How can it be changed?"

To round up the class, the teacher asked students to explain in their own words what they had learned and understood from the class, the teacher would guide their answers by making students questions.

The last 30 minutes of the class students worked on the English fair. The teacher wrote down on the board the things they had to work on and show by the end of the class. Both groups decided to ask for permission to work outside the classroom, to which the teacher agreed, however, they had to show their progress by the end of the class, if there was no progress points would be discounted on their final evaluation.

4th observed lesson (2 pedagogical hours)

The teacher started the lesson by greeting students and reminding them they had 2 more weeks left for the English fair. However, because of the coming bank holidays she said that it would be difficult to work on the fair, for that reason this class was fully dedicated to the English fair.

Before they got into their groups and started working, students asked what else they had to do for the fair. Although students had been working on the English fair for about two weeks they said that only oral instructions where given out and they did not exactly know what to do except for the choreography and the sketch. Because of the confusion among students the teacher decided to go group by group solving their questions and seeing their progress.

By the end of the class each group had to present to their classmates their work and time for feedback was given.

4.1.2 Case 2: municipal school

1st observed lesson (2 pedagogical hours)

The teacher began by asking students if they could remember what they had been doing those past few lessons. Most of the students were not paying attention, however, those who were said: "outstanding people".

Without introducing the activity or saying the objective of the class, the teacher handed out a reading comprehension worksheet. Once the teacher mentioned that it was an evaluated activity, students started to show interest and ask for instructions. In order to make sure instructions were clear they were given in Spanish. Also, the teacher encouraged students to work in pairs in order to discuss their answers and ideas. The worksheet consisted in a reading comprehension activity on outstanding people, in which they had different items such as true or false, vocabulary, matching and open questions. The teacher was constantly monitoring students and helping them in their progress by guiding their answers or translating words to Spanish. Although there were students who were concentrated on their work, more than half of the class was not working nor interested, for that reason the teacher repeated the instructions and emphasised that it was an evaluated activity. Moreover, although the activity was suggested to be developed in pairs, most students decided to do it individually and those who chose to work in pairs divided the work instead of working together in each task.

To finish the class the teacher made a summary about the outstanding people presented in the reading comprehension worksheet, she focuses on Malala as she is young and fights for education. The teacher proceeded to ask for students' opinions on her and the prohibition of education. Some students voluntarily participated, however, their answers were in Spanish.

Once the bell rung, students who had finish their work handed in the worksheet.

2nd observed lesson (2 pedagogical hours)

The teacher started the class by reminding students of the activity done last class. She handed out the worksheet, already checked, and give students the opportunity to check their worksheet and make corrections to improve their mark. She gave the first hour of the class for students to work on that. Once students received their marks, instead of discussing and understanding their mistakes, they exchanged worksheets and copied their classmate's answers.

Throughout the course of the first hour, students were playing cards, listening to music and chatting, few were focused on improving their work. Also, the constant noise in the classroom made it difficult for those working to concentrate.

After the teacher collected students' worksheets, the teacher gave instructions, in Spanish, to work on a group assignment. The assignment consisted in students preparing a PowerPoint presentation on an outstanding personality. Before giving out complete instructions, the teacher asked students to form groups of five. However, not all the students got in groups and the teacher allowed them to be in pairs or trios as she did not want to force students. Then, the teacher assigned each group an outstanding personality and the corresponding hand-out with the information about the person. The teacher made it clear that no further research had to be done, they only had to take the information from the hand-out and use it for the presentation. Additionally, another worksheet was given to each group in order for them to organize their ideas and information and for the teacher to assess their progress.

The teacher wrote the instructions and the due date on the board in Spanish, for students to be clear. However, most groups did not hand in any progress by the end of the class and had not understood the assignment.

3rd observed lesson (1 pedagogical hour)

The class started by the teacher telling students to get into their groups for the PowerPoint presentation as the class would be dedicated completely to it. Students got into their groups and the teacher handed out a reading comprehension worksheet to each group on the outstanding person they were assigned to present on. The worksheet was designed in order to guide students' work, as last class most of the groups had not handed in any progress. Instructions for the worksheet were written on the board in Spanish. The teacher went to each group to answer questions regarding the assignment and was constantly monitoring those groups who were on task.

The class finished 15 minutes earlier because students started to leave the classroom, for that reason the teacher was left with no time to check students' final work.

4th observed lesson (2 pedagogical hours)

The teacher started the lesson by writing on the board the tasks for the class: task 1: finish reading activity; task 2: go to the computer lab to create PowerPoint with 5 slides.

Students got into their groups and the teacher handed out the worksheet they had been working on. They had 45 minutes to work on it. Although it was group work in most cases only one or two students were working the worksheet. The teacher would answer questions whenever students asked, however, every interaction was always in Spanish.

Once the time to go to the computer lab came, students had not finished the worksheet, for that reason the teacher could not collect their work. In the computer laboratory students sat with their groups and worked on the creation of their PowerPoint using the information from the previous worksheet they had been working on. However, because most of the students had not worked on their worksheet there was no progress in the creation of their PowerPoint either. During their time in the computer lab, the teacher sent students an example of a presentation in order to guide their work and for them to understand what was required. The teacher wrote on the board websites that could help students to practice their pronunciation for the presentation as well as online dictionaries to look up meanings. During the class the teacher reminded each group that by the end of the class they had to hand in their worksheets and the PowerPoint finished in order to present the following week.

Ten minutes before the class came to an end the teacher asked students to send their progress to her e-mail. None of the groups had finished the assignment, for that reason the teacher told students that they had till Monday to send their power point finished in order to have time to check it and give feedback before they presented.

5th observed lesson (1 pedagogical hour)

The teacher reminded students that it was the last day they could send their power points for being checked and only one group had sent it. Because of the latter, the teacher gave time until noon of the following day.

The complete class hour was also assigned for students to improve their work and practice their presentation. However, students had no interest in the assignment and little progress was made. Although students sat with their group they did not work as one, in most cases only one student would do the job. For that matter the teacher decided to make class work a mark which would be individual. Even though the class was focused on the students, there was barely any interaction or participation, whenever there was only Spanish was used from both the teacher and students. Students agreed to send the presentation by the due date established earlier in order to receive feedback and present the following week.

By the end of the class some groups solved questions regarding the presentation and checked their work with the teacher.

Interview case 1 (see appendix N°4 for full interview)

In order to summarize the teacher's point of view regarding critical thinking and how it is implemented in the classroom I will focus on three main points that the teacher mentioned: relevance, implementation and evaluation.

Regarding the importance of critical thinking the teacher believes for it to be a fundamental skill in any teaching context. However, not essential in order to learn a second language. In fact, she mentioned that in order to learn English, analysis or deep understanding of things is not required. However, when the teacher was asked what is the aspect she believes to be essential to include in the development of a class, the teacher answered that she believes relevant for students to be able to communicate and use the language spontaneously not repeating by memory a given structure.

Furthermore, in terms of implementing critical thinking in the classroom the teacher expresses that she does try to include it whenever possible. However, time and school requirements regarding content can make it difficult. In order to implement higher thinking she makes reference to the communicative approach. The teacher implements activities which allow students to use real English in context and relate it to their life and experiences with the goal of developing critical thinking.

Finally, in relation to assessing critical thinking the teacher mentions that it is extremely difficult to do so due to students' lack of curiosity which she believes to be caused by the educational system they are brought up in that limits their thinking process and creativity. Moreover, she mentions that critical thinking is not constantly being assessed in the lessons, however, she believes that when time is given for students to communicate and produce the language focused around a context, critical thinking is being developed and it is in those instances that she tries to asses it. Furthermore, regarding evaluations, the teacher mentions that critical thinking is

most of the time included in an essay writing item in which students must express their opinion using the content being assessed in the test.

Interview case 2 (see appendix N°5 for full interview)

According to what it was answered by the teacher from case 2 in the interview, it is challenging for her to include critical thinking in general, either in the development of a class or in assessment. In fact, she said that when she tries to obtain students' opinion or develop higher thinking, she usually implements it in Spanish or else students are not motivated nor interested in participating.

