THE IMPACT OF SOCIO CONSTRUCTIVIST ACTIVITIES WHEN TEACHING CONTENT THROUGHOUT L2 IN STUDENTS AT A PUBLIC UNIVERSITY.

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DEDICATION

Quiero comenzar mi dedicación dando las gracias a mi madre Miriam por ser mi fuerza interior en todas las situaciones en las que me he sentido devastado. Muchas gracias mamá por estar ahí en todos esos momentos que te necesitaba, esto es para ti, estos son los frutos de tu lucha. Aun si mencionara todas las letras del alfabeto, o contara una constelación de estrellas, no podría ser capaz de pagar por todo. Creo que nunca podré pagar lo que han hecho por mí. También quiero agradecer a mi padre Jair por ser mi asesor en muchas situaciones, gracias por ser mi bastón, mi escudo, mi protector y mi apoyo y estar ahí cuando te necesitaba. Por último, quiero dar las gracias a mis dos hermanos Jeison y Felipe, esto es para ustedes también. Quiero demostrar a mis hermanos que hay otras maneras y rutas diferentes para caminar, especialmente para ti Felipe. Los quiero a todos.

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RESUMEN

La siguiente Investigación considera como objetivo describir el impacto en la implementación de actividades basadas en principios socio constructivistas, aplicadas a la enseñanza y aprendizaje de contenido en una Universidad Pública mediante interacciones grupales y aprendizaje colaborativo. Además, describir las percepciones y reacciones por parte de los participantes con respecto a la ejecución de dichas actividades. Otro de los objetivos de la investigación es observar cómo las actividades socio constructivistas pueden ser diseñadas para enseñar tanto contenido como la lengua Inglesa, a través del uso de estrategias de aprendizaje como lo son los mapas conceptuales.

El proyecto de investigación fue desarrollado en una universidad pública ubicada en la región del eje cafetero. La investigación tuvo lugar en el desarrollo de una asignatura de contenido, en donde se contó con la participación de 29 estudiantes, de los cuales se seleccionó un grupo específico de ocho estudiantes quienes fueron la muestra para la recolección y análisis de los datos. Los participantes fueron expuestos a actividades socio constructivistas a través de contenidos, desarrolladas a partir del uso de los mapas conceptuales en grupos de trabajo con el fin mediático de incrementar factores como la interacción, la motivación, la comunicación y la colaboración.

Los hallazgos obtenidos revelaron que los estudiantes compartieron, interactuaron y fueron partícipes de la construcción de conocimiento. Por otra parte, se evidenció que la interacción social en ambientes de orden académico, promueve el aprendizaje colaborativo; de la misma forma en la cual se aprovechan las situaciones de tipo social para aprender de otros.

Finalmente, se evidenció un impacto positivo, en el incremento de las habilidades de pensamiento crítico y desarrollo cognitivo a través de la interacción y el aprendizaje colaborativo entre los participantes.

ABSTRACT

This research aimed exploring the impact of the implementation of activities based on socio constructivist principles, applied to the teaching of content throughout L2 at a public university. In addition, it describes the participants' reactions and perceptions, regarding the execution of these tasks. The objective of the research was to observe how social constructivist activities impact teaching of content at a public university; through the use of concept maps.

The research project was conducted in a public university located at the coffee region in which twenty nine learners participated in the research study conducted in a content subject in which 8 students were selected to become the base for the collection and the analysis of the data.

The findings revealed that the students shared, interacted and participated in the construction of knowledge. Moreover, it was shown that social interaction within academic contexts fosters collaborative learning. Finally, the inclusion of collaborative learning and interaction among participants, derived in the enhancement of their critical thinking and reasoning skills.

CONTENTS

INTRODUCTION

One of the main goals of this research project was to analyze the impact of socio constructivist activities in an English Licenciatura program led in a public university. There, the subject matter is basically instructed through content materials. In order to learn content, the professor includes mind maps as a strategy to read and summarize the content provided. The purpose was to describe the effectiveness of the socio constructivist approach altogether with the implementation of Collaborative learning and the encouragement of social learning.

To take into account the socio constructivism, the activities and discussions were performed within small groups as the participants were expected to participate equally to complete the activities assigned by the teacher. Moreover, collaborative learning refers to the participation of people both individually and collectively to achieve the goals required in the course. Additional, the equal effort made by the students facilitated the interaction among learners in order to support, assist, and cooperate; taking advantage of previous experiences and knowledge. Socio constructivism is the core concept under which the events were described and analyzed.

The results of implementing socio constructivist concepts are the activation of critical thinking and the activation of collaboration with others, which can be used to fulfill diverse demands in daily life situations, including academic contexts.

The approach to instruction proposed in this research study is socio constructivism, and it is regarded as the umbrella term which deals with the exploitation of the social interaction

between students in order to achieve a common goal, which in this specific case is to use mind mapping to achieve a better content understanding. This approach was deliberately chosen as it has proven to increase the use of the target language and to enhance the learning process of a given content.

In the first chapter of the study, it will be explained the reasons of the implementation of this research, in order to support argumentatively why the project is important for the improvement of learning and teaching content, specifically in the Colombian context. Finally, the research questions were presented in order to illustrate the objectives of the study.

In the second part of the study, the different perspectives and definitions related to socio constructivism were presented, including their characteristics and previously acquired literature. Another main concept was Collaborative learning, so different definitions and opinions from students were also explained. Furthermore, different definitions regarding mind mapping are presented, as well as the previous studies which have explored its impact in the hand of socio constructivist activities. Additionally, a discussion among different authors is presented in order to support or contrast ideas about the research project. Finally, current and similar projects are presented to support the idea of this study in the literature review section.

Thus, the methodology taken into account for the study is explained. This segment includes: the type of study, the context, the rationale, the setting, the participants, the criteria for their selection connected to their characteristics in terms of aptitudes and level of interest demonstrated across the observations, and acceptance of the different opinions and viewpoints of their peers. It also includes the researchers´ roles, data collection methods which were: Observations, questionnaires, and semi structured interviews. Finally, the data analysis

procedures where a step by step explanation of how data was examined in order to reach the objectives of the research project.

In the third part of the study, the findings are presented in order to answer the different research questions developed for the study. Those findings are also confronted through a discussion with authors who support or disagree with the results found in the study. Those authors are taken from the literature review.

Additionally, the different pedagogical and research implications of the study are explained. The limitations found throughout the project, which are the problematic aspects that emerged during the research project, are offered; also the possible further research that can be developed in future studies is presented.

Finally, the conclusions are exposed. These final ideas are a product of an analysis of the findings altogether with the research questions and the comparison with previous studies.

1. STATEMENT OF THE PROBLEM

To begin with, social constructivism is one of the approaches that have been implemented in the field of pedagogy for the improvement of the learning process. It is necessary to clarify that some changes have been made through history in order to improve the quality and the effectiveness of learning processes; this change has gone through a long way starting from behaviorist approaches, then moving to cognitive, and more recently from constructivism to social constructivism (Flood et al., 2004). Taking this into account, it is addressed the main aspects of how learning is connected to social interactions and how both can provide potential positive effects regarding the learning of a content. Due to the constant evolution of methodologies, approaches and techniques based on the learning theories which also move from conductivist to behaviorists to constructivism and more eventually to socio constructivism principles.

The founding father of socio cultural research, Lev Vygotsky suggested that there is a close relationship between the use of language as a cultural tool for social interactions and the use of language as a psychological instrument for organizing our own, individual thinking (Vygotsky, 1978). Also, he suggested that the participation in cooperative activities can generate new understandings which we then 'internalize' as individual knowledge and capabilities. In other words, humans have the innate ability to communicate with others in order to fulfill their needs. It is evident that the primary function of speech is communication as a tool to establish social interactions. Above his conception, the rational and intentional communication of experience and thought requires a mediator which is the human speech, born from the necessity to communicate (Vygotsky, 1995).

Moreover, research in the social sciences has established that human interaction among individuals contribute to the growth of human beings in relation to the cognitive, linguistic, social, and personal development (Brisk, 1991; Campione & Brown, Rogoff, 1990; Vygotsky, 1978; Vygotsky, 1981). To portray, the process through which mental connections are establish between people when exchanging ideas and beliefs can be compared to the process that neurons facilitate in the sense of passing information from one to another creating what it is known as synapses. Vygotsky also believed that the cognitive development was a result of being involved with others in purposeful activities, and learning occurs during such collaboration.

Thereby, language is not only seen as the instrument by which individuals can formulate ideas and communicate, but also as a way for people to think and learn together. Some of the most creative thoughts occur when people are talking in a group (which supports the popularity of brainstorming and creative techniques). One of the most valuable opportunities that the academic contexts can potentially provide to students is that of sharing other people's thoughts within talk sessions to give each individual a chance to get to know others` ideas and then develop their own thoughts (Mercer, 1997). Social interaction encompasses the construction of knowledge collectively from previous experiences; in other words, language is also our essential cultural tool which is used to share experiences and thoughts, deriving in making sense collectively and cooperatively.

Moreover, Arias (2013) asserts that education must extend beyond the classroom and expand the possibility of global learning contexts. This conception aligns with the social constructivism as it emphasizes that learning must be carried out in several contexts bearing in mind the fact that people are mostly in constant contact with others in environments different from the academic. As a result, interaction with others can be suitable in the way that people learn models and styles of learning from others; still, it is highly important that teachers are

capable of constructing knowledge using peer interactions in order to prepare learners to achieve the current expectations of teaching and learning.

At this point, collaborative learning has caused the interest in many researchers, teachers, and investigators because of its importance, and advantages in the educational field. Collaborative learning enhances the problem-solving processes in relation to the improvement of student learning and effective teaching (Barkley, Cross & Major, 2005). Additionally, collaborative learning provides opportunities for students to learn how to work in groups, pursuing common objectives, with intentional and structured work plans, under the active commitment of cooperation, interaction and mutual support. These values can facilitate the construction of alternative proposals for the personal and institutional transformation in an interrelated way (Gutierrez, 2000).

In this research project, the phrase collaborative learning is used to refer to every academic activity that involves cooperation among group members (Barkley, Cross & Major, 2005).Yet, cooperative learning is an approach to teaching that is part of a more general approach known as collaborative learning. Cooperative learning is an approach to teaching that involves cooperative socio constructive activities among peers and small groups of learners in the classroom. Olsen and Kagan (1992) define cooperative learning as a group activity which is deliberately planned to produce individual learning from the social exchange of information between the participants of the groups. Under the concept of cooperative learning each learner is responsible for his or her own learning process as well as for making the efforts to maintain a reasonable level of motivation.

Although there is continuing debate and discussion about whether collaborative learning and cooperative learning signify the same thing or not, the two terms are reciprocally used in this

project study. However, the difference itself between collaborative learning and cooperative learning are not explained in the present study.

Thereby, it is necessary to use language to establish communication to fulfill an interactive need. On the other hand, our everyday experiences tell that the joint activities do not necessarily lead to success. In fact, it is often seen that misunderstandings occur when communicating and expressing ideas. Whereby, the collaborative activity can lead to confusion deriving in the coercion of individual creativity and the production of mediocre results. So, learners can take advantage of implementing this type of methodology since their previous experiences in their learning process, because it also complements not only for a better understanding of what it is being taught, but also it increases their personal growth (Gutierrez, 2000).

The implementation of collaborative learning has been derived from the transitional and historical events and the use of different methods and approaches to teaching and learning with the intention of improving students' affective and cognitive aspects of learning content. Traditional teaching methods have been gradually replaced by alternative and innovative practices which are intended to increase the effectiveness of students' language learning process in contexts of interaction (Ministerio de Educación, 2011).

Consequently, Socio constructivist activities has been increasingly used in order to offer opportunities for students to become dynamic participants in the learning, instead of merely being passive recipients of knowledge from the teacher. This also promotes interaction and collaborative environments that facilitate communication, self-esteem and identity (Imbernon, 1994). It is not only true that apprentices do master the subject issue, but also they can learn how to communicate with people, how to work as a group, how to respect different perspectives, and continuing as lifelong learners.

Cummins (2006) says that empowerment in relation to pedagogy is understood as the power receiving processes that collaborative relationships produce in the educational context. This empowerment is a result of class practices which not only allow students to relate the content of the curriculum to their individual and collective experiences, but also foster learners´ analysis of their relevant social events. This means that this process of empowerment promotes affirmation of students' identity and simultaneously develops the necessary intellectual and linguistic tools. Finally, the students not only develop strategies to participate and interact in the group activities, but also become more critical and analytical where they can reflect and evaluate their own experiences, beliefs, and realities.

On the other hand, the priorities that a teacher must consider must be to listen carefully, participate constructively, think critically, and work productively to solve common problems (Barkley, Cross & Major, 2005). Literature addresses the importance of the facilitative nature of collaboration in language learning (Nunan, 1992). In fact, there is a growing sense in American education that views collaboration among individuals, institutions and communities as the solution to the problems in education (Barnett, 1990; Bembry 1995; Trist, 1977). That is, educators, administrative staff, and teachers have been concerned about "how to enhance the quality of students´ learning, how to improve the effectiveness of teaching, and how to do both available and efficient." (Barkley, Cross & Major, 2005). In others words, how students build knowledge from their own understandings and condense it in order to apply it in their social activities.

Consequently, the professors should promote socio constructivist activities in order to succeed in learning. Such trends need to align with the social notion of learning depicted by Fisher &Abedi (1990) as "a cumulative collaborative project" which means that cooperation is unavoidable in the world of learning (quoted in Borden, 1992).

