

Engagement, agency and learning in an English as a Foreign Language Virtual  
Learning Environment: an interaction analysis

Engagement, agency and learning in an English as a Foreign Language Virtual  
Learning Environment: an interaction analysis

by

Daniel Hernando Rojas Rodríguez

November 15th, 2021

Advisor

Ph.D. Wilder Yesid Escobar

Foreign Language, Bilingualism and Bilingual Education

A dissertation submitted to the faculty of the  
Graduate School of Universidad El Bosque,  
In Bogotá D.C.

In partial fulfillment of the requirements for the degree of

Master of Education in Higher Education

Department of Education

**Artículo 37.**

Ni la Universidad El Bosque, ni el jurado serán responsables de las ideas propuestas por los autores de este trabajo.

Acuerdo 017 del 14 de diciembre de 1989.

### **Acknowledgements**

I would like to express my gratitude firstly to God who provided me with enough bravery along this process as well as the wisdom to embark and accomplish the goals on this academic journey. I also feel grateful to my beloved mother, who was always there, supporting me, encouraging me, from the very beginning to keep working on my professional development. Additionally, all my sincere gratefulness to my advisor Ph. D Wilder, for his permanent assistance, support, and guidance. Thank you for the knowledge shared, that certainly illuminated me. Finally, thanks to my teachers who contributed to my academic and professional growth and trajectory.

More than thankful and honored to meet you all!

### **Abstract**

The pandemic of COVID-19 has established new challenges for learning conditions, limiting social interactions, and teaching guidance in EFL. However, there have been spaces mediated by technology to encourage learning through virtual environments. As such, this research was carried out as a case study in a course of advanced English at a private university in Bogotá, Colombia. This work endeavored to observe the forms in which social interactions mediated by virtual classes influence the engagement (investment) and agency of students. To accomplish this, field observations, including the multimodal interaction analysis were carried out in order to examine the way communication was displayed, considering students' investment and agency in their learning. Additionally, a focus group and an individual interview were conducted to gather participants' views on such an experience to elucidate the forms that are conducive to investment and learning. As a result, several strategies to convey meaning emerged during the virtual classes. Such findings offered insights on the multiple ways meaning was configured and knowledge was constructed through social interactions mediated by virtuality; considering both, the actions that led students to get involved in their learning process and the teacher's actions to encourage it.

**Keywords:** agency, bilingual education, EFL, higher education, investment multimodal communication, VLE

### Resumen

La pandemia por COVID-19 ha traído nuevos desafíos para el aprendizaje, limitando las interacciones sociales y la guía en la enseñanza de inglés como idioma extranjero (EFL). Sin embargo, ha habido espacios mediados por la tecnología para promover el aprendizaje a través de ambientes virtuales. Esta investigación fue concebida como un estudio de caso en un curso avanzado de inglés en una universidad privada en Bogotá, Colombia. Este trabajo busca observar las formas en las que las interacciones sociales mediadas por clases virtuales influenciaban el compromiso (inversión) y la agencia de los estudiantes. Para alcanzar tales fines, observaciones de campo, incluido un análisis multimodal de interacción fue llevado a cabo, con el fin de examinar las formas en las que la comunicación se presentó, considerando la agencia y la inversión de los estudiantes en su aprendizaje. Adicionalmente, un grupo focal y una entrevista fueron aplicadas para obtener las interpretaciones de los participantes en esta experiencia, con el fin de dilucidar las formas que llevan al aprendizaje y su inversión. Como resultado, diversas estrategias para transmitir significados emergieron en las clases virtuales. Tales hallazgos ofrecieron una mirada a las múltiples formas en las que se configura el significado y se construye el conocimiento a través de las interacciones sociales mediadas por la virtualidad; considerando, las acciones que llevan a los estudiantes a involucrarse con su proceso de aprendizaje y las acciones del docente que promueven esto.

**Palabras clave:** agencia, ambientes virtuales de aprendizaje (VLE), educación bilingüe, educación superior. inglés como lengua extranjera (EFL), inversión, comunicación multimodal

**Table of contents**

<b>Chapter I. Introduction.....</b>	<b>11</b>
Political Context .....	13
Statement of the problem .....	16
Rationale .....	21
<b>Chapter II. Theoretical Framework.....</b>	<b>24</b>
Learning.....	24
Investment and agency in learning a foreign language.....	31
A social interaction approach to language learning .....	34
Multimodal communication as a way to foster understanding.....	39
Teaching.....	42
Information and Communication Technologies (ICT) as tools to mediate interactions for teaching and learning English as a foreign language (EFL).....	45
<b>Chapter III Literature Review .....</b>	<b>48</b>
International Context .....	52
National context .....	57
<b>Chapter IV Research Design .....</b>	<b>62</b>
Type of Study.....	62
Setting .....	63
Data Collection Methods .....	66
On Observations.....	66
On Interviews.....	69
On Focus Groups .....	72
Data Analysis.....	75
Ethical Considerations .....	84
Establishing trustworthiness.....	85
<b>Chapter V. Findings and Discussion .....</b>	<b>87</b>
Multimodal communication in meaning-making and classroom engagement in EFL VLE. ....	87
Investment to enrich identity and the acquisition of cultural capital through new discourses .....	99

## (VLE) TO ENCOURAGE (EFL) ENGAGEMENT AND LEARNING

	<b>8</b>
Agency in the construction and appropriation knowledge in VLE .....	111
The teacher as an agent of change.....	125
<b>Chapter VI. Conclusions and Implications .....</b>	<b>134</b>
<b>References .....</b>	<b>146</b>
<b>Appendices.....</b>	<b>167</b>
Appendix A: Informed consent for participants.....	167
Appendix B: Permission letter for undergraduate program director .....	169
<b>Annexes .....</b>	<b>171</b>
Annex 1. Education faculty approval letter. ....	171

### List of tables

<b>Table 1.</b> This table illustrates the studies considered for the literature review ordered by year of publication.....	51
<b>Table 2.</b> This table illustrates the number of questions proposed for the interview .....	71
<b>Table 3.</b> This table illustrates the number of questions proposed for the interview .....	73
<b>Table 4.</b> In this section, the research questions and objectives are presented for the development of the study .....	75
<b>Table 5.</b> Spoken language transcription conventions .....	77
<b>Table 6.</b> Mode-Code and explanation.....	78
<b>Table 7.</b> Codes from the second cycle of analysis and their explanation.....	80
<b>Table 8.</b> This table illustrates the chronogram of the stages for data analysis including dates of data collection, multimodal analysis, interviews and focus group analysis, and the overall data analysis .....	82



### Table of Figures

<b>Figure 1.</b> Example of picture-transcript 14. This example shows the way a communicative action is sequenced for analysis, including time, utterances and the modes employed .....	80
<b>Figure 2.</b> picture-transcript 2.This figure illustrates the way communicative actions are carried out within a class interaction .....	94
<b>Figure 3.</b> picture-transcript 4. This figure illustrates the way invested students participate in class interactions in order to negotiate meaning in the exercise of knowledge construction .....	105
<b>Figure 4.</b> picture-transcript 14. This figure illustrates a display of a class an interaction in which active agents constructed knowledge by means of their participative actions .....	118
<b>Figure 5.</b> picture-transcript 10. This figure illustrates a display of a class an interaction in which active agents constructed knowledge by means of their participative actions .....	129

## Chapter I. Introduction

Globalization acquired high relevance over the last decades since it has brought important changes to societies, including intercultural and economic exchanges that connected them. Bearing this in mind, the English language has become a global language; Initially, it was used in touristic contexts, but its frequent use gradually created connections among different cultures in the world to the extent of it becoming immerse into economics, politics, businesses, and technology (Chávez-Zambrano, Saltos-Vivas, & Saltos-Dueñas, 2017). Today, the English language has grown in popularity and usage to the extent that many people consider it important to learn English in order to feel they are updated and connected to the current world, creating consequently a considerable demand to learning it. In the same way, the interactions mediated by English have opened up possibilities to access new work and academic offers (Graddol 2000). In other words, the relevance the English language has earned due to globalization, brought the necessity to promote its learning so as to allow people to become part of the new world order in which everything is connected.

Subsequently, it is critical to mention that there is a great deal of students who are interested in learning such language. Therefore, educators need to reflect on their role, to acquire new teaching strategies to satisfy students' needs, while considering didactic effectiveness in different contexts and scenarios and satisfying the modern world demands. As it was established by Orjuela & Cocoma (2017), the modernization wave that we are living every day, and the introduction of information and communication technologies (ICT) applied to education, has brought a change that gives importance to the concept of building skills. In brief, as there are many individuals trying to learn

English, language teachers should transform their practices and ICT might help them to do so, as it offers tools that assist knowledge construction accompanied by social learning strategies.

Accordingly, as it is stated by Moreno et al., (2013), learning is achieved by means of social interactions so that encouraging social interactions may be useful to promote a pedagogical renovation that turns learning and teaching into something more meaningful and effective. Accompanied by this regard, López & Gallardo (2005) suggest that the implementation of ICT as a didactic tool for teaching a foreign language facilitates and promotes learning, given that new technologies offer real linguistic tools, as they increase the opportunities to interact with the target language as well as with people worldwide. So, by using these resources, the chances to develop on students' listening, speaking, reading, and writing skills increase. All in all, learning is accomplished through social interactions, so a pedagogical renovation might be carried out if the former is combined with ICT, as the latter offers real tools that boost learning.

Additionally, it is necessary to include teachers' support, as their guidance could promote or not meaningful learning chances. In that sense, Barcos (2017) recommends that the instructor should implement activities in which students can interact and work collaboratively, as they can negotiate and agree on ideas, leading to knowledge construction. Moreover, by implementing these kinds of strategies accompanied by several resources within a class, students are likely to engage and learn more easily, including a language learning scenario. Considering the former information, the following section revises the form in which language learning has been implemented in Colombia and the possible limitations on the implementation of bilingualism. First an

overview of the political context of EFL learning is provided, then, the statement of the problem is presented and finally, a look into the significance of this work is offered through the rationale of this research.

### **Political Context**

The Colombian government has considered it important from the very beginning to provide people with proper education. Thus, the Colombian constitution in its 67<sup>th</sup> article establishes that education is a right every citizen must have access to (Col. Const. art. 67). Additionally, it is considered as a public service, which means, it is vital and develops an important social role in the Colombian society and its development. Likewise, the general law of education, states that education contributes to the integral formation of people, and new technologies must be adapted as tools for the development of Colombian education in order to enhance progress (Ley General de Educación 115, 1994). Plus, and more recently, the Colombian congress issued 1651 law (2013), in which globalization effects are recognized, considering that in order to be part of a global community, it is of vital importance to learn a second language. Hence, provisions are issued regarding a bilingualism law that has the clear intention of developing in the Colombian population communicative skills in a foreign language (Ley de Bilingüismo, 2013).

With this view, past methods of teaching a language were based essentially on memorizing grammar rules, words, or phrases that either allowed or not students to learn to communicate in the target language (Sanchez & Angel, 2009). However, at the moment of transferring knowledge in an oral way, it was observed that a great deal of students struggled trying to express their thoughts in real conversations, something that

was supposedly learned by grammar, so that, most of them did not have enough communicative skills despite their grammar foundation (Martín, 2009). Due to that, along the history of teaching and learning a foreign language, it has been evidenced that even if a student possesses a wide comprehension of grammar, this does not guarantee understanding of the language or even proficiency. Therefore, with the intention of granting foreign language proficiency, there has been a methodological transition to a communicative approach, with the objective to promote foreign language learning by means of social interactions that lead the students to communicate using the target language (Martín, 2009). Thus, this segment endeavors to provide the route of bilingualism programs in Colombia. Initially considering the relevance of English and then, exploring some of the more recent programs implemented for its learning.

First, English language has been deemed as the lingua franca for many communities worldwide. It is estimated that more than one third of people worldwide have had a certain type of contact or relation in different contexts with English (Crystal, 2003). In this way, it could be affirmed that this language is popular for communicating, and it has also established a global community due to its widely use worldwide that enables people from different cultures to relate to each other (Chávez-Zambrano, Saltos-Vivas, & Saltos-Dueñas, 2017). In that sense, as English is implemented in different areas, many countries have tried to join that community, including Colombia. Thus, English language is the code that different cultures implement to communicate and relate. So, many countries and societies, have attempted to join such a community to be part of the modern world.

Second, in terms of the bilingualism programs implemented in Colombia, the National Education Ministry in 2015 established the national English program (PNI) 2015-2025, as a result of previous experiences, including the advisory of other institutions that supported the bilingual development in Colombian students (MEN, 2015). In addition to this, the national bilingual program called 'Colombia very' well has run as a renovation of the bilingual program '*Inglés el reto*'. Colombia's Very Well goal is to improve local students' English language proficiency levels, using diverse elements to accomplish this end. This includes suitable teacher training and ICT implementations as supporting tools, in order to fulfill international standards. It also intends to allow students to communicate effectively in the foreign language and represent the country in front of other cultures and countries' economies (MEN, 2016). Altogether, in the recent years the Colombian ministry of education has endorsed different English programs to help Colombians to accomplish international standards of language proficiency so as to belong to an international community.

Bearing in mind the national regulations and programs on bilingualism, this work takes a section to revise the way in which language teaching has evolved, regarding the aspects of providing communicative approaches that lead to social interactions in learning the target language, including the incidence of ICT in such processes. In brief, according to the Colombian regulations and aims to promote bilingualism, it is important to take into account the forms in which such programs and laws have contributed to the development of the target language learning through interactional and social strategies.

In summary, as it was previously stated, English relevance has grown due to its use among communities worldwide that attempt to communicate and relate to each

other. In this regard, Colombia has made efforts to join this group and make part of the global community by promoting bilingualism programs, which have evolved along time according to the needs of different contexts.

### **Statement of the problem**

The bilingual programs proposed by the government offer a solution to the limitations and drawbacks related to learning the English language; however, as Clavijo, et al. (2011) state, finding a solution to the challenges the Colombian context poses and fulfilling this kind of ambitious goals is not easy at all, since in the Colombian context there are not enough resources to cover all contextual needs with such educational programs. Neither are there enough trained teachers in the use of ICT, nor enough English teachers in service. In short, it is a big challenge to implement effective bilingualism programs, as the Colombian context poses challenging scenarios that prevent the achievement of such goals.

In addition to the former, there are very few training spaces for a suitable use of ICT that assist teaching. To illustrate this point, in a recent scenario such as the quarantine provoked by the pandemic of COVID-19, there was a mandatory isolation that made academic institutions close their physical headquarters and branches, so that their instruction had to migrate to virtual environments mediated by ICT to continue providing the educative service. Therefore, as it can be seen, the use of ICT tools was pivotal and fundamental to keep educating. However, lacking enough connectivity, resources and the knowledge on the practical use of these tools, made it harder for teachers and students to teach or learn. In short, lacking knowledge on the use of ICT in

educational environments has made it more difficult to face situations like the COVID-19 pandemic posed.

In accordance with this situation, Telemundo (2020) argues in a report that some students at college and university level who migrated to virtual learning environments (VLE), which are mediated by ICT, have lost interest in continuing with their careers, as they express their learning is not being stimulated on such environments, so they do not engage or involve much on their learning processes. Also, both, teachers and students do not know how to properly use the platforms implemented; in that sense the learning process feels different. Additionally, some teachers resort to traditional methods for their classes, avoiding effective communication, as most of them were suddenly migrated to digital platforms lacking enough proficiency in using them, making learning somehow demotivating (Mahyob, 2020). All in all, the sudden education digitalization caught educational systems off guard, the consequence being poor classes that demotivate students.

So, neither are there many opportunities to effectively interact or convey meaning, nor practical uses of the knowledge acquired, which might affect students' involvement and agency (Alfranca 2012; Mahyob, 2020). Particularly, with these obsolete methods applied in classes, students lose interest towards their learning processes, which results in poor implication or participation in knowledge construction. Under these conditions, Alfranca (2012) asserts that students' disinterest in learning depends on different factors such as, personal issues, sociocultural affairs but mainly, the content and the way instruction is offered. Then, educational practices are perceived as boring and unstimulating since they might represent monotonous experiences.



Considering the former, this section endeavors to illustrate the limitations of ICT tools integrated into educational processes in an emergency, bearing in mind students' involvement and agency. Initially the section will present a view on teaching to encourage learning, then it will present a description of the motivation factors that might encourage and help language students' involvement. Subsequently an approximation to agency and its influence in learning is established and, finally, the research question and objectives are stated.

On the one hand, learning should be encouraged by the teacher's actions accompanied by their methods. On the other hand, learning, according to Fairclough (2011), comes from the construction of knowledge through social interactions in which participation, communication and language have a critical role. As it is suggested by Escobar-Alméciga (2020), in order for the teacher to offer effective strategies to encourage learning, it is important to design interaction-based instruction, in which meaning can be conveyed and negotiated through multimodal or diverse means, including the verbal or semiotic. Also, it is critical to promote high-quality interactions among the education participants that result in better opportunities to increase learning and the understanding of content. So, for this reason, Renou & Lozano (2010) point that, in those kind of interaction scenarios, it is important to promote environments of collaborative learning and work focused on English learning. In this way, the knowledge source and practice are the communicative exchange between teachers and students, leading to the development of linguistic skills mediated by the interaction and cooperation. All things considered, learning is acquired through social interaction, and it

should be stimulated by teachers' methods that advocate social exchanges and learning.

Consistently, the motivation factor is important at any learning process. According to Keller (2008), motivation is promoted when the student experiences satisfactory outcomes in their learning. In this sense, motivation arises when the knowledge to be taught is meaningful and transmitted through stimulating strategies that make the learner curious to learn. Accordingly, Gardner (2005) proposes that the motivation to learn a foreign language might be related to the individual's interest to make part of a community that speaks a specific language. Thus, as motivation is essential at any learning process, teachers must implement effective strategies to foster it, in order to assure effective learning.

Accordingly, the motivation aspect might be accompanied by a social investment that assists the accomplishment of learning. In line with this, Norton (2013) asserts that language students invest in acquiring symbolic and material resources along their learning process in order to increase their cultural capital and social power. Additionally, investment seeks to connect the learner to the teaching practice and their commitment to learning, so that, they act in diverse forms to accomplish such ends (Norton & Toohey, 2011). It means that along the learning process and the actions made, the complex learner's identity changes through the social interactions established in an educational setting. Overall, motivation is essential at any learning process. This way, when it comes to learning a language, the motivation factor leads students to invest in their learning in order to acquire resources that help them learn and be part of a community.

As such, the term of individual's agency plays an important role in relation with motivation and investment. Agency has to do with the student's sociocultural capacity for self-determination and awareness to involve in learning processes, it requires the student or agent to take the ownership of learning, enabling them to be part and intervene in the learning design and knowledge construction process in order to obtain good learning outcomes (Brown,2014). In brief, motivation has an important role in foreign language learning, but it involves important social aspects such as investment in learning and agency which allow students to change their mindset and control their learning.

Under those circumstances, there might be a lack of social interactions that impede social learning in English language instruction when implementing ICT as the mediating tool and its application might not be encouraging. Therefore, students' investment and agency could be affected, including their learning processes. Consequently, the acquisition of linguistic abilities may be reduced. Given these points, the research question and objectives are established as follows:

- How does multimodal interaction as mediated by technological resources influence the investment and agency of university students in English as a foreign language (EFL)?

Accordingly, the objectives are presented:

- To establish the form in which the technological resources influence the investment and agency of EFL pre-service teachers.
- To unveil the influence of multidirectional communication applied in virtual learning environments (VLE) using ICT in English Language Learning (ELL).

## **Rationale**

The pandemic outbreak in 2020 changed the form in which humans interacted and related to others. Such changes led people to reduce physical and in-person social interactions, moving most of them to digital environments mediated by ICT (Williams, 2020). Considering this, educational systems were not prepared to face such an unexpected challenge, also, remote teaching was difficult for instructors to adapt to, and even months into the pandemic they were dealing with basic technological problems that did not allow them to impart their classes properly (García, 2020; Williams, 2020). All in all, the pandemic brought challenges to social spheres, including education which has been limited due to the new conditions. .

Consistently, as Mahyoob (2020) asserts, online teaching has provided certain spaces to explore new learning environments but, that is not enough in such a complex situation the world has faced in contemporary times. Provided that, massive online teaching is an intricate and demanding task that might present several difficulties to both, teachers, and learners if this is not appropriately structured, due to the lack of expertise using such resources to mediate instruction, leading in some opportunities to low performance and even drop out (Louwrens & Hartnett, 2015; Mahyoob, 2020). In this way, it is essential to encourage students to invest in their learning by at least attempting to engage them in their classes. For that reason, promoting social interactions for learning as well as communicative environments through ICT is a plausible option to achieve such a goal but, it could be a complicated task in such settings, which contain certain implications that make it harder to accomplish learning

goals. Accordingly, such effects on the Colombian context will be stated, then, the importance of developing communicative environments will be pointed out, considering its influence on students' investment and agency.

In fact, for the Colombian context, the issue of moving face-to-face classes to virtual ones has defied the educational system, as the nation does not have enough resources or proper strategies to confront the educational challenge the pandemic poses. In that sense, it is crucial to renovate educational plans to overcome this issue and effectively provide meaningful learning experiences, so, an initial step is to transform teaching practices, promoting effective strategies and the use of today's educative tools which facilitate knowledge construction in different environments (Parra & Galindo, 2016). All in all, teachers' transformation is essential to deal with unexpected situations, given that it is required for them to adapt to the diverse conditions in order to be effective.

Taking into consideration the former, this work has the intention to find a suitable form to promote communicative environments which are essential for educational spheres. Thus, by promoting educational spaces with a communicative approach in virtual environments, social interactions are likely to happen so that there are more chances for exchanges among the participants (Brown, 2014; Mahyoob, 2020; Williams, 2020). In that way, it could be asserted that the involvement from individuals may increase, leading them to engage in the process of knowledge construction as well as their own learning. Hence, agency and investment could be evidenced in such virtual environments. Overall, by promoting communicative approaches in virtual

environments, interactions and the involvement of students on learning processes, knowledge construction may increase.

Finally, this work may serve as a guide for revising the way interactional and communicative approaches operate in a virtual environment in EFL. Accordingly, this research may provide a view regarding the effects of the transition in learning from face-to-face scenarios to virtual spaces mediated by ICT, which are the main tools used to encourage communication among participants of EFL learning. In this regard, it also may give insights on the way interactions operate in virtual environments. So that, the emergence of improvements on the virtual learning experience could be suggested in the future. Briefly, it is important to revise the way communicative approaches operate in virtual environments to encourage learning and then, find improvements to boost interactional and learning experiences.

## Chapter II. Theoretical Framework

The theory herein addresses social and technological aspects affecting investment and agency and ultimately learning. Understanding the interrelations of the aforementioned concepts may potentially aid informed improvements in the teaching and learning processes including the development of linguistic and communicative skills in EFL in virtual environments. Starting from the premise that learning is achieved through social interactions, the theory herein focuses its discussion on the ways in which communication is mediated by semiotic resources and communicative modes which are at the core of the negotiation of meaning and the construction of knowledge. In that sense, we initially explore the concept of learning to subsequently establish associations to the concepts of investment, agency, social interaction, teaching and ICT, all in the frame of multimodal communication.

### Learning

Learning has been immersed in human's nature and history. From what is known, the prehistoric man used to modify his behavior according to what they learned from the environment and from their peers. Provided that, since ancient times, learning was considered as a fundamental tool to survive in unknown contexts, especially for nomad communities; this means that throughout practice and experience, learning was acquired (Ormrod, 2005; Feldman, 2009; Harari, 2014). In this regard for example, first hominids (before the *homo* gender) saw the necessity to move and shy away from predators, so that they started to adjust and learn how to adapt, until they evolved to *Homo sapiens* (Harari, 2014). In short, learning is a natural attribute that has

accompanied humans along their history in order to help them adapt, evolve and survive.