Furthermore, although she does recognize the importance of critical thinking based on being able to express ideas and opinions, she expressed to not have thought of it as essential in order to acquire a second language. Regarding the former, the interviewee focuses the skill of critical thinking on the ability to express opinions only.

Moreover, during the interview she mentioned two main aspects that she believes limits the implementation of critical thinking in the lessons. One factor that the interviewee makes reference to is the lack of interest and curiosity from students due to the educational system they are brought up in. She says that students most of the time are interested on the grade they achieve rather than on how and what to improve during their language learning process. She also talks about how difficult it is to avoid grammar oriented lessons and take that away from students, as most of the time they are used to that way of learning the language. The second factor the teacher makes reference to is the low range of production students have in their second language. The former she believes that limits the incorporation of any type of activity that encourages the use of critical thinking as students are unable to elaborate ideas of their own and communicate.

Regarding assessment, the teacher says that she does not assess critical thinking at all based on the idea of expressing points of view. The latter, she justifies by saying that students, as mentioned earlier, are focused on their mark and not on expressing their ideas, for that reason they copy each other instead of interacting and exchanging opinions.



CHAPTER 5: DISCUSSION

In the previous chapter the information gathered through the instruments used, these being observation, checklist, and a semi structured interview, was presented in a narrative style. Each observed lesson as well as the interviews were described in detail taking into consideration aspects relevant to the topic of critical thinking.

Furthermore, in this chapter I will describe the procedure through which the data collected was analysed as well as discussed and examined in order to meet the objectives and answer research question of the present study.

5.1 Analytical procedure

Regarding the preparation for the data to be analysed, the procedure was the following. First each observed lesson was summarized only taking into consideration aspects relevant for the study. In order for the summaries to be as detailed as possible, the audio recordings for each lesson as well as the checklists and the notes taken were considered and put together to complement the information gathered from each instrument. It is relevant to add that the summaries were made separately for each school.

Then, because teachers would sometimes use their mother tongue to express ideas, as they felt more comfortable using Spanish to give complete answers, interviews had to be translated in order for them to be analysed later. Once translated, the interviews were summarized and organized based mainly on the implementation, importance and evaluation of critical thinking according to the teacher.

Furthermore, in order to analyse the data previously mentioned it was decided to organise it according to the following aspects: techniques that encourage critical thinking and the assessment of critical thinking in the English lesson with the aim of meeting the objectives of this study. It is worth mentioning that the data from both educational establishments was examined together for each aspect previously mentioned and for that matter compared and contrasted with each other.

5.2 Data analysis

As mentioned previously, the data gathered in each educational establishment will be presented regarding two main aspects, these being: techniques and assessment of critical thinking in the classroom. Moreover, it is worth reminding the reader that the private educational establishment will be referred to as "case 1" and the municipal school as "case 2".

5.2.1 Techniques that encourage critical thinking in the classroom

Regarding the techniques considered, these are five which were taken from the checklist used to carry out the observation process and were previously described and defined in the chapter dedicated to the literature review. The techniques considered were the following: active learning, Bloom's taxonomy, Socratic questioning, reflective practices and cooperative learning.

ACTIVE LEARNING

Active learning consists on learners building knowledge through active interaction between the teacher, the learner and the environment (Clapp, 1996). Based on the former definition it can be said that in *case 1* active learning is present as the teacher would promote interaction and students' participation in every observed lesson. Although students would spontaneously use Spanish to interact in class, they did make the effort to use English whenever the teacher would encourage and remind students to use their L2 as much as possible in class discussions with her and the rest of their classmates. In addition, in *case 1* all students actively participated in class discussions and activities whether it was orally or written, as the teacher tried to connect the content to situations students could relate to which made it engaging for them. In fact, in the interview the teacher mentioned that the way critical thinking is included in the lessons is through communicative exercises where students can analyse real life issues, exchange ideas in small groups or role play, activities which are considered for the development of critical thinking through active learning within the classroom according to Dengler (2008).

However, in *case 2*, throughout the eight hours which were observed there was no interaction in English among students nor between students and the teacher. The teacher would constantly use her mother tongue to facilitate understanding as students were unable to communicate in English. However, even though the teacher would talk in Spanish students most of the time did not pay attention and it was a one way conversation, for that matter interaction was not present in the lessons, not even in Spanish.

Furthermore, in *case 1*, although the teacher would include grammar in her classes, it was in students hands to analyse the use of the structure and explore with help of their classmates how to use it in order to express themselves correctly. Most of the

time students would be able to use the new content by the end of the class by expressing orally and written. The former was possible because students had the space to explore, discover, analyse and reflect upon knowledge (Marlow and Page, 2005) resulting in deep learning instead of memorization (Anderson, 2000). For example, classes would most of the time start by introducing or reviewing grammar structures or content in general. However, the teacher would give instances for students to analyse the structure, discuss and come to their own conclusions on when and how to use it correctly by explaining it in their own words and being able to implement it to communicate. An activity that reflects the implementation of the former, is for instance on the 3rd observed lesson when the teacher showed an example of a sentence in past perfect and asked students to analyse, discover the structure and when it is used.

Case 2, on the other hand, although the teacher did not carry out classes in a lecture style in which grammar structures where the main focus, students were unable to ever produce their own ideas regarding the topic of the lessons. The latter is a result of the teacher not providing room for students to discuss topics critically but giving them large amounts of information for them to memorize or copy (Maiorana, 1991). For instance, for the oral presentation, students did not search for information nor analyse what they read on their own to create understanding, as instructions were to copy information from a text which the teacher had previously designed for them in which the information was already selected for them to copy in their PowerPoint.

Additionally, active leaning is understood as a student-centred methodology which focuses on involving students in the development of knowledge and leads to a deeper understanding of content and retention of learning (Petress, 2008). Taking the latter into consideration, it can be said that in *case 2* the teacher planned based upon the implementation of activities or assignment in which the teacher acted as a guide and monitored students work, rather than as a source of information. From the eight hours observed of classes in *case 2*, none were implemented in a lecture

format as students worked on assignments rather than on copying information from the board or from what the teacher delivered. However, as students had freedom to work during the class most of them were not on task and turned in a blank or incomplete assignment. Because of the former, it can be said that although the teacher incentivised active learning, students took advantage of the situation and interpreted as free time.

In case 1, lessons had a mix format in which teacher centred time was present, however, student centred activities where predominant. For instance, at the beginning of class it was teacher centred as it was the time in which the teacher would introduce the topic of the class and give out instructions or sometimes introduce a grammar structure. However, everything that followed the first 20 minutes of the lesson was student centred, activities in which the teacher would involve students to develop knowledge. For example, students had to plan and organise an English fair on their own for which they had to create and write a sketch, make informative presentations, posters and choreographies using their previous knowledge. Throughout this process the teacher would only monitor and give feedback regarding students' progress. Different to case 2, students had no problem with keeping on task and handing in assignments, progress or activities asked for as it is a format of working they are used to while in case 2, the teacher mentioned it was the first time students where working on an assignment.

PLANNING BASED ON BLOOM'S TAXONOMY

Regarding the presence of critical thinking based on the use of Bloom's taxonomy to develop and plan lessons, the following can be said about each case.