Above all, teachers must be social leaders and educational guides who are able to realize on how students perceive their instructional methods and explore how students, as learners, understand and value these methods. Teachers now days are required to face daily challenges to provide a diversity of educational techniques to an increasingly mobile and diverse student body, because of their different learning styles. Firstly, it is important for teachers who desire to implement socio-constructivism to know how students can react to this teaching method. Secondly, it is intended to find out the influence of social change on learning and teaching through researching students` perceptions among students, and in this specific case, in the university (Zhang, 2009). Thirdly, this paper implement mind mapping within a socio constructivist environment impacts the process of content learning in an English language learning context. Fourthly, Imbernon (1998) emphasizes that it is fundamental to plan and conduct collaborative training projects, focusing on communication, exchange of experience and the ability to accept the peer counseling.

The research project presents the integral formation centered in the human development, as an ongoing process of realization of human nature throughout interaction with others within the historical social, cultural, political and economic environments(Gutierrez, 2000).

In continuity, social constructivism rather than assuming that knowledge is somewhere in external reality asserts that its production is based on consensus which occurs in the dialogue among teachers and learners as members of a community that continuously seek knowledge. In addition, the dialogue stimulates thinking in a way that is not available to non-interactive experience (Mercer, 2001).

Talk is not just a form of social action; it is also a social mode of thinking by which humans can jointly construct knowledge and understanding (Mercer, 1995). Human beings utilize speech to present ideas, a form of reality, to dispute them, to share them; they use language to

construct cultures. People collectively create and establish language practices for exchanging ideas that nourish their own. Talking creates a capacity for organizing ways of thinking together (Mercer, 1996).

In relation to what is being proposed in this paper, the type of activities implemented for the realization of social interactions must be considered. Bearing in mind the fact that mind maps facilitate students' employment and interaction with content, Yan and Wang (2007) pointed out that mind maps can train the learner to improve the memory. It is an ideal tool for self-expression and communication. (Yan & Wang, 2007). Moreover, Jesen (1998) stated that mind mapping is an indispensable, useful and creative thinking tool for building up learning. Besides, It also promotes apprehension, recognition, and perception since mind mapping activates both the left and right hemispheres of the brain by employing "patterns of both organized notes and symbols in the mind maps" (Jesen, 1998).

In the Colombian context, applying socio constructivist instruction classes could be a very complex task because it is necessary to prepare teachers to teach using the strategy. This means an important amount of extra work required to teach language and content at the same time maintaining a balance. This idea is portrayed by Murphey (1996) who asserts that there may be few specialists who also speak or are willing to teach in the target language, but also there may be few language teachers who have experience in content teaching.

With the previously given contextualization, it is vital to report that the main concern that triggered this research project was to explore the impact of the use of socio constructivist activities throughout mind mapping in teaching English in an ELL context, where language and content were taught at the same time, and where the content was used as a mean to improve not only students' language proficiency, but also worldwide content where the students' needs and interests were taken into account.

Within the English language teaching program at pedagogical, educational and technological university of Colombia the students and teachers are being prepared to be competent in English with a C1 level according to the Common European Framework of Reference for Languages. This program emerged due to the needs of the region in terms of the aims proposed in the National Program of Bilingualism where language teachers are demanded to be competent in both; language proficiency and teaching.

In terms of improving the effectiveness of teaching, education as a social process for assimilating higher-level concepts and values may benefit from the increasing demand for an interactive learning environment in which teachers and students know, trust, and challenge each other to expand their knowledge. Mainly when students are actively involved in the study, meaningful and lasting learning can occur (Barckley, Cross & Major 2005).

In addition, one of the ways to articulate the role of teachers with the needs of society is to develop intercultural competences (Bonilla, 2012). The author says that the current worldview has opened access to other cultures. Therefore, she claims that developing intercultural competence is necessary to understand contemporary cultural behaviors that have to do with the contact with other cultures. From this perspective, educators are called to form foreign language students that not only see the language as a subject where the language is used artificially, but as a collaborative and social tool applicable to different areas of knowledge (Arias, 2013).

To conclude, Education is the structuring of an environment in ways that help students change positively through intentional and unintentional learning. Learning is a way of teaching within the student, which is constructed by the instructional program of a school (Johnson & Johnson 1975). Teachers and researchers have been pursuing effective instructional methods of teaching that will allow information and skills to be learn to all students as effectively as possible (Slavin, 1983).

In summary, this project is intended to investigate what is observed during the process of application of socio constructivist activities in English as a foreign language classes, and the responses and perceptions of the students to the alternative and innovative approach. The setting in which the research was developed is an ELL. The hypothesis is supported by the review of literature and its theoreticians and the evidences obtained from the methods and its analysis.

2. RESEARCH QUESTIONS

3.1 Main questions.

This research comes from the following major questions:

1. What is the impact of socio constructivist activities when teaching content throughout L2 in students at a public university?

2. What are the perceptions of a group of English Language Learners at a public university through the implementation of social constructivist tasks?

3. What are the characteristics of implementing mind mapping as a socio-constructivist strategy for content learning?

4. **LITERATURE REVIEW**

This section of the study presents a review of the literature and similar research studies related to the implementation of collaborative learning which belong to the socio-constructive method and also implementing mind mapping as strategies to learn content in a socio constructivist environment. It also provides the context of how social interactions have emerged in the field of education and how such interactions have improved the process of learning a foreign or second language.

Initially, it is necessary to clarify how social interaction was incorporated into the educational field and its consequences throughout history, departing from the concept of social constructivism, and also its effects in current methodological trends of teaching. It is widely known that socio-constructive learning, as a method of teaching, establishes a bridge between students and teachers, among students and their group mates, and most importantly in the middle of colleges and society. Collaborative learning not only helps students academically, but socially as well.

The review of the literature starts by introducing the foundations of how learning is conceived from the perspective that portrays human learning as a process that occurs not only throughout the experiences within a given environment, but also during the interaction with others. Besides, the influence that this conception has caused in higher education will be reported in this section.

Vygotsky (1995) suggests that the social environment stimulates students' inner instincts, thoughts, and behaviors; which can be taken into account by educators in order to explore new methods which facilitate learning.

4.1 ***The social nature of learning collaboratively***

It is important mentioning that learning is merely conceived from the perspective that people learn from the environment, through the interactions established with the context and the people who are involved in that environment. According to this notion of learning, people take advantage of their previous knowledge and experiences to construct the new one. Dubinsky, Mathews & Reynolds (1997) believe that learning is experiencing and learning is essentially social in nature. They emphasize that it is crucial for teachers to avoid the straightforward feeding of students with knowledge as giving food to babies because students need to create a context where they feel encouraged to learn, discover, explore, and regenerate by themselves, their understanding of the knowledge. Thus, build new knowledge upon the foundation of previous learning. This view of learning severely contrasts with traditional learning which is the passive transmission of information from one individual to another, a view in which reception, not construction, is the key (Vygotsky, 1978). Lave (1988) also declares that people learn by engaging in social practices which are performed in specific settings for practice, and that such environments are directly connected to the cultural area in which certain forms of identity are motivated.

In addition, Vygotsky (1978) states that there is a close relation between the uses of the language both; as a cultural and as a psychological instrument, suggested by the same theory and which has been already explained in the early chapters of this study. Bearing that in mind, it is possible to depict that humans can use language purposefully, significantly, and most importantly with different intentions because as humans, we possess the natural ability to utilize the language to communicate our feelings, ideas, and thoughts, mainly focalized with our necessities. Therefore, collaborative learning as an extensive socio cultural theory of learning which takes

into account the power of collaborative effort, suggests that the cognitive development is a result of being involved with others in purposeful, collaborative activities (Vygotsky, 1978).

In continuity, socio-constructivism has drawn people's attention since 1990 and its roots are focalized in experiential learning and student-centered instruction (Dubinsky, Mathews & Reynolds 1997). Consequently, Philosopher John Dewey and cognitive psychologists Jean Piaget and L.S. Vygotsky have defended this concept and strived to understand how teachers can help learners deal with the stress between what students already know and what is newly presented to them.

Moreover, it is necessary to consider that collaboration does not only impact the scope of the classroom, but it is also applied at universities, institutions, colleges, teachers, and even among cultures. The collaboration is not an innovative issue in education and we daily see how people collaborate with each other on a social level (Syed, 1999). More accurately, the higher Education Act of 1965 (PL 89-329) required partnerships between higher education and private agencies, the Elementary and Secondary Education Act, (PL 89-10), which required schools to collaborate with other institutes, Title VII and Public Law 94-142, which brought into contact bilingual education with conventional education, and the current economic realities in education have all encouraged and needed collaboration in education. (Cavanaugh, 1993; cited in Syed, 1999) has argued that the renewed focalization for collaboration between schools and universities searches for establishing concrete communication between the two institutes in order to enhance students' academic development.

Social constructivism emerges from the hypothesis that knowledge is social, rather than individual, constructed by communities of individuals. In other words, knowledge is claimed to be produced, over time, by successive conversations, and by ever-changing social and political

environments. Theoreticians also suggest that the knowledge of business should not be just the subject of competing scholars or experts, but the shaping and testing of ideas is something in which any person can participate.

However, socio constructivism does not only entail people talking or thinking together, but also involves the ability to communicate, share experiences, understand, and construct knowledge in a mutual and supportive way. Besides, socio constructivism has been used by educators, since collaborative teaching has been part of the job of teaching, and also continues to attract educators and researchers who are entirely interested in improving students` learning (Pugach & Johnson, 1995). Besides, Wigginton (1986) suggests that the highest academic level can be only reached if learners take responsibility for processing the new information; the reflections towards the new content according to their personal experiences, and the utility given to the new learning.

Additionally, socio constructivism accompanied by collaborative learning is believed to offer several benefits in comparison to other approaches as it also fosters critical thinking skills, develops individual accountability, increases the levels of reasoning and positive interdependence, improves problem solving strategies, and internalizes content knowledge, others (Gupta 2004; CSHE 2002; Gokhale 1995; Schofield 2006; Johnson, Johnson, & Holubec 1992). Furthermore, researchers have noticed that students who work in groups have better results in their learning process rather than those who prefer to work alone.

In addition to the statement previously described, the understanding of content is carried out through the implementation of the socio constructivist method, in which learners perform certain constructivist activities by the use of mind maps due to the fact that mind maps demands student to think critically, and most importantly, to internalize content in a better manner so that

students are able to cover the whole content and support each other during the group work activities.

Furthermore, Buzan, Dottino& Israel (2007), cited in Zhang (2009); have stated that great brains like Leonardo Da Vince´s employed images, pictures, arrows and other connective devices while taking notes, learning and remembering. Since they use both sides of their brain to learn and remember, they performed better than those people who made only linear notes. Likewise, we use our brains to create, plan and develop ideas." (Buzan, Dottino& Israel, 2007).

On the other hand, Wycoff (1991) suggests instructions on how to make a mind map:

"*A central focus or graphic representation of the problem is placed in the center of a page; ideas are allowed to flow freely without judgment; key words are used to present ideas; one key word is printed per line; key words are connected to the central focus with lines; color is used to highlight and emphasize ideas; and images and symbols are used to highlight ideas and stimulate the mind to make connections."*

4.2 ***Collaborative learning and group-work characteristics***

In continuity with the previous statement, it is necessary to determine the characteristics that collaborative learning and group work entail as it is not only the fact of communicating and exchanging ideas within the team work but constructing fruitful and valuable information to achieve the goals proposed in the activities as well.

Accordingly, the word collaborative in Late Latin means collaborates, defined as, to labor together. Webster's Third New International Dictionary defines collaborate as "to work jointly especially with one or limited numbers of others." Collaborative learning means students to work together instead of working individually.

Hence, Johnson & Johnson (1989) argue that when students are working in groups, they tend to learn more of what is taught and retain the content better when some strategies are used within the collaborative learning. In simple words, it is important for both students and teachers to adopt strategies that help them to make the collaborative learning in group works more comprehensible and meaningful (Johnson & Johnson, 1989).

In order to create an impact implementing collaborative learning; students need to socialize their experiences, doubts, ideas, arguments, and all sort of content with other students who share the same or common educational goals. Besides, when two students collaborate, they frequently have to justify and support their answers to each other, and this provides a great understanding of the exchanged information (Bruffee, 1999; Felder, 1995; Tinzmann; Schneider, 1995).

Besides, collaborative learning offers the opportunity to achieve new knowledge, skills and responsibilities that the students need in realistic society (Knowles et al. 1971, cited in Zhang, 2009). On the other hand, group work has been accepted as an efficient learning strategy because it provides opportunities for students to negotiate meaning; manipulate ideas with others and reflect upon their learning (Fraser & Deane, 1997). Teachers are in charge of providing appropriate environments and spaces in which students feel motivated to participate and contribute to their individual and collective growth.

Moreover, Johnson and Johnson (1991), cited in Zhang (2009); point out that individual accountability can be achieved where groups are kept to a small number; “The smaller the group, the greater individual accountability could be” (p.20). As a result, personal responsibility is increased. Furthermore, groups should comprise among two to four individuals, and the shorter the amount of time available to complete a task, the smaller the group should be.

Likewise, Trist (1983) believes that the solution for many complex problems requires collective collaboration to find solutions. Furthermore, universities are responding to the need of preparing graduates for 21st century workplaces where teamwork skills are valued (DETYA, 2000; Furnham, 2000; CIHE, 1996; Harvey et al, 1997).

Consequently, it is essential to adopt a strategy that aids both, teachers and students to understand and facilitate content in a better way, taking into account the circumstances of the context and the students' needs and interests. The specific strategy used in this study was mind mapping which entails collaboration with others, and fosters critical thinking.

In the following paragraphs, different points of view are exposed regarding social constructivism and the collaborative learning method and their interpretations. According to Johnson and Johnson (1991) and Baloche (1994) the majority of current research indicates that groupwork strategies promote greater academic success through strengthened social interaction because students are placed in situations where they must cooperate with another person.