Taking that into account, the term learning has diverse definitions. For Feldman (2009), learning is a lifelong progress and a transformation in which the acts and knowledge of an individual are the consequence of living experiences. In this way, Meza (2013) suggests that learning is an activity that leads to construct knowledge with the purpose of acquiring cognitive abilities to solve problems. Briefly, the term learning has been interpreted from different views, but academics agree on the fact that this is an act of obtaining new abilities to respond to certain problems in contexts.

Accordingly, some theories suggest that learning is permanent, and it is reflected in the student's behavior as well as in mind conceptions. This means that what is learned stays in time, although not 'forever' (Ormrod, 2005). Nevertheless, it is important to consider the individual's experience and their cognitive structures as the support to maintain it for longer periods (Ormrod, 2005). Subsequently, it is on reflecting moments when learning is concentrated, and the individual's behavior changes are likely to be carried out; as a result, it is right to say that this behavioral change (learning) kicked in (Lachman, 1997). For example, when a kid learns how to use utensils at the mealtime, when a youngster manages to perform algebraic exercises or when an adult knows who to trust in the moment of establishing friendship (Lachman, 1997). In the same line, some other authors suggest that learning comes from meaningful experiences mediated by individuals' social interactions (Schunk, 1997). Bearing in mind the former, learning is established as a social act that requires interactions with the elements that constitute its context. Hence, it is important to present an



approximation of such a term in order to establish the form in which this social act is established at diverse contexts, subsequently, a view on collaboration is integrated, accordingly, key aspects such as investment and agency are aligned considering their relevance in relation to collaboration.

As it was established before, some authors point out that learning is developed in a social environment, as Schunk (1997) suggests, learning is immersed in a sociocultural scenario where individuals observe others and acquire knowledge such as rules, abilities, or attitudes. Likewise, Ferreira (2016) suggests that people approve and adopt certain social behaviors by observing and following imitation models; those are either embraced when a kind of behavior is valuable for the culture or rejected. This imitation model is important because it can be observed when children learn to speak and adapt behaviors from their sociocultural context. Similarly, adults learn by observing and adopting their bosses or mates' attitudes and behaviors (Ferreira, 2016). Thus, learning is part of a sociocultural act, in which people acquire knowledge by imitating and adopting certain behaviors from the context and people they interact with.

Subsequently, Carrera & Mazarella (2001) state that learning is developed by means of interaction and experience. Therefore, the individuals start acquiring new abilities in an immersive and interactive process in a context, which leads to interiorize and develop behavioral and thinking structures. In this scenario, social interactions are essential within a setting considering that such encounters allow the possibility to communicate ideas or knowledge. In the same way, it is possible to debate views, share experiences, explain points, among others. Hence, social interactions grant the possibility to elicit viewpoints, construct knowledge and enrich a community, for

example academia, where teachers and students interact (Meneses Benítez, 2007). Thus, social interactions are encounters in which individuals have the possibility to share ideas and in that way construct knowledge.

As it was previously stated, social interactions are an essential feature that facilitates knowledge construction and meaningful learning and this implies the use of communicative activities, like problem solving, that lead students and teachers to the exchange of different views and ideas (Blecua, 2013). So, when it comes to social exchanges, there is the negotiation of meaning, which ends up in a meaningful experience that results in learning (Meneses Benítez, 2007; Blecua, 2013). Considering the latter, the meaningfulness degree is determined by different factors; the most important one states that interactions are valuable when they contribute to achieve an objective and to fulfill or address a situation or a problem (Shimazoe & Aldrich, 2010). Therefore, it could be affirmed that interactions are meaningful when the outcome accomplished among participants in a task is greater than the result of developing the same task individually (Shimazoe & Aldrich, 2010; Blecua, 2013). Thus, the benefit of interactions is the exchange of mutual skills, in order to solve more complex challenges, in that case, this mutual enrichment notion is the base to collaborative learning (Shimazoe & Aldrich, 2010). Overall, social interactions lead to knowledge construction, they should be meaningful, in order to accomplish objectives that are translated into learning.

Learning is a social act that is carried out when we encounter others in many domains including academia. Considering that, scholars have proposed different approaches regarding this term. Some argue that communication is a fundamental

aspect here and should be multilateral in order to contribute with knowledge construction (Maldonado, 2007). Accordingly, Martinez (1999) argues that learning is accomplished when such interactions are supported by peers and such assistance boosts the development of a task. This way, such interactions configure a collaborative environment that facilitates learning. Thus, the social act of learning has been studied and interpreted in different spheres. In that sense the term collaborative learning has obtained certain relevance due to its view which advocates the joining forces to overcome challenges.

Considering the former, Carretero (1997) supports that learning is accomplished by a process that comes from groupwork rather than individually. Some researchers were able to determine that students obtain better learning levels and outcomes when tasks and activities are developed by groups, since it enables the construction of scenarios in which the possibility to express ideas, explain a topic using arguments and convey meaning is feasible (Maldonado, 2007). Considering the former, Mayer (2000) establishes that interactions carried out among students organized by groups facilitate understanding at high levels, depending on the culture and environment. In brief, learning is encouraged when conditions of collaboration and group work are set in a social setting, for example a class.

In addition to the former, for Cenich & Santos (2005) when interactions among students are encouraged by the teacher strategies, the possibility for them to construct their own knowledge is a simpler task. Provided that the conditions to share ideas, discuss, contrast, and negotiate meaning increase, so that new ideas start arising (Lucero, 2004). Accordingly, to provide such experiences, the teacher should become a

guide that assists their students offering spaces for free expression, facilitating group's interactions through diverse means, including the available technology (Maldonado, 2007). In essence, teachers should create spaces for collaboration in which sharing ideas, contrasting them, and reaching agreement be easier, so as to help in the process of knowledge construction.

In regard to the former, collaborative learning includes students' agency and willingness to work as a team. Hence, in order to accomplish this end, students should respect and accept their peers' views and contributions towards a common task. Also, they should consider that there is an exponential chance to enrich their knowledge when working together, so that it is critical for them to establish clear objectives within the group as well as roles (who does what), the methodology to perform it (how) and the moment to perform it (when) all this work must be done thoroughly (Maldonado, 2007). Considering this, collaborative work resembles a synchronized clock, whose pieces work together to be functional and effective. Altogether, collaborative learning requires collaborative work, so it is necessary for students to have a good attitude to join efforts that attempt to achieve common goals

As it was already mentioned, spaces of collaboration for learning are necessary to construct knowledge but, it requires certain students' attitudes towards the process. Accordingly, Guitert & Simérez (2000) point those interactions and reciprocity are critical elements to test and establish differences and contrast with the background knowledge; the comprehension of new content comes from the articulation of previous experiences, with the new contributions generated by groupwork. To achieve this, individuals should be engaged in a relationship with a social group that is being constructed and re-

constructed through the interactions involved, so that the individual has the control to be part or not in such processes of meaning negotiation (Avila, 2019). Overall, in order to construct knowledge in a collaborative practice, it is necessary that students actively participate, but their interventions depend on their engagement which is determined by the social contexts where interactions occur.

Consistently, another important key element to take into account in order for a group to accomplish learning is the individual's investment to learning. Considering this, individuals have their own reasons for learning and participating in knowledge construction, so that investment is conceived as a further aspect of motivation an individual could have in order to belong to certain knowledge community; Such a thing leads them to acquire elements and attitudes which assist their learning goals (Norton, 2013). To sum up, individuals who attempt to accomplish their learning goals act in several ways to acquire elements that assist them to do so.

In summary, learning is a social act that is mediated by social interactions but, such a thing implies several aspects to consider. As learning is achieved through meaning negotiation among individuals, there are different elements involved such as collaboration, which implies joint efforts with your peers to accomplish goals. It also implies a specific kind of relationship individuals must have with the context so that interactions lead students to the practice of knowledge construction (Maldonado, 2007; Ferreira, 2016; Avila, 2019). In the same way, it is important to take into account the inner motivations that lead individuals to acquire knowledge and eventually invest into their learning and fully commit to such a process (Norton,2013). On the whole, learning

is a complex social act that leads to the acquisition of elements that come from experiences that are established by means of negotiation during social interactions.

### **Investment and agency in learning a foreign language**

Immigration to rich countries is a phenomenon that receives different communities which converge to a common place; therefore, it is right to say that there might be a multicultural environment where many individuals have their own cultural background (Norton, 2013). These people need to integrate to the social community they have moved to, including the fact that, in order to do so, they need to communicate, for that reason, it is common that those communities adapt a common code; the host country's official language (Norton, 2015). Accordingly, it has been stated that language is loaded with a cultural background that sets diverse identities, and when it comes to learning another language, individuals moved by their determination add elements to their identity to be able to participate in the new social context (Dörnyei & Ushioda, 2009; Murray, Gao & Lamb, 2011). Considering that, students invest in their learning and in so doing, acquire resources that modify their identity that help them integrate into a knowledge community. In that sense, investment is established as a construct that allows students to accomplish their learning goals including their agency, subsequently, it is important to mention that these aspects are essential in language learning.

First of all, investment is a sociological construct which argues that language learners invest in learning a foreign language to make part and participate in a society (Norton, 2013). Having this in mind, when students invest in their learning, they perform actions that facilitate achieving such learning goals, for example when it comes to

engaging in practices that allow them to comprehend, master or develop skills in order to gain certain resources along their learning process, such as symbolic ones (language, education, and relationships) and material ones (capital or goods), which increase their own value, and this leads to obtain at some extent cultural capital and social power (Norton, 2015; Newmann, 2021). Moreover, during this process, individuals change their identity and then replicate this transformation in their social interactions (Norton 2013). Briefly, investment argues that language students commit to learning the target language, mastering skills in order to be able to participate in a society, in that sense, they acquire resources that change their identity and then, this is applied in social communications.

Accordingly, it is important to mention that investment is mediated by social interactions and the individuals' agency or determinations to act in a context. With this in mind, Bourdieu (1991) asserts that individuals' contexts might be characterized by inequalities, struggles to the access of power, etc. which could affect students' agency towards learning. Then, as established by Avila (2019) agency is the individual's relationship with a social group that is constantly being re-constructed. Considering that, the individual or 'agent' is the one who moved by their own purposes or determinations decides to actively engage and take over their own learning process in a social context, choosing how to invest to achieve their own goals (Norton 2013; Norton, 2015; Avila, 2019; Newmann, 2021). For that reason, it is important to promote a proper environment in educational practices where interactions play an important role for knowledge construction, and also, encourage students' investment and participation. In brief, it is critical to develop a proper environment where interactions configure learning, in this way encouraging students' investment and agency.

Bearing in mind the former, As Norton (2015) suggests, language is not only a simply linguistic system that encompasses words and phrases, it also has important loads of cultural identity and social practices that modify the learner's individual's identity. Hence, learning a language not only implies acquiring a code for communicating, but it also includes the acquisition of certain social practices (Norton 2013); in that way, people who invest in learning a foreign language obtain such elements that allow them to have the right to speak, to be listened, to interact and to participate in a social core assisting an identity configuration (Norton, 2013). So, in such an event, teachers need to mediate and guide those interactions to encourage students' investment and engagement in their learning process. Thus, interactions mediated by the target language have important cultural backgrounds that have incidence on the learner's identity, that is why teachers must do an effort to provide proper environments that allow conditions for participation to learn the target language.

In line with the former perspectives, investment and student's agency are fundamental on language learning processes. On the one hand, investment is related to motivation and can tell the way students get involved or engaged with their learning practices, explaining the need to be part of a knowledge community, so that, when students invest, they acquire elements that grant the possibility to join those communities (Norton, 2013). In addition, Darwin & Norton, (2015) suggest that by including current technologies such as internet and digital tools, learning a language turns easier, as students have much more possibilities to interact and engage in their learning processes, moreover, these new interaction spaces configure more communities and set new identities (Gee & Hayes, 2010). On the other hand, students'



agency is essential in language learning as this one is considered as an ability that establishes meaning and relevance to something, and this occurs in groups or individuals (Lantolf & Thome 2006). So, these actions empower students to act according to the contextual characteristics they are in. Briefly, investment and agency are fundamental in learning processes as they can tell aspects related to the motivation of learning a foreign language and the contextual situations that encourage students to appropriate their learning.

In short, investment and agency are key elements for learning a language. Just as it has been reviewed, investment is a sociological construct that conceives language not only as a code but also as a cultural representation of a community (Darvin & Norton, 2015). In that sense, individuals who study this language acquire such elements by investing time, resources and efforts in acquiring symbolic and materials assets with the purpose of obtaining knowledge and being included in a community with the same knowledge (Norton, 2015). Equally important, students' agency determines the disposition for learning, this is translated into the actions taken from the student to contribute and make part of the interactive process of learning (Brown, 2014). Hence it has a strong relationship with the individual's ownership of such a process. To sum up, investment is essential for learning a language as it establishes prominent motivations and needs to achieve such a goal, in the same way, students' agency is fundamental as this one establishes certain attitudes and actions taken towards learning.

### **A social interaction approach to language learning**

As mentioned by Kress (2011) in theorizing the elements of education such as learning or teaching, language has a critical role, since it is considered as a code that

turns into a vehicle and carries knowledge to be either learned or shared in form of symbols. In this regard, Gee (2011) states that such code is usually structured by utterances that are loaded with meaning. The latter comprises a wide range of elements contained in a social structure, such as, subjects, contexts, topics, experiences, views, etc. Subsequently, as the utterance's meaning is enriched by many elements of context, its interpretation could vary, since there might be more information to re-frame such concept or meaning. In line with the former, Gee (2011) also puts emphasis on the fact that utterances, mediated by language, are also accompanied by intentions that could either destroy or build things in the world, since they lead to actions and interactions in a society, so that there is a constant construction and re-construction of reality. In this case, it could be asserted that language is an element subject to interpretation, that transports information and intentions framed towards certain social scenarios that enable learning. Consistently, it is necessary to understand the forms in which language configure learning events by means of socialization. In the same way, such interactive events lead to the development of individuals' discourse and eventually identities.

In regard to what was already stated, according to Fairclough (2011), people are organized in social structures within scenarios where they are able to interact. In this case, such interactions are mainly put in place by using the language. Thus, these encounters are located at certain physical spaces that allows exchanges among individuals (Fairclough, 2011). Hence, such a setup leads to the construction of conventions and symbols that communicate and help understand the complex reality (Fairclough, 2011). With that being said, Escobar-Alméciga (2020) affirms that communication is a semiotic exercise that reflexes personal views, beliefs and

characteristics; furthermore, it also attempts to frame and reframe personal or communal realities at different levels of social life. Overall, as humans are organized in social structures, interactions mediated by communication among those social structures' members are essential in order for them to comprehend reality.

Taking that into account, such interaction activities lead to the development of individual's discourse which is presented as language-in-use combined with social practices, such as views, behavior, ways of being or thinking, etc. (Gee, 2011). Consistently, these practices might be similar and reflected on other individuals who gather in groups for their common views. Then, Gee (2011) additionally asserts that language helps on setting an identity, that is accompanied by the forms in which those individuals act, interact, and engage to certain behaviors. Social interactions occur in multiple settings, in that sense, individuals acquire first a primary discourse which is established in a sociocultural environment, then, by means of experiences they incorporate other discourses depending on the diverse contexts they have been to (Gee, 2011). In other words, discourse is an affiliation between an individual and a group of people with whom it is possible to share certain traits; however, individual's discourse might change across experience and contexts.

Consequently, identity is characterized by the discourses we acquire along our experience in social contexts. Gee (2011) asserts that identities are rich so that this leads to social languages, which in essence are the styles of language a person enacts in different contexts in order to transmit an affiliation to a social group. This way, identities set figured worlds that represent sociocultural spheres where traits, practices, acts and outcomes are recognized, so that, by considering pluralistic worlds, individuals

are able to reflect, act and create variations of those practices in order to establish their own identity (Holland, Lachicotte, Skinner, & Cain, 1998; Gee, 2011). All in all, identity grants certain traits to individuals, and this identity is displayed in different contexts, where particular characteristics are recognized. Nonetheless, agency moves the individual into establishing their identity and possibly change it.

Bearing this in mind and considering the educational sphere, Kress (2011) conceives education as a social process that involves social agents, values, structures, purposes and processes which require social interactions, and more elements apart from the specific code that accompanies the accomplishment of said objectives. Also, he argues that it is necessary to include a multimodal semiotic approach to understand the educational context. This way, social interactions always involve a message that is transmitted and then interpreted by a receptor who makes meaning out of it, leading to the construction of signs (Kress, 2011). That way, considering discourse, it is possible to affirm that there is emergence of semiotic elements that guide meaning making processes and encourage learning (Fairclough, 2011; Kress, 2011). Likewise, during a social exchange, a set of conditions need to be achieved for it to be a learning event; first, the individual's agency helps the student to recognize differences between the matter of discussion and their prior knowledge, then their minds struggle to make sense out of the two views, consequently, their mind attempts to solve the conflict by finding connection and consensus between the concepts.(Kress, 2011). Given these points, Fairclough (2011) also suggests that learning is a form of social transformation, encouraged by semiotic conditions. In brief, learning involves agency, social interactions, and a semiotic frame, in order to transform individual's structures.

As established by Kress (2011) the act of learning is mediated by the representations or symbols an individual or agent makes from their knowledge, so that language plays a role in shaping the way in which knowledge is represented and communicated. This means that there is an important bond between communication and learning, as it occurs in social environments where interactions among individuals and groups entails a knowledge change. Thus, experiences, feelings, ideologies and identities can change as well (Fairclough, 2011; Kress, 2011; Escobar-Alméciga, 2020). Considering this, such changes are possible when the agent gets involved in acting, interacting, and intervening in a setting (Fairclough, 2011). As it can be seen, learning is established by symbols that are built through individuals' interactions in which there is a social exchange of knowledge, experiences, or beliefs.

To sum up, learning is achieved by agents who exchange information using language and semiotics, in order to establish new discourses and identities when interacting. So, language and semiotics are important elements to human nature, since they are the means with which the world is represented. That way, such representations are interpreted by individuals who come with a discourse that builds an identity. Here, social interactions are essential, since such exchanges lead to the transformation of views and discourses when negotiation of meaning is established, resulting in learning events that modify identities. Thus, language and signs help to understand the world, and in the same way, social interactions assist this understanding when individuals transform their views and come to learn.

**Multimodal communication to foster understanding**

In current times we have seen new ways for communicating, interacting and acting. Globalization and digitality have facilitated and created new forms for relating to others, changing, to some extent social structures (Graddol, 2006). Consistently, Gonzalez (2012) suggests that due to such expansion, different forms of interpersonal communication have emerged, which are fundamental in educational processes, and this has given rise to multimodality. The latter is understood as the different factors to consider when negotiating meaning through social interactions, not only taking into account speech, but also, bearing other elements such as gestures, proxemics, gaze, layout, among others (Norris, 2004). Briefly, the globalized and tech era brought important shifts into people's lives. Nowadays, communication has expanded its modes in social interactions and, as a result, there is an acknowledgment of multimodality.

Regarding the former, Norris (2004) asserts that all human interactions involve multimodality given the wide variety of elements involved. On the one hand, there are verbal channels that are informative, since they involve spoken and written language; such elements are clear enough to convey a message when interacting. On the other hand, there are other channels to communicate meaning, such as images, distance, posture, noise, and elements perceived in the background (Norris, 2004). Those elements encourage interactions as well as shape meaning in a message. Accordingly, Kress & Van Leeuwen (2006) state that in some cases, the non-linguistic channel might be more communicative than the linguistic one. In this sense, multimodal communication offers additional information that helps understanding any learning process. Thus, multimodality comprises sequences that establish meaning. Additionally,

multimodality facilitates the negotiation of meaning, facilitating knowledge construction within social interactions.

Subsequently, social interactions imply multimodal communication in which participants always employ modes that represent and support their acts. Norris (2004) establishes the former as systems of representations with a communicative function, filled with meaning, that are composed by a chained sequence of actions. There are lower-level actions that correspond to a group of actions performed within an interaction (Norris, 2004), and there are also higher-level actions, that represent the sum of the lower-level actions performance (Norris, 2004). In other words, there are systems of representation that people use in their interactions. At the same time, said interactions can be divided into actions may be of a low or a high level depending on their complexity

Consequently, according to Kress et al (2006), delving multimodality into a classroom requires analyzing communicative acts that are displayed in speech, layout, gestures, artifacts gaze, pictures and the multiple modes that could be used by participants of an interaction, in order to convey meaning. In accordance with this, Bonner (2014) establishes that during class interaction, participants use a combination of modes; they communicate ideas that are shaped by their sociocultural background and their preferred modes in meaning negotiation. At that point, social interactions start to configure knowledge construction and such mode needs to be timed and hierarchically ordered to make meaning. So, the analysis and description of those modes may provide an understanding of social interactions, and how meaning and concepts are constructed in such events (Bonner, 2014). Thus, the exploration of

modes and communicative acts lead to the comprehension of the construction of meanings during interactions.

Bearing in mind the former, understanding the multimodality inherent to communication is essential to comprehend how teaching and learning are conceived. Due to the combination of modes presented within class interactions, students could use semiotic resources to represent their knowledge using multimodality. In the same way, teachers could use multimodality to present concepts and transmit knowledge in an easier way (Skyer, 2016). Teachers and students establish and arrange social semiotic resources to culturally construct knowledge; these modal resources could be mixed and re-ordered to design and present educational material to promote the learning of concepts (Kress, 2010; Skyer, 2016). All in all, being aware of multimodality is critical for educational settings since it could help us to understand how teaching and learning are established and how knowledge is constructed through diverse means and modes.

In sum, multimodal communication is present within human interactions and helps in the process of knowledge construction. Then, multimodality appeals, not only to semantic resources, but also to semiotic ones in order to negotiate meaning within social exchanges of information. This way, the agents of social interaction use a combination of modes in sequences of lower-level actions that help them to reinforce and convey meaning more easily. This can be applied to educational settings since the negotiation of meaning among individuals leads to knowledge construction. Overall, multimodal communication is a way in which knowledge construction is facilitated.



## Teaching

Teaching is defined as the social act or method of giving instruction to a group of people considering principles, ideas or knowledge that accompany it (Cambridge, 2020). Consequently, teaching, as part of the process of education, is framed within a set of social interactions that include three main elements; the student, the teacher and knowledge (Pérez, 2008). In the same way, Berzosa (2004) argues that teaching aims to transcend the mere transmission and reception of knowledge; it rather attempts for the student be conducted into reflection and to the development of creativity. All in all, teaching is a vital part of education and has the objective of developing skills by means of interaction.

Considering the importance of teaching in educational processes, teachers should reflect on their role in order to offer meaningful learning experiences that advocate effective learning. Likewise, it is important to state that learning is influenced by a wide range of social factors, including physical spaces, cultural backgrounds, educational environments, socioeconomical characteristics etc. (Ortiz, 2015). As a result, the sum of such elements may provide meaningful learning experiences which are assimilated by individuals and may last. Thus, teachers should be concerned about the quality of the experiences they provide to their students, so that these are perceived as meaningful by their students.

Taking the former information into consideration, Ortiz (2015) suggests that teachers should encourage settings or environments where social interactions can turn into meaningful experiences. In order to do so, teachers should keep in mind certain considerations to provide a suitable experience: First, it is critical to understand that

students might possess prior knowledge related to the content to be taught, making it easier for the teacher to present the new knowledge as long as it is connected with those prior ideas (Ortiz, 2015). In the same way, knowledge should be contextualized to give it a purpose (Ortiz, 2015). Subsequently, teachers must provide an environment that allows social interactions that lead to the negotiation of meaning among the participants. This can happen through collaborative work, tasks completion, practical exercises, among others (Ortiz, 2015). Henceforth, learning environments are key to foster meaningful learning experiences, that should be mediated by tools that enhance effective learning.