Firstly, in case 1, the teacher expressed in the interview that an aspect she considers to be essential to include in every lesson is for students to be able to create communication by themselves using the content seen in class. She mentioned that in order to do the former, activities in which students have to analyse real life issues are incorporated with frequency in the lessons. In fact, from what it was observed students would always be given space to create, produce or construct their own ideas using English, skills which according to the revised Bloom's Taxonomy correspond to creating, which is considered a high level of thinking ability (Anderson, 2001). Creating requires putting elements together to form a coherent or functional whole; reorganize elements into a new pattern or structure, for that matter students have to be able to generate hypothesis, create new ideas, plan, design, produce and construct (Anderson, 2001). Taking as reference the previous definition, regarding case 1 it can be said that the high thinking skill of creating is present as the teacher would normally incorporate activities in the lesson in which students had to imagine themselves in a given situation and write about it or make questions on it. For example, in one lesson the teacher formulated questions such as: what would you do if there was a shooting at your school? Students had to write down their answer and justify it. The former activities made students generate hypothesis on how to connect the elements, structures and content given to them in the class to create a coherent text of opinion. On the other hand, in case 2, the ability to create was not detected, although the teacher planned activities, such as the presentation on an outstanding person, which gives space for students to generate ideas, points of views and construct meaning of their own. The reason for students not being able to develop the former skills is because the teacher believes, as she expressed in the interview, that students' lack of vocabulary and ability to produce in their second

language enables them to create their own piece of writing or construct opinion. For that matter and not to frustrate students, for the presentation the teacher decided to give students a text from which they had to copy the information instead of using it as a source from which they could create their own review or summary. In addition, it was observed that when the teacher incorporated a question in one of the reading comprehension worksheets in which the students had to give their opinion, they copied their classmates as what mattered to them was the final grade and finishing the worksheet rather than trying to express their viewpoint and building knowledge. In fact, the teacher expressed in the interview that due to the former situation she avoids including essay questions or of opinion in worksheets and tests.

Moreover, "to analyse" is considered as the ability that allows students to break material into its constituent parts and determine how the parts are related (Anderson, 2001). Using the former definition to guide the present discussion it can be expressed that in *case 1* analysis was present, however, scarcely. The teacher tried to include activities in some of the observed classes which asked students to differentiate and discriminate. For instance, in one of the lessons students had to analyse an activity on their workbook and try to find the difference between a robber, mugger, burglar and a thief and explain it in their own words. To do so they analysed the sentences in their workbook in which the vocabulary was being used and with their classmates would discuss the difference, they would also try to recall a situation in which the vocabulary had been used, such as in movies, series or books to finally come to an answer. Additionally, in a different lesson, a pupil asked what is the difference between first conditional and second conditional. Instead of the teacher explaining, she gave students the space and opportunity to apply their previous knowledge and analyse the difference based on examples of the two conditionals.

In case 2, however, analysis was not observed in the development of the lessons based on the definition by Anderson, previously mentioned. Although the teacher included reading comprehension worksheets and assignments which can be used to encourage analysis and higher order thinking skills, the activities which were

included in the worksheets were based on matching, true or false and reorganizing the reading comprehension text. The former activities, according to the table included in the national framework for the English subject based on the revised Bloom's taxonomy (included in the literature review), correspond to the lowest thinking skill which is to memorize as some of the key words mentioned are to name, match, identify and make a list.

Moreover, evaluation is also considered a high order thinking ability, understood as the capability to make judgments based on criteria and standards (Anderson, 2001). Taking Anderson's definition as reference it can be put forward that in case 1 space for students to evaluate, check, and discuss their work as well as their classmates was given. However, more advantage could have been taken from those instances. For example, in the activity from the first observed lesson in which students had to give their view point on what they would do in extreme circumstances, such as a shooting, earthquake or robbery, time was given for students to discuss their answers to the point they would critique how valid their classmates' ideas were by sometimes even justifying their judgments with evidence or life experiences. Another example in which students were able to spontaneously discuss their work and progress, was in the implementation of the English fair. In their groups students would discuss what they liked about their work, what they had to work on or change. For instance in the creation of the sketch for the fair among group members they would give each other feedback on their pronunciation, acting or volume of their voice. Nonetheless, from this assignment more guided instances for each group to exchange their progress and receive feedback could have been promoted by the teacher by designing a checklist or worksheet for students to write down their critiques and assessments.

However, in *case 2* students did not show interest in evaluating or judging their own work nor of their pairs in order to improve, as what mattered to them was whether their answer was wrong or right, not how to improve it. In the case of the

presentations, for example, although students were given the chance to work in groups to exchange ideas and have classmates with who to check their progress with, they did not take advantage of this. Instead, in most groups only one member would do all the work while the rest did nothing.

SOCRATIC QUESTIONING

Socratic questioning is a technique that encourages active interaction between teacher and students as they answer probing questions. According to Paul & Elder (2007) Socratic questions require learners to engage in systematic, deep investigation of their thoughts and explore their own metacognitive process.

For the latter description to take place, communication or interaction between the students and the teacher is fundamental. For that reason, in *case 2*, Socratic questioning was completely absent since there was barely any exchange of words in English or in Spanish, as it was mentioned previously in Active learning. Moreover, if students elaborated questions these were in Spanish as well as very superficial and specific. All of the questions students elaborated during the observation period were regarding instructions, for that matter deep investigation or analysis to respond their questions was unnecessary. Because of this, in the following analysis only *case 1* will be considered.

There are three types of Socratic questions: spontaneous, exploratory and focused. The following analysis will be made individually for each type of question.

Firstly, based on the fact that spontaneous questions are unplanned questions asked as a response to statements made by students with the purpose of prompting

students to explore their beliefs and improve understanding of a topic or concept (Paul & Elder, 2008) it can be said that in *case 1* the teacher would sometimes include spontaneous questions when giving feedback to students or whenever checking activities. For instance, in the third observed lesson when students had to explain in their own words what they understood by past perfect, the teacher in order to guide their answers would make students questions like the following: "can we combine it with past simple? Did the action happen before or after another action?" The former questions allowed students to introspect their understanding on the topic as well as clarify it.

Additionally, another instance in which spontaneous questioning took place in *case* 1 was when the teacher gave students feedback on their work. In the case of written work the teacher would check each students' answers individually. Whenever a mistake was found the teacher would not correct it and change it for them, instead the teacher would make questions such as: "what do you mean by...? Do you think there is another way of expressing....? Why did you put.....?" This provoked students to reflect on their work. Sometimes they would not answer immediately and would go back to their sits to think, to then check again with the teacher.

Secondly, exploratory questions are understood as questions that are planned ahead of time for purposes such as verifying what students already know or believe about a topic; examining issues that provoke students interest; identifying areas of disagreement between students; and evaluating students understanding (Paul & Elder, 2008). Regarding the latter it can be said that exploratory questions were made by *case 1 teacher* to fulfil two main purposes, which were to verify students' knowledge on a topic and to evaluate students understanding.

In the second observed class, for instance, in order to introduce a new unit and to determine what students already knew regarding the topic, the teacher asked students what they knew about crimes, what crimes they had heard of and who are big known criminals. Those questions incentivised discussion among students as they started to share their ideas, knowledge and believes regarding the topic and the teacher was able to obtain an overview of students' knowledge as she generated a brainstorm with the ideas called out.

Moreover, the teacher from *case 1* also made use of exploratory questions in order to evaluate students understanding. An example of the latter is the third observed lesson when the teacher asked students to explain the use of past perfect in their own words and to give an example. Students had a hard time answering these questions, since past perfect was a content that they had difficulties to understand and use it correctly. For that matter they took some time to think and analyse the class as well as the activities they had done in order to answer correctly. Additionally, it is important to say that these questions were not directed to one specific student to answer, instead they were for the whole class, which gave space for students to discuss and exchange ideas in order to narrow their answers.

Thirdly, focused questioning is used to bring about a deep understanding of a topic by engaging students in an extended and integrated discussion in order to clarify; analyse; evaluate thoughts and perspectives (Paul and Elder, 2008). According to the latter it can be said that in *case 1* focused questions where absent as there were no lessons developed or planned round a question which students had to investigate about in order to elaborate an answer. There were questions which started discussions in order to clarify students understanding on the topic, as it was mentioned previously, however they were far from being extended and in-depth discussions.

Nonetheless, based on that Socratic questioning requires learners to examine and explore their own metacognitive process (Paul & Elder, 2007) it can be said that in *case1* the teacher did not guide students to question their thinking and learning

process regarding the acquisition of the language with the intention of students understanding their learning. Questions such as: "How can I achieve a certain aim? Why am I learning this content? What can I do to learn the content more efficiently?" were not developed for students to reflect on with the goal of improving and facilitating their learning process.

REFLECTIVE PRACTICES

According to Costa and Kallick (2009) reflective practices are learners' ability to construct meaning from experiences and to link the meaning derived to past and future experiences, transforming the learner from one who simply receives knowledge to one who produces it.