At the same time, group work is widely known as an efficient way to teach as workloads increase and available time diminishes. Group work has many benefits for effective learning while also preparing graduates for future work.

Similarly, Dawes & Claire, cited in Mercer; explain that the Exploratory Talk approach helps participants to use strategies and constructively with each other's ideas. Under this approach, relevant knowledge is shared, suggestions are actively taking into account, contributions are treated with respect, and opinions, ideas, and the suggestions offered for collective consideration should be supported with arguments.

Moreover, Mercer (1996) suggests that some ways of talking in group activity can be of special educational value, but such discussions are relatively uncommon in classrooms. That is,

children in classroom groups may talk with one another in ways that do not engage them in any prolonged or profound thinking about ideas or questioning of reasons, evidence or information.

4.3 *Factors that affect collaborative learning.*

As in every study inside the Educational field, there will be always pros and cons that must be taken into consideration in a research study. In this way, it is significant to point out that both possibilities must be conceived when conducting this specific research study. Thus, many factors intervene during a research study, as the contribution of the participants, the context, the setting, personality factors, and some others. However, researchers of this study consider both aspects, and that is why different viewpoints are exposed in the next paragraphs.

In addition, there are some problems related to collaborative learning based on socio constructivist activities that are taken into account according to (Quaddus & Tung 2002).

Group work: lack of perceived relevance to actual demands, lack of clear objectives, inequality of contribution among group members, unequal distribution of effort, overuse of group work, lack of staff support, lack of choice and flexibility, and difficulty accommodating cultural and language differences among students. In other words, the lack of support, motivation, knowledge, and most importantly effort, may lead the members of the group to frustration. In fact, some theoreticians expose the negative aspects that such method can cause in certain people that have had good experience while working with known people, and that people may fail to achieve their goals when they are placed with unknown group members.

The research conducted by the University of South Australia suggests that students do encounter frustration with aspects of group work in spite of its apparent popularity. For example, one graduate student, when surveyed, offered the following answer:

> *"I acknowledge the reasons for including group work as a component of a university course; however due to the nature of groups, it usually falls to one or two individuals to do the bulk of the work. As a student motivated to achieve the best results of which I am capable, I find it frustrating that not only do other students get a free ride so to speak, but that through being forced to work in groups, the task becomes more difficult than it would have been if done alone." (University of South Australia, 2001c)*

Another research study connected to the effectiveness of collaborative learning as Imel (1991) asserts, there is little empirical evidence that collaborative learning works as it relates to learning outcomes in adult education. Homan and Poel (1999) express a similar view that group work has been established to be far less effective than it should be in many cases and that students must be first taught how to be effective group members.

> Jim Davis, a Chemistry instructor from Harvard University pointed out that: "*Collaborative learning works best for students who are in the middle. For the weak, they have trouble and do not know what to do at all. For the best, they spend more time working on the finer points; already understanding the fundamental that everybody else needs helps on."(P?)*

In addition, Simon (1992), cited in Chen (2010); states that Jim Davis's opinion was confirmed by another anonymous student, who commented that:

> *"I think the key factor is the level of other people in the particular group. I know that I want to learn things I don't understand. I find it not as useful for me if I spend most of my time explaining much more basic concepts to somebody else. I need to learn stuff, as well."(P.?)*

Simon (1992) &Zheng (2009), cited in Chen (2010); have also pointed out that collaborative learning is more useful with students who are at a higher level, have acquired the fundamental knowledge, and are ready to discuss and assist.

Furthermore, Haring-Smith (1994) stated that it is not positive to implement collaborative learning all the time as people learn differently and there is a moment when lectures are the most efficient way to communicate ideas. If all classes were conducted in the same manner, students and teachers would feel inhibited to achieve knowledge by themselves. In this sense it is crucial to implement textbooks, libraries, laboratories, and each other to learn.

In continuity, Zhang (2009) highlights that the contribution of the participants in collaborative activities is often positive as a student commented that the appreciation from his/her peers, was very satisfying "Generating ideas and sharing views". The contributions of many different perspectives aid the construction of knowledge and understanding which might not be achieved in individual activities. This has been acknowledged by educators as one of the major benefits of students working in collaborative environments where new ideas are formed and shared.

In the same research study, the comments from students included: "We got a broader range of knowledge". Another student indicated that there were benefits in brainstorming and hearing others' views that they would have never thought of; and others appreciated the opportunity to learn new things from peers that they did not know before, and gaining different perspectives. Besides, students feel motivated to work in a social environment with their peers because of the inspiration that they caused on their classmates in order to present their best work to benefit the whole group.

However, Zhang (2009) states that there are numerous reasons to believe that group work can result in less than positive contribution and outcomes for the participants. Among the author´s reasons some concepts like competition, group dynamics, assessment and poor group work organization are exposed. Working collaboratively means making significant changes to traditional learning styles as learners need to face and accept the dynamics of group work.

Bosworth and Hamilton (1994) point out that this is not an easy task:

"Collaborative learning requires students to participate actively and perform cognitive and social tasks that are new and often difficult. It is not surprising that students do not always greet this experience with unalloyed enthusiasm."

Miller et al. (1994) assert that group work can force tensions to emerge and as a result, students may experience confusion and even anxiety about the work in a collaborative classroom and towards the way they will be evaluated. Mutch (1998) also highlights that the tension students experience as they work in groups may be a predictor of what they will experience in the workforce and its consequent poor results. Also Nour and Yen's (1992)express that group decision making in organizations requires increased levels of communication, coordination, and collaboration, which generally takes longer.

Finally, with the intention to conclude the debate among different viewpoints exposed by the theoreticians, the benefits and factors that affect collaborative learning of working with others will be summarized. Furthermore, some examples and citations will be presented as a way of comparing and contrasting ideas of the characteristics mentioned before.

Other aspects that affect collaborative learning:

- Unequal distribution of effort
- Difficulties of accommodating different work schedules
- Lack of staff support
- Previous negative experiences
- High time consumption during the discussions
- Individualization of the knowledge

Some examples of negative aspects in collaborative learning agree when a member of a given group is not willing to contribute or provides useless ideas to overcome the challenges proposed within the activities of the group, but benefits from the contributions of others which will eventually lead the whole group to success. They often fail to attend meetings, are late or difficult to contact in order to accomplish the task proposed. This phenomenon is defined as “Free riding” and is most likely to occur when one group member is more capable and willing to provide for group success (Chapman & Arenson, 1993). Conversely, students who take on such leadership roles are more likely to believe that they do most of the work. This is well considered as a form of individualization in which certain participants do not support and assist their peers during the group work, but they take advantage from the abilities of the others.

More specifically, Zimbardo (1996), cited by Furnham (1997); in his theory of individualization, suggests that being in a large group allows people to be covered with a mantel of

anonymity and consequently, abandon their personal responsibility for the consequences of one's action. Students are likely to work less efficiently when being in large groups, particularly when individuals work with strangers (Furham, 1997; Johnson & and Johnson, 1991). Working in a group can, therefore engender 'social loafing' or laziness, and the effort that an individual applies when working collectively is less than the effort an individual does when working alone (Chapman & Arenson, 1993).

Nevertheless, Zhang (2009) proposes a strategy to avoid students who do not work within the group work, and this is to design assignments in which students rely equally on the input of each individual for success. In this sense, the teacher can make individuals more accountable for the consequences of work avoidance. This may also assist instructors in acknowledging individual group member's efforts and achievements in completing a task for which every member is responsible (Johnson & Johnson, 1991).

Benefits of Collaborative Learning

- ✓ Improving time management and communication
- ✓ Better assessment practices
- ✓ Increasing arbitration by teachers
- ✓ More effective allocation of students to groups
- ✓ Allowing choice of group members

- ✓ Making group work optional

- ✓ Building confidence and cooperation

In Zhang's research, it is also evident that some students show the importance of learners being able to choose their own group members. Allowing choice to students at first year level may not be effective as students are unlikely to know enough about their colleagues to make informed choices. However, Williams (1981), cited in Houldsworth and Mathews (2000), claims that giving students the choice of been members is an important contribution to group success, arguing that when students have the opportunity to work with their friends, then social loafing is less likely to occur.

In conclusion, Socio-constructivist is an umbrella term for a variety of educational approaches involving joint intellectual effort by students, or students and teachers together. Usually students are working in groups of two or more members, mutually searching for understanding, solutions, meanings, or creating a given product. Socio-constructive activities vary widely, but most center on students' exploration or application of the course material, not simply the teachers' presentation or explanation of it (Smith &MacGregor, 1992).

5. METHODOLOGY

This chapter describes the research methodology and procedures to observe reactions and perceptions of a selected sample of undergraduate public university students in Colombia, focusing on the learner-centered methods they were exposed to (Collaborative learning). This chapter includes the type of study, context, setting, participants, role of the researchers, data collection methods, and data analysis.

5.1 Type of study.

For this particular research project, the methodological design included the characteristics of a qualitative, descriptive-interpretive case study. For this reason, this research project is a qualitative research. Due the fact that this study aimed at explore the effects of the implementation of an English Language Teaching approach in order to see the responses and reactions of the learners, the participants were involved and were the focus on the study, a great deal of qualitative data was present. Also, the use of semi-structured interviews, questionnaires and observations made the study qualitative. In addition, the data was qualitatively analyzed, and it came from a deep process of data analysis based on the perspectives that the theoretical framework offered.

Wallace (1998) defines qualitative research as the description of data which is not amenable to be counted or measured in an objective manner, and therefore it is subjective. Moreover, this research is a descriptive; interpretive; case study for the following reason: It was a descriptive study because it thoroughly portrayed the events that occurred during the application of socio constructivist activities (mind-mapping) in and ELL context, and the process experienced by students.

Burns (1999) also provides support for describing the type of study of this research project. The author asserts that data collection and analysis is guided by the examination of different people's thoughts, insights and concerns to provide interpretations and descriptions of these instances. Also, Merriam (2009) points out that descriptive case studies includes words that are used in order to express what the researchers learned about the phenomenon and the description of the context and participants.

Likewise, case studies are focus on individual, small groups or individuals within a group, and document experiences from groups and individuals in a specific setting. According to Smith, as cited in Merriam (1998), case studies can be differentiated from other forms of qualitative research by the fact that these studies focus on a "single unit" or a bounded system. According to Merriam, the boundedness can be determined by asking "whether there is a limit to the number of people involved who could be interviewed or a finite amount of time [for observation]..." (pp. 27-28). In case studies, detailed information is gathered from multiple sources and often from the individual(s) being studied.

On the other hand, Cresswell (2007) also provides ideas to explain why this research study aligns with the concepts of interpretive research as it seeks to gain understanding of the world by subjective meanings of one's experiences in order to create different perceptions from a phenomenon. What is mentioned before, was relevant to the study because based on the data, the researchers interpreted the data in order to construct an idea about the phenomenon studied. Finally, it was a case study because the learners were neither expected to learn more nor to be more motivated with the implementation of socio constructivist activities. The main objective was to observe if in this particular case the theory applied in the teaching practice, producing an observable effect for further analysis.

5.2 Context.

The study took place in the English Language Teaching (ELT) program at an urban public university named The Pedagogical, Educational and Technological University of Colombia (PETUC) located in a middle sized city in Colombia, surrounded by natural landscapes. The university has an active population of about sixteen thousand students. In addition, The PETUC University at Colombia was founded in 1961 by means of the 41st law as the most representative model of culture of the region as a State or Public Institution. After that, it became an Institution based on academic belonging to the national order as a part of the Ministry of Education. On April 2nd 2004 the English teaching program was opened at PETUC in the Humanities and Languages Faculty. Likewise, the program population is approximately (780) seven hundred eighty students and (33) thirty three professors.

The English Teaching Program aim this objectives; first objective, it highlights the importance of training English language teachers with ethical and analytical values, capable of teaching English as a foreign language with a high quality level. Second objective, English language teachers who are able to develop and study topics in teaching and learning. Third, English language teachers are expected to be capable of implementing research regarding English Language teaching and learning. English language teachers should have the knowledge of the language, capacity to present content, knowledge of the theory and the practice of current trend and methodologies of English language teaching. Furthermore, another objective is the development of abilities, values and aptitudes that enable them to perform their teaching activity. This study was conducted in a content-based subject. This subject is entirely taught in English. In relation to what it is being mentioned, The ELT program draws from the levels of language proficiency of the Common European Framework of Reference for Languages (CEFRL) as a

guide to standardize the students' English language learning. The ELT program also applies the CEFRL as an English international standard of proficiency to test the English language proficiency in the students throughout the 10th semesters. The students reach a C1 level of proficiency. The ELT program at PETUC seeks to prepare professionals in the ELT area to perform teaching and research in real educational fields. Thus, the ELT program provides students the opportunity to practice the language with multimedia tools. Moreover, the students have the possibility to get academic sources at the university library. Students in the ELT program are enrolled in (45) forty-five courses for a total of ten semesters.

5.3 Setting

In this study, the specific setting was a content subject which was conducted at PETUC. The classroom was well-equipped, with audio-visual aids (computer, video projector, VHS, tape recorder), a white board, a bookshelf, and comfortable chairs. In addition, the classroom counted with a quiet environment with airy place, the number of hours students are exposed three hours per week to the subject. The curriculum or standards the subject follows are named by the …… The teacher is a University professor with a Linguistics master and doing a Phd. in Ciencias de la Educación. The subject is a content-based subject which involves theories from applied linguistics under the curriculum of a content based course.

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5.4 Participants.

According to the guidelines of the disciplinary of the language teaching program students of this semester should be in B2 level. A group of twenty-five undergraduate students were the student-participants who were enrolled in the content language class with a B2 level of proficiency. The students belonged to the ELT program offered by the University. Thus, they were in the process of studying content based English language instruction as a requirement for

their bachelor's degree. They were currently in fifth, sixth, and seventh semester of the program. The (PETUC) university requires the students from the ELT program to have attended eleven subjects in general, six English levels, and four content subjects at the moment of attending the subject of the research study, the sum of hours of the subjects have an average of three thousand one hundred and forty hours.