Learning environments are established by teachers in educational settings. Their goal is to facilitate learning opportunities. In effect, these scenarios are to bring meaningful learning experiences for the students to acquire new knowledge and attitudes that allow them applicable to their own contexts (Florez, Castro, Galvis, Acuña, & Zea, 2017). For Duarte (2003) learning environments promote interactions, through the use of a space where participants in a determined moment develop abilities and values, related to a curriculum the didactic resources and the context per se. This author also points that there are conditions that develop certain types of behaviors. These behaviors can be evidenced when the participants interact with objects and/or amongst themselves and adopt some roles within the activities given. This way, it is suggested that through this process, the appropriation of knowledge and the development of new forms of thinking take place. In brief, learning environments are spaces that the teacher uses to encourage learning, using different didactic resources and strategies.

Consistently, there is a wide range of tools that accompany learning environments like ICT which have helped to the development of virtual learning environments (VLE) with new possibilities for interacting and learning. Regarding this, Perez de A & Tellerina (2012) affirms virtual platforms contain a wide range of resources that help instruction, for example, several formats to present content, as well as varied tools that support interactions and the possibility to keep track of the learning processes and manage content effectively. This derives in new ways to control and guide teaching and/or learning. Thus, VLE change the way education is presented as it offers new models and methods to share information.

Then, VLEs contain certain characteristics that facilitate interactions and learning opportunities. VLEs are flexible, given that they allow synchronus and asynchronous interactions. This way, students and teachers have the chance to meet in virtual classrooms at a given time, and also interact and access content materials at any other time (Perez de A & Tellerina, 2012). Likewise, Leakey & Ranchoux (2006) point that such flexibility allows teachers to focus on guiding processes rather than transferring information, and also, there are more, and even richer opportunities, for interactions because knowledge construction does not end after one interaction but can extent to others who access the content in a different moment. Therefore, teachers who implement VLEs are able to expand the way interactions for constructing knowledge occur, making those experiences somewhat richer.

To summarize, teaching is a fundamental aspect of education, as it facilitates meaningful experiences and the varied forms of constructing knowledge through learning environments. Under those circumstances, teaching should generate scenarios

with the proper material where students can interact with their peers and acquire knowledge. That way, the teacher becomes a generator and facilitator of learning experiences. Additionally, by using tools such as the ones provided by ICT this process may turn more meaningful and may even expand the forms in which learning is achieved.

### **Information and Communication Technologies (ICT) as tools to mediate interactions for teaching and learning English as a foreign language (EFL)**

As it has been pointed before, English language is quite relevant in the globalized world, so that learning this language is a priority for many individuals worldwide. Chandia (2015) states that English language students require to develop receptive linguistic skills; understanding written and auditive texts, and their production ones; oral and written expression, in order to effectively communicate. The improvement and progress of these abilities depend on several factors such as the learning environment that is promoted through the pedagogical strategies of the teacher (Chandia, 2015). Overall, as learning English has become a need for the modern world, there is a great deal of people who need to develop communicative skills to be competent and there are different elements involved to effectively achieve such a goal.

Considering the former, in order to provide more learning opportunities, there is a wide range of resources that may be used, including ICT (Felix, 2005). In fact, ICT stimulate students as there are many activities, formats, and tools that boost learning opportunities (Izquierdo, de-la-Cruz-Villegas, Aquino-Zuniga, Sandoval-Caraveo & Garcia-Martinez, 2017). Actually, the use of them may even lead to an institutional and educational transformation.

As ICT offers important assistance and advances for educational matters, governments around the world have attempted to implement such resources to boost learning (Felix, 2005). Subsequently, in the Colombian context, the government is planning to expand the internet coverage in order to reach the 70% of the population by 2022 (MINTIC, 2019). Likewise, these resources are expected to help Colombians to connect with the global community, provide elements that aid education deficiencies and finally, facilitate remote learning in order to address the situation generated by Covid 19. Briefly, as many Colombians have had exposure or contact with ICT, the government has planned to expand its coverage to reach faraway locations and provide to more people the opportunity to access information.

In light of this, ICT is considered a great tool to boost learning, including language learning (Alessia, 2017) given that ICT and the internet offer varied instruments and new ways of interaction that encourage students to invest in their own learning processes. That way, learning English through ICT can make it be a simpler task, as there are many multimodal resources that encourage diverse forms of communication and adapt to learning styles (Warschauer, 2000; Bonner, 2014; Alessia, 2017). By having a wide range of formats to present information and activities it is likely that many students will interact with those elements more effectively, thus facilitating learning processes (Alessia, 2017). Therefore, accomplishing language learning goals could be a more attainable task (Gardner, 2005; Darvin & Norton, 2015).

As Alessia (2017) suggests, the internet and new technologies have interactive tools that facilitate learning and teaching a foreign language in several ways: they offer opportunities for practice, provide valuable material and also, through the use of different platforms and networks it is possible to connect people worldwide, overcoming class limitations and constraints. In case of EFL, those resources open possibilities of real interactions with native speakers of English allowing a more meaningful experience for learners as there are authentic practices for language use (Alessia, 2017). Overall, ICT advances provide learners with valuable learning opportunities.

In summary, new technologies help language learners to accomplish their learning goals. First the variety of resources allow them to involve and invest in their learning, as it makes it easier to assimilate information. In line with this, ICT tools offer to language learners a variety of chances to interact with others worldwide, so that putting into practice the target language becomes something more meaningful as there is an authentic use that is only provided by those spaces.

### **Chapter III Literature Review**

As it has been stated in this work, English language is fundamental in our modern society, as it is the medium that people from diverse backgrounds worldwide use to communicate (Vélez-Rendón,2013). Accordingly, learning this language has become an important task for many contexts, in that way Sánchez (2013) argues that in order to achieve such a goal in a context like the Colombian one, it is critical to rethink the ways in which English is taught. Many scholars have conducted research to find and offer effective solutions to potential problems in educational processes, aiming at renovating teaching practices that may transcend traditional models and methods for teaching so as to cover today's students demands, needs and expectations. Consequently, teachers of English have also tried to update their classrooms methodologies.

In line with the former, it is important to consider that modern technologies can facilitate access to resources, and educational materials. Therefore, the assistance that those technologies offer could accelerate learning at a great extent by increasing learning-teaching modalities (Maldonado, 2007). In this scenario, ICT have expanded learning environments, providing virtual spheres to mediate learning, changing the ways in which individuals interact (Gallego Rodríguez & Martínez Caro, 2003). In the same line, it could be asserted that these virtual learning environments are flexible, providing a wide range of learning resources that adjust to learners' times and styles, and such a thing facilitates learning (Maldonado, 2007).

Likewise, taking into account the social aspect of learning, widely discussed in the previous chapter, it is important to integrate these vast tools with social interactive

experiences to ensure the negotiation of meaning and then the construction of knowledge. Despite the wide range of resources found in technologies, as the internet and VLE ones, it is critical to include social interactions among learners in teaching practices mediated by these environments so that students are able to discuss ideas, contrast them, agree on things and exercise meaning mediation, which result in a deeper understanding that cannot be acquired by oneself (Revelo-Sánchez, Collazos-Ordóñez, & Jiménez-Toledo, 2018). As showed above, ICT offer great opportunities to learn due to the vast resources offered, however, as teachers it is essential to include social interactions in VLE given that negotiation of meaning is vital to ensure learning.

Consistently, it is right to say that ICT and VLEs offer great alternatives that facilitate teaching and learning, for that reason they have been implemented in the recent years, despite the possible limitations related to social interactions. Considering this, facing the mandatory isolation caused by the pandemic, ICT tools and VLE were implemented to mediate teaching-learning processes in a massive way. So, the experience generated by the using those resources can illuminate ways to enhance teaching and learning practices in general.

Subsequently, it can be asserted that ICT resources have offered alternatives and solutions to certain educational problems including the ones related to EFL learning. Considering this, the implementation of these resources should be revised and analyzed in order to determine forms, findings, problems, and results on the accomplishment of EFL learning goals when education is mediated by such means. Hence, this chapter addresses studies in which EFL is mediated by ICT, considering



social interactions as a fundamental aspect to support learning. Different investigations are presented from an international context and then, from the national one.

To carry out a review of the existing literature, this paper used the methodology of Kitchenham (2004) c. I revised studies related to EFL learning mediated by ICT in a social learning framework. Then, using Okoli & Schabram (2010) search criteria, I searched over a period of 15 years, it means works from 2005 to 2020, since during that period, language education evolved due to ICT and pedagogical advances. The articles search was carried out from August 20<sup>th</sup> to October 3<sup>rd</sup>, 2020.

Several databases were implemented including keywords that assisted in finding related academic articles. I used ProQuest, SCIELO, Redalyc and Google scholar, in this case, Escobar-Alméciga (2020) states that such databases facilitate the identification of academic literature made by authors who relate to the local contexts or with similar characteristics. The key words that oriented the search were related to EFL learning in VLE, ICT in EFL, and EFL collaborative learning in VLE. In the same way, the exclusion and inclusion criteria are described as follows:

- Articles in Spanish
- Studies carried out in the Iberian-American context
- Works between 2005 to 2020
- Quantitative, Qualitative, and mixed studies
- Relation with the terms of collaborative learning, bilingual education, EFL learning mediated by ICT, VLE in EFL learning in their keywords

Then, such criteria allowed to profile the information obtained from such databases in order to meet the goal of this search. As a result, 14 articles were selected for revision, then, as suggested by Okoli & Schabram (2010) they were organized for the purpose of being read and analyzed to confirm its convenience for the objectives of this search. In this way, the articles are described as follows:

**Table 1.** This table illustrates the studies considered for the literature review ordered by year of publication.

Number	Authors
1	Duran & Barrio (2007) <i>Disposición y uso de recursos informáticos para la enseñanza aprendizaje del inglés: Una descripción a partir de una muestra en cien centros públicos de educación infantil y primaria de la comunidad de Madrid</i>
2	Mateus & Moreno (2010) <i>Mejoramiento de la habilidad de listening en estudiantes de 5° grado del colegio Eloy Valenzuela a través de cuentos</i>
3	Quintanilla Espinoza & Ferreira Cabrera (2010) <i>Habilidades comunicativas en L2 mediatizadas por la tecnología en el contexto de los enfoques por tareas.</i>
4	Clavijo Olarte & Quintero (2012) <i>Una experiencia de formación inicial de docentes de inglés para la inclusión de las TIC en la enseñanza de lenguas</i>
5	Herrero Arnanz, (2013) <i>Retos en la integración curricular de las TIC en la enseñanza del inglés</i>
6	Menéndez (2013) <i>El uso de las TIC en la enseñanza bilingüe</i>
7	Roncado (2014) <i>Desarrollo de competencias comunicativas en inglés mediadas por las tic de un grupo de estudiantes entre los 12 y 15 años del colegio litecom del municipio de Jamundí, valle del cauca</i>
8	Torres Cajas (2015) <i>Aprendizaje cooperativo utilizando tecnologías de la información y comunicación (TIC) en una clase de idioma extranjero: Percepciones de los estudiantes universitarios</i>
9	García-Sánchez (2016) <i>Educación a distancia, interactiva y ubicua para el aprendizaje de lengua inglesa</i>
10	Montenegro (2016) <i>Apropiación de tecnologías de información y comunicación (tic) en docentes de inglés del nivel beginner del centro de idiomas de la universidad de Nariño para los procesos de enseñanza</i>

11	Correa & Correa (2017) <i>el uso de las tic para motivar el aprendizaje de inglés en los estudiantes del grado séptimo de las instituciones educativas simón bolívar y rafael Uribe Uribe del municipio de puerto López – meta</i>
12	Torres Cajas & Yépez-Oviedo (2018) <i>el aprendizaje cooperativo y TIC y su impacto en la adquisición del idioma inglés</i>
13	Gomez & Mateus (2019) <i>aprendizaje para la comprensión mediada por tic: una apuesta pedagógica disruptiva para el desarrollo de las competencias comunicativas del inglés para algunos colegios públicos de la secretaría de educación de Bogotá.</i>
14	Belda-Medina (2020) <i>el aprendizaje del inglés (I2) mediante herramientas digitales (tic) por estudiantes mayores desde un modelo andragógico y heutagógico</i>

Note a. Self elaboration

Subsequently, after completing the selection, and the processes of profiling and reading, Okoli & Schabram (2010) suggest the composition of the report. In that sense, the articles were again organized by origin, considering on the one hand, articles from international contexts and on the other hand, studies from the national context. With this in mind, we considered important to provide certain relevance to local studies as this work is conducted in a Colombian scenario. All in all, after completing the phases of selecting, profiling, and reading relevant literature, the elicited studies were divided into two categories, in order to highlight the relevance of local studies as this research is established in Colombia.

### **International Context**

Regarding the implementation of ICT for EFL learning, Duran & Barrio (2007) were trying to analyze the influence of ICT in EFL in Spanish classrooms, specially at initial educative levels. Through questionnaires sent to different institutions, there was the intention to elicit information about the way teachers used technological resources to make their teaching practices more effective. The results suggested that ICT tools have

great potential to benefit EFL learning, however, they advise other teachers to use those resources just to assist teacher's methods, which should appeal to collaborative learning, since peer work derives into better results in language learning. In addition to this, it is important that teachers have training in ICT because such resources are meant to be the future in education. Overall, the study found that ICT are a great alternative for English teaching, since those resources facilitate learning, however, it is important to mention that teachers' mediation and strategies are key to develop such learning.

In line with the former, Quintanilla Espinoza & Ferreira Cabrera (2010) attempted to integrate a task-based approach to foster collaborative learning in EFL implementing ICT tools. By implementing Computer assisted language learning (CALL) they observed an increase of interactions towards language learning. They followed an experiment approach and divided the intervention in two groups the control group received instruction in a traditional way, whereas the other was taught under CALL and the task-based method. The results suggested that the CALL group accompanied by collaborative learning of the task-based instruction activities had an important increase in meaningful language learning, compared to the other group. Methods such as the use of weblogs, internet search and short-term projects facilitated social interactions among students and created the conditions to authentically use the target language, moreover, the development of tasks in a cooperative way assisted knowledge construction. In brief, in this study, linguistic abilities of the target language were acquired by social interactions in a class that was supported by the implementation of activities mediated by ICT.

Menendez (2013) attempted to observe and present the effects of implementing ICT resources in bilingual education at elementary school levels. This research pointed that ICT facilitate teaching practices, since students can become more engaged with their learning. This way, teachers resorted to use ICT to boost their practices. Hence, by using software of web 2.0 it was possible to promote students' collaborative learning, providing more opportunities of interaction in the target language by means of cooperative activities. Similarly, it was possible to engage them to the content, providing more enjoyment towards learning by means of several formats and tasks. As it has been noted, the implementation of ICT in bilingual teaching, provided an important support that dynamized learning opportunities, facilitating collaboration among students and the use of the target language, including engagement with the learning processes.

About social learning implementation by means of ICT in a EFL context, Herrero-Arnanz, (2013) sought to find a didactic implementation of ICT in an English unit appealing to social learning. In this way, along seven sessions, there was the implementation of task-based activities accompanied by collaborative work mediated by ICT in an EFL class. Such implementation required students to work by groups finding solutions to English assignments using the tools of the Web 2.0 such as eBooks and wikis. The results pointed out that the implementation of the didactic proposal increased interactions and language use. In line with this, it concluded that teachers should encourage meaningful learning experiences by promoting social interactions and collaborative activities to ensure knowledge construction. Given these points, it could be affirmed that social learning activities mediated by ICT tools engage students with their learning as their experiences become more meaningful.

In the same line, Torres-Cajas (2015) endeavored to evaluate how EFL learning experiences when instruction was mediated by ICT tools and collaborative activities were perceived. So, by means of surveys it was found that there was a wide acceptance of teaching methods that appeal to interactions among students, given that learning is achieved by collaboration and in so doing, there is an authentic use of the target language. In the same way, the implementation of ICT's resources dynamize learning. Although those results were optimistic, sometimes the class sessions became repetitive and students said they felt demotivated, for that reason, this research advised that teachers should reflect on their roles to provide a sensible use of ICT and social learning strategies to keep students engaged to their EFL learning process. In a word, ICT resources accompanied by social learning strategies are meaningful elements for EFL learning, however teachers should make sure that there are experiences within the use of ICT that engage students when using those resources.

In terms of VLE applied in EFL contexts, García-Sánchez (2016) states that distance education is an opportunity to encourage EFL learning through virtual interactions. Regarding this, the author argues that by ensuring a communicative approach in EFL, interactions within a VLE can be boosted, and language learning becomes easier. That way, this study was carried out through the implementation of a learning platform that included collaborative activities for users in different parts of the country. As such collaborative work helped knowledge construction in the VLE as students were required to interact and work in activities such as forums, videos, oral expositions, performances, etc. Results suggested that VLEs can provide authentic interactions that lead to knowledge construction and enhance the use of the target

language. That way, language competence could increase. All in all, VLEs offer spaces of interactions when a communicative approach is established and when learning is supported with collaborative activities

Subsequently, Torres Cajas & Yépez-Oviedo (2018) attempted to foster EFL learning promoting collaborative activities in a VLE. This study took a group of EFL students and guided them to work in VLE collaboratively platforms such as Moodle and Google Drive. Students took the EFL course remotely so that their interactions were mediated by a VLE, in that sense, it was observed that by assigning collaborative activities communication among students increased, resulting in more language use and an improvement of EFL skills. At the end of the research, participants were tested in communicative competence, resulting in good results in comparison to the diagnose test they took at the beginning of the course. Thus, VLEs assignments encouraged students to actively participate in collaborative tasks. This resulted in more meaningful interactions, which made the students learn from peers when constructing knowledge.

Consistently, Belda-Medina (2020) affirmed that ICT boost learning opportunities of EFL due to the wide range of resources that engage students to their learning. In this case, this research was carried out with an adult student population in a workshop program of communicative English. In line with the former, this study included a pre and a posttest which aimed to implement ICT for learning and the development of communicative skills in EFL. Classes were carried out using a ludic methodology in which the participants were asked to use game apps such as Kahoot, Quizizz, Quizaile, among others. The results suggested that there was a positive willingness from the participants as the mediation of knowledge was simple and they had the opportunity to

interact with others to catch up and participate of the activities. The author suggested that ICT facilitated participation and implication of students towards their EFL learning. Accordingly, social interactions were essential in the development of skills, since students collaboratively interacted when they asked for orientations, doubts solutions, assistance in general in the used of ICT and EFL. In essence, ICT facilitated EFL learning as the methodology connected to the students, in the same way the use of ICT and the target language promoted a collaborative environment where interactions were essential to accomplish goals.

### **National context**

In terms of national works related to EFL mediated by ICT and a social approach to learning, Mateus & Moreno (2010) addressed a problematic related to the English language by implementing collaborative activities through ICT tools in an EFL class. The implementation of this proposal attempted to use a narrative software tool that told tales to a group of students, using familiar vocabulary, to support and develop listening skills in EFL. Data were gathered through tests. The results suggested that such methodologies supported learning and listening development in EFL. All in all, the implementation of activities mediated by ICT in EFL learning, assisted students to enhance their linguistic abilities.

Considering the value of ICT in EFL teaching, Clavijo Olarte & Quintero (2012) attempted to train language students in the use of ICT with educational purposes. This led them to design a VLE where students were able to participate throughout the fulfillment of collaborative projects. In that case, blogs, debates and interaction tools of the web 2.0 offered the conditions to construct knowledge and to foster collaborative



learning. The results demonstrated that the experience students had was beneficial to acquire online abilities, as well as to enhance their linguistic competence. All things considered, the implementation of collaborative activities that involve social interactions in a VLE encourage students learning by actively participating of their knowledge construction.

In line with the former, Roncado (2014) established that ICT project-based implementation for EFL learning might contribute to effectively communicate and use the target language. In this sense, this research intended to propose a class project in which students could implement ICT to record the interactions within a community using EFL to communicate; in this case, this project was designed for EFL students to gather in groups and document community events, interview people and capture views using the target language and ICT resources. Then, they were expected to upload recordings to a Facebook group in which other students reacted. Also, students reported their work in class by having presentations and discussions about those experiences. The results established that ICT tools had a great potential in education, since the students used them collaboratively to enhance their EFL learning. As a reflection, the authors mention the importance to train teachers in using such technologies to create better didactic strategies that engage students and assure authentic scenarios of EFL learning. Given these points, EFL learning can be boosted by designing proper teaching strategies that involve collaborative work and ICT tools.

As a matter of fact, Montenegro (2016) suggested that ICT should be implemented as a pedagogical tool in order to promote EFL learning by means of collaborative activities in teaching practices. Considering this, that work attempted to

analyze the use and the appropriation of ICT for EFL teachers at elementary levels. This way, it was established that ICT offer varied tools to assist language learning at elementary levels since the formats are attractive to learners. However, there are limitations in the use of them that must be addressed by teachers in order to foster their learning practices. At this point, it was recommended that teachers implemented activities that allowed social interactions within the use of ICT, for example forums, chats, discussions, among others, to ensure that the negotiation of meaning would be established, and knowledge could be constructed. So, this author offers a reflection suggesting teachers should not fully rely on ICT resources, but rather integrate them with social learning activities that stimulate language use and learning by means of interactions and collaboration. In the long run, EFL learning is achieved by socially constructing knowledge, in that case ICT might provide a great help to accomplish that goal, but those resources should be considered just as tools but not as teaching strategies.

Subsequently, Correa & Correa (2017) attempted to establish the forms in which EFL students gain motivation by the multimodal means ICT offer towards the presentation of information in VLE. Considering the former, web 2.0 offer different formats in which information can be presented and can be offered. That way, by implementing videos, audios, images, blogs among others in a VLE, students get more involved with their EFL learning. That is to say that they felt more motivated to participate and interact in their classes. This was evidenced during the needs analysis, as some of them argued that regular classes that did not implement ICT for EFL learning were boring, accompanied with this, they did not feel engaged with their

classes when instruction was limited to listening to the teacher. So, by having in mind the former, the implementation of an EFL learning platform encouraged autonomous learning as there were multiple ways in which information was offered, accompanied by class collaborative activities which fostered learners' implication to their learning and EFL use to perform tasks. Thus, students obtained more motivation to participate in their EFL learning processes when teaching activities were related to collaborative work and when the information was presented in diverse forms in the VLE.

In addition to what has been reviewed, Gomez & Mateus (2019) proposed the methodology of flipped classroom to foster EFL learning by offering interactive activities in class and diverse information formats at home, encouraging the construction of knowledge in face-to-face class sessions and the flexibility of time for content learning. For this study, there was a problem of communication in EFL at a course in a school located in Bogotá. So, the researchers considered that it was critical to provide more scenarios for EFL communicative practice. In that sense, they opted to flip the class, creating materials mediated by a VLE in which students at home watched videos, performed certain tasks, and reviewed content, then, in class they were required to develop practical workshops encouraging EFL communication. That way, it was possible to offer more time to work on EFL communicative skills. The results demonstrated that learning mediated by VLEs equipped students with flexible learning resources that facilitated such goal. In the same way, it also provided more learning scenarios that encouraged autonomous learning, leading up to having richer experiences of interactive learning and authentic EFL use. Overall, flipped classroom as

mediated by VLEs helped EFL learning as it provided scenarios of effective language use by means of social interactions offered in classes.