Regarding the former it can be said that in both observed cases reflective practices were predominantly absent. However, as it has been mentioned previously, in *case* 1 the teacher did promote class discussion regarding the content of the lesson. Questions were elaborated for students to analyse and reflect on the meaning of vocabulary and use of grammar structures to later use them to communicate and elaborate pieces of writing. Nonetheless, neither in *case 1 or 2* reflection was present regarding students' learning process as reflective practices include becoming aware of difficulties, identifying problems and formulating as well as evaluating conclusions (Ornstein & Lasley, 2004). Based on the former, in *case 1 and 2* teachers did not assign time in their lessons for students to identify their strengths and weaknesses in order to work passed them.

Furthermore, based on what was mentioned previously with respect to reflective practices involving students' learning from their past experience, it can be put forward that students from both observed educational establishments did not have

instances to discuss with their pairs, the teacher or to reflect on their own in relation to how to improve their work, in the form of group interviews or teacher—student interviews. For example, in *case 1* during the observation period students had a test to end a unit. Once the marks were handed out and the content of the unit had already been delivered, students did not reflect on whether they had achieved the aim for the unit or not; on what they still had to work on; what could have been done differently on their part as well as from the teacher's part and how they could improve. Instead the teacher immediately started a new unit. A similar situation occurred in *case 2*. Throughout the observation process students had to develop a reading comprehension worksheet in pairs. Once the worksheet had been checked the teacher gave students the opportunity to correct their mistakes in order to improve their marks. However, this instance given by the teacher was not guided, for that matter, students did not reflect on their mistakes and on how to improve their answers. Instead they copied their classmates whose answers were correct as their main priority was to have a passing mark.

Furthermore, in the interview the teacher from case 2 made reference to developing interviews with students in order to move the focus form their mark to their learning progress. However, she referred to this as impossible to carry out as time was a restriction as well as students behaviour and attitude towards the class.

COOPERATIVE LEARNING

According to Johnson, Johnson and Smith (1991) cooperative learning is providing students with the opportunity to work together in small groups to optimize their own learning and that of other group members, as group members work together they benefit from mutual interdependence in the achievement of learning goals since there is an active exchange of ideas. Taking into consideration the description by

Johnson, Johnson and Smith (1991), in case 1 there are multiple instances in which students not only worked in groups but also cooperative learning was promoted by the teacher. For instance, in the first observed lesson for case 1, students were reviewing conditionals as they had trouble with that specific content and the test was the following day. In order to increase students' interest and receive help through their learning process from their peers, the teacher decided to do an activity in pairs. For the latter activity students had to make questions to each other using conditionals and write down their partners answers. Since they worked in pairs, spontaneously, students would give each other feedback and correct their mistakes. As a result, the exchange of different ideas and viewpoints enhanced the growth and inspired broader thinking. Also, whenever they had questions regarding the structure they would exchange ideas and with each other's knowledge build an answer. Additionally, for the preparation of the English fair, students were divided into two groups. Although groups were large, around 7 students per group, most of the group members would work and give ideas on how to improve the sketch, presentation or choreography. Moreover, despite the fact there were activities in which students had to work individually, they would still turn to their class mates for guidance, check their answers or to exchange opinions on how to do an exercise.

On the other hand, in *case 2* the teacher would always promote group work in order to facilitate and optimize student's work, since they would have classmates with who they could exchange ideas. However, despite the fact students worked in groups, collaborative learning did not take place based on the definition referenced previously. For example, for the first two lessons observed, students had to work on a reading comprehension worksheet in pairs. Instead of exchanging opinions and working together, students would divide the work and do it separately or even in some cases only one member would do all the work. Additionally, for the PowerPoint presentation, a similar phenomenon occurred. Students had no interest in working in groups, most of them preferred to be alone, to which the teacher agreed. However, those who did make groups barely worked as one. Throughout the process of

creating the presentation groups would not even sit together to discuss their topic and work would be unevenly distributed as one group member in most of the cases took all the work load. Although the teacher promoted group work she did not focus on guiding students' work, despite the fact the teacher was aware it was students first time working on an English oral presentation and in larger groups, for that matter most probably students were in the need of assistance for their interaction to be ontask.

5.2.2 Assessment of critical thinking

According to Saiz & Rivas (2012) in order to asses critical thinking there are three aspects to consider when designing an assessment, these being: items must include questions about everyday situations in which students can put the content into action, the test must include different domains, with the intention of integrating all the sub skills of critical thinking and open questions must be asked in order to leave space for students to think and organise their own ideas and knowledge. Taking into consideration the previous reference it can be put forward that in case 1 regarding the implementation of tests, the teacher expressed that she would always try to include an item dedicated to essay writing in which students would have to organise their thoughts and ideas in order to express their opinion regarding a given topic. Also, in order to do so, students had to use the content from the unit which was being evaluated, for that reason vocabulary and grammar were assessed. However, in case 2, the teacher mentioned in the interview that she avoided including essay style questions in tests or any type of assessment as students would not respond because they were unable to use the content in context, as well as it highly affected their final mark and that was not the idea. In other instances she would find that a group of students would all have the same answer, for that reason she was not assessing each students' real production of the language, making the item not valid.

Furthermore, according to Dochy (2001), in Chile we have a "testing culture" in which teaching and learning are individual process and students are imagined as passive learner who have to memorise content narrated by the teacher. Based on the former, it can be said that both teachers believe for the "testing culture" to have negatively affected on students ability to think critically. In *case 1*, for instance, the teacher expressed that students are used to memorizing and repeating content which as a result has limited her to applying assessments in class which include high thinking abilities. Moreover, the teacher expressed that despite the fact that she tries to incorporate critical thinking during the class, she says for it to be extremely low as it is difficult to change students' perspective towards learning.

In addition, she mentioned that students are fully dependent on the teacher. Students are used to being passive learners and not interacting in lessons, in fact the latter was evidenced whenever the teacher elaborated activities in which students had to exchange opinions, talk and work in groups, as in most cases it would take students about 10 to 15 minutes to finally be on task. Also, it was observed that in the development of class activities in which higher thinking was being assessed students would constantly need the teachers' approval of their work in order to continue. In case 2, the "testing culture" also restricted the implementation of critical thinking assessments in the class. For instance, the teacher expressed that for her it has been difficult to plan classes leaving aside a lecture style lesson as students are used to a structured way of learning, in which they memorize content to then implement it without changes in the test. Also, it was observed that students did not know how to work in assignments on their own without the teachers constant guidance as most of the students would not be on-task through the development of the lesson. It was perceived as students believed they did not have to work because the teacher was not in front of the classroom delivering content.

Moreover, Facinone (1990) puts forward that many teachers lack the time and resources to design assessments that accurately measure the ability to think critically, which results in teachers avoiding the implementation of them. In both cases observed the teacher made reference to the former in the interview carried out. In *case 1* the teacher mentioned that the pressure from the school's heads in order to use the workbook in class, finish a unit and deliver content in a given time was high. Therefore, her main priority was achieving the directives' expectations and only when possible activities designed by herself in which she could asses higher order thinking were included.

In case 2, the teacher also expressed that time limited the implementation of critical thinking in the lesson, as a result she would develop activities that assessed critical thinking in workshops rather than in the class. However, not all students attend the workshops as they were not obligatory. Moreover, the teacher made reference to the implementation of interviews, in order to assess critical thinking, as an instance that would be impossible to develop, due to the lack of time she has available. For the reason just mentioned the teacher leaned towards activities that she could check in a short amount of time such as true or false or matching, assessment tools which according to Haynes, et. Al (2016) emphasize retention of factual information and incentivise students to memorize instead of exercising and developing higher order thinking.

Furthermore, according to Angelo & Cross (1993) classroom assessment should be a regular activity, as it offers students the opportunity to reflect on and engage in course content. Taking this into consideration, in *case 1* the teacher would often include instances to assess students' understanding on the content by developing communicative activities in which students had to use the content seen throughout the development of the class to produce real English interactions. These exercises generated opportunities for students to receive feedback from both the teacher and their peers. Additionally, for the English fair students would be constantly asked to

give in their group progress at the end of each class to receive feedback from the teacher. As students reported back to the teacher they would analyse the aspects in which they had to work on and elements that were missing. Despite the fact that there was no guided self-evaluation or co-evaluation, in their groups students would spontaneously comment on each other's work and progress, however, not in depth nor with justifications for their arguments.