When conducting the first set of observations, some students have difficulties to attend the course and some eventually not attended it, leaving the data collection process at a raw stage. For this reason, an alternative plan was designed to undergo this circumstance.

Description of the focalized participants:

The focal participants were selected based on the attitudes and aptitudes demonstrated from the beginning of the observations and evidenced in their performances during the activities in which they interacted with their peers, and also their capacity to share with others. The eight focal participants were university students which already approved the previous required subject of Second Language Acquisition and were attending the content subject which is allocated in the fifth semester according to the academic curriculum. They were four male and four female learners with an average age between twenty and twenty seven years old.

On the other hand, a consent format was delivered to both the teacher and the participants to count with their acceptance in conducting the study within the group. In addition, the codification given to the participants are S1, S2, and so on; in accordance to Strauss and Corbin (1990)who define coding as the process of examining the raw qualitative data which will in the form of word, phrases, sentences or paragraphs, and assigning codes or labels. More importantly, this is a typical sampling of maximum variation according to Miles & Huberman (1994, p.29) cited in Merriam (1998 p .63); which involve identifying and selecting those cases who represent widest possible range of characteristics that can richly affect the results and purpose of the study.

5.5 ***Researchers´role.***

The three researchers were complete observers since they did not interact with the participants during the observations. According to Lodico, M., Spaulding, D., Voegtle, K. (2010) the role of the complete observers is just to observe the activities of a group without becoming a participant in those activities in any way. During the project, the researchers arranged different schedules in order to conduct the observations, in this sense there were always two observers in the seminar classes while the other one was typing and organizing the data systematically. In addition, it is main that qualitative research entails that researchers usually transcribe their data; that is, they type the text (from interviews, observational notes, questionnaires, etc.) into word processing documents as a fundamental procedure to maintain data appropriately organized to avoid piles of papers.

5.6 ***Data collection methods.***

The methods were piloted with some participants from the same course during the data collection process described here. The instruments for the collection of data used in the present research study were as follows. (the methods were piloted during one semester).

Questionnaire: Wallace (1998) defines questionnaire as a form which includes a set of questions to be answered through which researchers can elicit meaningful data to explore the knowledge, opinions, ideas and experience of learners. “Questionnaires are usually answered in written form, but may also be used in an interview” (p. 259). This method was selected in order to provide insights and specific information to support the answers of the research questions. It is also important to report that the questionnaire contained mainly open questions that aimed at collecting students’ answers in regard to their level of proficiency, their desires, needs, and likes in the learning of the English language, and especially their opinions about socio constructivist tasks within the seminars.

Interview: According to Lodico, Spaulding &Voegtle (2010) interview is an important instrument, now that it helps us to find out those specific things which cannot be directly seen from the researchers' perspectives, such as feelings, thoughts, and intentions. In order to conduct the interviews, the researchers provided a general perspective regarding the outline of the interview to the teacher who informed students that an interview would be conducted after the class. Thus, during the semi-structured-interview there were two of the researchers present and both used audio-recording devices during the interview.

Observation: This method was used as a personal tool in which researchers could observe the details regarding the events, behaviors, and interactions between the participants. Likewise, Freeman (1998) states that this type of method is useful because in this way researchers can write some events, actions, and perceptions that the audio recording may not provide. In addition, Pierre (2005) adds that an observation is the process of recording the behavioral patterns of people, objects and events into a systematic manner. As a result, the researchers observed and wrote down all the events performed by the participants into field notes.

5.7 Data analysis.

This section presents the process of data analysis throughout one semester in order to answer our research questions. According to Merriam (2009) data collection and analysis should be a simultaneous, recursive, and dynamic activity in a qualitative research; however, the data analysis is not finished once the data has been collected. Quite the opposite, analysis becomes more intensive as the study progresses and once all the data is already collected. The analysis began with the first observation, the first document read, the interview, and the first survey received. Then, emerging insights, hunches, and tentative hypotheses led to the refinement or reformulation of the research questions. This interactive process allowed us to produce credible and trustworthy findings in accordance to Merriam (2009) who asserts that researchers should be

present rigorously before the collection of the data, during the collection of it, and after the analysis of the data as well, in other words, the researchers are present during the whole process of the data analysis.

Besides, the organization and administration of the data also began early as it is suggested by Merriam (2009) as she claims that "the organization and management of the data also begins early, but must be completed once all the data have been collected to enable intensive analysis". In this sense, this process was developed through the analysis of the data which was collected using the three instruments: eight questionnaires, sixteen observations, and one group interview.

Initially, the researchers collected data mainly through observation sessions in which the professor was the principal instructor of the knowledge that was imparted in the class. After having the first instrument completed, the researchers continued with a group interview using an observation format that involved the general and key questions based on the socio constructivist perspective and the implementation of mind maps. Finally, with the reinforcing of the data, the researchers implemented questionnaires, as a way to provide more opened opportunities for the students to express their perceptions in a spontaneous way.

Thereafter, the data were organized into portfolios which were, labeled and entry-digitalized into a text processor as the first step to have a better organization. Also, the digitalization of the data served to identify the teacher's concerns about the content taught during the sessions observed, his expectations of the study group's process while developing the activities and the students' perceptions in the implementation of social activities.

Furthermore, Participants´ voices were recorded which was then transcribed into a word processor document that facilitated the manipulation of the data. In addition, it was possible to synchronize the data through the implementation of an online cloud which offered the opportunity to share, edit and keep the material safe. Most importantly, the researchers access the

information without time or location constrains through the use of mobile devices, computers or any technological device with access to internet. Besides, the answers of the questionnaires were fully transcribed as well as the group interview.

The preparation of the data was initiated simultaneously with the analysis process. The group interview was fundamental during the analysis of the perceptions because students were the primary source in order to establish the patterns that could potentially support our study. Besides, we considered the group interview to complement the data from the observations.

In addition, the observations and the group interview were organized in relation to each one of the questions proposed for each instrument. The observations contained twelve pre-designed questions as well as the group interview. The objective of the questions within the data collection methods was to isolate certain aspects. Then, piloting the questionnaire which contained ten open-ended questions that were numbered according the quantity of questions each instrument had. Within the questionnaire the participants were expected to express their opinions. We also enumerated the students, the instruments, and also assigned the initial of the name of the researcher who gathered the data. That is, if the researcher found a pattern in his or her observations and the patter was localized in any of the twelve questions, it was codified with the initial of the researcher, the number of the instrument, and the question. As an example, if the pattern was located in one of the researcher's Observation and it was question 1, the code was WO2Q1, if the instrument was Interview, Student 4, and Question 3, the code was IS4Q3. In the case of the Questionnaires the number of the student was also the number of the questionnaire, an example of the coding process for this data collection instrument is QES5Q10 (Questionnaire, Student 5, and Question10). All the data that were gathered were analyzed to match the objectives of the study and also answer the research questions. For conducting the observations

an important amount of time was devoted by the researchers (one academic semester approximately).

In order to organize and then analyze the data collected in this qualitative research, the process was divided in four phases: data preparation, data entry, data identification, and data manipulation. *Data preparation* involves taking notes from the observations, transcribing interviews and questionnaires in order to make more bearable the process of triangulation. *Data entry* involves the transcription of all the information and patterns collected, using the instruments of data collection. *Data identification* is intended to divide text data into analytically, meaningfully and easily locatable segments. In addition to the above mentioned statements, during *data manipulation*, these segments were searched for, sorted, retrieved, and rearranged (Tesch, 1990). However, the big umbrella term of Grounded Theory was the one which led us towards a better interpretation of the data, and also offered suggestions on how to codify and categorize the data in order to make the triangulation process more structured and organized.

The grounded theory as it is mentioned by Merriam (1998) drawn from Glaser & Strauss (1967, p.45) is composed of a variety of instruments such as interviews, observations, and questionnaires in which data are compared with other section of it to determine similarities and differences. According to Grounded Theory, open coding represents a process of identifying, naming, categorizing and describing phenomena found in the data (Borgatti. 1996, p 2). In order to give a more detailed explanation of how a category must be established and how important itis to find the interrelations of one item with another during the systematic analysis of the data, we find the contribution by Strauss and Corbin important which is quoted in Patton's book of *Qualitative Research and Evaluation Methods 3rd Edition (2002) page 487.* This authors` notion depicts that theory designates a set of developed categories that are analytically interlinked through coherent statements of relationship to form a theoretical framework that explains some

significant social, psychological, or educational phenomena. Once concepts are linked through statements of relationship into a descriptive theoretical framework, the research findings move beyond conceptual ordering to theory.

Accordingly, the analysis of the data was initiated by the researchers under the perspectives described above. Thus, during the data analysis some master lists were made in order to have strong statements which we considered valuable for this study; these consisted in making separated lists of statements, terms and possible categories and subcategories which could support our study from the data collected. Afterwards, the rest of the data was compared in order to take advantage of the information with the intention of getting more patterns to analyze. Having written these ideas, we started to identify the names or codes to build possible categories that enlightened the aspects we intended to work on. The following step was to group our open codes according to the participant's affinities and commonalities observed in the data (Merriam, 2009). With the groups defined, each group was named with sentences based on our interpretations given to the commonalities. The group's names were revised with our research advisor in order to create solid arguments. Consecutively, we could identify four main categories and eight subcategories that represent the emerging groups.

Finally, four charts were made in order to present the categories and subcategories drawn from the data(See appendix 5). This process is named a data display. As Freeman (1998) says, "displaying these patterns and relationships servers crystallize the analysis and to assemble an integrated interpretation" (p 103).

Thus, the first category presents two subcategories that responded to what it is intended to identify through one of our research questions. Thus, the consecutive categories were complemented with subcategories in order to provide a more concise explanation of the findings.

The following chapters present the categories and subcategories, its explanations, and results which give answer to our research questions.

The process was developed through the analysis of the three instruments: eight questionnaires, sixteen observations, and one group interview.

6. FINDINGS AND DISCUSSION

As it was indicated previously, the Grounded theory method was used to analyze the data. By applying this method, the data was examined by means of a very methodical procedure which is explained by presenting the foundations of each one of the categories obtained through the triangulation of the instruments, their definition and the connection between one another.

Initially, one of the processes recommended by the grounded approach is presented (Freeman, 1998), cited in Arias (2007. In this research, five major ideas were identified through the triangulation: Socio constructivism, collaborative learning, cooperative learning, mind mapping, and interactivity.

After the procedure of appointing, the key words of the study were highlighted; also the most relevant concepts and ideas emerged during the selection process of the categories and subcategories of the collected data. Through the association and accentuation of the key patterns or insightful units of meaning, each group was divided into sub groups, which served as a complement for the explanation of each category. Then, these categories and subcategories were named with related statements which summarized the overall meaning of each category and subcategory. As a result, the following categories with their sub-categories emerged as a result of the implementation of the grounded theory:

Category	The importance of the teacher to assign and monitor group work activities.	Socio constructivist mind maps as tool to summarize content Socio constructivism demands students' roles within group work	Sub-categories

Chart No 1: First category and subcategories

6.1 The importance of the teacher to assign and monitor group work activities.

The importance of the teacher to assign and monitor group work activities emerged from the characteristics and issues obtained during the collection and the systematic analysis of the data. This importance facilitates the process of learning content, in the sense that it helps students internalize, accommodate, and transform the new information in order to adapt it. Some theoreticians, for instance Leontiev (1981), refer to the movement of development which Vygotsky called "internalization" as a process of the personal appropriation of cultural capital that results from a period of "guided participation" or "cognitive apprenticeship" (Newman, Griffin & Cole, 1989; Rogoff, 1990; Rojas-Drummond, Hernandez, Velez &Villagran, 1998). In addition, Socio constructivism entails students' cooperation and collaboration through interactions, in order to achieve common goals to learn content through guided tasks monitored by the teacher.

> **IS7Q1** *"(...), I have some experiences with the students that need the guidance all the time or/and they always have troubles because maybe working in groups may become, they're really noising, misleading, and they get like... well I don't know how to say "dispersos".*

QES4Q3 *"…however the teacher's guideline is really important to encourage students to become aware of these types of activities"*

In accordance with these samples, both participants agreed on the guidance of the teacher which turned out to be fundamental inside the classroom and also highly important for controlling the activity. Moreover, the teacher was the one who controlled and organized the group works; he monitored and helped students in the construction of guided knowledge. In the first sample, the student claimed that the presence of the teacher inside the classroom was important in order to control the activity and to avoid misleading of the activity. The second sample displays that the teacher needed to foster students in this kind of activities in order to make students interact among the group work. This finding is aligned to what Mercer (1995) states that teachers scaffold students through guided participation among them. Teachers also help learners in the construction of knowledge because theory highlights the role of teachers in helping learners in the development of new manners of describing and contextualizing experience. The author highlights the importance of scaffolding within the group work by the teacher; because the instructor was asserted to be one member in the learning community who also promotes and proposes learning from their previous experiences in order to contextualize and describe the content information.

The category "The importance of the teacher to assign and monitor group work activities" produced interrelated subcategories that remarked the effectiveness of team learning in which students make contributions through certain tools which entail cooperation, in order to achieve common goals and also to accomplish a given final activity. Within the main goals we were able to find: socio constructivist mind maps as a tool to summarize content and the demands that socio constructivism requires regarding the students' roles within group work.

6.1.1 ***Socio constructivist mind maps as tool to internalize content:*** Along with the socio constructivist theory, it is vital to mention that the implementation of mind map arose as a proposal made by the teacher, with the intention of using mind maps as a tool to read and summarize content constructively. After the information was read by the students at home, they formed small groups in class and discussed the information condensed in their mind maps. Students accepted the strategy proposed by the teacher and implemented it for their interactions and discussions in order to extent their knowledge.