In summary, according to the analysis carried out in this chapter, ICT are powerful tools that might adapt to educational practices and diverse scenarios. This way, it is important to notice that these tools need to be integrated with proper social learning strategies within pedagogical interventions in order to ensure EFL learning. In line with this, ICT offer a wide range of activities and formats that adapt to the students' different learning styles and paces, so that as teachers, we need to have a sensible implementation to motivate and involve our students in their learning. Accordingly, those resources were used in varied contexts facilitating to some extent teaching practices. However, they do not do all the job, for that reason it is essential to integrate them with effective learning strategies that use social interactions and collaboration to negotiate meaning and construct meaningful learning, especially in an EFL scenario. In brief, ICT integrated to collaborative and social learning strategies transform educational practices and ensure efficient learning of the foreign language.

## **Chapter IV Research Design**

Research includes a methodological framework in which an array of procedures, strategies, instruments, and techniques are implemented and integrated with theoretical constructs to address a problem and provide an approximation to reality (Balestrini, 1998). In this sense, this study endeavors to inquire and understand human phenomena which are considered as complex and subjective (Escobar-Alméciga, 2020). So that, this chapter has the purpose to define a methodological framework that serves as a guide to address an issue related to investment and agency in a multimodal interaction framework, resulting in an approximation that lets us comprehend such a reality. Accordingly, this leads to the selection of a research approach followed by the description of the setting for this intervention. In that sense, considering the pertinence for the context, the data collection methods are established; namely interviews, observations and focus groups. Subsequently, data analysis plan is described, including ethical considerations and the validation criteria to carry out such a research work.

### **Type of Study**

This study is conducted under the qualitative approach, as the endeavor here is to understand human phenomena. Accordingly, such an approach encompasses the human dimension which involves thoughts and behaviors under social contexts; considering interactions, norms, thoughts, reasoning, dispositions, in order to be interpreted and described (Sherman & Webb, 1988; Creswell, 2007; Eyisi, 2016). All in all, to address the problem that has been stated in this research, the qualitative

approach has been selected as it provides an interpretative view to understand human phenomena.

This work was established as a case study that takes sixth semester students from an undergraduate program to analyze its interactions and consequently the agency and investment that they are conducted to and ultimately their opportunities to learn. A case study is a comprehensive description and analysis of a social unit, it also attempts to bring the comprehension of a situation result of human interaction by, exploring the phenomenon within its context, implementing different data sources to find integral view of an issue and, taking into account its multiple sides (Merriam, 1998; Baxter & Jack, 2008; Dawidowicz, 2020). This way, to have an approximation to the situation described along these lines, Merriam (1998) proposed the evaluative case study design that attempts to provide a wider description, analysis, and judgment of a phenomenon in a social unit, establishing as a result, greater comprehension of it and then, offering alternatives to address the situation which in this study is related to sixth semester students' involvement to their EFL learning. Briefly, case studies endeavor to describe and explain phenomena that occur in specific settings as the result of human interactions, so that they may be used as tools to comprehend educational events .

### **Setting**

This study takes place in a private university located in the northern area of Bogotá. This institution offers different undergraduate and graduate programs. As a matter of fact, this university is quite recognized for its educational programs related to health care such as medicine, nursing, psychology, surgery, among others. Likewise, there is an important foundation in pedagogy, bilingual education, and teacher training.

As such the undergraduate bilingualism teaching credential program was chosen as the scenario to undertake this research. This program has six English levels that attempt to reach C1 level, according to the common European framework of reference for languages (CEFR). Students of sixth level were asked to participate since their language proficiency is high and so, it is easier to visualize their interactions, since their communication skills should be fluent and there should not be struggles related to this matter.

In this scenario, due to the pandemic situation occurred in 2020 caused by the COVID-19 disease, the institution decided to migrate its classes to VLE, so that, instruction was mediated by the internet and ICT tools. With that being said, this study proceeded to request the participation of the English VI level students from the licensure program of bilingual education: The students' proficiency level ranged between C1 and B2 English level according to CEFR. Likewise, this was a course oriented by one tutor who created meaningful sessions to encourage English learning.

Consistently, the group of students was composed by approximately 28 members, ranging from 19 to 28 years old. For this study, all of them were invited to participate, but only 18 decided to do so. They received an explanation of the extent and procedures of this research project. Also, there was also a short meeting and an illustrative video with the purpose of providing the clearest information regarding the study, likewise, they were given of an informed consent (See appendix A) in which all the information related was written. These students came from different backgrounds, their English level in general terms was balanced, however, some of them had certain minor difficulties. Additionally, they all seemed to have a great disposition to work and

get involved with their learning. Yet, some of them were more active than others on their interactions with the teacher and with the activities proposed.

In terms of their classes, the English VI course had the purpose to strengthen the students' linguistic skills in EFL. In that sense, students were expected to use complex EFL structures to communicate, considering the language not only as a code but also, as an intercultural tool that granted them the knowledge to think critically and to be aware of other cultures (Norton, 2013). In brief, the course aimed to illuminate the students with sociocultural knowledge embedded in a foreign language, learning how to communicate while considering such aspects.

This course employed for the development of its content two main platforms., First, the *Cambridge Viewpoint Online Course and Workbook 2*, where the content of the course was provided, and then, google meet, where students interacted with their peers and the teacher developing activities through synchronous sessions. On the one hand, in terms of *Cambridge Viewpoint Online Course and Workbook 2*, there was a wide range of interactive activities divided into 12 units that simulated the practical use of EFL. This platform offered grammar, listening writing, reading, and speaking components to ensure EFL learning, including practical situations for the development and use of authentic language. On the other hand, google meet assisted the development of their synchronous classes. In this case, the students and their tutor met virtually, and discussed their work. Additionally, in such a space, the teacher proposed several activities to reinforce, orient and practice EFL content.



### **Data Collection Methods**

In order to capture all situations, interactions, thoughts, performances motivations towards the class experiences, it is essential to gather relevant information that allow us approach to the understanding of the phenomena embedded in this study. Considering this, selecting and designing suitable data collecting methods is fundamental due to the fact that, they synthesize, elicit and indicate all the work in a research project (Merriam & Tisdell, 2015). In that sense, constructing instruments for data collection could assist us to validate and accomplish our research objectives. With that being said, observations to the field might help to identify how students interacted and engaged to the lessons, then an interview to the teacher could aid to understand the phenomenon from her interpretations, in the same way, a focus group could provide different perspectives from the participants towards their class experience.

### **On Observations**

They represent an encounter with the phenomenon of study, which means that by observing, it is possible to identify the interactions and the way things operate in the specific setting (Kawulich, 2005; Merriam & Tisdell 2015). In this sense, it is required to pay attention and write in detail what is being seen, in order to obtain information about the situations that naturally occur in the studied setting. Also, it is important to align this technique with the purpose of the study; in this particular situation, observe how the students invest and appropriate of their own learning process. In addition, it is important to point out that a non-participant observation was implemented, as the researcher approached to watch interactions in the field without taking an active role, attempting not to affect the natural class course (Ostrower, 1998). Briefly, observations were

essential for this study in order to capture the actions inside the setting, for that reason, a non-participant technique was selected, to keep the interactions and situations from the setting as natural as possible.

For this research work, observing the way students interact is essential to determine the ways students get involved in their learning processes. In that sense, the observation process was carried out through the class recordings made of the sessions along the course. Such recordings allowed to capture students' attitudes and behaviors towards their classes. As Penn-Edwards (2004) asserts, the sequence of moving images recorded, grants the possibility to be revised and analyzed at different moments, including the elicitation of multiple actions given in the context, directing such information to the research interest. Because of this advantage and the necessity to really pay mind to students' interaction recordings were used to gather data.

To carry out the observations of the field, I had to take some time to organize the data offered. There was an approximate of 32 synchronous English classes recorded. The length was around 1:07 hours per session, which means an estimated of 40 hours in total. Such data were extracted from the google Meet platform, as there were chances of interaction in situ. Subsequently, participants usually met on the google platform. From the very beginning of the lessons, it could be observed that social interactions were encouraged, having conversations, discussions and interactive activities which required students' participation. Thus, in order to start observing the field, it was important to have the data and then, organize them in order to observe such interactions.

In this regard, considering the vast amount of data recorded, it was important to reduce and profile it, so there were several stages in this process. In this sense, the first stage attempted to trim moments in which interactions were not evident enough like the following three: First, there were moments of preparation for certain activities such as readings, groupwork, tasks completion, among others which were mostly silent. Second, there were also moments in which the teacher was waiting for students' responses of a given question. Thirdly, those non-interaction episodes also happened when there was internet lagging and some technical issues related to connectivity. In addition to this, sometimes switching activities led to these episodes as well. So, by cleansing such episodes, there was a significant reduction of the recorded classes, resulting in an approximate of 26 hours. All in all, by reducing and profiling data, it is easier to perform observations in a research field.

On the second stage of profiling and reduction, there was a subsequent revision of the videotaped class sessions of the course under study, in that sense, another cleansing phase was carried out, excluding any sort of interaction or intervention from the students who declined their participation in this research project. Therefore, the only interactions and interventions considered were taken from the individuals who agreed to be part of the study. This way any interaction involving participant and non-participant students was dismissed in order to respect the students who denied their permission. As a result, there was an approximate of 12 hours in total to be analyzed. Thus, on the second stage on data cleansing, the interactions taken were from the ones who agreed on participating on this research study.

Accordingly, those 12 hours were filtered again in order to select the most meaningful interactions. As there were some moments of long monologues in which not many interactions were evidenced, the researcher decided to dismiss such events. In addition, some interactions were cut because of internet lagging which made the data incomprehensible. There were also topic deviations, or non-related conversations which were discarded. The results offered in this final cleansing gave 3.5 hours of meaningful interactions related to presenting a topic, an assignment, and discussing around any meaningful matter of the class. In brief, the result of the last stage of cleansing allowed the possibility to have the more meaningful data to be observed.

In sum, observations allowed the identification of the forms in which things operated in my study and it was necessary to revise and profile class recordings to be able to implement this collection method. There were several phases in the process of reducing the vast number of hours of the video recordings offered, so, by cleansing such data, it was possible to have meaningful material connected to the interactions searched for this research. That way it was possible to keep only relevant information for this study.

### **On Interviews**

Interviews elicit narrative data in which perceptions, feelings beliefs and views towards a phenomenon are established, so that we can approximate to the comprehension of a situation (Buriro, Awan, & Lanjwani, 2017). Likewise, Merriam & Tisdell (2015) establish that interviews are vital when it is not possible to observe feelings or thoughts on interpreting the world or a phenomenon. Plus, they are necessary to evoke past events which provide relevant information of an experience. In

this sense, interviews grant the possibility to freely express participants' own thoughts and feelings, leading to know and analyze verbal and non-verbal data (Berg, 2007).

Also, Opdenakker & Raymond (2006) suggest that this method assists the researcher to indagate in depth people's views. Thus, interviews allow the expression of thoughts and feelings on certain experiences people could have. In that sense, past events evoked in a narrative provide information that could have been missed at some point.

Regarding the former, there is a wide range of interview types that can be applied; however, semi-structured interviews might help to elicit authentic data from the participant which could help to approach to the research problem. Semi-structured interviews are conversations with a specific purpose, allowing the participant to express freely when discussing certain topics (Harrel & Bradley, 2009). Consistently, semi-structured interviews develop a guide that covers the topic at discussion, engaging the participant in a formal interview, in which specific and standardized questions are asked, allowing the respondent to describe points in particular forms, providing new ideas of the topic at hand (Merriam & Tisdell, 2015). In other words, the semi-structured interview allows the participants to engage in a conversation having a clear agenda. In that sense, the answers can provide more ideas to the subject at hand.

Accordingly, a semi-structured interview was conducted with the teacher, in order elicit her narratives on the course development and the phenomenon at question. Considering that, a one-to-one interview facilitated the process of obtaining information about her experiences, thoughts, beliefs and attitudes along the process as she was the one in charge of providing learning experiences. It also allowed the possibility to capture the participant's personal meanings and comprehension on the phenomenon

(Andersson & Öhlén, 2005). In line with this appreciation, questions were designed and sent for an expert evaluation from the education faculty at the institution, so that, they were proposed as follows:

**Table 2.** *This table illustrates the number of questions proposed for the interview*

Number	Question
1	What could you say about the group's commitment to learning English?
2	What attitudes or actions from your students demonstrated interest to your class?
3	How important was it for you that your students interacted with an open Camera?
4	What can you say about the group participation... how would you say they participated?
5	What kind of strategies or content did you use to encourage your students' participation?
6	How could you describe the evolution process of your students along the lessons?
7	How did the social and virtual environment promote or inhibited interaction?
8	How connected did you feel with your students?
9	What do you think was the impact of your lessons on the students' commitment to learning English?

10	What do you think was the impact of the teacher on the students' learning process?
----	------------------------------------------------------------------------------------

*Note b. Self-elaboration*

### **On Focus Groups**

Focus groups are defined as opinion spaces where a group of people discuss around a common topic, they have become familiar with, to capture participants' views, attitudes and perspectives towards a mutual interest, allowing the chance to construct a narrative from the varied viewpoints (Morgan & Spanish, 1984; Kitzinger, 1995). In this way, a sort of semi-structured interview is conducted in order for the researcher to act as a moderator, asking questions and attempting to generate a relaxed conversation in which diverse opinions are encouraged (Wilkinson, 2004). Accordingly, such an activity has the intention to analyze interactions as well as participants' answers and reactions towards the questions proposed. In that sense, the elicitation of diverse opinions construct and generate data, so it is likely to happen that each participant states and re-states their views by listening to the others (Morgan, 1997; Merriam & Tisdell, 2015). All in all, focus groups are important tools when it comes to approaching to the understanding of a situation or problem, as they elicit different opinions towards a common experience which construct meaning.

Given all these points, for this research, a focus group interview applied to the participant students helped to gather their diverse class perceptions and experiences on their learning processes, considering their investment and agency when interacting. As established by Hamui-Sutton & Varela-Ruiz (2013) when implementing a focus group, it

is imperative to bear in mind some considerations in order to appropriately elicit authentic data from the indagated experience. To do so, it is important to have a relevant agenda and questions that trigger the conversation, subsequently, the selection of participants, who in this case were students that actively participated in their classes; they were selected considering that their contributions were meaningful as they were involved in such an experience. Then, as stated by Escobar & Bonilla-Jimenez (2017) the focus group should have a guide that directs roles, questions and agreements, including the possibility of recording in order for the data to be later analyzed. In this way, considering the former, it was possible to elicit students' opinions regarding the research purpose and then analyze them. The questions used were the following:

**Table 3.** *This table illustrates the number of questions proposed for the interview*

Number	Question
1	How engaged did you feel along the course of English VI?
2	What is your opinion on the virtual classes you had on the English VI course?
3	How connected did you feel to the teacher's explanations?
4	What do you think made you feel connected or disconnected to her explanations?
5	How connected did you feel to the material and resources used in class (digital and physical)?



6	What do you think made you feel connected or disconnected to these resources?
7	Do you feel difficult to connect, engage, be involved in particular moments in the class? Why do you think that is?
8	How important was it for you to have an open camera when interacting and trying to make a statement in class?
9	When you struggled explaining something How did you manage to make the others understand your point?
10	What could be the direction of communication you experienced in your classes?

Note c. Self-elaboration

In summary, the former data collection methods allowed the elicitation of meaningful data for this study, including students' and teacher's opinions on the experience along the course. Those were useful to have a closer view on the understanding of the research problem. In line with this, observations allowed the collection of the most natural information as the recording authentically showed the way things operated in the real setting. This way, an interview for the teacher was implemented trying to capture her views on the forms in which teaching was developed in order to encourage students' interactions to observe and analyze their agency and investment for learning. Finally, a focus group was proposed to obtain students' views, attitudes and perceptions towards their learning experience, as it was essential to have their insights. Thus, by having diverse data sources it was possible to approach to the comprehension of the phenomenon of study

## Data Analysis

This research work attempted to determine the impact of multimodal communication on students' investment and agency when it is done through ICT on an EFL course along an academic semester. Several theories were revised, and data collection methods were proposed in order to approach and understand said reality. Accordingly, to achieve such a goal and come to an approximation to the phenomenon at issue, it was essential to determine a research question and subsequently their objectives which are described below:

**Table 4.** *In this section, the research questions and objectives are presented for the development of the study.*

Research question	1. How does multimodal interaction as mediated by technological resources influence the investment and agency of university students in English as a foreign language (EFL)?
Objectives	<ol style="list-style-type: none"> <li>1. To establish the form in which the technological resources influence the investment and agency of EFL pre-service teachers.</li> <li>2. To unveil the influence of multidirectional communication applied in virtual learning environments (VLE) using ICT in English Language Learning (ELL).</li> </ol>

Note d. Self elaboration

In this sense, several analysis cycles were carried out, as it was essential to, firstly, understand how the social interactions involved in the setting configured the ways in which students negotiated meaning, and ultimately engaged to their learning

processes. In order to achieve such a goal an interaction analysis in the group was carried out. Then, it was analyzed how such interactions suggested student's investment and agency within their EFL learning process. All in all, analysis cycles provided a close encounter with the answer and achievement of the research goals.

In the same way, the triangulation of data, collection methods and theory were implemented as an alternative to validate the findings of this investigation, given that this is an effort to explain the phenomena of the research from different stances, resulting in a more detailed perspective or explanation of the situations (Cohen & Manion 1986; Heale & Forbes, 2013). Accordingly, an interaction analysis for this research is presented, considering the emergence of the first coding procedure, subsequently the second stage of coding is presented, regarding investment and agency towards learning, leading to the development of analysis categories.


Interaction analysis requires the comprehension of the elements involved in events when negotiation of meaning is established. Considering the former, this research aimed at analyzing the resources participants implemented to convey meaning along their interactions, evaluating how the speech community was set, as it is configured by several elements such as, the speech situations, or the setting of the class, the speech events, where situations are ruled by social arrangements or norms, and speech acts that are determined in the examination of the multiple ways semiotic resources and modes are used, formed, arranged, transformed in communicative actions. All of this, taking into account the relation of such components with other communicational contexts (Escobar-Alméciga, 2020). Thus, such elements configured the way interactions were carried out for the negotiation of meaning.

In line with the former, as stated by Norris (2004), social interactions involve a wider view of communication, integrating verbal and non-verbal modes to convey meaning. In this sense, in a social setting such as the virtual classroom of this study, when it comes to participants' interactions, there was an interplay of several elements or modes that assisted meaning construction which was configured by meaning density and intensity (Norris, 2004; Escobar-Alméciga, 2020) . For the purpose of this study, as the interactions were mediated by a VLE, some of these modes were restricted, whereas others were evident enough to be considered, such as, speech, body postures, gestures, head movement, gaze, and layout, given that there was a scenario where the students and the teacher interacted, including moments when they opened their cameras and had some communicative exchanges. In brief, as suggested by Norris (2004) when it comes to social interactions, there is always an interplay of diverse modes which varied in density and intensity assisting meaning construction.

As asserted by Norris (2004) language is one of the primary modes to make meaning, so the others are subsequently displayed, for that reason, this mode is transcribed first. In that order, attending to Norris (2004) proposal for analysis, there are some conventions that provide information of the form language is employed. This way, the example below provides the form in which spoken language transcriptions are presented.

**Table 5.** *Spoken language transcription conventions.*

Transcription conventions	
Spanish utterances	in italics
Descriptions	(in parentheses)

Emphasis	in CAPITALS.
Overlap	indicated by these brackets 
Time	besides the participants' intervention in parentheses i.e (0:00)
Participants	Students' initials or teacher label
Transcript line	indicated in parentheses at the beginning of the transcript i.e (1)

---

Note. e. Norris (2004, p. 72)

Accordingly, in the first stage of coding as previously stated, it was important to determine how semiotic resources and communicative modes were employed to construct meaning to subsequently determine the degree of investment and agency students accomplished in such communicative events. In this way, the data were classified as Escobar-Alméciga (2020) establishes into six descriptive codes presented as follows:

**Table 6.** *Mode-Code and explanation*

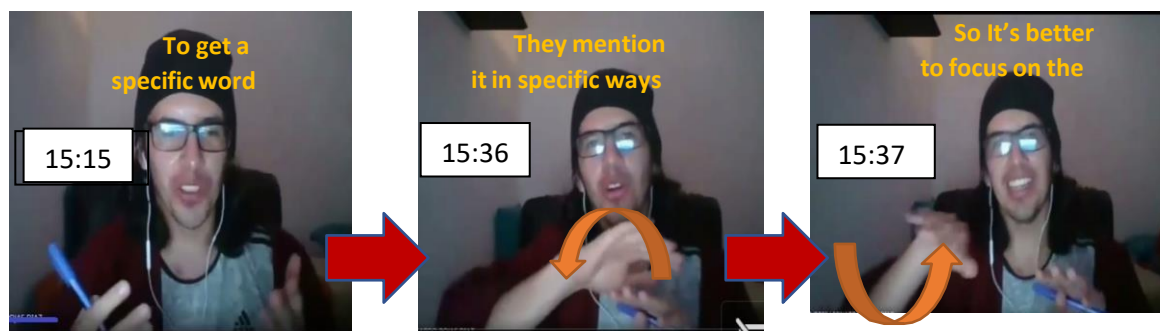
Code	Explanation
Gestures	Body movements that convey meaning
Speech	Talk

Gaze	The way eye direction indicates communicative action.
Posture	The way body position indicates communicative action.
Layout	The way and the organization, of people, places and visual representations convey meaning.
Head movement	the way individuals position their heads to convey Meaning.

---

Note. f. Escobar-Alméciga, (2020, p. 89)

Additionally, as stated by Norris (2004) there is an interplay of resources and the communicate modes displayed in an interaction. In that sense, the transcription system should account for the content of the communicative acts, for that reason, it was imperative to include picture-transcriptions that illustrated the way the former modes of communication namely gestures, layout, gaze, posture, and head movement operated. Regarding this, picture-transcriptions were implemented as one tool to reveal the semiotic resources and communicative modes adopted by participants, differentiating them from speech, as it is offered in the example below.



**Figure 1.** *Example of picture-transcript 14. This example shows the way a communicative action is sequenced for analysis, including time, utterances and the modes employed.*

On the first cycle of analysis, it was possible to determine the ways students employed several resources to negotiate meaning in their classroom, when involved in their learning processes. This way, multimodal communication was key to construct meaning within class interactions, as participants had exchanges employing diverse modes, and interactively negotiating meaning that was transformed into knowledge. Thus, multimodal communication was fundamental for processes of knowledge construction.

In this way, the former led to a second cycle of analysis which advocated new codes that emerged from the identification of theoretical constructs represented and evidenced in the study field. With this in mind, through the interactions displayed, it was possible to elucidate students' actions that committed them to invest and show their agency extend towards EFL learning. In this way, those codes are described below.

**Table 7.** *Codes from the second cycle of analysis and their explanation*

Second Cycle Coding	Explanation
Identity	Traits subjects adopt and are produced in social sites, structured by relations power, in which the subject assumes positions within a discourse that changes over time and space (Peirce, 1995).
Participation	Actions that agents perform to engage in a practice (Evnitskaya & Morton, 2011)

Change agent	An individual whose actions promote changes in groups, people, and environments (Zubialde, 2001)
--------------	--------------------------------------------------------------------------------------------------

---

Note g. Self-elaboration

Bearing in mind the former, after completing the interactional analysis, the data was appraised and coded. On the one hand, observations provided the opportunity to identify the interactions in situ along the study, also they helped to register the way things run, so that, the analysis of communication was facilitated. On the other hand, the focus group and the interview allowed the classification of views, the construction of narratives that evoked past events and the interpretation of the lived experiences (Wilkinson, 2004; Merriam & Tisdell, 2015). This way, the codification format consisted of the data collection techniques initials, then the participants' initials followed by the transcript number, For example, FG ALRD transcript #. Then, the information was classified and finally triangulated. All in all, after completing interactional analysis, the triangulation was required in order to find patterns which could help to validate the information and achieve the research goals.