In case 2, on the other hand, occasions in which students could reflect on their work where not regularly part of the lesson. Students would work on an assignment or worksheet and there would not be time assigned during the fulfilment of their work for students to assess and think on their progress or whether they were on the right path.



CHAPTER 6: CONCLUSION

Previously, the data gathered from the observation process in each educational establishment was discussed and supported with literature in order to meet the objectives and aim of the present study. Due to the latter, the way critical thinking is assessed as well as the implementation of critical thinking in each school was described regarding techniques, which if well implemented higher order thinking is developed.

In this chapter, however, limitations that were presented during the development of the investigation will be put forward as well as a reflection on aspects that could be improved. Furthermore, an agenda on ways the current study could be continued will be presented together with a summary of key findings.

6.1 Implications

Taking into consideration the results previously presented and discussed, it can be said that they, for the most part, influence two main aspects: second language learning as well as the way teachers are trained.

6.1.1 Pedagogical implications

From the data gathered it can be said that in the municipal school observed the teacher did not develop activities which promoted students' use of critical thinking as the teacher expressed that they were unable to produce in their second language. However, language development and thinking are closely related. Studies have confirmed the role of critical thinking in improving ESL and EFL writing abilities (Rafi, n.d); language proficiency (Liaw, 2007) and oral communication ability (Kusak &

Robertson, n.d). Due to the former, I believe that making higher-order thinking skills an integral part of an L2 curriculum would help students in any educational setting to obtain a level of English that would allow them to establish basic communication.

Moreover, the results from this study can help teachers to move the focus of critical thinking from the ability to exchange points of views to implementing activities in the class in which students are able to question and reflect on the learning process, difficulties as well as being able to assess their process and their classmates with clear arguments.

6.1.2 Professional development implications

From the results obtained, the implementation of techniques that promote critical thinking is scarce and teachers expressed that it is was difficult, if not impossible to include critical thinking in the classroom for reasons such as: the lack of knowledge on the language, time and not knowing how to implement critical thinking. However, I believe that this research can encourage teachers to develop critical thinking as it explains the use and implementation of it not targeting the use of their L2 but as a way to enhance students learning process in order to have as a result students' production in their L2.

Moreover, the present study shows that there is a necessity to implement courses, training and guidance for teachers to learn how to implement critical thinking as they believe for it to be an important skill, however, as mentioned before they do not know how to develop it.

6.2 Limitations

Having discussed the main findings of this investigation in the latter chapter, it is relevant to also acknowledge limitations that arose throughout the development of this study together with aspects that could have been done differently in order to improve.

Firstly, the observation period in the educational establishments should have been adapted to the period of time in which a unit is delivered in each school instead of establishing an amount of hours, in order to have been able to observe the delivery of a unit from beginning to end. For instance, in *case 2*, the introduction of a new unit nor the closure of one where observed, for that matter it was impossible to witness methods and techniques applied by the teacher to introduce new content and to close a unit in order to move on with the school curriculum. However, due to time constraints it was impossible to extend the observation period. Obtaining schools' and teachers' permission was a difficult process which delayed the development of the research.

Secondly, I believe results could have been more accurate and representative regarding the difference in the implementation of critical thinking in municipal and private schools if more educational establishments from both contexts would had been observed. The former, in order not to focus on the difference between two schools or teachers, which was difficult not to do, but on the implementation of the curriculum regarding critical thinking.

6.3 Agenda for further research

This present study took place in order to examine and understand how critical thinking is implemented in different educational contexts. However, having that data it would be possible to extend the current study by implementing a complete unit in

both educational contexts, municipal and private, planned based on developing students' critical thinking, meaning that material and content would have to be adapted in order to assess high order thinking skills. The former with the goal of analysing whether critical thinking oriented lessons would have positive outcomes on students' language learning process.

Moreover, the present study focused on examining the development of critical thinking in second year of high school classes only, as it is the level in between from starting high school and graduating. However, if further research is carried out it would be beneficial to examine and compare whether there is a difference and the implementation of higher order thinking skills is higher in fourth year of high school than in the earlier years of high school.

6.4 Conclusion

To conclude, the motivation behind the development of the present study was fundamentally that critical thinking has become a relevant skill to develop in order to succeed in the 21st century community as well as to facilitate the learning process of a second language. However, there are scarce studies in Chile dedicated to the implementation of critical thinking, for that matter little is known about the topic, especially among teachers.

Moreover, the aim of the study was to examine the use that teachers of English in a second year of high school class of Chilean schools give to critical thinking in order to plan, deliver and evaluate their classes. In order to achieve the aim, a comparative case study was conducted, throughout which 2 different educational contexts, a private and municipal school, were observed for a period of eight pedagogical hours.

Furthermore, the data gathered from the implementation of the methodology was analysed and main findings were put forward previously in chapter 5. However, as a summary, the following can be said. Firstly, the implementation of techniques that promote the development of critical thinking are deficient in both educational establishments. However, in the private school there were more instances in which the teacher promoted students to use higher order thinking skills. Whereas in the municipal school, although the teacher implemented assignments and activities that if well used they could have developed critical thinking, the latter did not occur. Also, one of the main reasons for critical thinking to be absent in the municipal establishment was due to the lack of interaction between students and the teacher, as instances for students to receive feedback, exchange opinions and use the language in general were not present.

Secondly, according to what was analysed, the lack of implementation of techniques that promote critical thinking could be caused due to the lack of knowledge teachers have regarding techniques and methods that promote higher order thinking. When teachers were asked regarding the implementation of critical thinking in the classroom they focused on students' ability to share and give their opinion regarding controversial topics, not taking into consideration encouraging students to reflect, question and analyse their learning process. For that reason, teachers believed that critical thinking was relevant, however, not essential for learning to occur.

Lastly, regarding the assessment of critical thinking, it can be said that the private educational establishment assessed higher order thinking skills with more frequency than in the municipal school. However, in both cases teachers expressed that the "testing culture" highly affects students ability to think critically and narrows the implementation of assessments dedicated to it, as students are used to memorizing and repeating what is delivered by the teacher.

Additionally, it is worth mentioning that as expressed by teachers from both cases, time constraints limit the design and implementation of activities, assignments and assessments that promote critical thinking having to fulfil obligations set by their heads, regarding content and marks is their main priority.



REFERENCES

- Airasian, P. W. (1997). Classroom assessment (3rd ed.): New York: McGraw-Hill.
- Albrecht, W. S., & Sack, R. L. (2000). *Accounting education: Charting the course through a perilous future*. Sarasota, FL: American Accounting Association.
- Anderson, L.W. & Krathwohl, D.R. (Eds.) (2001). *A taxonomy for Learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives.* New York: Addison Wesley Longman.
- Angelo, Thomas A. and Cross, K. Patricia. (1993). *Classroom Assessment Techniques*. San Francisco: Jossey-Bass
- Aviles CB. 1999. Understanding and Testing for Critical Thinking with Bloom's Taxonomy of Educational Objectives. Washington (DC): ERIC Clearinghouse.
- Bloom, B. (1956). A taxonomy of educational objectives. Handbook 1: Cognitive domain. New York: McKay.
- Bruning, R. H., Schraw, G. J., Norby, M. M., & Ronning, R. R. (2004). *Cognitive psychology and instruction* (4th ed.). Upper Saddle River, New Jersey: Pearson Prentice Hall.