> **QES4Q3** *"...Mind maps facilitate the process of learning content since learners can share when working in groups what they understood."*
>
> **IQ3S7** *"...group work helps you to see different viewpoints and also helps you to learn content with the mind maps"*
>
> **IQ7S7** "*… se está trabajando en grupo y se está compartiendo el mind-map con los otros compañeros como lo hemos hecho en clase…"*

As it can be seen above, students agreed on the fact that the implementation of mind maps can facilitate learning content in the sense that they can share and express ideas, thoughts, and beliefs. In the first two samples, students expressed that mind maps facilitated and helped them narrow and understand the content better than working on their own. They had more sources and points of view that boosted their construction of new knowledge. The third sample demonstrates that socio constructivist mind maps entail collaboration and cooperation of their peers, and also promotes debates and discussion of the topics because they need to explain what they have in their mind maps in order to make it comprehensible to the others.

In addition, students followed unconsciously the steps of a guide proposed by Gao (2007) in which he stated three basic steps on how to make mind maps in team work. Firstly, each member is expected to draw out the information they have mastered and also to engage in brainstorming activities. Secondly, they socialize their mind maps with each other and discuss

which factors are necessary and important. Finally, they make a new mind map together, combining the strengths of each individual mind map and some new concepts. During this socio constructivist learning activity, all ideas are taken into consideration and all members are encouraged to take part in it, hence, their sense of responsibility is enhanced.

> **IQ8S1** "*Yo creo que lo más valioso de los mind-maps es que nos permiten apropiarnos del conocimiento, ósea lo volvemos nuestro al momento de crear nuestra propia versión del contenido"*

> **IQ8S2 "…** *al hacer el mind-map nosotros lo volvemos nuestro al adquirir, porque para nosotros hacer el mind-map sería como tomarlo para nosotros los conceptos más relevantes como para otros pueden ser otros, entonces es eso apropiarse"*

In these samples, when students created the mind maps, they could internalize and manipulate the content information proposed by the teacher as they wanted. They also compared and contrasted their viewpoints. Moreover, it is true that they not only appropriated the concepts within the information, but also that they transformed the content in order to share it among the group work. In addition, students tended to be more critical when they read and were also able to underline important information from the documents in order to contextualize it in the construction of the mind maps. This sort of strategy is more helpful for students in the building and appropriateness of the content. Wells (1994) describes Vygotskian social constructivism as the learner appropriating the knowledge and procedures encountered in interaction with others. Under this notion the apprentice constructs an own personal version of the new information. The author mentioned that the appropriateness of the knowledge and the procedures is acknowledged to the interactions made by the students. In this case, it is important to highlight that learners learn content and knowledge throughout the implementation of mind maps as a strategy drawn from the socio constructivist activities suggested by the teacher.

> **IO6S2***"Pues para mi seria como sintetizar pues lo que uno ve, como esa lectura como tan amplia, y si uno logra sintetizarla en un mapa es como una manera más didáctica de ver*

> *la lectura y una manera más fácil de ver la lectura. Si usted es capaz de hacer el mapa entonces ya sabe qué es lo que dice la lectura sin tener que estar pasando hojas y hojas esperando a ver dónde es que va encontrar el término"*

Thus, with this sample, we concluded that mind maps challenged students to read content. It also encouraged students to take notes, to brainstorm ideas, thoughts and concepts in order to make the reading process easier and more effective. Likewise, mind maps made reading more dynamic and didactic for students. The above-mentioned sample can be connected to what Chen (2010) asserts; in the sense that any course of action that entails thinking, contemplation, cognition, remembering, and creating can be potentially supported by the use of mind mapping.

Furthermore, Wycoff (1991) points out that mind mapping benefits the tendency of the mind to work briefly; it makes people to focus on main ideas quickly capturing ideas and thoughts in relatively short periods of time. Both theoreticians agreed on the fact that mind maps are the perfect tools when narrowing, remembering and creating information, and also collecting the most relevant concepts of the read content.

6.1.2 ***Socio constructivism demands students' roles within group works:*** During the implementation of socio constructivism within an EFL class, students performed unconsciously explicit roles among the group work. They were constantly interacting, debating, sharing and talking to each other with the purpose of accomplishing certain tasks. Students faced the necessity to work collaboratively in order to develop the activities effectively and also to highlight the importance of mind maps. Constructivism is based on the assumption that people develop cognitive skills through the interaction between society and its environment. Therefore, the building of knowledge is seen as an individual process (Wolff, 2003, p. 324). Learners developed activities mainly through working in groups; however, they were also responsible of their individual learning process.

WO2Q2Q3 "*Students exchange their written ideas and notes during the session…One student asked to the partners who were behind to let him see the notes that they have in their notebooks"*

"Students felt engaged when working with groups because they paid attention to others' opinion and created bases from what they have read in order to support their ideas"

In these samples, students provided evidence on the fact that there was an exchanging process of ideas and notes in order to make the development of the activity. They were performing roles suggested in the socio constructivist theory; still, they did not become aware of that, they simply developed the activity. According to the constructivist concept, there are two principles that are essential for efficient learning: self-organization or autonomy and cooperation (Wolff, 1994, p. 421). Hence, the learners' responsibility plays an important role, because they are responsible for their learning during the development of the course.

WO2Q5 "*People sit close to their partners of presentation in order to clarify ideas and to assign roles during the presentation"*

In this sample, we can infer that students sat next to their peers to clarify and to have a clear idea of the role that they had to perform during such activity; they coordinated their ideas in order to present them to the whole class.

WO1Q2 "*In some cases they correct common errors and they complement each other"*

WO3Q2 "…*Students accept the opinions of the others and correct themselves if it's necessary"*

Drawn from the samples above, it is possible to infer that one major factor suggested in collaborative learning was included: cooperative learning. Students complemented the other partners' ideas and also contributed with the task. Consequently, students accepted their partners' contribution and gave feedback to their peers when it was necessary. Likewise, Cohen (1994, p. 6) suggests that cooperative learning stimulates students to find solutions for special problems

through interacting with the members of the group. Therefore, they have to discuss, form ideas and opinions and are expected to provide meaningful feedback. The students contributed to the group by giving ideas to complete the activity and such contributions encouraged the students to take advantage of the interactions and to correct and give feedback to their peers.

Category	**Students' enrollment in socio constructivist activities**	Students' perceptions towards groups work activities Student's perception with respect to roles among group work activities	Sub-categories

Chart No 2: Second category and subcategories

6.2 ***Students' enrollment in socio constructivist activities.***

This category resulted from the analysis of data connected to the following concepts: perceptions and roles. In the first pattern, we refer to the way learners perceived their own commitment and their participation with the group when performing socio constructivist activities. In the second pattern, it is evident how roles emerged from the activity and from the participants. According to Johnson and Johnson (1991) and Baloche (1994) the majority of current research indicates that group work strategies promote greater academic success through strengthened social involvement because students are placed in situations where they must cooperate with one another. However, there are challenges within the group work; such as the tensions that can arise due to concerns about assessment of group activities (Gatfield, 1999), the competition for high grades (Imel, 1991) and the appropriate management that entails complexities of group dynamics (Johnson & Johnson, 1994).

> **IQ3S7** "*Pues la verdad es que yo me siento muy cómodo trabajando solo pero también me siento bastante cómodo trabajando en grupo porque puedo utilizar diferentes técnicas"*

In this sample, students reported how working in groups made them feel comfortable when explaining and supporting their viewpoints collaboratively with the other members of the group. Also, it shows how they could use the techniques that they had already implemented in similar situations, in other words, they were able to bring their personal and academic background to the field of learning along with their peers´ prior experiences. An essential part of this process is that the participants shared their past experiences and relevant information designed for activities in order to complete the task (Mercer, 2001). We agreed with the theoretician in the sense that the implementation of students' past experience in order to complement each other was held within our study as our participants evidenced to make the work more comfortable throughout positive interaction. In the following samples the students relate to the inclusion of talking leadership in accordance to their level of proficiency within the group work task.

> **IQ3S2** *"... Como te decía ahora que yo siempre trabajo con el mismo grupo, entonces ya entre nosotros nos conocemos pues como las habilidades entonces ya sabemos para qué somos buenos entonces nos repartimos el trabajo"*

Mentioning that they are already aware on their individual strengths in some skills, the students conceived that it was useful to know the members of the group in order to distribute the work proportionally and appropriately. In this way, students included collaborative work as a strategy to distribute or select responsibilities according to their levels of proficiency and accuracy in the topic that they were asked to work on.

Similarly, Davis ( ) a Chemistry instructor from Harvard University, stated that collaborative learning works best for students who have different levels, because the activities are divided according to their level of proficiency in the language. By doing this, the activity

becomes more flexible and the most challenging concepts of the assignment are expected to be explained by the students who have more capacity in solving the task because of their previous knowledge in resolving this type of activity *(Simon, 1992, cited in Chen (2010).*

Besides, working collaboratively implies dealing with different learning styles as Bosworth and Hamilton point out as a difficult activity. Collaborative learning requires students to participate actively and to perform cognitive and social tasks that are new and often difficult. It is not surprising that students do not always greet this experience with unalloyed enthusiasm (Bosworth & Hamilton, 1994).

6.2.1***Students' perceptions towards group work activities:*** Through the analysis of the data we noticed that most of the students responded differently than others while working collaboratively. They pointed out how collaborative learning and socio constructivism affected them in relation to their personal and professional performance. Then, some samples that can provide a highly insightful explanation of how this subcategory emerged are provided.

> ***IQ3S7"****...el trabajo en grupo le ayuda a usted a ver diferentes perspectivas, de pronto cambiar la suya en cuanto a algo también, ayuda a aprender cosas que usted de pronto no tenía"*

In this sample, the benefits of working collaboratively with other members of the learning process because students can take advantage of the different viewpoints. When students are asked to work socio constructively, they not only master the subject matter, but they also learn how to communicate with people, and how to respect different perspectives (Chen, 2010). Collaborative learning provides students the possibility to become active participants in the learning, rather than being passive recipients of knowledge from the teacher. They can learn alongside their peers presenting their perspectives about certain activity.

> **IQ2S7** "…*sentir como la motivación. Aparte de eso, no solo criticar, sino también decir y recibir las buenas perspectivas y las buenas opiniones y las felicitaciones por así decirlo de lo que está haciendo"*

In this sample, the participant stated how motivation was perceived as an important characteristic that is produced from socio constructivist activities. At this point, the enthusiasm boosted the overall enrollment within the activity. Besides, the student emphasized on the fact that collaborative learning increased their motivation and promoted acceptance among the participants. Hence, Barkley, Cross & Major (2005) assert that the priority of the teacher must be to engage the learners in order to establish an effective reception by students, as well as, fostering critical thinking, constructive participation, and productive work to solve problems. That is to say, that there will not be social communication at least the teacher helps them to engage with one to each other; the teacher is pretended to be the main source for interaction among students. However, the next sample expresses the contrary of what the author suggests:

> **IQ3S1** "(…) *también aporta en lo personal porque mediante el contacto pues con otras personas uno puede descubrirse, pues tener como una referencia de si mismo viendo lo que los demás, pues tienen concebido de lo que es uno, como un reflejo de lo que nosotros somos ante el resto del grupo, y también cómo nos vamos desempeñando, si como líderes o como los que ayudan o si uno es colaborador o no lo es, bueno uno aprende a descubrir mediante la interacción"*

With this sample students say that socio constructivism also contributed in their personal growth by means of interacting with others. On the other hand, identity was also promoted through social interactions as there was a constant need to implement social skills, involving explicit teaching of appropriate leadership, communication trust, and conflict resolution skills. With these values, the teams are expected to function effectively providing opportunities for students to act as resources for each other and thereby assume a more active role towards the learning process (Tinajero, Calderón, Hertz-Lazarowitz, 1993, p. 242). In agreement with the

theoreticians, socio constructivism entails identity about how learners feel identified with the group in order to develop determined functions and how good they perform a given role.

6.2.2 ***Student's roles´ assumed towards group work activities:*** during the development of this project, and through the systematic analysis of the data, it was also evident that participants learned from the others' perspective, due to the fact that collaborative learning entails active cooperation of the members of the groups. In addition, learners became aware of they did not only depend on the others' contribution, but also in their autonomy in order to learn. It is intended to analyze on the aforementioned statement by Wolff (2003) who strongly states that learners are the responsible of their own learning; they must develop autonomy while constructing learning. In this way, we consider that working with others derives in the development of learners´ autonomy.

The following sample was obtained through an interview conducted to a student. We asked him. This was one of the participant's answers:

> **IQ3S7** "*A mí siempre; por lo que me hecho la responsabilidad encima, me toca llamar la otra persona y decirle "que hubo pues, hágale pues, y es usted empuje y empuje".*

From this sample, it can be observed that the learner is concerned about his role in the group work; he expressed to have pushed the other members of the group when working collaboratively in order to perform the activity. Consequently, it can be deduced that in this type of procedure, working collaboratively is not as fruitful.

> **IQ3S7** *"Cuando me toca trabajar con personas ajenas a este grupo de trabajo, entonces yo suelo hacer lo que hace John, yo suelo echarme toda esa responsabilidad encima porque me aferro a pensar que por culpa de esas otras personas se vaya a ver afectado mi trabajo, entonces me sobrecargo de trabajo."*

This sample portrays how the student feels responsible when working with a group work. She affirmed to feel responsible for the work that should be performed by the group. As a consequence, she takes the role of a leader for the group because she wanted to maintain a high performance and do not affect her work. Ganem & Harun (2011) emphasize that when the whole responsibility is left uniquely to one member of the learning community. The contributions will not be successful; as a matter of fact, the results will be isolated and poor. Learners must designate responsibilities and roles to each member of the team work in order to success in the task.