The triangulation process carried out in this research approximated us to the comprehension of the phenomenon at study. In this way, as stated by Heale & Forbes (2013) triangulation in qualitative research allows the examination and validation of findings through the concurrence of information from diverse sources. In light of this, this research work made triangulation through the data collection methods namely, focus groups, interviews and observations, as well as with the comparison with theory. Briefly, triangulation provides credibility to research findings and accordingly, for the



purpose of this study, the triangulation of data collection methods, data per-se and theory served as sources for validation.

In line with this, the triangulation process facilitated the emergence of categories of analysis for this research. On the first cycle of analysis, the first category discusses the influence of multimodal communication on meaning making and provides insights on the way participants engage in knowledge construction by investing in their knowledge. The emerging category on the second cycle of analysis was about investment related to identity and culture, through analysis of new discourses through EFL learning; The third category; participation as an act to construction and appropriation of knowledge in VLE discusses the construct of agency of the participants in their learning processes, and finally, the teacher as an agent of change offers the pedagogical implications on the matter.

Analyzing the vast amount of data required several phases and actions, such as examining their components, triangulating, and categorizing. For that reason, it was important to establish a chronogram that included stages that organized the data collection, analysis, and findings stages. So, in order to attend this requirement, it was vital to set realistic and short-term goals, determined as follows (see table 8).

**Table 8.** *This table illustrates the chronogram of the stages for data analysis including dates of data collection, multimodal analysis, interviews and focus group analysis, and the overall data analysis.*

	<b>August - November 2020</b>	<b>November 2020</b>	<b>April - May 2021</b>	<b>May - June 2021</b>	<b>June - July 2021</b>	<b>August- September 2021</b>
<b>Data</b>						
<b>Data Collection</b>  (Class recordings)						
<b>Data analysis</b>  (Multimodal class recordings analysis)						
<b>Data collection</b>  (Focus group/ Interviews)						
<b>Data analysis</b>						

(Focus group/ Interviews)						
<b>Document submission</b>						

Note. h. Self elaboration

To sum up, in order to determine the impact of multimodal communication when it is established by ICT on the students' investment and agency towards their learning on a course of EFL, I used interactional analysis in order to understand the ways students conveyed meaning to get involved with their learning processes. In addition to this, on the second cycle of analysis such interactions were revised and compared with theoretical constructs which established the way students invested in their EFL learning, accompanied by their extend of agency. Thus, data was triangulated in order to establish patterns that led to the emergence of categories that described such investment and agency events. Thus, this analysis provided an approximation to the understanding of the phenomenon embedded in this research work.

### **Ethical Considerations**

In order to collect the data required to support this research, this study considered the fundamental ethical matters present in the resolution 8430, in its articles 5 and 6 (Ministerio de Salud de Colombia,1993). Here it is stated the importance of human dignity; Also, the article 11 from the same law, determines this study as research without risk. In concordance, following the declaration of Helsinki as cited in AMM (2008) the information referring to the identification of the subjects included will not be

revealed, nor used with different purposes apart from the ones on this study: The participants' privacy and anonymity will be guaranteed.

On the one hand, the students involved in the setting were informed of the research project, also, it was said that they could decide whether or not to participate. They were asked to fill an informed consent with all details of the research, authorizing the use of data gathered on synchronous class recordings, interviews and focus group with the possibility of verbatim quotation. On the other hand, to carry out this project, the researcher requested permission by sending explanatory and approval letters of the project to the education faculty directors; firstly, it was sent to the education faculty dean (See annex 1) Subsequently, to the education undergraduate program director (See appendix B) Finally to the head teacher of the classes under study (See appendix A).

### **Establishing trustworthiness**

In order to provide reliability to this research it is important to consider the validation criteria established by Merriam & Tisdell (2015) in which several elements in a research work are considered to establish trustworthiness. Considering this, the first condition as asserted by Escobar-Alméciga (2020) is the engagement to the field. In this regard, this study was carried out and the data were collected along an entire academic semester of 2020. Subsequently, the second element that is suggested is the triangulation procedures (Merriam & Tisdell. 2015). In this regard, this study implemented different forms of validation, considering the triangulation theory, data, and the three data collection methods. In line with this, class observations, interviews and a focus group allowed were used. Thus, by following the research procedures stated in academic literature, this study was shaped by a reliable support.

In concordance with the former, this study is based on theoretical constructs that provide approximations to reality and human phenomena. In this case, three main theoretical constructs supported the basis of the study, considering, investment as a theory of identity change and learning, the theory of multimodal communication and the agency construct. Finally, as an ethnographic case study, the contexts, situations, actions, and the resources employed to make meaning, including modes acting together are explained in the analysis section (Escobar-Alméciga, 2020). All in all, this study is established by the basis of theoretical constructs that provide the comprehension of the phenomena involved in this work.

## **Chapter V. Findings and Discussion**

In accordance with the analysis described above, it was possible to elucidate the forms in which interactions mediated by VLE influenced students' investment and agency in their EFL learning. In this sense, as stated by Escobar-Alméciga (2020) communicative actions are established within the configuration of space where they occur, and through the sociocultural and linguistic context shaped by the individuals who construct meaning when interacting. As such, the communicative events mediated by the multimodal actions and interactions reflected in class, configured the forms in which students conveyed meaning and ultimately engaged in their learning processes. Bearing this in mind, the findings of this study provide a greater understanding of the influence of multimodal interaction in EFL learning when it is mediated by VLE. As such, the analysis is organized in four categories, namely, (1) multimodal communication in meaning-making and classroom engagement in EFL VLE, then, (2) investment to enrich identity and the acquisition of cultural capital through new discourses. Subsequently, (3) agency in the construction and appropriation of knowledge in VLE, and finally, (4) the teacher as an agent of change.

### **Multimodal communication in meaning-making and classroom engagement in EFL VLE.**

Human communications involve interactions which are essential to the transmission of information, they also establish meaning and construct knowledge since they have the potential to convey, reproduce and characterize ideas. In that sense, such information is shaped by different ways or systems of representation that are employed by agents who delve into communicating something and support their actions

(Vygotsky, 1980; Norris, 2004). Considering this, humans employ both, verbal and non-verbal cues when they communicate and interact, which lead to the construction of meaning through diverse forms of messages; therefore, those interactions are considered multimodal (Norris, 2004). Briefly, human interactions lead to the construction of meanings as there is the intention to communicate a message using several systems of representation.

Consistently, in an educational scenario where social interactions are mediated by a VLE, the teacher must find ways to promote effective communication and collaboration to engage students in the negotiation of meaning and ultimately achieve learning. In this sense, teachers must reflect on their practices in these environments to ensure meaningful experiences that come from interactive and collaborative activities, which promote communication and in turn, guarantee learning (Alves, Miranda, & Morais, 2017). Hence, VLEs should be directed as appealing scenarios where discussions should be promoted and where ideas should be communicated in order for them to be part of knowledge construction. Thus, virtual environments should be configured from a social perspective in order to provide meaningful experiences through different ways of social interactions.

In the research at hand, it was observed that the teacher employed several strategies to involve her students, promoting knowledge construction, in this way, several students attended such a call and participated, employing modes to express their ideas and construct knowledge. The teacher promoted interactions by asking questions and encouraging active participation, which led several students to voluntarily intervene in the exercise of knowledge construction demonstrating here cognitive

engagement. They usually answered, replied comments, and shared their thoughts in a continuous conversation. In the process, students used diverse modes such as speech, gestures, gazes, and movements to present their views and support their acts when communicating in EFL. Thus, it was possible to observe the way in which meaning was established as well as the forms in which students involved in such learning practices. So, it can be affirmed that such interactions were learning opportunities of EFL for the students who actively engaged.

A fundamental aspect of multimodal interactions in a VLE was students' participation and the ways they presented their ideas, which were forms to construct knowledge. On the one hand, as stated by Zimmerman (2000) learning is fostered when individuals' agency leads them to have an active role and participate of knowledge construction. In this way, it could be asserted that such actions are portrayed by individuals who are committed to involve in these practices using diverse strategies in the social event of learning (Blumenfeld, Rogat, & Krajcik, 2006). On the other hand, knowledge is constructed by the negotiation of meaning established within social interactions and the interplay of semiotic modes from engaged agents (Zimmerman, 2000; Norris, 2004; Blumenfeld, Rogat, & Krajcik 2006). With this view, it could be said that active agents were committed to construct knowledge employing diverse modes in meaning negotiation, and such a thing promoted EFL learning when mediated through a VLE. Thus, students' participation in VLE was essential for EFL learning as they constructed knowledge employing diverse modes in communicative acts.


In order to illustrate how participation accompanied by the exercise of meaning negotiation operated and allowed knowledge construction, the following excerpt



presents a class situation in which some students who were engaged to the class voluntarily participated in an activity, so that, they were able to collectively negotiate meaning using several modes. As such, it was evidenced that a high agency reflected in participation, facilitated knowledge construction. Also, by employing different modes, such as images, gestures and words, the collective negotiation of meaning led to achieve learning, including concepts, vocabulary, and different elements of EFL when it was mediated by VLE. Thus, multimodal communication and an active participation of students facilitated EFL learning by means of meaning negotiation.

#### O Excerpt 1 teacher, ARLD, AM and NAT Transcript 1

The teacher asked her students to draw in a VLE a witch, then the students discussed their views and some concepts using EFL.

- |      |                        |                                                                                                 |
|------|------------------------|-------------------------------------------------------------------------------------------------|
| (1)  | (0:03) <b>Teacher:</b> | your first task of the day is to draw a witch (uses the                                         |
| (2)  |                        | layout and waits for the students to participate)                                               |
| (3)  |                        | all you have to do is to draw a witch (students started                                         |
| (4)  |                        | Their drawings) wow, ok, so let's start identifying some                                        |
| (5)  |                        | COMMON ELEMENTS                                                                                 |
| (6)  |                        | Among our drawings, give me common elements                                                     |
| (7)  |                        | you see here (approaches to the screen)                                                         |
| (8)  | (0:24) <b>ALRD:</b>    | NOSE.                                                                                           |
| (9)  | (0:25) <b>Teacher:</b> | (uses gesture to agree) the nose for sure                                                       |
| (10) | (0:27) <b>AM:</b>      | (inaudible)  |
| (11) | (0:29) <b>Teacher:</b> | Again                                                                                           |
| (12) | (0:30) <b>AM:</b>      | The hat                                                                                         |

- (13) (0:31) **Teacher:** (nods to agree) the hat aha
- (14) (0:35) **ALRD:** The broom? The broom stick es? (crosses arms as he
- (15) is not sure)
- (16) (0:40) **Teacher:** (head movement-nodding) yes, the broom
- (17) (0:43) **NAT:** The smile
- (18) (0:45) **Teacher:** okay, the smile, what type of smile is that? (moves
- (19) her hand to her face)
- (20) (0:51) **ALRD:** like a person who is malicious, something like that?
- (21) Hahaha
- (22) (0:56) **Teacher:** yeah yeah yeah (uses gaze to maintain contact) it's
- (23) like an evil smile, it's
- (24) Not like an any innocent---- friendly smile, specific,
- (25) specific smile hahaha what else?
- (26) (1:15) **ALRD:** the black color
- (27) (1:16) **Teacher:** (nods her head) hmm hmm definitely, we associate
- (28) witches with the BLACK COLOR
- (29) (uses the layout to search more drawings)
- (30) are they pretty?
- (31) (1:27) **ALRD:** NO, they're not hahahahaa
- (32) (1:29) **Teacher:** well, your drawings are pretty (uses gestures to
- (33) mirror what she is saying) but
- (34) Technically we don't think of pretty
- (35) women when we think of witches right? Okay
- (36) Black color, evil smile, anything else?
- (37) Any other elements?
- (38) (1:59) **ALRD:** The hair is not tide? it's always like

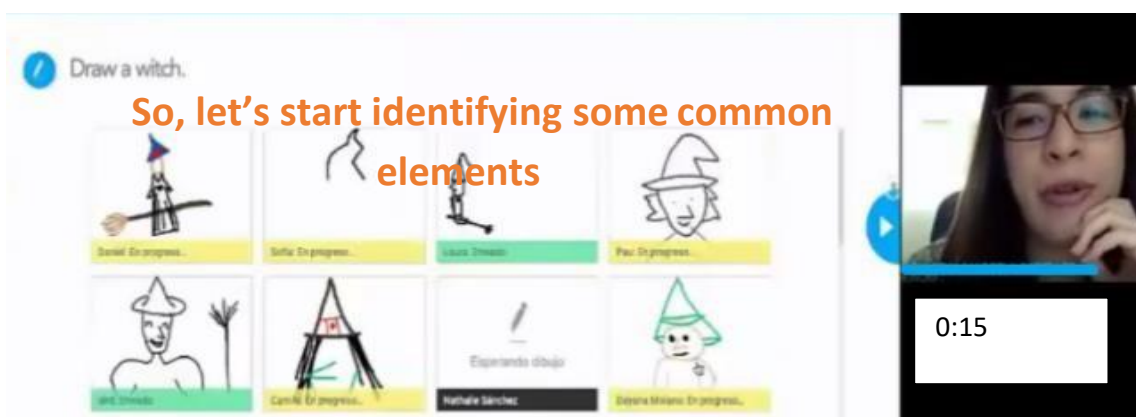
- (39) (Uses gestures to represent frizzy hair)
- (40) (2:04) **Teacher:** (nods her head and focus the gaze)
- (41) down like the hair is always down
- (42) (2:06) **ALRD:** NO, like it's disorganized (uses gestures
- (43) to exemplify messy hair)
- (44) (2:11) **Teacher:** okay, warped, hahahaha it's always
- (45) warped, so it's like yeah all over the
- (46) Place, frizzy, with a lot of volume haha
- (47) (2:23) **ALRD:** YES, hahahahaa

In the interaction presented above, the teacher asked her students to represent in a drawing the term 'witch', so, meaning negotiation revolved around such a request, resulting in an EFL learning opportunity. As it could be noted in line 1, the teacher encouraged students to participate providing their assertions on the task proposed. Subsequently, in line 4 and 5 she asked her students to elicit some common characteristics to define the term in question. Accordingly, in line 8 ALRD intervened contributing with the term "nose", then, after teacher's approval, AM and NAT presented their contributions as observed in line 12 and 17. Afterward, the teacher attempted to maintain the interaction asking more related questions. As it could be seen in line 18 and 20, ALRD answered those questions and continued contributing with terms to approximate and construct an imaginary of a witch. At this point, ALRD was engaged in the conversation and tried to contribute as much as he could providing examples that assisted knowledge construction as observed in line 20 and 26. Then, in line 38, ALRD tried to offer more ideas, but it seems he struggled with it, so that his intervention was assisted by the teacher who took into consideration the cues given by the student and

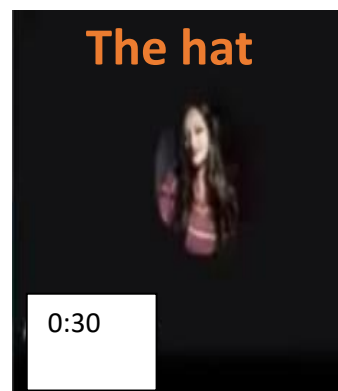
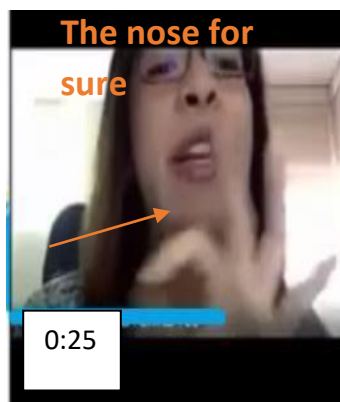
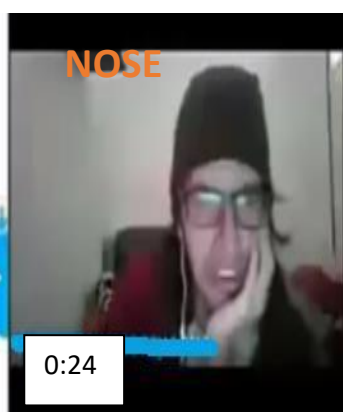
then, provided the term in the foreign language. Thus, it could be asserted that students' participation and their multimodal interactions resulted in the elicitation of several elements that constructed knowledge, providing an approximation to the concept in question which led to the presentation of new vocabulary in the target language.

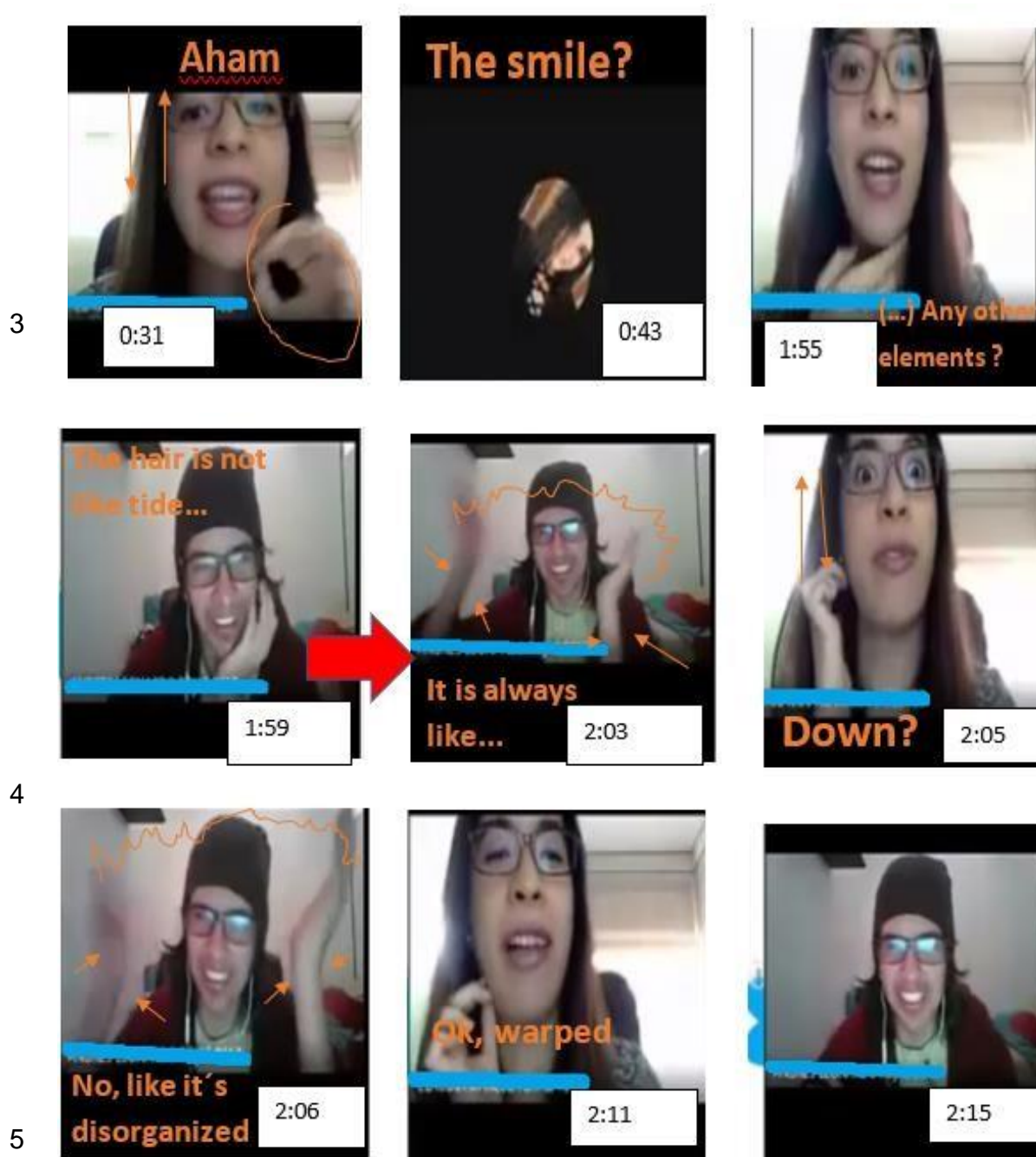
As such, the excerpt presented above provided an overview on the way students interacted, discussed, engaged and participated in meaning negotiation. Considering this, figure 2 offers an account of what other modes were simultaneously achieving in terms of communicative actions.

1



2





**Figure 2.** picture-transcript 2.This figure illustrates the way communicative actions are carried out within a class interaction

The sequences of images presented above offer the diverse modes the teacher and students employed in the negotiation of meaning to ultimately construct knowledge using the target language. As it could be noted, in the first sequence the teacher asked

her students to participate sharing common traits of the term they were discussing. Subsequently, on sequence 2 and 3 some students voluntarily presented their assumptions, then, the teacher presented her approval to such contributions by displaying what Norris (2004) established as metaphoric gestures, that occur when individuals use hands gestures to represent categories or abstract ideas. Then, she promoted more interactions by asking more questions. Accordingly, on sequence 4, ARLD attempted to mention the term, but he did not find the specific word, so , he resorted to what Norris (2004) calls deictic gestures, trying to represent a notion of the real world with his hands in this case a type of hair. Then, the teacher observed such a sign, and mentioned a word that could represent that gesture, nevertheless it was not what the student meant, as observed in sequence 5. So, once again he performed the gesture putting emphasis on movements to reinforce his point. Finally, the teacher was able to understand and presented the term the student was looking for; 'warped'. With this in mind, by employing diverse modes during interactions, meaning negotiation was configured, and such a thing led to knowledge construction and learning opportunities through the student's intervention as a sign of his involvement to construct knowledge.

In addition to the former, as presented in figure 2, the actions that led to knowledge construction highly represented students' commitment to EFL learning. This exercise elicited students' viewpoints on a term, so that active participation as considered by Brown (2014) is a capacity of self-awareness and agency that moves the student to commit and involve in their learning process. In this sense, it could be asserted that the activity mediated by VLE moved students to contribute to knowledge construction using diverse modes as the interactions and the content involved were a meaningful

opportunity for EFL learning. Thus, participating of knowledge construction employing diverse modes is a sign of students' commitment for learning, so that interactions with such purposes should be promoted in a learning climate.

In line with the former, multimodal communication has an important influence in students' learning processes. In this sense, learning is facilitated when interactions are accompanied not only but the language, but also by other semiotic modes established by individuals (Bonner, 2014). Accordingly, when learning is facilitated by diverse means, students are likely to engage more in their processes (Brown, 2014). Therefore, it could be affirmed that multimodal interactions are key to develop learning processes and make students commit to their learning as understanding is facilitated. During the observations on this study, multimodal communication was used to boost EFL learning as students engaged in their processes having diverse forms in which they received and presented information mediated by VLE. All things considered, multimodal communication could offer tools to facilitate learning when interacting, and by doing so, it is possible that students' engage more in their learning processes.

Considering the former, multimodal communication placed a central role in meaning negotiation and, hence, understanding. Considering this, the next excerpt presents a student's perception regarding the relevance given to multimodal communication in his learning process. In this way, he said that understanding is facilitated when interacting, so that learning might be more engaging and fostered when there are several cues that assist the comprehension of concepts. Thus, multimodal communication could be conceived as an aid to foster understanding.

## FG Excerpt 1 Researcher and ALRD Transcript 5

The participants observed a clip of their former classes and then the researcher asked some questions related to such experience.