- Chaffee, J. (1988). *Thinking critically.* Boston, MA: Houghton Mifflin.
- Clapp, G.L. (1996). The Reggio Emilia approach: Adaptation and implementation for early childhood primary education in the United States. Akron, OH:

 University of Akron
- Clasen, D. R., & Bonk, C. (1990). *Teachers tackle thinking*. Madison, WI: Madison Education Extension Program.
- Clements, M. (2018, November 22nd). Reflecting for Learning. Retrieved from Becoming the Edunators: http://www.edunators.com
- Conley, D. (2015). A New Era for Educational Assessment. Education Policy

 Analysis Archives, 23, 8.
- Costa, A.L. & Kallick, B. (Ed.). (2009). Learning and leading with habits of mind:
- Sixteen essential characteristics for success. Alexandria, VA: Association for Supervision and Curriculum Development.
- Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches.* Thousand Oaks, CA: Sage.
- Cromwell LS. 1992. Assessing critical thinking. *New Directions for Community Colleges*, 77: 37–50.

- Davies, A., & Hill, M. (2009). *Making classroom assessment work*: Wellington, N.Z: NZCER Press.
- Dengler, M. (2008). Classroom active learning complemented by an online discussion forum to teach sustainability. *Journal of Geography in Higher Education*, 32(3),481-494.
- Dewey, J. (1933). How We Think: A Restatement of Reflective Thinking to the Educative Process. In J. Dewey. Boston: D. C. Heath.
- Diamond, R. M. (Ed.). (2002). Field guide to academic leadership: A publication of the National Academy for Academic Leadership. San Francisco: Jossey-Bass.
- Dochy, F. (2001). A new assessment era: different needs, new challenges.

 Research Dialogue in Learning and Instruction, 10(1), 11-20.
- Duron, R. Limbach, B. &Waugh, w. (2006). Critical thinking Framework For any discipline. *International Journal of Teaching and Learning in Higher Education* 2006, Volume 17, Number 2, 160-166
- Dwyer, C. P., Hogan, M. J., & Stewart, I. (2014). An integrated critical thinking framework for the 21st century. *Thinking Skills and Creativity*, *12*, 43-52.
- Elder, L., & Paul, R. (1994, Fall). Critical thinking: Why we must transform our teaching. *Journal of Developmental Education* 18(1), 34-35.

- Elder, L., & Paul, R. (1997). Critical thinking: Crucial distinctions for questioning. *Journal of Developmental Education* 21(2), 34.
- Elder, L., & Paul, R. (1998). The role of Socratic questioning in thinking, teaching, and learning. *Clearing House*, 77(5), 297-301.
- Emir, S. (2009). *Education Faculty Students' Critical Thinking Disposition According to Academic Achievement*. World Conference Education Science.
- Facione, P. A. (1990). *Critical thinking: A statement of expert consensus for purposes of educational assessment and instruction*. Newark, DE: American Philosophical Association.
- Facione, P. A. (2007). *Critical thinking: What it is and why it counts.* Millbrae, CA: Measured reasons and the Academic Press.
- Fink, L.D. (2003). A self- directed guide to designing courses for significant learning. Retrieved July 20th, 2018 from www.byu.edu/fc/pages/tchlrnpages/Fink/Fink_Article.doc
- Fisher A, Scriven M. (1997). *Critical thinking: Its Definition and Assessment*. Point Reyes (CA): Edgepress.
- Flores, D. 2016. La importancia e impacto de la lectura, redacción y pensamiento crítico en la educación superior. *Revista del Instituto de Estudios en Educación Universidad del Norte 24:* 130–135.

- Frijters, S., ten Dam, G., & Rijlaarsdam, G. (2006). Effects of dialogic learning on value-loaded critical thinking. *Learning and Instruction*, *18(1)*, 66-82.
- Gipps, C., & Stobart, G. (2003). *Alternative Assessment. In W. Harlen (Ed.),*Student assessment and testing (Vol. 2, pp. 89-102). Los Angeles, CA:

 SAGE.
- Halpern, D. F. (1998). Teaching Critical Thinking for Transfer across Domains:Disposition, Skills, Structure Training, and Metacognitive Monitoring.American Psychologist, 53, 449–455.
- Hatcher, L. (2003). Step-by-step basic statistics using SAS: Student guide. Cary, NC: SAS Institute, Inc.
- Hatcher, D. L., & Spencer, L. A. (2005). *Reasoning and Writing: From Critical Thinking to Composition.* 3rd. ed. Boston: American Press.
- Haynes, A., Lisic, E., Goltz, M., Stein, B., & Harris, K. (2016). Moving Beyond
 Assessment to Improving Students' Critical Thinking Skills: A Model for
 Implementing Change. *Journal of the Scholarship of Teaching and Learning*,
 4, 44-61.
- Heyman, G. D. (2008). Children's critical thinking when learning from others. *Current Directions in Psychological Science*, *17*(5), 344-347.
- Huang, G.H. (2006). Informal forum: Fostering active learning in a teacher preparation program. *Education*, *127(1)*, 31-38.

- James E. Zukk (2006) Key aspects of how the brain learns, chapter 1 in new directions for adults and continuum education. no 110, Wiley Periodicals summer
- Johnson, D, Johnson, R., & Smith. K.(1991). *Cooperative learning: Increasing college faculty instructional productivity.* Washington, DC: George Washington University.
- Johnson, D. M. (1992). *Approaches to research in second language learning.* New York: Longman.
- Johnson, R. T., & Johnson, D. W. (1986). Action research: Cooperative learning in the science classroom. *Science and Children*, 24, 31-32.
- Keeley, S. M., & Browne, M. N. (1986). How college seniors operationalize critical thinking behaviour. *College Student Journal*, *20*, 389-95.
- Krathwohl, D.R. (2002). A revision of Bloom's Taxonomy. *Theory Into Practice*, *41(4)*212-218.
- Kusaka, L. L., & Robertson, M. Beyond Language: Creating Opportunities for Authentic Communication and Critical Thinking. 14, 21-38.
- Liaw, M. (2007). Content-Based Reading and Writing for Critical Thinking Skills in an EFL Context. *English Teaching & Learning*, 31(2), 45-87.

- Lin and MacKay. (2004). *Thinking through modern foreign languages*. Chris Kington Publishing, Cambridge
- Lipman, M. (1988). Critical thinking-what can it be?. *Educational Leadership, 46(\),* 38-43.
- Mackey, A. Gass, S. (2005). Second language research methodology and design.

 Mahwan, New Jersey: Lawrence Erlbaun associeates.
- Mahyuddin, R. (2004). The incorporation of thinking skills in the school curriculum, Kaijean Malaysea.
- Maiorana, V.P. (1990). The road from rote to critical thinking. *Community Review,* 11,53-63.
- Marlowe, B. A., & Page, M. L. (2005). *Creating and sustaining the constructivist Classroom* (2nd ed.). Thousand Oaks, CA: Corwin Press
- McCarthy, J. P., & Anderson, L. (2000). Active learning techniques versus traditional.
- Teaching styles: Two experiments from history and political science. *Innovative Higher Education*, *24*(*4*), 279-294.
- McKeachie W.J., & Svinicki, M., (2006). *Teaching tips.* Boston, MA: Houghton Mifflin.

- Ministerio de educación de Chile. (2016). *Idioma extranjero: Ingles. Programas de estudio Segundo medio.* (6th .Ed.). Santiago, Chile: Ministerio de Educación.
- Mineduc, OCDE & SIMCE. PISA Evaluación de las competencias lectoras para el siglo XXI. Marco de evaluación y preguntas de la prueba.
- Miri, B., David, B.-C, & Uri, Z. (2007). Purposely teaching for the promotion of higher-order thinking skills: A case of critical thinking. *Research in Science Education*, *37*(4), 353-369.
- Mora, D. 2013. Pensamiento crítico en el currículum oficial y en los textos escolares. Concepcion, Chile: Universidad del Bio Bio.
- Norris, Stephen P. (1985). Synthesis of research on critical thinking. *Educational Leadership*, *4*2(8), 40-45.
- Ord, W. (2007). Dear teacher, where are we going? *Gifted Education International*, 22(2), 238-247.
- Ornstein, A. C. & Lasley, T. J., (2004). *Strategies of effective teaching.* NY: McGraw-Hill.
- Paul, R. (1992). *Critical thinking: What, why, and how.* New Directions for Community Colleges, 1992(77), 3-24.