> **IQ3S1***"…al final se puede dar un resultado más completo, precisamente por lo mismo, porque mirar los otros qué tienen para aportar, qué tal vez unos hayan olvidado o simplemente no hayan interpretado"*

From our point of view, this student said that the results of activity involving collaborative work can be successful and fruitful when all the contributions of the members of the group are put together. Thus, the result is more complete due to ideas provided complement the work done. Also, students completed the ideas of the students who could not interpret the material and readings. Smith (1986) & Tiberius (1990) suggest that each participant of the group is responsible for his or her contribution related to the topic, and all participants work together to combine the individual contributions into a final version of the task.

The following sample was obtained through an interview conducted to students. We asked them about the kind of support they provided or received when working in groups. This was one of the answer from one of the participants:

> **IQ5S2** *"Cuando uno trabaja en grupo es bueno no solamente dedicarse a lo que a usted le toco hacer y desentenderse de todo el resto de trabajo porque muchas veces esa persona no sea capaz no pueda hacerla o tenga alguna dificultad para hacerla, entonces si uno estar pendiente de todo el trabajo de todo el proceso de todo, entonces puede estar como seguro de que el trabajo va salir bien; no estar a bueno entonces a usted le toco eso y yo ya me desentiendo de eso no vuelvo a estar pendiente de lo que a el otro le toca*

hacer, o sea es trabajo en equipo no dividirlo por individualidades hay que trabajar en grupo compartir todas esas dificultades como grupo"

Out of this sample, we were able to observe that she did not only focus on her responsibility and role inside the group work, but she was also aware of the work of the others and their development of the task. This is part of what socio constructivism suggests. Therefore, all students read the assignments but each member agreed to provide in-depth attention of a particular segment of the material to the group and to answer as well as possible the questions that other members of the study team (Gushy, 1988; Johnson, Johnson, and Smith, 1991; Light, 1992).

Category	**Socio constructivism fosters critical thinking**	Critical thinking throughout learning together	Sub-category

Chart No 3: Third category and subcategory

*6.3**Socio constructivism fosters critical thinking***

This third category emerges to present the contributions made by the participants in the social constructivist environment. Hence, critical thinking involves a wide range of concepts that are directly connected in the implementation of group work. The major aspects that a teacher must consider in the learning process must be to hear and pay careful attention to what students say, perform socially, think critically, and work for the same purpose to solve common problems (Barkley, Cross & Major 2005). Talking is not just a form of collective action; but also a social

mode of reasoning by which individuals can build knowledge and understanding together (Mercer, 1995). Human beings utilize speech for several purposes; sharing ideas with others, increasing personal and collective experience, and presenting ideas; all these as form of contextualized reality to build cultures. Socio constructivism aside to collaborative learning is intended to provide numerous advantages and not just learning from others. Furthermore, it prompts critical thinking skills, expands individual responsibility, increases the levels of analysis and positive inter-reliance, improves problem solving strategies, and internalizes content knowledge, among others (Gupta 2004; CSHE 2002; Gokhale 1995; Schofield 2006; Johnson, Johnson, & Holubec 1992).

In order to present this category, key concepts will be continuously connected to what emerged during the data analysis process: Critical thinking, sharing ideas, thoughts, and beliefs. These concepts were mainly obtained from the patterns and behaviors observed in the analysis of the data. After having triangulated the instruments, it is noticeable how students activated their cognitive skills in order to implement them in the collective construction of knowledge.

According to Totten, Sills, Digby, & Russ (1991), learning together gives students opportunities to engage in discussions and debates, and thus become critical thinkers. Initially, students needed to establish rapport within the group work in order to produce knowledge and communicate their ideas to the other members. In this sense, students were exposed to an environment of expressing and receiving viewpoints, which required the presence of respect towards their peers' contribution.

> **CO1Q12** ***"****Acceptance of other ways of thinking, and developing a more critical and flexible (...)"*

During the observations conducted inside the collaborative environment, a researcher noticed how students received and accepted the contribution of the others and then implemented

it for their benefits in the creation of their mind maps. Consequently, participants analyzed and interpreted the explanation of their peers which derived in a process of critical thinking.

In a study conducted by Falchikov (1986, p. 147), the author reported that one of his students noticed that learning throughout teamwork was 'challenging, helpful and beneficial'. The participant of Falchikov´s study asserted that team work helped them 'think more, learn more, and become more critical and structured' (Falchikov, 1986, p. 161). In this context, we can add that learners are challenged through the use of socio constructivism, which implies the use of critical reasoning when listening to the others' viewpoints about a given content.

In a questionnaire, one of the participants presented its answer when he was questioned:

What do you consider more effective for your process of learning, working alone or with others? Why?

> **QES8Q2***"I prefer to work alone. I manage my time; I write what I want, what is relevant to me. However, I consider very important the group work because it enhances critical thinking, discussions; many points of view appear, so, both are necessary to improve my process of learning".*

This student explained some aspects related to individual and group work. He mentioned that his preference was definitely to work alone because the learner can control his time and can write any ideas he wanted to. We can deduce that the learner has had experiences in other group activities which have created an unenthusiastic view towards team work due to their learning styles. On the other hand, the student also highlighted that working collectively challenged him to think critically towards the different points of view that he had to face when discussing their points of view in the group work. This process of classification was asserted to define the reliability and potential contribution of the information for the improvement of their learning process. In addition, these kinds of activities came out to be beneficial in the sense that they

helped learners enhance their reasoning skills and their evolution in the process of knowledge construction as well (Coll y Monereo, 2008).

6.3.1 **Students thinking critically when learning together:** This subcategory emerged as a part of critical thinking because of students' reactions perceived when collaborating with the others members of the group to complement each other's ideas and concepts. In agreement with Zhang (2009) education as a social process for assimilating "higher-level" concepts and values may benefit from increasing demand for an active learning environment in which the teacher and students know, trust, and challenge each other to expand their knowledge and worldviews.

Besides, the implementation of collaborative learning can provide a meaningful and lasting learning which grows from a personal and active participation (Barkley, Cross, & Major, 2005). Students take advantage of the contributions of the others, but some considerations must be taken into account in the process of sharing knowledge. Under this conception, students are conceptualized as members of a learning community who exchange worldviews, departing from the principles of respect and tolerance.

W01Q12 *"Work in groups makes students to ask to others about something that they* The study of mind mapping with collaborative learning. A Seminar Paper Presented to the Graduate Faculty University of Wisconsin-Platteville. In Partial Fulfillment of the Requirement for the Degree Master of Science in Education by Zhongxiang Chen (Sophia) 2010.

> *don't know or is not clear. Students take advantage while working with others because they ask and speak and elicit as much as information as they can in order to success in the activities suggested by the teacher".*
>
> **QES6Q4** *"That you learn to share and receive ideas from others".*
>
> **IQ2S1** *"...aprender desde el proceso como estudiantes, a compartir, tolerar, aportar".*

In these samples, it is evidenced how learning is carried out collectively, they explained metaphorically, ants working for a common objective in which each member develops a given function to achieve a final task. In the first sample, the researcher could observe that the fact of joining students into small groups promoted speaking and production of speech, in order to elicit information of certain concepts that might not be clear in the readings. .

The second pattern emerged as a result of the participants´ answer to the question: *what is the purpose of group work for language teaching and learning?* The participants expressed that the role of group work was to complement the need to learn how to share, how to interact with others when receiving and explaining points of view. In addition, the third pattern also suggests that learning to share and learning to tolerate and respect the others' contributions were the foundations of effective group work.

Zhang (2009) mentioned that with the complexity of a gradually more interactive cultural world, there is a need for education to teach people how to make more peace than war. Tolerance, appreciation of differences in perspectives and cultures, creative problem solving, critical thinking, and conflict resolution; can be taught in a collaborative atmosphere. The interrelation and well rapport established by the students in the collaborative environment facilitated the learning process, in the sense that they establish relationship that requires positive interdependence, they master a sense of "sink or swim together" in the accomplishment of the task. Also, they must know that if one member fails in the process, then the group fails. Moreover, they become aware of their individual accountability because each of them has to provide a certain contribution to enhance the collective process of learning. Furthermore, they develop interpersonal skills as communication, trust, leadership, decision making, and conflict resolution (Johnson & Johnson, 2008). In completely agreement with John Dewey who promoted

democracy in education, we can add that learners worked democratically with the other members as they supported the others' ideas and respected the external suggestions within teamwork.

Furthermore, according to Davidson (1990), one way a learner can effectively work in groups and develop a high proficiency regarding interpersonal skills is by talking, listening, explaining, and thinking with others as well as by himself and herself. In conclusion, the collaborative learning method takes advantage of heterogeneity in classes by encouraging learners to learn from others and from more and less knowledgeable peers.

Category	**Language trends in socio constructivist activities**	Code switching as strategy to foster content understanding in socio constructivist environments	Sub-category

Chart No 4: Fourth category and subcategory

6.4***Language trends in socio constructivist activities***

In this final category the role and usage of the language appeared to be of great importance for the students, since they needed to communicate effectively to avoid misunderstandings while they communicated their ideas and instructions to their group partners. Besides, it is essential to mention that socio constructivism and collaborative learning entail more than just activating their critical thinking, but also the inclusion of an appropriate use of the language with significant purposes that promotes the development of the communicative competence. Accordingly, Vygotsky suggests that language is a matter of human concerns since

it permits the understanding of the world because it becomes the main vehicle of the human growth. Similarly, he proposes that the use of language is closely connected to cultural events through social interactions and that the use of language serves as a psychological tool for organizing our individual thinking. In this context, students evidenced to have gone further towards the implementation of the language for both; growing culturally and organizing together their ideas coherently after having discussed the concepts to accomplish the task proposed by the teacher. This process was possible through the inclusion of collaboration with the others and resulted in the collective and individual growth of the participants.

The following sample was obtained through an interview conducted to students. This was one of the answer from one participant:

> **IQ4S7** *"Pues en cuanto a enseñanza y aprendizaje del lenguaje es educar como en un ambiente digamos artificial de lo que va hacer la aplicación del lenguaje. Cuando usted esté trabajando en grupo y está conversando utilizando el lenguaje, expuesto a un proceso social, mientras que usted cuando sale de ese contexto, usted está en un contexto artificial, usted está adiestrando de cierta forma un contexto real, a utilizar el lenguaje"*

In the present sample, it is revealed that students are taught within an artificial learning environment to utilize the language in a learning environment. After they learnt to use the language significantly, they also noticed that such knowledge could be used not only in educational fields, but also in authentic contexts. Consequently, they express that the language and the new knowledge could also be applied in practical activities as it is the case of socio constructivism; in other words, it means that applying linguistic knowledge and skills to understand and communicate effectively within the group wor kcan improve their overall abilities in other areas.

> ***QES7Q4*** *"to encourage the development of the linguistic and sociolinguistic competences inside a learning environment".*

As it can be seen above, the student in this sample affirmed that working constructively encouraged him to develop linguistic and sociolinguistic competences.

6.4.1 **Code switching as strategy to foster content understanding in socio constructivist environments:** In addition to language trends, it is relevant to explain that along with the triangulation of the methods, some specific elements were seen during the analysis of the information which is the case of the use of the language. As it is explained in previous findings the main vehicle of communication and interaction has been language which serves as the main source to negotiate meaning and provides a positive impact in the process of learning

> **QES1Q4** *"… the language is used during the process, so the learning is more natural and successful".*

The student explained that language is accurately produced through the interactions made within teamwork. However, it is fundamental to present different evidences which support more precisely the use of language. Mercer &Wegerif, (2003) suggest the term "Exploratory talk" which represents a way in which partners involved in problem solving activities can use language to think collectively; in other words, to "interthink effectively" to solve problems and achieve common goals.

> **WO1Q11***"Students prefer speaking Spanish rather than English because is easier for the explanation of some concepts which are hard to understand or are not clear on the readings"*
> **WO3Q11***"They use both languages to make nicer the work and to not feel stress. Besides, when complex sentences are presented, students prefer explain them in their native language rather than the target language"*

In these samples obtained from one of the observations, a participant suggests that students use their native language in most cases in which the explanation of complex concepts

were necessary. In this sense, it is stated that the expectation in the production and improvement of the target language was not completely accomplished just when working in groups. Moreover, the fact that in this answer the student was more likely to use his native language during the negotiation of meaning and the explanation of complex concepts. Differently, Eldridge mention that this type of code switching can be understood as a "Floor holding" approach in which the alternation of two languages is carried out with the aim of maintaining the flow of the conversation without interruptions. In others words, it depends mainly on the intention of the speaker while producing oral speeches, it is the interlocutor who selects whether to code switch or not.

CO4Q11 "*Some groups use L1 and the others L2 while negotiating with the content*"

In a different observation made by another researcher, he observe that students used two languages interchangeably in order to negotiate content in a way in which the participants of the group could understand clearly the concepts from the content. They switched the languages and explained the concepts in their own words, which means that from their perspective, it was helped to understand the content read.

SO5Q11*"Spanish is spoken sometimes. However, some students use code switching in order to communicate."*

Finally, in the previous sample taken from the observation made by another researcher, the observer, pointed out that Spanish was spoken mostly in the collaborative environment. On the other hand, code switching was seen as a tool to collaborate with ideas. Ausubel (1963) stated

that individuals are more likely to use the language if there are motivational factors that lead to the requirement of using the language purposefully and meaningfully.