**Researcher:** How important were the interactions displayed in order to construct knowledge?

**ALRD:** it was really **helpful to be able to express ourselves by using our body language** (...) I can speak maybe because I was one of the ones trying to make meaning, I remember that in that moment because I mean, **I was trying to understand the question (teacher question on the video) and understand what we had just watched on the video**, It was really useful because I I I was a bit like confused, so **I needed it to express or to complement what I was saying with my body language so I can I can make my teacher understand what I wanted to say**, because I remember I couldn't find like easily the words to express my ideas, **so really important**. Hahaha

As it was observed, the student pointed that body language and other modes besides verbal language are important for meaning construction. Such modes are useful when it comes to expressing and making meaning in circumstances language is not enough. In that sense, Norris (2004) asserts that people always use systems of semiotic representation to assist their actions and language in order establish meaning. In line with this, the student also mentioned that multimodal communication assists understanding as the cues offered by the body language for example contribute to comprehend situations, so that it is easier to engage in learning. Thus, multimodal communication supports individuals when they express and try to convey meaning. In the same way, multimodal communication is critical in teaching practices, as multimodal interactions may assist language learning. In this sense, when interacting with students in the exercise of knowledge construction, the teacher should promote the



negotiation of meaning throughout such exchanges. Norris (2004) argues that people employ verbal and non-verbal channels to communicate and establish meaning. Then, in a context of language learning, those elements should help students to construct the target language communicative competence which involve more than linguistic features. Thus, the next excerpt offers the view of the teacher on multimodal communication including interactions and their relevance in language learning.

I Excerpt 1 Researcher and teacher Transcript 6

**Researcher:** How important was it for you that your students interacted with an open Camera?

**Teacher:** **Non-verbal communication is an essential part of language learning; I'd say of every learning process as the cues we may perceive can lead us to understand something.** Actually, not being able to see all my students during virtual classes has been one of the biggest challenges of this new format. (...) , I wasn't able to see all of them during most of the semester, which made me feel unmotivated and lonely. **However, the camera is not only important because of the interaction with the teacher, but also because it is the one that allows us to see if students are actually there and to realize when they don't understand something** since, they will hardly ever say they are confused with an open mic. Finally, **language learning is not only about linguistic features, it also has to do with suprasegmentals, gestures, body movement...**

Regarding the former, multimodal communication and interactions are important for learning processes as they facilitate understanding. This way, the teacher acknowledged that verbal and non-verbal communication are essential to ensure learning, due to the fact that the cues presented in communicative acts may boost comprehension and then, learning. Accordingly, the former is related to multimodality,

so, as stated by Skyer (2016) multimodality is present everywhere and accompanies communication so that it configures the ways in which we perceive information and ultimately learn. Likewise, she asserted that learning a language does not only have to do with acquiring a linguistic code, but it involves communicative features that surpass it, including body language, suprasegmental elements and gestures. Briefly, multimodality accompanies communications, hence, it is present and helps to construct knowledge and learning when interacting.

In summary, multimodal communication is present in all human interactions, and they configure diverse forms for understanding and learning. So, multimodality assists processes of meaning negotiation that ultimately turn into learning experiences (Bonner, 2014). In this way, interactional scenarios are necessary to engage students and facilitate learning, given that by discussing and sharing thoughts in diverse ways, it is possible to assure effective learning experiences. This includes scenarios where instruction and interactions are mediated by VLE which may or may not help knowledge construction. Also, it could be affirmed that as multimodal communication facilitates understanding, it is easier to involve students with their learning (Brown, 2014; Bonner 2014). Thus, multimodal communication is key to construct knowledge, for that reason, scenarios of social interactions should be promoted to foster learning, especially in virtuality, in order to engage and involve students.

### **Investment to enrich identity and the acquisition of cultural capital through new discourses**

Humans' experiences determine their interpretations of the world and, these are represented by words that configure a discourse and subsequently an identity (Gee,

2011). That being said, discourse is related to the way people communicate and act as members of social groups who possess their own views and interpretations that establish certain characteristics (Gee, 2011). Considering this, it could be affirmed that the different cultures we see around the world have their own discourses and identities. As such, when those groups interact using varied modes with others, the negotiation of meaning leads to gain elements that enrich individuals' discourses (Norris, 2004; Gee, 2011). In that case, social interactions are acknowledged as fundamental acts that assist the acquisition of elements which enrich knowledge. All in all, language as well as communication modes are valuable instruments that allow humans to shape a discourse and an identity, which are subject to modification through interactions in a diverse world.

Subsequently, it can be asserted we live in a globalized and connected society that massively interact, communicate, and share information in diverse ways, and this has led to the construction of a global citizenship that has given rise to new communities and identities (Gee & Hayes, 2010; Darvin & Norton, 2016). In this sense, new social practices and discourses have been established, hence, many people worldwide attempt to make part of that community for multiple reasons, putting effort to invest in resources to acquire these new social practices and ultimately join such a group (Gee & Hayes, 2010; Jones & Hafner, 2012; Darvin & Norton, 2016). All things considered; modern society is characterized for being connected, also it has expanded the ways in which people interact and communicate, leading to the emergence of new communities and identities that are appropriated by several individuals in their pursuance of belonging to a group.

Regarding the former, some individuals endeavor to change their discourse by adopting a new language to be integrated into a community. In this sense, Norton (2015) asserts that some people invest in material and symbolic resources that allow them to participate in the social practices of a community, increasing their value as agents in a society. In this process, Peirce (1998) states that language learners acquire resources that change their identities. In that case, the students here invested in their EFL learning in diverse forms, attempting to acquire elements that facilitated their inclusion in an English community, resulting in the modification of their discourse by means of their interactions in a VLE. Accordingly, the forms in which the students interacted to invest in their learning and the reasons for investing in learning are explained below.

In order for the students to invest in their language learning, it is important to provide certain conditions that allow them to acquire elements for this purpose. In this way, Norton (2013) suggests that the teacher must facilitate such a process providing spaces that allow students to interact and communicate, ensuring educative settings free of exclusion or discriminatory practices. By following this, it is likely that students will invest by engaging in their learning process, as stated by Newmann (2021):

Engagement in academic work is the student's psychological investment in learning, comprehending, and mastering knowledge or skills. Students' levels of engagement in academic work can be inferred from the way they complete academic tasks: the amount of time they spend, the intensity of their concentration, the enthusiasm they express, and the degree of care they show (p.34).

As such, if students feel they have the right to speak, they can enrich their discourse and identity when interacting with others, feeling confident and also, involving in practices that increase their opportunities to be integrated in the target community (Blumenfeld, Rogat & Krajcik, 2006; Norton, 2015). Thus, to encourage investment, it is

important to provide a suitable space for meaningful interactions that ensure students with learning opportunities they can involve in.

In this way, it was observed that in a suitable space, our students interacted and invested in their learning by engaging in knowledge construction practices, acquiring elements that helped them to increase their discourse. So, the communicative actions mediated by VLE established and assisted the way meaning was conveyed, considering that during such activities invested students were able to obtain cultural capital through knowledge construction which served them to acquire elements that extended their discourse.

This is reflected in the following excerpt, as it can be evidenced that around an interactive discussion mediated by VLE, invested students who engaged to negotiate meaning, used diverse modes, and then constructed knowledge, which equipped them with cultural capital that was incorporated into their discourse. This means that such situation became a learning opportunity.

O Excerpt 3 teacher, NT and ARLD Transcript 3

(5) (1:16) **Teacher:** Aha, perfect, basically when we talk about the UK we are

(6) talking about talking about a POLITICAL TERM, that includes.

(7) what countries? Again?

(8)(1:28) **NT:** Wales, Scotland, Northern Ireland and hmm England?

(9) (1:36) **Teacher:** There you go, perfect, so that's the United Kingdom, they have

(10) a POLITICAL AGREEMENT, that's why they're not like

(11) necessarily geographically related, They're pretty close

(12) OF COURSE, but mostly we refer to A POLITICAL TERM,

(13) what about Great Britain? So Who's that?

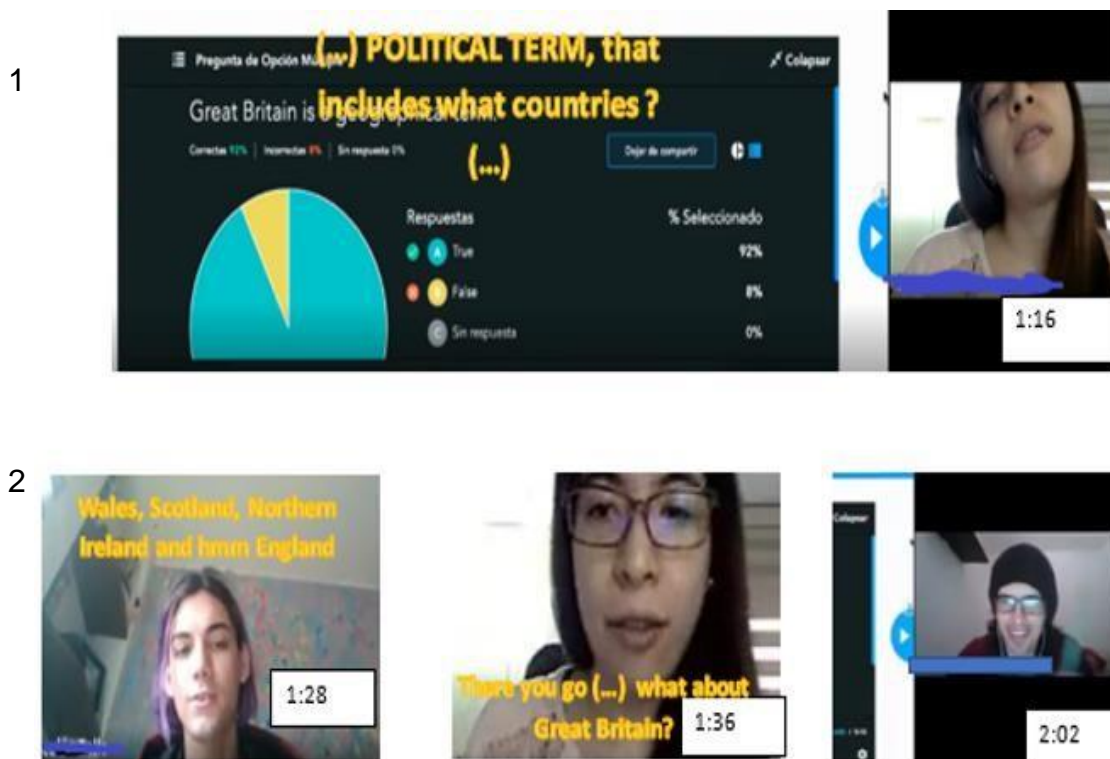
(14)(2:02) **ALRD:** The all the places that actually compound the the Great Britain

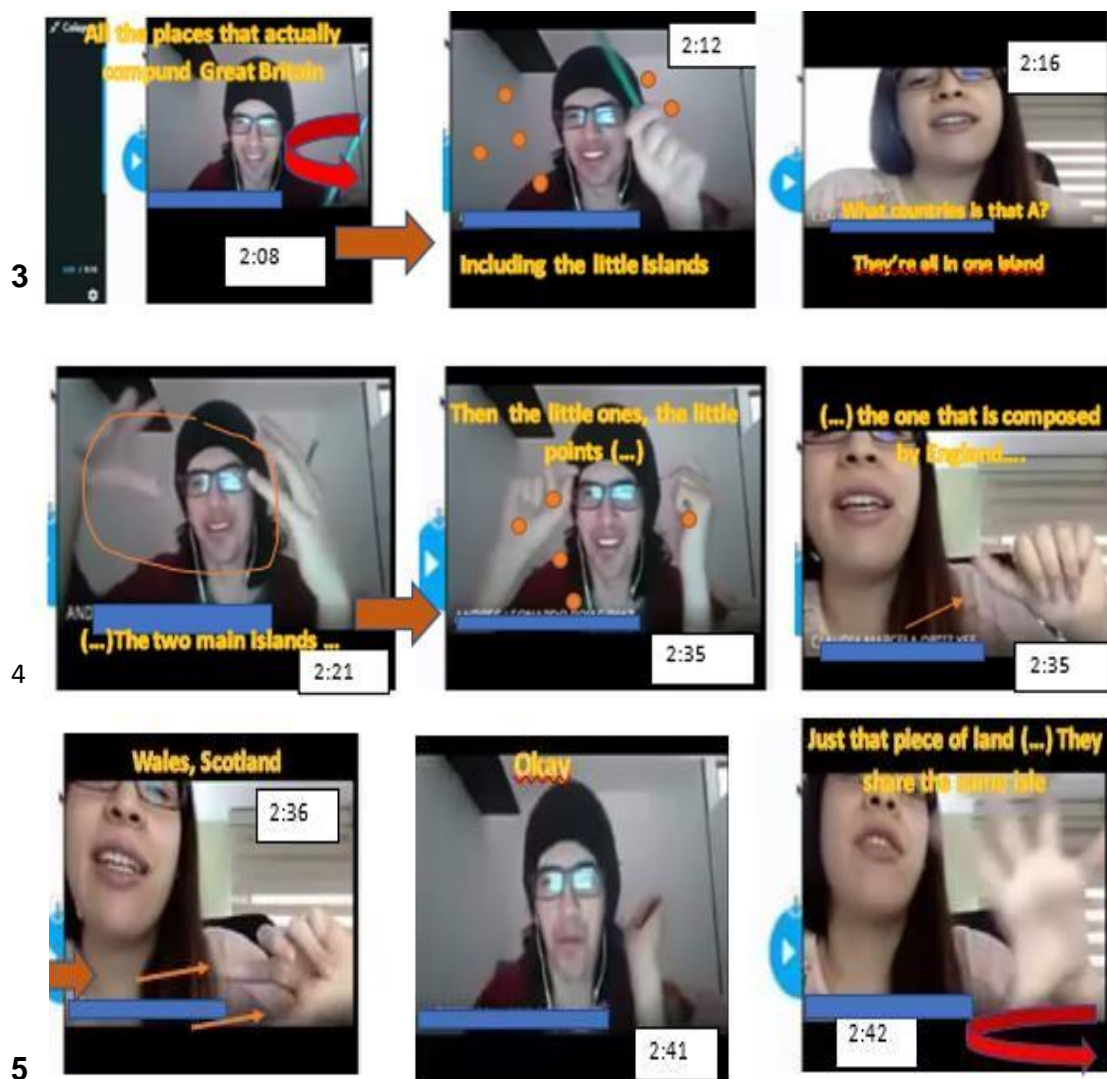
- (15) (uses the pencil to draw circles) , including the little Islands
- (16) (uses gestures to draw points)
- (17) (2:14) **Teacher:** But like what countries is that A? so, they're all in one island
- (18) (2:20) **ALRD:** no, no, no, the actual, the about the two main islands (Gesture
- (19) of aggrupation) and then the little ones the little points
- (20) (Gesture of pointing) he the guy mentions, no? ha
- (21) (2:28) **Teacher:** But Great Britain is only the, the, one island, the one that is
- (22) composed by (Starts listing) England, Wales, Scotland, that's
- (23) Great Britain
- (24) (2:41) **ALRD:** okay
- (25) (2:43) **Teacher:** so just that piece of LAND, like all those three together but it's
- (26) a geographical term because those three share the same
- (27) (Uses gestures) the SAME ISLE BASICALLY, the same
- (28) Island

Invested students participated in knowledge construction and this allowed them to acquire information that assisted their learning. As observed above, in line 5 the teacher recapped information from an activity developed formerly, then, she proceeded to ask her students some questions related to it. In this case, line 8 shows that NT voluntarily participated providing information that answered the question proposed, demonstrating attentiveness and involvement in knowledge construction. Subsequently, in line 9 the teacher agreed with that answer and continued offering information. Then, she opened the space for more interventions, asking another question. As it can be seen in line 14, ALRD presented a point, he elicited his ideas toward the question proposed, in order to contribute with details related to the conformation of Great Britain. Here, the teacher detected a drawback with ALRD's answer, so she reformulated the question and presented cues to guide ALRD to the right answer. Accordingly, ALRD had the opportunity to discuss with the

teacher the concept at hand as observed in line 17,18 and 21. As a result, the teacher presented a clarification to the concept previously offered by the student. Subsequently, in line 24 it could be observed that ALRD accepted such a clarification, incorporating such information into his knowledge. In this sense, it could be asserted that students who invest in their learning, involve and engage in the practice of knowledge construction, which leads to the negotiation of meaning and ends up acquiring elements that increase their knowledge.

The former excerpt offered us a situation in which a discussion established learning opportunities form an activity mediated by VLE. Therefore, the interactions seen allowed students to contrast, hear and clarify related concepts. Figure 3 illustrates the ways in which invested students participated of the aforementioned activity, employing several modes in meaning negotiation, which resulted in the acquisition of elements for their learning.





**Figure 3.** picture-transcript 4. This figure illustrates the way invested students participate in class interactions in order to negotiate meaning in the exercise of knowledge construction.

The situation presented above illustrates an EFL exercise that promoted the elicitation of concepts that were discussed by invested students who were able to construct knowledge employing modes when interacting. In this sense, as observed in sequence 1, the teacher promoted the interaction asking questions, so that, this action led NT to participate providing the answer, as observed in sequence 2. Subsequently, the teacher continued asking questions. So, in sequence 3, we can observe that ALRD tried to participate, he used hand gestures in two moments to support his intervention;



first, his hands used iconic gestures (Norris, 2004) to mimic what he was saying. Subsequently, the second move tried to simulate the composition of Great Britain employing what Norris (2004) calls deictic gestures. On sequence 4, the student once again made a point accompanying his ideas with deictic gestures to support and exemplify his answer; first an aggrupation that represented the main Islands of Great Britain and second the smaller units that accompany those Isles. At that point, the teacher presented and explained the concept, so she employed iconic gestures to mirror and illustrate her views as observed in sequence 4 and 5. These interactions showed the extent of the students' investment, as by engaging in active interventions, it was possible to acquire and reinforce their knowledge. Thus, it could be observed that interactions promoted in class exercises supported by modes helped to reach understanding and then, knowledge construction, facilitating the acquisition of elements that were incorporated in learning.

Considering the former, it could be affirmed that students who invest and engage in knowledge construction along their EFL learning are able to acquire elements that transform their discourse. In this case, the students who invested in class by engaging and taking part of the construction of knowledge were able to increase their cultural capital, as they obtained useful information that contributed to their learning within the discussions proposed. Hence, when interactions result in learning experiences, individuals' discourse can be modified, including their identity that is transformed when the elements that have been learned, advocate participation and the inclusion in a community (Gee, 2011; Norton & Toohey, 2011). In addition, investment grants the possibility of not only taking actions to learn a linguistic code, but also acquiring the

cultural value behind it, which enriches the individual, facilitating the inclusion on a community (Peirce, 1998; Norton & Toohey, 2011). For this reason, it could be said that the students presented above were invested by engaging in the practices that were being carried out, so that they obtained useful elements that reshaped their discourse and facilitated their insertion to the target community . In other words, students who invest in their learning by actively participating of such a process can acquire useful elements that transform their discourses and identities.

In line with this, students invest to their EFL classes mediated by VLE by involving in knowledge construction when they perceive significance on the content. Therefore, teachers should facilitate EFL learning offering varied content and activities that engage students to learn something meaningful (Alfranca, 2012). In that sense, students gain interest and take actions to invest in their learning when the content offered facilitates the acquisition of elements that broaden their discourse (Norton, 2013). In order to illustrate this point, the next excerpt presents a student's view on the importance of presenting meaningful content, as she mentioned, she felt more engaged and also participated more actively when treating relevant topics. In this way she claimed that the content offered along the course allowed her to increase her linguistic and cultural competence, which are essential traits in EFL learning. In brief, students invested in their learning when meaningful content was presented, so that, the acquisition of cultural capital and language was facilitated.

## FG Excerpt 2 Researcher and DMQZ Transcript 4

**Researcher:** How engaged did you feel along the course of English sixth?

**DMQZ:** I think **the classes were really engaging**, because, ah, the teacher eh, brought different strategies and different activities everyday, so, we felt comfortable with it, so, it was not just, always the same, but **we tried to develop different things that make us like, move, speak or maybe think of different aspects that we may not be used to think of, so it was really interesting, because additional to learn like the grammar and the structure of the language, we learned** eh eh **culture as well** and that's useful because we need to know more than just how to speak in English

As mentioned above, EFL students invested in their learning when they received different activities and content that allowed them to acquire elements to increase their cultural value. In this sense, such learning opportunities were provided by the teacher who offered diverse activities and meaningful content to involve her students. By encouraging interactions and presenting historical-and-culture content related to the target language, students were able to invest by engaging in processes of knowledge construction, as they took actions to learn considering such topics relevant for their learning process. In this case, invested students increase their cultural capital which is reflected in new discourses when they take actions to acquire symbolic and material resources (Gee, 2011; Norton 2015). To put it briefly, in order to ensure effective learning, it is important that students engage, providing meaningful activities and content that impulse their investment.

Subsequently, EFL learning mediated by VLE requires a teacher's structured pedagogical intervention to promote interactions in order to encourage students' investment and learning. Then, it could be asserted that the teacher's class design is

critical to ensure learning: These designs should provide communicative environments that engage students and assure their investment and learning. In that sense, social interactions should be promoted to construct knowledge when discussing meaningful topics, leading to the acquisition of competencies (Bonner, 2014; Norton, 2015; Alves, Miranda, & Morais, 2017). The next excerpts present the way the teacher designed and presented her content, considering her view on the students' involvement in their learning.

#### I Excerpt 2 Researcher and teacher Transcript 7

**Researcher:** What kind of strategies or content did you use to encourage your students' participation?

**Teacher:** I think one of the most powerful tools for encouraging participation is the variety of the activities. Therefore, **the fact that we had a different topic every day of the week helped a lot with this. Some people were very active during the history-and-culture sessions while others preferred the ones dedicated to grammar and skills development (...)**

---

#### I Excerpt 3 Researcher and teacher Transcript 8

**Researcher:** How could you describe the evolution process of your students along the lessons?

**Teacher:** When we work with beginning levels, the evolution of the process is very easy to track in linguistic terms. However, when working with more advanced levels it is harder to put your finger on the changes and improvements of each student at a linguistic level. However, **I think that this group showed a great process in terms of content. They were able to write an argumentative essay based on the topics we studied in class, and they also talked about them with confidence and providing examples.**

Considering the former, investment and learning are encouraged by the ways teachers organize their class sessions. As mentioned above, variety in terms of content and activities might encourage students to involve in their learning, therefore, it is important to offer suitable subjects and strategies that catch students' interest as teachers also make part of investment (Norton, 2015; Alves, Miranda, & Morais, 2017). With this assertion, the teacher of this course realized that providing an appropriate space for interacting accompanied by history-and-culture content, her students would get more involved, obtaining more learning opportunities, so that, they were able to enhance their EFL abilities and increase their cultural capital (Bourdieu, 1991; Norton, 2015). Additionally, by having invested students who were committed to increase their knowledge, it was possible to observe their evolution process of learning that increased the chances to acquire new literacies and discourses (Norton, 2015). On the whole, investment is also constructed from the teacher, as the strategies that are offered influence the way students commit, explore and invest in their learning.

To sum up, in order to encourage EFL investment and learning it is important to provide interactive spaces where meaningful experiences could arise. In this way, students invested and learned when they had free expression scenarios interactions that assisted them in knowledge construction (Norton & Toohey, 2011; Alfranica, 2012; Norton, 2013). In addition to the former, the teacher provided a communicative environment mediated by VLE which allowed students to invest engaging in their learning processes, granting them the possibility to acquire not only linguistic abilities but also cultural capital (Norton, 2013). Such elements were incorporated in students' discourse, contributing to identity changes that ensured EFL learning. Briefly, EFL teachers need to offer authentic learning opportunities when instruction is mediated by

VLE, so that by promoting interactions and meaningful experiences, it is possible to encourage students' investment and ultimately learning.

### **Agency in the construction and appropriation knowledge in VLE**

As stated formerly, social interactions are essential for learning as they can construct and re-construct knowledge when communication is established, allowing individuals to modify their discourse (Vygotsky, 1980; Gee, 2011). Along these lines, Guo, Chen & Hou (2019) suggest that as educators, it is critical to provide such an experience in order to ensure effective knowledge construction and ultimately learning. Accordingly, Evnitskaya & Morton (2011) point that collaboration and communication are critical to ensure learning, but this requires agents' participation. Thus, learning is accomplished in participative and cooperative acts that people carry out in social interactions, which lead to the transformation of discourses in the exercise of knowledge construction.