- Paul, R. W. & Willsen, J. (1993). *Critical thinking: How to prepare students for a rapidly changing world.* Santa Rosa, CA: Foundation for Critical Thinking.
- Paul, R. W., Elder, L., and Batell, T. (1997). California Teacher Preparation for Instruction in Critical Thinking: Research Findings and Policy Recommendations. Sacramento, CA: California Commission on Teacher Credentialing.
- Paul, R. (2005). The state of critical thinking today. *New Directions for Community Colleges*, 2005(130), pp.27-38.
- Paul, R., & Elder, L. (2007). Critical thinking: The art of Socratic questioning.

 Journal of Developmental Education, 31(1), 36-37.
- Paul, R., & Elder L. (2007). Critical thinking: The art of Socratic questioning, part II.

 Journal of Developmental Education, 31(2), 32-35.
- Paul, R., & Elder L. (2008). Critical thinking: The art of Socratic questioning, part III.

 Journal of Developmental Education, 31(3), 34-35.
- Paul, R. & Elder, L. (2008) *Critical thinking: tools for taking charge of your learning and your life*.Pearson/Prentice Hall.

- Paul, R., & Elder, L. (2009). *The miniature guide to critical thinking* (5th ed.). Dillon Beach, CA: The Foundation for Critical Thinking.
- Perkins, D. N. (2001). Wisdom in the wild. *Educational Psychologist, 36(4),* 265-268.
- Petress, K. (2008). What is meant by "active learning?" *Education, 128(4),* 566-569.
- Quarstein, V. A., & Peterson, P. A. (2001). Assessment of cooperative learning: A goal criterion approach. *Innovative Higher Education*, 26(1), 59-77.
- Qualifications and Curriculum Authority (2001-2002). Using thinking skills.

 Retrieved July 20, 2018, from

 http://www.ncluk.net/gt/languages/teaching_thinkingskills.htm
- Rafi, M. S. (n.d.). Promoting Critical Pedagogy in Language Education.

 International Research Journal of Arts & Humanities (IRJAH), 37, 63-73.
- Reimers, F., & Chung, C. (2016). Teaching and Learning for the Twenty-First Century. Harvard Education Press
- Rogers, C. (2002). Defining reflection: Another look at John Dewey and reflective Thinking. *Teachers College Record*, *104(4)*, 842.

- Roberts, T., & Billings, L. (2008). Thinking is literacy, literacy thinking. *Educational Leadership*, *65(5)*, 32-36.
- Saiz, C., Rivas, S. F. (2012): Validación y propiedades psicométricas de la prueba de pensamiento crítico PENCRISAL, *en Revista Electrónica de Metodología Aplicada, 17* (1), pp. 18-34.
- Schon, D. A. (1983). The Reflective Practitioner. NY: Basic Books.
- Scriven, M., & Paul, R. (2004). *The Critical Thinking Community*. Retrieved November 28, 2005
- Sharma, M. & Elbow, Gary S. (2000). *Using Internet Primary Sources to Teach Critical Thinking Skills in Geography*. Westport, Conn.: Greenwood Publishing Group.
- Shepard, L.A. (2000). The role of assessment in a learning culture. *Educational Researcher*, 29(4), 4-14.
- Smtart, K.L., & Csapo, N. (2007). Learning by doing: Engaging students through

 Learner-centred activities. *Business Communication Quarterly*, 70(4), 451457
- Smith, P. L., & Ragan, T. J. (2005). *Instructional design*. Hoboken, NJ: John Wiley & Sons, Inc.

- Smith, P. L., & Ragan, T. J. (2005). *Instructional design (3rd ed.)*. Hoboken, NJ: Wiley & Sons.
- Smith, V. G., & Szymanski, A. (2013). Critical Thinking More than Test Scores.

 International Journal of Educational Leadership Preparation, 8, 16-25
- Teaching Strategies. (2003). *The Educational Technology Centre*, University of Sydney, Australia. Retrieved July 22, 2018, from http://alex.edfac.usyd.edu.au/BLP/Teaching_Skills/questioning.htm
- Tetnowski, J., & Damico, J. (2001). A demonstration of the advantages of qualitative methodologies in stuttering research *Journal of Fluency Disorders*, *26*, 17-42.
- Thomas, G. (2011). How to do your case study: a guide for students and researchers: London: Sage Publications Ltd, c2011.
- Totten, S., Sills, T., Digby, A., & Russ, P. (1991). *Cooperative learning: A guide to research*. New York: Garland.
- Tsui, L. (2008). Cultivating critical thinking: Insights from an elite liberal arts college. *The Journal of General Education*, *56*(3-4), 200-227.
- Voogt J., & Pareja N. (2012). A comparative analysis of international frameworks for 21st century competences: Implications for national curriculum policies. *Journal of Curriculum Studies*, 44:3, 299-321.

- Yin, R. K. (2009). Case study research: Design and methods (4th Ed.). Thousand Oaks, CA: Sage
- Yuretich, F. R. 2004. Encouraging Critical Thinking: Measuring Skills in Large Introductory Science Classes. *Journal of College Science Teaching* 33 (3): 40–46.



APPENDIX







APPENDIX N°1

CARTA DE AUTORIZACIÓN

Proyecto de Tesis:

"The role of critical thinking in the English classroom"

"El rol que cumple el pensamiento crítico dentro de la clase de Ingles"

Valentina Guzmán Polanco

Universidad de Concepción

Profesor guía: Profesor Jaime Gómez

Estimados profesores,

Soy Valentina Guzmán egresada de Pedagogía de Ingles de la Universidad de Concepción. Me dirijo a ustedes para solicitar de su apoyo y autorización, debido a que en estos momentos me encuentro desarrollando mi tesis de pregrado sobre el rol que tiene el pensamiento crítico dentro de la clase de inglés.

El pensamiento Crítico es una habilidad cuyo desarrollo y enseñanza dentro del aula ha sido jreconocido de suma relevancia para obtener aprendizaje significativo por parte de los alumnos. A pesar de la importancia que se le ha dado, no existe mucha investigación al respecto en nuestro país. Mi estudio tiene como objetivo principal examinar el uso que le dan los profesores de inglés al pensamiento crítico durante el desarrollo de sus clases.

Para poder cumplir con el objetivo anteriormente nombrado, será necesario observar el desarrollo de 8 horas pedagógicas de la clase de inglés de un curso de cuarto año de enseñanza media de su establecimiento, por lo cual se requiere de autorización y conocimiento de la investigación por parte del profesor a cargo de la clase de inglés como también de los alumnos y apoderados, si se estima necesario por parte del establecimiento. Sin embargo, si es posible, para no alterar los resultados sería ideal no informar al profesor sobre la principal temática a investigar.

En relación a las observaciones, es importante destacar, que las clases se desarrollarán de manera normal, no existirá ningún tipo de intervención por mi parte en relación a la planificación de la clase ni materiales a utilizar. Para facilitar el análisis de las clases se grabarán audios, sin embargo estos no serán trascritos y por lo tanto no estarán presente en la tesis. Una vez finalizadas las observaciones, se realizará una entrevista semi estructurada al profesor de inglés a cargo del curso, con el objetivo de obtener su perspectiva al respecto del pensamiento crítico y la entrega de sus clases.

.Al llevar acabo esta observación en su establecimiento los resultados y análisis obtenidos al finalizar la investigación serán entregados para así posiblemente ser utilizados como guía para mejorar el proceso de aprendizaje de los alumnos a futuro.

En caso de requerir alguna información específica o resolver dudas no dude en contactarse por correo electrónico a vguzmanpolanco@gmail.com.

Su participación en este proyecto es de suma importancia, por lo que rogamos su colaboración.

Le saluda atentamente,

Valentina Guzmán Polanco



He leído y aclarado mis dudas respecto participación de mi establecimiento.	o de esta investigación, y autorizo la
Firma del Director	— — Fecha
Nombre del Director	
Firma de la Profesora Guía	
(Firma en duplicado: una copia pa <mark>ra el direct</mark>	or y otra para las estudiantes tesistas.)