7. PEDAGOGICAL AND RESEARCH IMPLICATIONS

In the following paragraphs, the pedagogical and research implications will be explained. The pedagogical implications refer to what was discovered through the investigation about social learning and the positive effects that were noticed while observing the implementation of this methodology. Also, the personal growth increased as both students and pre-service teachers recognized and adopted the socio constructivism. Moreover, research implications refer to what was carried out during the process as researchers, and the further research which can be conducted as a deeper investigation of important phenomena in relation to this specific topic.

During the process of investigation, the researchers initially needed to arrange meetings in order to divide the roles of the workloads equally, as well as to start with the collection of data. All these, bearing in mind the essentials of qualitative research in order to take into account students' behaviors, reactions, and thoughts to obtain valuable patterns that provided insights to answer the research questions.

Consequently, we noticed that implementing social interactions to teach content derives in numerous benefits within a learning environment. At the beginning, the interaction was evident as the learners performed the activities by interacting with the others most of the time the researchers' attention and increased the expectations to continue deepening in the topic. Under this conception it is worth saying that tasks and activities should be predesigned in order to execute it accordingly to students' interests and needs what makes it more challenging for teachers to improve the quality of English instruction in the classrooms.

Hence, further research which can be considered in future projects is not only suggested to involve the data collection instruments used in this study, but the researcher could gather

learners' artifacts in order to provide evidence of the advantages and disadvantages of the strategy in the four skills as well. For instance, to improve the experiences for a better development of communicative competences, and prompt critical thinking skills to deal with adverse circumstances, expose viewpoints, and find creative solutions to real-life situations.

Furthermore, the existent literature provides the fundamental information for the understanding of the pedagogical field in order to have a wide spectrum of what teachers face in their experience in classrooms. Collaborative environments have entailed an enormous impact in this study, and its implementation is highly suggested as a potential option for the teachers who desire to implement socio constructivist activities and seek to build effective learning scenarios.

There is an important amount of literature regarding the area of socio constructivism and collaborative learning. These concepts are nowadays of high pedagogical interest, and they are best implemented if combined along with the interest towards the English language teaching-learning. Whereby, more research about teacher's guidance or role should be conducted in further research, since every unique case affords educational data for the ELT field that should be applied by facilitators who are interested in implementing socio constructivism in collaborative tasks.

To conclude, socio constructivism and collaborative learning have attracted attention across the time because these concepts align with the current trends of language teaching; however, there is a low expertise on how to conduct socio constructivist activities in collaborative tasks. The instruction on how to implement socio constructivist learning scenarios should initiate in the University programs of English language teaching. Specifically, because undergraduates enrolled in language teaching programs should know about methods and strategies for learners to develop communicative and social competences, show tolerance to accept the different viewpoints, and construct the reality that surrounds them socially. After all, language teachers have the dual responsibility of guiding learners to develop their communicative competences, but also, to guide humans towards proposals for a better society.

8. LIMITATIONS OF THE STUDY

During the development of our research project the most relevant limitation was the time. Since some of the researchers were about to finish the degree and some of the researchers were extremely busy presenting different tasks and exams to finish their ELT program. The others were preparing classes for their practical sessions in the principal schools investing time on preparing lesson plans.

Consequently, some of the researchers evidenced time constraints for being present to conduct the scheduled observations; for that reason, there were always two researchers in the classroom. In the cases when one of the two researchers in charge was not able to attend the class, a different researcher replaced the position.

Moreover, the researchers found limitations when attending the advising sessions as in some cases some of the researchers were in class or were away for lack of economic resources to travel.

On the other hand, a certain lack of motivation of some students to participate in the research study was evidenced because when the consent letter was given to all the students some of them decided not to collaborate with the study. Some of them even decline their acceptance to be observed. This caused an overall delay in the analysis process.

Unfortunately, one of the struggles on the continuous process of collecting and finding information to support the study was the lack of material and books related to our case study at

the main library of the university. Sometimes, material that was necessary to complement the study was not available, it was already taken by other readers. However, this was not a big obstruction because fortunately we were able to find available material on the internet mainly based on the “Proquest”platform of the university.

Finally, some problems were found at the beginning of the process of investigating because of the low research experience possessed in conducting qualitative research. Still, all the advice provided by the advisor was taken into account, and his instructions followed step by step, which facilitated the process of the investigation. Regarding the analysis and reflection of the data, the researchers faced some difficulties since as a qualitative descriptive interpretative case study; the research entailed some limitations based on the subjectivity of the qualitative data. Hence, the analysis of this data has in some ways carried out according to the reflective and humanistic characteristics of a person who just watches and describes the facts observed through the investigation. This human condition involves the presence of biases, but they were progressively omitted as there was a rigorous and systematic triangulation of the different instruments. On the other hand, those biases were specifically monitored or reduced by the permanent observation and implementation of different data collection methods and the triangulation of those methods.

9. CONCLUSIONS

In this section, the different conclusions after the implementation and analysis of the research project will be exposed. The conclusions were formulated through the process of answering the research questions. The first question refers to what the impact of socio constructivist activities is in enhancing content learning in students from a public university.

In order to answer this question, it can be concluded that participants expressed that at the time of developing or interacting in a socio constructive environment, the facilitators' guidance is necessary. In this sense, the importance of the role of the teacher to construct knowledge in socio constructive processes should be further investigated in a qualitative study.

Another major conclusion is related to the idea of learners experiencing changes throughout the process in terms of language development and content as learners were motivated towards content and language, and evidenced with participation and engagement. Participants felt changes in language development because they started a process of understanding the language in a more contextualized way, talking and exchanging information about previous experiences and strategies that they already knew. As a matter of fact, the inclusion of mind maps made it more bearable for students to internalize the concepts to be learnt during the seminar.

Finally, the participants demonstrated more motivation in the content based and social interactive classes because they express and contrast ideas with others in a foreign language and in their mother tongue

Moreover, the inclusion of socio constructivist activities in ELL setting conducted in the present study comprehended the continuous cycles of qualitative research. The constructivist tasks that enhanced critical thinking skills development were determinant tools that encouraged learners to use the target language and simultaneously trigger their cognitive skills. Also, the implementation of a socio constructivist approach boosted the preparation of competent students for real setting in a collaborative and cooperative way.

In this sense it is not possible to establish precisely how much the cognitive skill of undergraduates was developed throughout this process. This would have requested tests related to the thinking area and its development. Since this study took place in a context where content was the principal aim of instruction, we did not specify on measuring how the cognitive and analytical skills of the learners progressively developed. Instead, we focused on researching how impacting the interaction through social interactions and collaborative learning affected the process of learning of the students and better understanding of content.

In this sense, the collaborative characteristic of a socio constructivist environment demonstrates to be a beneficial strategy for enhancing content and understanding in an atmosphere that stimulated learners to interact, communicate different viewpoints, enroll the students' responsibilities, and simultaneously activate their critical thinking. This improvement was possible throughout the adaptation of mind maps as tools to summarize content. Further research should be implemented with different activities, but taking always into consideration social interactions as the main goal. It is necessary to prepare tolerant people who respect the differences. Also, the social concepts related to the use of the English language in real and different purposes must be viewed as essential.

The following research question was about what the perceptions of a group of English Language learners at a public university through the implementation of social constructivist tasks were.

With the aim of answering the question, it is necessary to state that there were situations at the beginning of the study in which students still preferred to work on their own, but then they became aware of the positive aspects they could take advantage of. For instance, group work involved less time consumption, equal effort, responsibilities, scaffolding of their knowledge, respect for others' contributions, acceptance of themselves, just to name a few.

Consequently, it is concluded that learners found the implementation of this activities motivating within the collaborative setting in which they were involved. Whereby, they were aware of cooperating and sharing their viewpoints in realistic circumstances where communication was crucially needed.

The capacity to collaborate and cooperate is fortunately not an innate quality of all human beings. It can be developed through a variety of experiences and is enhanced by direct teaching and learning in classroom situations. Indeed, Johnson and Johnson (1997) advocate that building collaboration and co-operation through encouraging controversy and argument. This can be achieved within group work that tackles problems through presenting opposing arguments which helps learners to generate discussion and sharing differing viewpoints.

In addition, students perceived that working with others expanded the sight of their knowledge since students accepted different viewpoints that could complement their ideas or changed their conceptions about a given topic. Most importantly, learners found Collaborative learning very beneficial for their personal growth in the establishment of identity as within the

teams the participants must adopt a diversity of roles that encourages values such as leadership and responsibility.

Finally, some negative aspects were expressed by some of the students when developing the activities collaboratively. To exemplify, the learners felt in some way responsible for the result and accomplishment of the tasks which implied to call their partners and push them to work. Conversely, some other participants expressed that for the lack of support and commitment of their peers their grade could be negatively affected.

So, with the aim of answering the question, it can be concluded that learners utilized their conceptual maps as a strategy to condense and internalize content. They assumed a position of appropriateness of the content since they wrote strong statements that they argued and defended within discussions. Besides, some of the learners found mind mapping dynamic to read extensive readings because of the synthesized content to avoid massive loads of text.

Additionally, the implementation of Socio-Constructivist activities on the present research project lasted for a period of a semester, a period of time that revealed important data that evidenced learners' progress on critical thinking processes. However, it is important to understand that both criticality and language development are not subjects that could be achieved in such a short period of time. Yet, one of the most important conceptions to comprehend is that critical thinking is a life-long effort and an individual does not become a critical thinker under periodical sessions of instruction, as a matter of fact, it requires a cognitively disciplined process that stresses individuals to persistently use skills in various situations and for different subjects and purposes.

To conclude, it is important to consider the vehicle that students utilized to communicate their ideas, thoughts and opinions which was the language. With the inclusion of this type of method the participants evidenced an improvement of their oral speech. Besides, they felt encouraged to develop linguistic and sociolinguistic competences within the social environment. In this context, it is highly important to mention that as well as they used mind mapping to contextualized content, they also used code switching as a strategy to communicate clearly, to avoid misunderstandings , and time consumption during the performance in the task.

Students used code-switching sometime to communicate understanding of the content read to the others. In other words, socio constructivist activities helped them and guided them through their learning process, specifically with the inclusion of cooperative learning as they supported and assisted each other in their both collective and individual growth.

Nonetheless, the fact that students alternate languages and that they did it in certain ways and with different purposes, means that they used code-switching because they conceived the classroom as a bilingual space and they could not resist using their first language as it is culture and identity too. However, the main goal within the learning scenario was to clarify meaning and concepts, and the importance of the content of the seminar served as a reason to have an active participation of the students and to avoid free riding practices.

10. REFERENCES

Vygotsky. (1978). Making Groups Work: University Students' Perceptions. International Education Journal Vol 4, No 3, 2003 http://iej.cjb.net 177 Flinders University, School of Education.

Brisk, 1991, Campione & Brown, Rogoff, 1990, Vygotsky, 1978, Vygotsky. (1981). *Foreign Language Teaching & Language Minority Education, Número 19.* Editado por Kathryn Anne Davis.

Barkley, Cross & Major. (2005). *The study of mind mapping with collaborative learning.* A Seminar Paper Presented to the Graduate Faculty University of Wisconsin-Platteville. In Partial Fulfillment of the Requirement for the Degree Master of Science in Education by Zhongxiang Chen (Sophia) 2010.

Barnett, 1990, Bembry 1995, Trist. (1977). *Cooperative Learning and Second Language Teaching*. Cambridge University. 32 Avenue of the Americans, New York, NY 10013-24-73, USA. As published in Language Education, Press 2006.

Ausubel, D. (1963). *The Psychology of Meaningful Verbal Learning. New York: Grune &Stratton.*

Bedoya Hernandez, Ana Milena. (2012). *Teaching english throughout content-based instruction to efl beginners at a language institute in Pereira.* (Tesis de pregrado). Retrieved from http://hdl.handle.net/11059/2997

Fisher &Abedi (1990). *Collaborative language learning and teaching.* United States of America: Cambridge University Press.

Benjumea Echeverri, Katherine, Escobar Marín, Liliana Morales Castillo. (2011).

Improving academic writing in an ELT program through writers' workshops. (Tesis de pregrado). Retrieved from http://hdl.handle.net/11059/2141

Burdett, Jane. (2000). *Making Groups Work: University Students' Perceptions.* International Education Journal Vol 4, No 3, 2003http://iej.cjb.net 177 Flinders University, School of education jane.burdett@unisa.edu.au

Council of Europe. (2001).*Common European Framework of references for languages: Learning, teaching and assessment.* Cambridge: Cambridge University Press.

Dawes, Lyn & Sams, Claire in Littleton, K., Miell., D., and Faulkner, D. (2004). *Learning to Collaborate: Collaborating to Learn.* Nova Science Pub. Inc.

Fehling, Sylvia. (1998). *Cooperative Learning in the EFL Classroom*. Universität Kassel (Germany).

Jack R. Fraenkel., Norman E. Wallen. (1996). *How to design and evaluate research in education.* Third edition. Lane Akers, Inc.

Gutierrez, Martha Cecilia, Orfa E. Buitrago J. (20). *La Formación docente en las prácticas educativas una propuesta basada en la investigación.*

Marguerite G. Lodico., Dean T. Spaulding., Katherine H. Voegtle. (2010). Methods in Educational Research from Theory to Practice. Second edition. Published by Jossey-Bass. San Francisco.

Mercer Neil (2001). *Palabras y mentes como usamos el language para pensar juntos.* Editorial Paidos.España.

Mercer, Neil In Wells, G. & Claxton, G. *Learning for life in the C21st: Sociocultural*

perspectives on the future of education. Developing dialogues. Oxford: Blackwell. (press).

Mercer, N. & Wegerif, R. (2003). Is 'exploratory talk' productive talk? In Daniels. HRJ., Edwards. A (Editors) (2003). Psychology and Education: a reader (pp 79-102). In (pp. 79-102). London: Routledge/Falmer.