Accordingly, VLE mediated by the internet are new scenarios for interactive exchanges, so that educators must implement appealing activities to promote effective learning experiences. In regard to this, ICT's resources should be appropriated by teachers as tools to foster interactions, discussions and collaboration to effectively engage students to participate of knowledge construction and offer learning opportunities in these new learning spaces (De Smet, Van Keer, & Valck 2008; Tu, Blocher & Gallagher, 2010; Guo, Chen & Hou, 2019). In this way, encouraging participation is key, because such an agency act allows the accomplishment of learning (Mayontera, 2017). In a word, knowledge construction is an act mediated by the teacher

who should use varied resources to encourage agents' participation who interact and ultimately engage in a social practice of transformation, achieving learning goals.

Consistently, students may be considered as agents in a classroom, and their participative acts in interactional learning environments contribute to the transformation of the individuals involved in such a practice. "The subject's actions, intentional and conscious, in their relations to other participants have repercussions on the transformations that the activity system undergoes" (Guimarães Ninin & Camargo Magalhães, 2017. P3). This means that the relations built in such interactional and collaborative social practices influence the individual in terms of the contributions along the process of meaning negotiation and knowledge construction. In that sense, participation demonstrates high agency also, it is essential to get involved in processes of knowledge construction that assure learning. Thus, teachers should offer participatory environments and activities to encourage such acts that construct knowledge and appropriate learning, subsequently, participatory acts should contribute to individuals' transformation within interactions.

Participative acts are promoted by the conditions teachers offer for interactions in learning environments. In this sense, Fusco (2012) states that free expression scenarios allow students to intervene and interact, facilitating processes of knowledge construction in VLE for example. As a result, there are more chances of active participation which should be encouraged and oriented by teachers who are in charge of directing and providing communicative scenarios (Fusco, 2012). Accordingly, in the teacher's role as a guide of communication, participation could also be encouraged by inquiring, leading to discussions, consensus, viewpoints elicitation, among others which

eventually allow knowledge construction (Fusco, 2012). In short, knowledge construction as mediated by participation during social interactions should be ensured by teachers' intervention in order to provide effective scenarios that lead to learning.

Ensuring suitable spaces for discussions boost participation of students in knowledge construction. As mentioned above, students engage and interact more when they can express and discuss their thoughts, so that, students' participation in such practices allows the negotiation of meaning and then, knowledge construction (Vygotsky, 1980; Fusco, 2012). In this scenario, teachers need to provide proper conditions to achieve such goals, promoting communicative spaces of participation and interactions which are mediated by their interventions. Having in mind the former, the following excerpt presents a class situation in which the teacher promoted participation in one interaction, attempting to make a discussion of a relevant topic for her students; to do so, she asked some questions, then, some students voluntarily decided to intervene showing an important extent of agency in their concern to learn something useful.

O Excerpt 5 teacher, DMQZ, LS and ARLD Transcript 13

- (30) (11:13) **Teacher:** what do you think ? do you think it's super hard? Or  
(31) super easy? Or like? What's your verdict? For the  
(32) listening?
- (33) (11:32) **ALRD:** (INAUDIBLE) cause I needed to I mean I didn't do as I  
(34) should Have because I stopped the audio (Uses  
(35) gestures to exemplify) pause and put the answer and  
(36) then, otherwise I would have been able to remember that  
(37) answer. I cannot do it
- (38) (11:56) **teacher:** NO NO NO You totally can, okay interesting, Marce?



- (39) (11:58) **DMQZ:** yeah, I think this is hard because if you have in real life to
- (40) listen audio just once, it would be really hard so that's what
- (41) Andrew was saying
- (42) I had to like to pause the audio and answer until that
- (43) point and then continue listening, because otherwise I
- (44) don't know I would forget the answer or something like
- (45) that, but I think this is really hard (nods head) if if you just
- (46) listen to it once
- (47) (12:35) **teacher:** (nods head) It's really intense cause you have to write the
- (44) answer as soon as you hear them, because if you involve
- (48) writing one, they might
- (49) (12:42) **DMQZ:** (nods head)
- (50) (12:42) **Teacher:** be (inaudible) the next one, so you gotta be super
- (51) focused. I think the fact that is is paper based,
- (52) makes it less bad, I don't know what you think?
- (53) but I feel like (gestures to exemplify) typing is trickier
- (54) than (uses gestures exemplify writing) just like
- (55) writing quickly yeah
- (56) (13:04) **ALRD:** (inaudible) if you have the right (gesture to exemplify) it'd
- (57) be pass
- (58) (13:05) **DMQZ:** yeah
- (59) (13:09) **ALRD:** so, you will be able to be aware of the next (uses gestures
- (60) to mirror what is being said)
- (61) (13:10) **teacher:** (nods head, then continues) any strategy in this part of
- (62) the test? but maybe you have discovered, and you can
- (63) share with us?

- (64) (13:37) **LS:** can I say something?
- (65) (13:38) **Teacher:** (nods head) Yes Natalie of course
- (66) (13:41) **LS:** I presented the IELTS last year and yeah it was quite tricky
- (67) (inaudible) they gave me time to listen, and answer so I
- (68) suggest that focus a lot on what is on the paper (inaudible)
- (69) (...) also it was kind of hard because the room was quiet
- (70) (inaudible) (...) yeah I suggest to read carefully before
- (71) you try to fill the gaps
- (72) (14:46) **Teacher:** aha, that's amazing, great Natalie, it's great to have
- (73) (gesture of approval) testimonies you know.
- (74) (14:54) **ALRD:** I have another one, (inaudible)
- (75) (14:55) **teacher:** aha
- (76) (14:56) **ALRD:** it was when I was taking a course, and we get the chance
- (77) to get in this topic, I mean (gestures that mirror what is being said)
- (78) the IELTS and these kinds of exams, my teacher told me that it
- (79) was important to I mean, normally, what we will do (display of the
- (80) same gesture) is to focus on or try to get a specific word, but the
- (81) IELTS tricks us and what they do is to like to go around
- (82) (gesture of a circle) and (inaudible) but like mention in
- (83) specific ways so it's better to focus on the context (gesture of a
- (84) circle) and not just to look for a word (uses gestures to point with
- (85) fingers) Be aware of the context ( gesture, mirroring what's being
- (86) said) that they are giving you and then you can, you have more
- (87) chances to fill the correct word (gesture of catching something)
- (88) (15:50) **Teacher:** Definitely (nods her head) oh my god that's amazing,
- (89) that's great a great piece of advice, thank you Andrew

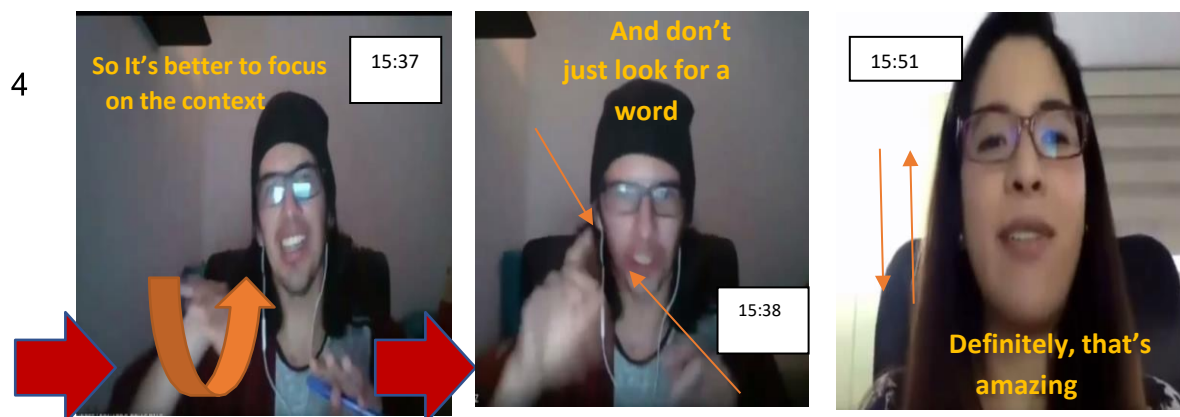
- (90) , focus on the whole thing of the context don't just play for it  
(91) because they might not even see literally what you are  
(92) expecting and pff It's gone (gesture of mirroring what's  
(93) being said), its over you cry, don't cry

Students' participation configured interactive scenarios that helped them to acquire knowledge from peer's experiences, boosting their opportunities for learning. As observed above, the teacher in line 30 asked her students to present their views on an IETLS listening exercise. In this case several students offered their perception towards the activity as observed in line 33 and 39. In the same way, in line 50, the teacher presented her experience to assist her students on how to address such a situation, subsequently, some other students intervened in line lines 59, 66 and 76 sharing their outlooks and experiences toward this situation in question. As such, they recommended using certain strategies to perform adequately, so that, participants' experiences, and interventions constructed an imaginary of the situation at hand. In this sense, it could be asserted that agents' participation constructed useful knowledge for the whole group, this was possible by the space the teacher provided which encouraged interactions and free expression. All in all, interactive spaces for free expression encouraged students' participation which ensured knowledge construction and learning opportunities

As showed, class interactions were triggered by the intervention of the teacher who set a space for speaking. In this way, it could be said that participants were interested in learning something useful, for that reason they got involved in knowledge construction, demonstrating their agency and commitment in their learning process. They implemented diverse modes to convey and negotiate meaning during their

interactions, so that figure 4 illustrates the forms in which these participants constructed knowledge with their actions.





**Figure 4.** *picture-transcript 14.* This figure illustrates a display of a class an interaction in which active agents constructed knowledge by means of their participative actions.

As it can be seen, students' participation was essential to ensure knowledge construction within the class interactions mediated by VLE, demonstrating commitment to their learning processes. In the sequence of images presented above, the teacher promoted participation by asking questions and opening the possibility to discuss around the topic presented (how to properly perform at international exams of English) as seen in sequence 1. In that sense, one student voluntarily participated and attempted to state a point, he used what iconic gestures to mirror what he was saying (how to drill listening), subsequently, on sequence 2 the teacher displayed sagittal movements (Norris, 2004) to approve the student's opinion. Accordingly, she added her experience to reinforce the point formerly mentioned, in this case, she performed deictic gestures to exemplify writing and typing accompanied by a comparison. Thus, the interactions observed offered opportunities for knowledge construction, in this sense, agents' participation was essential as their interventions configured meaning, demonstrating their commitment to learn.

Additionally, in the exercise of knowledge construction, students as agents and their participation in interactions should be promoted by diverse means as their interventions facilitate learning. As it can be seen in figure 4, sequence 3 suggest that after stating a point the teacher had the intention to discuss more on the topic at hand, so, she continued asking questions in order to elicit ideas that could help students with the situation in question. Afterwards, in sequence 3 and 4, one student intervened again stating another idea that came from his experience: He accompanied his words with some iconic gestures trying to mirror what was being said. Then metaphoric ones, when he talks about the strategies to perform well at the exam, attempting to represent abstract ideas. In line with this, as seen in sequence 4, the teacher agreed with the points discussed, she employed nodding or sagittal moves to show her support to the things presented. As a result, such interaction provided useful information to help the students face that situation (taking the exam and how to perform good). Accordingly, such an outcome could not have been pointed if agents had not contributed to knowledge construction, so that their participation was essential in those interactions to provide a learning opportunity. All in all, participative social interactions should be promoted in order to assure knowledge construction and then, learning experiences.

Consistently, participating in interactions assured learning opportunities demonstrating commitment and high agency toward the own learning process. In this way, it could be asserted that students who involved in an interaction to negotiate meaning and ultimately construct knowledge felt committed to their learning process as they were concerned to contribute with something, using varied forms to deliver it. (Bonner, 2014; Guimarães Ninin & Camargo Magalhães, 2017). This way, their agency

moved them to appropriate their learning process, taking actions to facilitate so, for example, participating, interacting, discussing among others (Brown, 2014; Guo, Chen & Hou, 2019). In this regard, such actions are encouraged by the teacher who is in charge of guiding communication and providing a climate to carry out these learning acts. As it was observed in the former sequences, the VLE provided by the teacher allowed students to state their points, facilitating their interactions resulting in committed students who actively participated in knowledge construction. Overall, by promoting participation and interactions, students are likely to engage to and appropriate of their learning processes facilitating knowledge construction and ultimately learning.

In the same way, participation is essential in the development of classes, as these interactions that constructs knowledge and foster learning. Hence, Evnitskaya & Morton (2011) suggest that student's involvement and participation in classes depend on the conditions for learning. It means that in order to encourage such acts, the teacher should bring different activities and topics that establish a social dialog in which some students as transforming agents could present their points in the exercise of constructing knowledge, while others who act as listeners can engage and learn, from the active participants' actions and interactions. In this sense, the next excerpts present the views of the teacher on the importance of participation for constructing knowledge, also the different forms to encourage it for engaging more students in such practices.

## I Excerpt 4 Researcher and teacher Transcript 11

**Researcher:** What kind of strategies or content did you use to encourage your students' participation?

**Teacher:** I think one of the most powerful tools for encouraging participation is the variety of the activities. Therefore, the fact that we had a different topic every day of the week helped a lot with this. Some people were very active during the history-and-culture sessions while others preferred the ones dedicated to grammar and skills development. We also had a "conversation session" (...). **Another way to promote participation was the use of collaborative activities like games, brainstorming, questions, etc, also, through websites such as nearpod, mentimeter, quizizz, etc.** where they can participate in real time without opening their mics, this is particularly useful when there are shy students. Hmm, regarding content **I think the use of authentic material was crucial.**

---

## I Excerpt 6 Researcher and teacher Transcript 15

**Researcher:** What can you say about the group participation?

**Teacher:** It was a multi-level group, so we had very proficient and confident students on one hand, and shy and less proficient ones on the other. This was evidenced in the oral participation, which was rather uneven. However, **most of them did participate during the collaborative activities and were able to answer questions whenever they were asked. It wasn't the most active group but there was always someone who was ready to save the day.**

---

## I Excerpt 8 Researcher and teacher Transcript 17

**Researcher:** How did the social and virtual environment promote or inhibited interaction?

**Teacher:** This is an interesting point. For some people, it is easier to interact face to face and they feel inhibited when facing virtual settings, while others have told me that they feel more comfortable in front of their laptop. However, from my point of view, the virtual environment tends to inhibit interaction, especially if cameras are off. **It takes really active students to go beyond this situation and truly take their process in their hands. In this particular group I'd say we had half who truly interacted and another half who mainly listened but were able to learn something.**



Participation can be encouraged in diverse ways in order to engage students and ensure knowledge construction. Accordingly, as mentioned by the teacher, students' participation was essential to promote learning, but it was necessary to offer diverse activities to assure their interventions. In this sense, the teacher asserted that such activities need to be supported by ICT tools in order to boost students' participation, as these resources accompanied by collaborative activities seem to catch students' attention and interest in interacting. Then, as asserted by Guo, Chen & Hou (2019) collaborative activities mediated by VLE boost the forms in which students negotiate meaning, due to the multiple ways necessary to intervene or express oneself. In addition to this, as stated in the interview, presenting appealing content and activities engage students in participation and subsequently in interactions. Therefore, the teacher must endeavor to present varied content and activities that motivate students to join interactions in order to accomplish learning. All in all, participation from students is fundamental to assure learning experiences. Then, varied activities including collaborative ones should be promoted using educational resources, including the ones supported by ICT.

In line with the former, active participation is not the only way to be committed to learning. With this in mind, the teacher asserted that it was not possible to have all the students participate all the time, but the agents who constructed knowledge somehow influenced the others who preferred to be listeners. This way, Guimarães Ninin & Camargo Magalhães (2017) suggest that in the social event named class, students' involvement could be established by the active agents who construct the new, and the others who prefer to be listeners but, act as non-neutral observers due to the fact that

they also learn from the interactions of the active actors. Consistently, the following excerpt presents the view of a student who was able to learn something new from the contributions and participation of her classmates during the class interactions, also she pointed the importance of the activities and participatory spaces provided mediated by VLE. Thus, students' participation is a cue of agency and engagement to the class and learning process. At the same time, such interventions influence peers who acquire knowledge from observing such interactions.

FG Excerpt 4 Researcher and EYCS Transcript 14

In this section of the focus group, the students were asked to watch a video of one of their former classes and from that material, answer some questions related.

**Researcher:** How do you think meaning was established in these interactions ?

**EYSC:** (...) I Remember that hahaha (inaudible) that the student has a doubt and maybe... for example in this class that it was like, the topic was like, (Inaudible) kind of history, about everything, so it was difficult to explain, maybe if, I remember that moment (class event on the video) that I was in front of my computer and at this moment **I didn't have doubts, but maybe come another student (Referring to participation) and says oh teacher I have a doubt, and even that I wasn't thinking about it, even it wasn't happening in my mind, I could say that okay, maybe with the questions, doubts, and contributions that other students**

Knowledge is collaboratively constructed, for that reason it is important to provide proper scenarios to encourage interactions and participation which ensure learning experiences. As it can be seen, the student pointed that it is essential to have a suitable space for expressing and interacting in order to construct knowledge, as the ones who participate on it share their views and ideas, which at some point might influence the

others who prefer to be listeners, providing a learning experience. Therefore, Guimarães Ninin & Camargo Magalhães (2017) add that, the transformation of a context by the interactions of agents involve collaborative participation that results in new concepts or ideas, in that order, such actions impact the ones involved in those social encounters, including observers and actors. For example, in the situation evoked by the student, it was evidenced that she was able to reconstruct or reaffirm her thoughts by the intervention of an active agent in a class interaction despite her not having an active participation. Briefly, in the exercise of knowledge construction it is essential to have suitable spaces for interactions, as agents could engage and participate, promoting learning experiences even to the ones who only observe.

In the final analysis, teachers should promote interactions bringing activities that encourage participation in their class scenarios, in this way influencing students' agency to construct knowledge. As mentioned formerly, participation is something essential that on the one hand, demonstrates student's agency and commitment to their learning process. On the other hand, it assures interactions to operate and achieve knowledge construction, including active agents and quiet ones. In this sense, teachers need to encourage participation by offering spaces for expressing and by providing diverse activities that engage students to collaborate in achieving such a goal. In order to foster the former, teachers may resort to diverse resources to promote such interactions. This way, ICT offer varied tools that may assist and engage students in these practices, so that interactions could be boosted when mediated by a VLE. Overall, agents' participation is fundamental for social interactions as this ensures the negotiation of

meaning that results in knowledge construction, so that such a thing should be promoted by different means.

### **The teacher as an agent of change**

Teachers are facilitators to knowledge as they encourage and guide classroom communication. They also promote interactions among students through diverse activities that foster learning. In that sense, as learning is the result of communication, teachers are in charge of designing communicative environments that ensure meaningful learning experiences. To achieve such goals, teachers implement several strategies that attempt to transform their students, including their spaces and their practices. In this way, Van der Heijden et al., (2018) assert that to assure these transformations, teachers need to innovate in their practices, using suitable resources to engage their students and guiding them to collaborate and interact. Bearing in mind the former, these actions might define a good teacher, including the different strategies and approaches to treat and develop a topic which ends up causing an impact on the student (Fullman, 1993). In this sense, in teaching practices, it is essential to positively influence students with satisfactory experiences to facilitate learning, so that, teachers need to provide interactive spaces for knowledge construction where interactions emerge from authentic exchanges (Priestley et al., 2012). Consistently, teachers are active class agents who promote learning experiences through diverse means and influence students in their learning processes, assuring changes on them. Hence, teachers' actions performed along classes encouraged changes in students, in that way, these actions also facilitated learning opportunities.

Teachers' actions within a class influenced students learning and promoted changes on these agents. Accordingly, Lane, Lacefield-Parachini, & Isken (2003) state that in class settings, teachers endeavor to provide learning experiences by means of different strategies which result in learning opportunities. In this way, these actions might influence students who see teachers as leaders within class interactions, so that it is likely to adopt certain behaviors that may increase individuals' discourse (Vygotsky, 1980; Carrera & Mazarella, 2001; Lane, Lacefield-Parachini, & Isken, 2003; Gee, 2011). In this sense, the next excerpt presents the students' view on the influence of the teacher as a change agent during their learning process. They were impacted by the didactic strategies implemented for content learning, so that they were able to take several elements for their future practices as pre-service teachers. Consistently, Lane, Lacefield-Parachini, & Isken (2003) suggest that in a pre-service teacher instruction, the teacher's role and actions are essential to construct meaningful experiences, which are established to transform the pre-service teacher's mindset, and therefore, their future practices (Lane, Lacefield-Parachini, & Isken, 2003). In essence, teachers' influence and practices impact class agents who could change through the experiences offered.