CHECKLIST FOR OBSERVED LESSONS

School:	number of hours:
date:	

TECHNIQUE	CRITERIA	TALLY	PRESENT	ABSENT	COMMENT
	* * * *	\star			
	There is teacher-students	←			
	and student-student interaction				
	the class is students centred	A			
ACTIVE	The teacher doesn't				
LEARNING	focus on the content but on how students are				
	acquiring it Students learn from				
	experience, they observe				
	and then simulate				
	The teacher involve				
	students and invites them				
	to participate (they have an active role)				
Planning upon the higher					
	order thinking skills of				
	analysis, synthesis and evaluation				
BLOOM'S	Students analyses				
TAXONOMY	concepts				
	and theories				
	Students' background				
	knowledge is activated				

	1			ı	1	
	Evaluation: students have					
	the ability to judge their work as well as their					
	classmates with					
	reasoned arguments					
		-				
		nd teacher				
	elaborate questions to					
	contribute to students'					
	lear					
		s provide				
	feedback	and start				
		ssions				
SOCRATIVE	Space and t	ime is given				
QUESTIONS	for Students	s to ask and				
	ans	wer.				
	Spontaneous	questioning				
		ponse to				
	statement	s made by				
	stud	ents.	→			
	Direct answers are					
	avoided, the teacher		→			
	promotes interaction		\sim			
	Exploratory questions are					
	made in order to		Α.			
	determine what students					
	already know about the					
	topic and evaluate		-//			
	unders					
	Focused qu	estions are				
	made for students to					
		eir thoughts				
	and assumptions.					
	and accumptione.					
		Discussions				
	The					
	teacher	Interviews				
	encourages	interviews				
	reflective	1				
REFLECTIVE	process	Logs				
PRACTICES	regarding					
	the content.	Journals				
	Students	construct				
	meaning from					
		ences.				

	students apply content in context		
	Students work collectively or in small groups to process information		
COOPERATIVE LEARNING	Students are given the chance to exchange ideas		
	Students don't work as individuals throughout the majority of the lesson		



Interview

- 1. What are the aspects you believe to be essential to include in the development of a lesson?
- 2. Is critical thinking present in your lessons?
- 3. How do you promote students to thinking critically? Are you familiar with any methodologies or techniques?
- 4. How do you asses critical thinking in your class?
- 5. How important do you believe critical thinking is for language learning?

<u>Interview transcript:</u> teacher from case 1 private-bilingual educational establishment

1. What are the aspects you believe to be essential to include in the development of a lesson?

- I believe the most relevant aspect in a class is for everything to be linked and to focus on the objective of the class, although I believe this, I barely ever communicated the objectives to students. Also, for me it is important in a lesson for students to produce and use the content which is being looked at in class, what I mean is that it is essential that by the end of the class students can communicate using English.
- So do you focus more on how students acquire the language more than on the content?
- Yes, for me students' progress and how they acquire the language has more weight than grammar itself, or content. However, I still have classes that are purely grammar centred because I believe content also must be included and given importance for students to understand the reason why they are using certain grammar structure. Time to explain the structure that they are using and how to use it for me is fundamental in a class, but I try for the delivery of grammar content not to take over the lesson.

2. Is critical thinking present in your lessons?

the ability to think critically but time is a big restriction. The pressure from directives is so much regarding finishing certain units of the book on a given time that is hard to fit in extra things. The book limits a lot the use of critical thinking in the class, because completing the exercise from the book and finishing the units are my main priority, I try to include critical thinking, but it is difficult. If I include critical thinking, it would be in communicative exercise where they can exchange ideas with their partners or role play.

3. How do you promote students to think critically? Are you familiar with any methodologies or techniques?

- I try to put the content into context or use their life experience for them to use the language based on that and create conversations around that given topic.
- In relation to methodologies or techniques to promote critical thinking, I just thinking making the language learning process meaningful is key and useful to develop critical thinking. Like for example analysing real life issues, however, it is extremely difficult to achieve that. I try to avoid for students to stay with what they have in the class book, so I try to encourage them to analyse real life situations.

I would say that the main methodology I use to promote critical thinking is a communicative approach, although I must include grammar in my lessons, I try to lean as much as possible towards the communicate methodology.

4. How do you asses critical thinking in your class?

In this class it is very difficult to assess critical thinking, most of the students copy each other, so I do not get their honest learning progress. Also they are used to memorizing what is taught and then repeating, they are not curious enough to do their own research, they are in a very low level of being able to think critically, however, I do thinking that it is because of the educational system they are brought up in. It is very difficult to change that perspective towards learning that they have now that they are older. I mean students fully depend on the teacher, they are not able to make their own decisions or take action on their learning. That is why the level of critical thinking I can assess is extremely low. The only way I can think that I asses their critical thinking is when they communicate with their classmates and use the content in context, that is how far I can go in order to evaluate critical thinking.

- Do your tests or evaluations include items which assess critical thinking?

Yes, I normally include an essay writing item in which students have to write their opinions, believes and own experiences related to a topic, the topic would normally be something they can relate to. However, the points for that writing are based on grammar, punctuation, vocabulary and content. The purpose of this writing items is for students to apply all the content, this is vocabulary, grammar structures and others in their writing.

5. How important do you believe critical thinking is for language learning?

- I believe critical thinking is important in any learning context. It helps students to go beyond the content given by the teacher. In English itself it helps students to develop their communicative skills, allowing them to express their opinions and thoughts about a topic or issue with other classmates and this way exchange opinions at the same time they can give and receive feedback from classmates as well as from me.

I don't believe, however, that critical thinking is essential for students to learn English. Learning English doesn't require a very deep analysis, in fact there are many things that you must learn by memory like for instance verbs, you don't need to think critically in order to learn the verbs you just need to memorize them.

Interview

Interview transcript: teacher from case 2. Municipal educational establishment

1. What are the aspects you believe to be essential to include in the development of a lesson?

- For me it is essential to think on students' interests, age and level.
 Whenever thinking of an activity or the development of a class I first analyse whether it is adequate for the students or not to get them engaged at least
- When planning activities what do you focus on other than student's interest?
- I must say that for me it has been difficult to plan activities leaving grammar a side, I know I must aim for students to use real English. However, students need, they even ask, for a more structured way of learning the language since that is the way they have been taught their whole life, you could even say it is something cultural. It is difficult to aim at a more communicative style..as the idea is not to put bad marks.

2. Is critical thinking present your lessons?

- Not really. I try to but it is difficult, however, it is incorporated in the books given by the ministry of education. The reason why I think it is difficult is mainly because students in second year of high school can barely produce in their L2 which makes it impossible to ask for students to give me their opinion or to write an essay on a topic. Also, I run out of time during class in order to incorporate critical thinking. I have English workshops in which I use higher thinking skills, however not all the students go to that workshop.

3. How do you promote students to thinking critically? Are you familiar with any methodologies or techniques?

- Whenever I try to include critical thinking I do it in Spanish. I know it is not recommended but it is the only way I get students to interact and give their point of view. Another technique I use for students to give their opinion is through the use of videos and visual support. I usually show videos to introduce a unit or new topic in order to get students commenting on the issue based on what they get from the video. Also I try for the videos that I use to be something of their interest or to which they can relate to.

Also, last semester I took a course on critical thinking dictated by the ministry of education from which I tried to take ideas from. However, I found it difficult if not impossible to implement them in this context. For example, debating I found it very difficult, I can't get students to express ideas so fluently orally, but I was able to get them to write short paragraphs.

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4. How do you asses critical thinking in your class?

- I do not assess critical thinking at all, not even in worksheets or tests. When I have tried to include it as essay questions in worksheets for example, I have found that students copy each other, they are not interested in sharing their thoughts, their main interest is having a correct answer in order to improve their mark. In test for example I avoid including items in which they have to write.
- Whenever they have presentations do you add self-assessments or group assessment?

I don't, I have seen teachers do it but it is difficult especially with a group like this one that you have observed. I would like to do it, however I am aware that I would require of time in order to call each student individually and discuss her assessment, to not focus their mark on the number but on their learning progress.

5. How important do you believe critical thinking is for language learning?

Giving their opinion is important but I don't know if essential in order to learn a second language. I hadn't really thought of critical thinking in that way actually so I don't have much to say.