Merriam B. Sharan. (2009). *Qualitative research a guide to design and implementation Revised and expanded from qualitative research and case study Applications in Education* .Published by Jossey-Bass. San Francisco.

Merriam B. Sharan and Simpson L. Edwin. (2000). *A guide to research for educators and trainers of adults.* Second edition. Krieger Publishing company. Malabar Florida.

Ministerio de Educación Nacional República de Colombia. (2006). *Estándares básicos de competencias en lenguas extranjeras: Inglés. Formar en lenguas extranjeras: ¡El Reto! Lo que necesitamos saber y saber hacer.* Bogotá (Col): Imprenta Nacional.

Nunan, D. (1992). *Collaborative language learning and teaching.* United States of America: Cambridge University Press.

Panitz, Ted (1996). *A Definition of Collaborative vs Cooperative Learning.*

Patton, Michael (2002). *Qualitative research and evaluation methods*. Third edition. Published by sage publications. United States of America

Richards, Jack C., &Rogers Theodore S. (2001). *Approaches and methods in language teaching (2nd. Edition).*United States of America: Cambridge University Press.

Syed, Zafar (1999). *Learning with others: Collaboration and Partnership.* Military Language Institute, United Arab Emirates.

Zhang, L. (2009). *Engaging university learners in critical thinking to stimulate collaborativelearning: Perceptions of american and chinese students.* University of South Dakota.

Zhongxiang Chen. (2010). *The study of mind mapping with collaborative learning.* University of Wisconsin-Platteville.

Dubinsky, Mathews & Reynolds. (1997). *Learning for life in the C21st: Sociocultural perspectives on the future of education*. Developing dialogues. Oxford: Blackwell. (press).

Gupta 2004; CSHE 2002; Gokhale 1995; Schofield 2006; Johnson, Johnson, & Holubec 1992. *Asian students´ perception of group work and group asssigment in a New Zealand* institution. Intercultura Education, volumen 19, issue 3, 2008.

Buzan, Dottino & Israel. 2007, cited in Zhang. 2009. *Engaging university learners in critical thinking to stimulate collaborativelearning: Perceptions of american and chinese students.* University of South Dakota.

Cavanaugh (1993) cited in Syed (1999). *Meaningful Learning: The Essential Factor for Conceptual Change in Limited or Inappropriate Propositional Hierarchies Leading to Empowerment of Learners*. Department of Education, Cornell University, Ithaca, NY, USA Institute for Human and Machine Cognition, University of West Florida, FL, USA Received 14 September 2000; revised 17 December 2001; accepted 14 January 2002.

Borden, (1992). *Foreign Language Teaching & Language Minority Education, Número 19.* Editado por Kathryn Anne Davis.

Bruffee, 1999; Felder, 1995; Tinzmann; Schneider. (1995). Online Collaborative Learning: Theory and Practice. Editado por Tim S. Roberts.

Johnson and Johnson (1991), cited in Zhang. (2009). *Making Groups Work: University Students' Perceptions.* International Education Journal Vol 4, No 3, 2003.177 Flinders University, School of Education.

DETYA, 2000; Furnham, 2000; CIHE, 1996; Harvey et al. (1997).*Making Groups Work: University Students' Perceptions.* International Education Journal Vol 4, No 3, 2003.177 Flinders University, School of Education.

Dawes & Claire, cited in Mercer. *Talk Box: Speaking and Listening Activities for Learning at Key Stage.* British Library Cataloguing in Publication Data, 2004. Edited by Lyn Dawes, Claire Sams.

Quaddus & Tung. (2002). *Virtual and Collaborative Teams: Process, Technologies and Practice*. Edited by Susan Hayes Godar, Sharmila Pixy Ferris.

Simon 1992, cited in Chen. (2010). *The study of mind mapping with collaborative learning.* A Seminar Paper Presented to the Graduate Faculty University of Wisconsin-Platteville. In Partial Fulfillment of the Requirement for the Degree Master of Science in Education by Zhongxiang Chen (Sophia) 2010.

Simon. 1992 & Zheng. 2009, cited in Chen. (2010). *The study of mind mapping with collaborative learning.* A Seminar Paper Presented to the Graduate Faculty University of Wisconsin-Platteville. In Partial Fulfillment of the Requirement for the Degree Master of Science in Education by Zhongxiang Chen (Sophia) 2010.

Zhang . (2009). *Engaging university learners in critical thinking to stimulate collaborative learning: Perceptions of american and chinese students.* University of South Dakota.

Zimbardo. 1996, cited by Furnham. (1997). *Making Groups Work: University Students' Perceptions.* International Education Journal Vol 4, No 3, 2003.177 Flinders University, School of Education.

Williams. 1981, cited in Houldsworth and Mathews. (2000). *Making Groups Work: University Students' Perceptions.* International Education Journal Vol 4, No 3, 2003.177 Flinders University, School of Education.

Smith, as cited in Merriam. (1998). *Qualitative Research and Case Study Applications in Education.* Revised and Expanded from Case Study Research in Education. 2 revised, editor Wiley, 1997, ISBN 0787910090, 9780787910099.

Miles & Huberman. (1994). *Qualitative research a guide to design and implementation Revised and expanded from qualitative research and case study Applications in Education.* Published by Jossey-Bass. San Francisco.

Lodico, Spaulding &Voegtle. (2010). *Qualitative research a guide to design and implementation Revised and expanded from qualitative research and case study Applications in Education.* Published by Jossey- Bass. San Francisco.

Patton. *Qualitative Research and Evaluation Methods.* 3rd Edition, John W. Creswell University of Nebraska-Lincoln. 2002.

Newman, Griffin & Cole, 1989; Rogoff, 1990; Rojas-Drummond, Hernandez, Velez & Villagran. 1998. S*ocial interaction to individual reasoning: An empirical investigation of a possible socio-cultural model of cognitive development.* Rupert Wegerif. Centre for Language and

Communications, School of Education, The Open University, Walton Hall, Neil Mercer, Lyn Dawes, Milton Keynes. MK7 6AA, UK.

Mercer. 1995. *Teaching children how to use language to solve maths problems.* Neil Mercer Faculty of Education, University of Cambridge, 184 Hills Road, Cambridge, United Kingdom CB2 2PQ. Claire Sams. Faculty of Education and Language Studies, The Open University, Milton Keynes, United Kingdom MK7 6AA, UK.

Wolff, 2003. *Cooperative Learning in the EFL Classroom*. Sylvia Fehling, Universität Kassel (Germany). 2005.

Barkley, Cross & Major. 2005. The Study of Mind Mapping with collaborative Learning a Seminar Paper Presented to the Graduate Faculty University of Wisconsin-Platteville In Partial Fulfillment of the requirement for the Degree Master of Science Education by Zhongxiang Chen (Sophia). 2010.

Ganem & Harun. 2011. *Contemporary Approaches to Second Language Acquisition.* Edited by María del Pilar García Mayo, María Junkal Gutierrez Mangado, María Martínez Adrián. AILA, Applied Linguistic Series 9. John Benjamins Publish Company. 2013.

Gushy, 1988; Johnson, Johnson, and Smith, 1991; Light, 1992. *Asian students´ perception of group work and group asssigment in a New Zealand* institution. Intercultura Education, volumen 19, issue 3, 2008.

Totten, Sills, Digby, & Russ. 1991. *Information and Knowledge Transfer: the Impact of Collaborative Learning (CL) in Enhancing Students Academic Performance in Nigerian*

Universities. IEEE Multidisciplinary Engineering Education Magazine, VOL. 4, NO. 1/2, JUNE 2009.

Barkley, Cross, & Major. 2005. *The study of mind mapping with collaborative learning.* A Seminar Paper Presented to the Graduate Faculty University of Wisconsin-Platteville. In Partial Fulfillment of the Requirement for the Degree Master of Science in Education by Zhongxiang Chen (Sophia) 2010.

11. DECLARATION AND ETHICAL CONSIDERATION

We, Carlos Andrés Agudelo, Sandra Biviana Ospina, William David Cano Ortiz, declare that the contents of this thesis represent our own advised work, and that the thesis has not previously been submitted for academic examination towards any qualification. Furthermore, it represents our own opinions and not necessarily those of the English teaching field.

Any research that involves other people in some way has ethical implications. This study was conducted in accordance with the guidelines for research suggested by Goodman (2002:38-54) and Wellington (2000:54-57). All participants were treated with respect and sensitivity. Permission was requested from the participants(see Appendix 1). The consent letter was given to the learners to sign, granting them permission or not to participate in the research and were returned the following session. These letters were filed and are available on request.

12. APPENDIXES

Appendix 1: Consent letter format

UNIVERSIDAD TECNOLÓGICA DE PEREIRA

CONSENTIMIENTO INFORMADO PARA PARTICIPAR EN UNA INVESTIGACIÓN

Participación en una investigación llevada a cabo por Agudelo V. Carlos A.: Cano William D.: y Ospina Sandra B. estudiantes del pregrado Licenciatura en Lengua Inglesa de la Universidad Tecnológica de Pereira. Han sido identificados como posibles voluntarios en el estudio porque la investigación concierne estudiantes de lingüística aplicada en el programa de la Licenciatura de Lengua Inglesa.

Propósito del estudio: Investigar el impacto del aprendizaje socio-constructivista en la lengua y el desarrollo de contenidos

Confidencialidad: La información obtenida en relación con este(a) estudio, que puede identificar el estudiante se mantendrá confidencial y será compartida únicamente con su permiso, los pseudónimos serán utilizados en los documentos relacionados con este proyecto de investigación. Todos los datos y la información obtenida serán utilizadas exclusivamente para este proyecto de investigación. Los datos y la información (con seudónimos), sólo se entregarán a la Universidad Tecnológica de Pereira.

Participación y Retiro: Los participantes pueden optar por participar en este estudio o no. Si usted se ofrece voluntariamente a la práctica, usted puede retirarse en cualquier momento. También puede negarse a contestar cualquier pregunta que usted no desea responder, y aún permanecer en el estudio.

Identificación de Investigadores y junta de revisión: Agudelo Carlos A. Correo electrónico: khanguex@utp.edu.co Cano William correo electrónico: yumishone1990@hotmail.com Ospina Sandra B. Correo electrónico: sabiosbe@gmail.com

FIRMA DEL PARTICIPANTE EN LA INVESTIGACIÓN

Yo entiendo los procedimientos descritos anteriormente. Mis preguntas han sido respondidas satisfactoriamente, y me comprometo a participar en este estudio. Se me ha proporcionado copia de este documento.

_____

Firma del participante

Appendix 2: Interview format

INTERVIEW FORMAT

Interviewee´s name: _____ Date: _____ Time: _____ Class: _____

QUESTIONS	YES	NO	HOW/WHY	Analysis
1. What are your personal experiences working in groups for learning content?				
2. What do you think is the purpose of sharing your work with others?				
3. What do you think about group work task contribution to the development of personal ways of thinking?				
4. How collaborative work/learning affects you? Why?				
5. How do you take advantage when learning with your partners?				
6. What do you think is the role/purpose of group work for language teaching and learning?				
7. Which strategies do you usually use in order to improve your learning when working in group work?				

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8. What kind of support do you provide or receive when working in group work?				
9. What is the main purpose of working with mind maps?				
10. What skills do you activate when working on mind maps?				
11. What do you think is the role of the mind map in terms of content understanding?				
12. What kind of information do you share in group work tasks?				
13. What is your role when working with group work task?				
14. How is your interaction with the assigned group?				
15. What do you think about group work activities and their effectiveness for learning content?				
16. What language is spoken by the group during group work?				

Appendix 3: Observation format

1

Observation Format

Observation # _____ Time _____ Date _____

QUESTIONS	YES	NO	HOW/WHY	COMMENTS
1. What are your personal experiences working in group work for learning content?				
2. What do you think is the purpose of sharing your work with others?				
3. What do you think is the role/purpose of group work for language teaching and learning?				
4. Which strategies do you usually use in order to improve your learning when working in group work?				
5. What skills do you activate when working on mind maps?				
6. What do you think is the contribution of implementing mind maps for learning content?				

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7. What kind of information do they share in the group work task?				
8. What is the role of the teacher when working with group work task?				
9. What is the role of the mind map in terms of content understanding?				
10. What do you think about group work activities and their effectiveness for learning content?				
11. What language is spoken by the group during group work?				
12. What do you think about group work task contribution to the development of personal ways of thinking?				

Appendix 4: Questionnaire format

QUESTIONNAIRE

Name: _____ Date: _____

Time: _____ Class: _____

These questions refer to cooperative/collaborative group work:

1. How do you feel working with others?

2. How is more effective your process of learning, working alone or with others? Why?

3. Do you consider that group work facilitates the process for learning content? Why?

4. What do you think is the role/purpose of group work for language teaching and learning?

5. Which strategies do you use in order to improve your learning while working with others?

6. How do you support your statement when sharing with others?

These questions refer to mind maps:

7. How mind maps help you provide value information to the others?

8. What is the main purpose of working with mind maps?

9. What skills do you activate when working on mind maps?

10. What do you think is the role of the mind maps in terms of content understanding?

Appendix 5: Charts with the main categories and their sub-categories

Category	Group work tasks as socio constructivist strategy to learn content.	Socio constructivist mind maps as tool to summarize content Socio constructivism demands students' roles within group works	Sub-categories

Chart No 1: First category and subcategories

Category	Students' enrollment in socio constructivist activities	Students' perceptions among groups work task Student's responsibilities with respect to roles among group work tasks	Sub-categories

Chart No 2: Second category and subcategories

Category	Socio constructivism fosters critical thinking	Critical thinking throughout learning together	Sub-category

Chart No 3: Third category and subcategory

Category	Language trends in socio constructivist activities	Code switching as strategy to foster content understanding in socio constructivist environments	Sub-category

Chart No 4: Fourth category and subcategory