## FG Excerpt 3 Researcher and ALRD and DMQZ Transcript 9

**Researcher:** What is your opinion on the virtual classes you had on the English VI course?

**ALRD:** (...) my opinion, regarding like this environment, of course it was different from the presential ones (...) but **it was interesting how this teacher C, ehh was able to explore new tools and to use them in order to make it a little bit more interesting and engaging** (...) so, yeah in that case it was like really (inaudible) **we also learned about ehhe how many different ways and platforms that we can use to perform our lesson which are really really interesting for us as students**

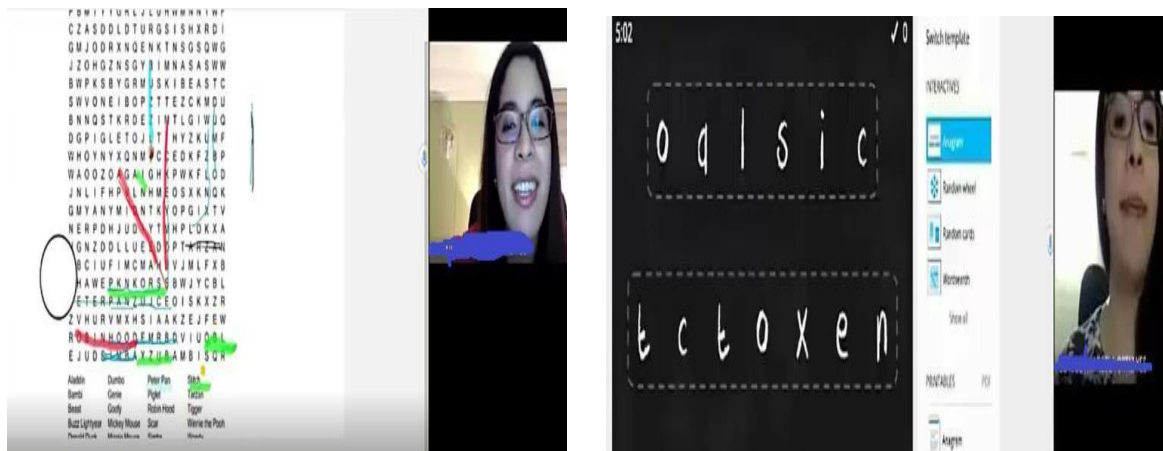
**DMQZ:** It was really interesting because as A said, the virtual environment is really different to a face-to-face one, but also, **I think that English VI course equipped us with a lot of tools, virtual tools like web tools we can use now as pre-service teachers and as future teachers**, taking into account that virtuality is like here to stay, because we don't know how long will this pandemic be, and haha **it is also really useful to know that those tools that we used last semester with teacher C will be useful for us to apply different activities for our future students**, so it was really interesting (...) **Even if it was a virtual class we were able to interact with each other**

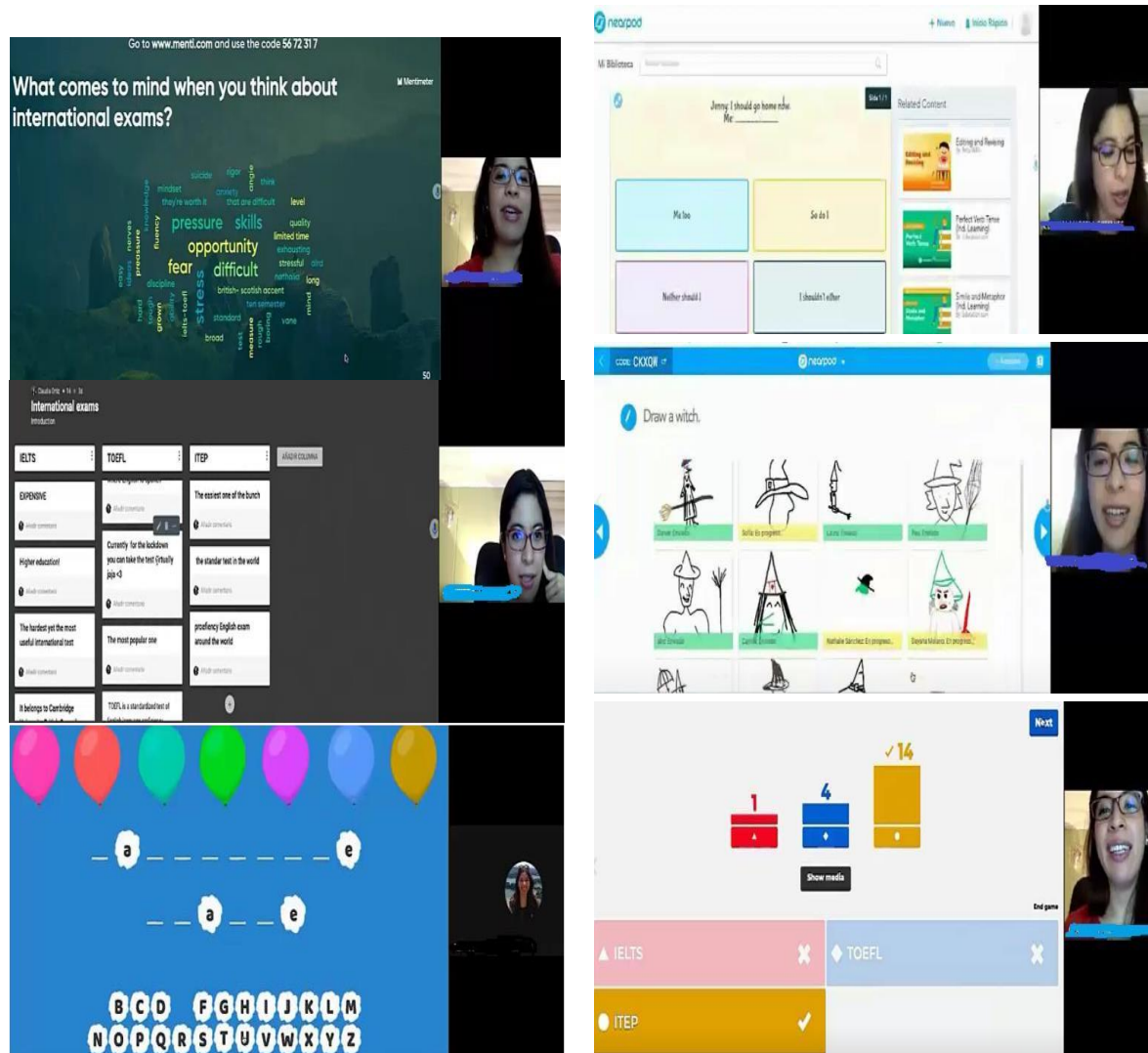
In this regard, it could be asserted that teachers' actions facilitate the transformation of agents and spaces by offering meaningful experiences. As presented in the excerpt, ALRD mentioned that he was able to engage, interact and learn when the activities and resources offered by teacher were facilitated by ICT's tools which made them interesting. In addition, as stated by DMQZ, the way the teacher performed was essential for her learning, due to the fact that, she was able to learn and also acquired useful elements for her future practices, taking the teacher's actions as a model. Therefore, it could be asserted that teachers are agents of change because they cause an impact on their students who not only learn content but also, received valuable information for their future performance, modifying assumptions, beliefs towards the development of their professional practices (Lane, Lacefield-Parachini, &

Isken, 2003). Thus, the actions that teachers implement within their classes facilitate the transformation of their students, as they are influenced by the experiences offered: This way, learning is assured.

According to Hattie (2012) in order for teachers to be effective agents of change, it is important to engage students in learning construction practices; this is achieved by promoting different experiences through diverse activities that appeal to social interactions. In this regard, Felix (2005) suggests that ICT tools may be an allied to diversify teaching practices which are likely to engage students in knowledge construction. Hence, the next figure illustrates the diversification of the activities promoted by the teacher to encourage interactions and EFL learning mediated VLE. These actions led students to engage in their learning as they were able to participate and interact through ICT tools. In brief, implementing diverse activities mediated by ICT in teaching practices may engage students to interact and learn.

O Excerpt 4 teacher and class Transcript 10





**Figure 5.** picture-transcript 10. This figure illustrates a display of a class an interaction in which active agents constructed knowledge by means of their participative actions.

Activities mediated by ICT tools in VLE encourage students' involvement facilitating interactions and ultimately learning, resulting in a successful teaching experience. As observed above, the teacher offered multiple activities and formats along the course in order to encourage students' participation. Subsequently, it could be observed that some of them were engaged as they made part of those interactions mediated by ICT. In this case, Hattie (2012) suggests that teachers as agent of change



have the mindset to excel in their practices, so, they resort to multiple activities that diversify the negotiation of meaning, and this, catches students' attention and interest, . Therefore, ICT offers information in diverse formats which could be considered as multimodal, so that learning is facilitated when agents interact with others and with such resources (Lane, Lacefield-Parachini, & Isken, 2003; Felix, 2005; Bonner, 2014). In addition to this, such a variety promotes on students-teachers' attitudes, the intention to be change agents and the acquisition of elements to develop their own practices, modifying perceptions on teaching (Lane, Lacefield-Parachini, & Isken, 2003). In essence, the variety, in terms of formats and activities when teaching is essential to boost learning and meaningful experiences: This has the potential of changing students to some extent.

Considering the former, teachers as agents of change are committed to provide by diverse means meaningful learning experiences that help students evolve. In this case, teachers perform several actions to create a learning climate that assures meaningful experiences. Such actions could be regarded as strategies to promote knowledge construction that at the event of being applied, result in experiences that influence students to change and acquire knowledge (Lane, Lacefield-Parachini, & Isken, 2003). Considering this, the next excerpt presents the teacher's view on being an agent of change, also the forms to engage students in classes.

## I Excerpt 4 Researcher and teacher Transcript 11

**Researcher:** What kind of strategies or content did you use to encourage your students' participation?

**Teacher:** (...) **Another way to promote participation was the use of collaborative activities like games, brainstorming, questions, etc, also, through websites such as nearpod, mentimeter, quizizz, etc.** where they can participate in real time without opening their mics, this is particularly useful when there are shy students. Hmm, regarding content **I think the use of authentic material was crucial. We listened to podcast, watched videos and read documents from "the real world", which usually motivated them to speak and go beyond the classic English class (...)**

---

## I Excerpt 5 Researcher and teacher Transcript 12

**Researcher:** What do you think was the impact of the teacher on the students' learning process?

**Teacher:** I always try to motivate my students in every way I can, to take their preferences and needs into account, and to make them feel comfortable throughout their process. I had already worked with most of the students in this group and I think that gave us an advantage because we have been together in a variety of classes in the past. I hope I got to motivate them to go beyond what they study **in class, to try to be the best version of themselves, and to have a critical view of everything, always analyzing things from a variety of perspectives. I don't know if they see me as a role model,** I guess we'd have to ask them hahaha. However, **I do hope they enjoyed the class and got to take something meaningful from it with them.**

In this way, teachers who act as agents of change not only guide students to the understanding to content but also, attempt to transform them with learning experiences. As observed above, the teacher affirms that her actions and strategies attempted to engage students and transform them in order to achieve their best version. Considering this, it could be said that she was committed to encourage changes and besides teaching content, she was concerned with providing meaningful experiences that allow students to evolve and gain a knowledge that would remain over time. This way, teachers' actions should go beyond the transmission of knowledge, they should rather

guide students to find the significance and relation of what is being taught; being able to think critically and come to an answer when interacting with the others, assuring meaningful changes on individuals who evolve with those experiences (Fullman, 1993; Lane, Lacefield-Parachini, & Isken, 2003; Hattie, 2012). On the whole, the teacher who acts as a change agent proposes and implements strategies that promotes not only learning but also meaningful changes on the students.

Thus, the teacher as a change agent is someone whose actions are focused on providing effective learning and making a difference on students, facilitating their changes. This was reflected on the strategies proposed to encourage learning and have meaningful experiences. For this scenario, the teacher's actions influenced students for their future practices, as they were colleagues. So, the dialog among these two was able to enrich them due to the fact that, students not only acquired knowledge but also acquired more relevant elements that transformed them, and the teacher was able to implement diverse strategies to ensure learning. In sum, the teacher is an agent who enables meaningful learning experiences that may change students.

In conclusion, it was possible to identify the forms in which students perform and involve in their EFL learning when it is mediated by VLE. Hence, it could be asserted that when it comes to EFL learning, the teacher endeavored to create a positive environment to promote interactions and then, EFL authentic communication. Considering this, diverse strategies and activities assisted by ICT through a VLE were implemented with the purpose to promote meaningful changes on the students. In this sense, many of them engaged to these exercises, being able to negotiate meaning using diverse modes when interacting with their peers and the teacher, as a result

knowledge construction was assured, and students ended up learning something meaningful. Accompanied by the former, it was possible to elucidate that by means of interactions students invested in their learning, acquiring elements along the classes that changed their discourse. Such an endeavor was facilitated by agents' participation which served to construct knowledge. In addition to this, the teacher intervention was essential to facilitate learning, due to the fact that she provided suitable spaces and encouragement to have learning events, also her proposals served as a reference for students' future practices as professionals in education. All in all, social interactions are fundamental in EFL learning especially when it is mediated by VLE. in this way, ICT serve to engage students and provide different scenarios for participation which configure learning opportunities. Hence, teachers should assure such spaces implementing diverse strategies to engage students in their learning, promoting meaningful changes on them.

## **Chapter VI. Conclusions and Implications**

In this work, it was possible to approach and establish the ways in which multimodal interaction mediated by technological resources influenced university students' agency and investment toward their EFL learning. Here multimodal communication was key to accomplish this research work goals, not only establishing the forms in which communication was set in such an environment but also, offering insights on the way students conveyed meaning and involved during their interactions, showing an extent of commitment and engagement along such processes. In addition to this, the sensible intervention of the teacher was essential, as she was the one who guided, provided, and encouraged learning experiences, using varied resources to promote such interactions in order to boost students' learning; this was reflected on how the students got involved, acted and interacted in order to share, present or discuss their ideas in the spaces given. All in all, multimodal interactions facilitated by the teacher encouraged students' involvement and learning in EFL.

As such, multimodal communication facilitated understanding in the virtual learning scenarios, which allowed students to connect to their learning processes when interacting. This way, considering social interactions as events that allow the exchange of ideas, identities and views through varied modes, learning may turn easier, as the sum of the cues offered within interactions assist the negotiation of meaning and ultimately learning (Vygotsky, 1980; Norris, 2004; Fairclough, 2011; Gee, 2011). In regard to this, it is possible to assert that, learners dealt with information more easily and such a thing enabled them to invest by engaging in the social practices of the classroom, including their learning. Briefly, multimodal communication and interactions

are fundamental in learning processes, as there is the exchange of information, which is negotiated through different modes that assist understanding.

Accordingly, the social interactions that were carried out in VLE configured knowledge construction, which helped students to acquire valuable elements that modified their discourse through peer's participation and the teacher's intervention. In line with this, the teacher's instructional design promoted students' interactions, which in turn served to involve them in their learning process, especially when they participated in the activities offered and mediated by VLE. Hence, interactive scenarios where students can participate, express, discuss their views, and receive information in varied forms encourage their interest in learning, as well as enable the exercise of knowledge construction, which results in the appropriation of valuable elements that modify individuals' discourse, achieving learning and personal goals (Fullman, 1993; Norris, 2004; Gee, 2011; Fusco, 2012; Norton, 2015). In brief, encouraging social interactions in a learning setting fosters knowledge construction, as students are able to participate and involve in such social practices in order to acquire elements that ensure learning.

Considering the former, multimodal interactions accompanied by ICT in an educational framework influence students' engagement and learning. Departing from the premise that learning is achieved through interactions and the display of communicative acts, this work found multimodality as an essential feature in learning processes, so, it could be asserted that, multimodal communication was a tool for meaning making and, influenced students' EFL learning and engagement to it. Also, students' investment in their learning was fostered by multimodal interactions which allowed them to acquire elements that enriched their discourse. Accordingly, multimodal

interactions facilitated the construction and appropriation of knowledge in VLE through students' participation, then, the teacher played a critical role, providing interactional scenarios in VLE to assure learning and changes in class. Thus, multimodal communication paves the way to learning since understanding may be facilitated, but this can be achieved through the teacher's pedagogical actions that make students participate and involve in their learning.

Regarding this, multimodal communication in interactions influenced EFL learning in VLE, facilitating understanding and engagement to educational processes. Undoubtedly, it was observed that social interactions and multimodality were key to have successful learning experiences, as the practical use of the target language accompanied by extra cues were established when it came to the negotiation of meaning, so that comprehension was boosted, especially when these interactions were supported by the varied resources of ICT. In this sense, as stated by Brown, (2014) when students find it easier to understand content or information it is likely that they will commit to their learning processes. So that, it could be claimed that multimodal communication in interactions clearly impacted students' learning and engagement, due to the hints given that walked them to understanding, making easier the process of learning. Overall, multimodal communication and interactions provide greater understanding of content, facilitating the process of engagement to learning.

Consequently, students' investment in EFL learning was supported by multimodal communication mediated by VLE during their interactions, so that they could obtain elements that enabled learning and enhanced their discourse. As noted along this work, the class scenarios presented allowed the display of multimodal interactions mediated

by VLE, which encouraged students to discuss, share their views and speak in the target language. In this way, ICT resources facilitated such actions, due to the varied ways in which students presented their outlooks, participated in knowledge construction, and even received information. In addition, this was possible by the teacher's intervention who set the spaces and the content that served students to interact, increase their knowledge and enhance their discourses. Accordingly, as stated by Norton (2013) suitable educational scenarios and activities for investment grant learning by acquiring both, linguistic abilities and cultural capital which empowers students. As such, it could be asserted that multimodal interactions when mediated by ICT tools impact students' investment as there is the possibility for them to express and make part of social exchanges that assure learning experiences. Thus, multimodal interactions mediated by ICT resources encourage students' investment as the target language use and the negotiation of meaning are promoted, assuring the obtainment of useful elements that transform the individual's discourse.

Considering the former, multimodal interactions in classes promoted the construction and appropriation of knowledge in VLE through students' participation. In this sense, as observed formerly, knowledge construction was possible due to the interactions students carried out, employing diverse forms to negotiate meaning within the classes mediated by VLE. So, their participation and commitment were essential to accomplish such ends. Additionally, participatory actions served other students who preferred to be viewers and listeners to learn from their peers' actions; this was possible by the environment and activities the teacher provided through VLE, so, these communicative spaces mediated by interactional activities demonstrated the extend of



agency of students who were encouraged to participate and appropriate elements in the exercise of knowledge construction. As indicated by Guimarães Ninin & Camargo Magalhães (2017) individual's participation in interactions demonstrate their agency and commitment to transform their context, allowing the emergence of new ideas or concepts that impact the group in which interactions are displayed. Thus, it could be stated that multimodal interactions as mediated by VLE encouraged students' agency to learning, as communication is presented in students' participation which is necessary for knowledge construction events and its appropriation.

Consistently, the teacher's role was essential for students' investment and agency toward their EFL learning, as she enabled interactional scenarios in VLE that assured learning opportunities and changes in class. In line with this, as it could be seen the teacher endeavored to promote students' interactions, presenting class information in multiple formats and encouraging participation with varied activities that allowed them to involve, intervene, express, and communicate in order to construct knowledge. Accordingly, the teacher's actions served as a model for the students' future performance. As such, teachers are agents who influence students and enable changes in them through instructional designs that foster meaningful learning experiences (Lane, Lacefield-Parachini, & Isken, 2003). Then, it could be asserted that the teacher's role is fundamental to assure learning in educational settings, as they are in charge of guiding communication and implementing strategies that encourage interactions and changes through learning, in this case EFL. All in all, teachers are agents who facilitate learning and changes through the strategies and environment established in their instructional design.

Accordingly, the situations described along these lines provided valuable information to achieve the research goals established. Considering the first one, it was possible to identify that the implementation of ICT tools in classes facilitate multimodal interactions as many modes could be portrayed. Also, ICT assist the delivery of information, due to the varied formats it may offer to students. Considering this, understanding may turn easier, so that, it is likely that students engage more in these scenarios, hence, they may invest in their EFL learning at a greater extend, being more interested, active and participative in interactions when constructing knowledge and using the target language displaying their agency in such scenarios as well. In brief, ICT resources applied to education assist instruction, facilitating learning opportunities due to the varied forms in which information could be presented and conveyed, so that there is a greater opportunity for students to engage, invest and commit to their learning.

Equally important, in VLE multidirectional communication is fundamental to ensure EFL learning. In this way, as stated by Vygotsky (1980) social interactions are essential for the construction of knowledge, so this is mediated by the communicative acts individuals enact within these social encounters. With this in mind, it could be asserted that communication is fundamental in interactions and learning, especially when there are several individuals involved, as meaning could be negotiated in a wider and richer extent, so multidirectional communication enrich learning experiences (Vygotsky, 1980; Evnitskaya & Morton, 2011; Bonner 2014; Skyer, 2016). As such, in our VLE it was evidenced that despite the ICT resources and strategies that encouraged participation and students' involvement, it was observed that sometimes the teacher strived to maintain communication and interaction, evidencing at these

episodes more bidirectional communication. However, it is incontrovertible to say that in other moments when several students seemed engaged and participated in the exercise of knowledge construction, multidirectional communication played a fundamental role, that equipped students with knowledge constructed from their interventions. Thus, multidirectional communication is fundamental to assure learning, so that it is important to constantly encourage it at VLE, as this one may engage students to knowledge construction.

In summary, multimodal and multidirectional communication are necessary to assure successful learning experiences, especially in VLE. In this way, as mentioned formerly, multimodal interactions and communications facilitate understanding and learning, but this must be encouraged by the teacher's intervention. With this in mind, it is likely that students engage and invest in their learning as the latter might be an easier task. In addition to this, the teacher must resort to varied and appealing materials, content, and strategies in order to motivate students to construct knowledge, so, tasks and activities that required multidirectional communication should be offered. In such a way, having interactional scenarios is a great opportunity to foster learning, here ICT presents multiple resources that may be useful to cover these needs. All in all, to ensure learning and engagement to such a process, it is important to promote scenarios where varied activities encourage students to interact and construct knowledge; this is accomplished by promoting multidirectional communication in which ICT may serve as mediating tools due to its wide range of resources.

### **Pedagogical Implications**

Considering that learning emerges from interactions and the communicative acts presented in such events, it is important for the teacher to design communicative environments in instruction (Escobar-Alméciga, 2020). This way, learning might be encouraged by means of meaningful learning experiences in which meaning is negotiated within interactions. Regarding the former, it was observed that students tended to get involved in their learning when they had the possibility to express their views, practice and socialize through the target language. As such, it could be asserted that it is essential to design interactional scenarios where students can communicate and construct knowledge, in order to assure learning. Briefly, as learning is achieved by means of interactions, instruction should be focused on communicative acts that foster knowledge construction and students' engagement to it.

In light of the former, this research work offered a view on how to address and develop instruction to achieve learning when this one was mediated by VLE. With this in mind, interactional designs served to boost students' EFL learning opportunities and their engagement to it, so they were able to invest and achieve learning goals when classes were mediated by VLE. In this sense, instruction should be designed in a communicative framework, using varied resources that facilitate learning through interactional exercises where knowledge is constructed by engaged individuals who invest to increase their learning. As such, it is important to reflect on proper ways to develop instruction in order to encourage students' investment in VLE, then, review the connection of this with a biopsychosocial model in education, and finally, offer the implications of this work for further research.

As it could be seen, when instruction is mediated by VLE, it is important to develop interactional strategies in order to encourage students' involvement and participation in knowledge construction. In this sense, in order to assure learning in VLE it is essential to resort to varied didactic strategies and spaces that foster students' interventions and contributions, so that, they can see there is a social setting where they can express, discuss and obtain something from those actions (Peirce, 1998; Fairclough, 2011; Alfranca, 2012). With this view, teachers need to consider designing their classes with an interactional approach, taking the role of directing communication, especially in VLE, as students' participation is required in order to achieve learning; being operative participants or silent ones, so that, it is possible that they engage in their classes and learn from those experiences. All in all, when instruction is mediated by VLE, it is essential that teachers develop their classes employing interactional approaches in order to get their students involved in the exercise of knowledge construction.

In line with the former, interactional strategies for learning should be accompanied by diverse activities which could be supported by ICT, so it is possible to encourage students to invest in their learning. In order for teachers to be effective enablers of learning experiences, it is important to consider that useful content accompanied by interactions and varied activities must be offered, especially in VLE (Lane, Lacefield-Parachini, & Isken, 2003; Priestley et al., 2012; Van der Heijden et al., 2018). With these conditions, students are likely to invest in their learning, as they see, they could obtain valuable elements from the interactions and situations offered, in which they could communicate, share ideas, views, identities, culture and many other

elements that may transform and empower them (Peirce, 1998; Lane, Lacefield-Parachini, & Isken, 2003; Fairclough, 2011; Norton, 2013). As such, to motivate students to invest, it is important to consider that instructional designs should offer valuable content, accompanied by activities and spaces that dynamize communication encouraging students to interact and participate in knowledge construction; this could be accompanied by ICT as there are plenty of resources that may support these actions. In brief, students' investment may be encouraged by teachers whose instructional designs advocate useful content through engaging activities that allow interactions and the construction of knowledge.

Accordingly, from an educator's view students are unique due to their sociocultural contexts, traits, and experiences, so that, it is important to consider a biopsychosocial approach when designing instruction, in order to boost their learning opportunities. In light of this, students are acknowledged as individuals who have rights, their own views, beliefs and who are the result of the interactions with elements from the ambience and their context (Vanegas & Gil, 2007; Núñez, 2019). In this way, it is necessary that teachers design instruction considering that everyone is different, aiming at developing their potential to accomplish their best version (Booth & Ainscow, 1998). As such, providing communicative spaces in classes where students can exchange ideas and construct knowledge is essential to develop everyone's potential. Thus, educators must provide interactional spaces in their classes in order to assure learning experiences that are configured by social exchanges that enrich individuals.

### **Limitations and implications for further research**

This research work opened the possibility to analyze the ways in which virtual education may encourage students to invest and engage toward their learning. As mentioned formerly, mandatory virtual education may demotivate some students, however, if instruction is accompanied by a sensible intervention of a teacher who endeavors to guide communication and promote interactional events and activities in which knowledge is constructed by individuals' participation, students may take actions to involve and invest in their learning. Thus, virtual scenarios for education should foster human interactions to achieve learning.

As presented along these lines, the students' EFL learning process was also accompanied by a LMS platform that could have been analyzed to revise how this material might have encouraged our students to invest or not in their learning. Despite the effort of obtaining permission to analyze such material, it was impossible to receive it, so that the chance to revise and examine how the platform encouraged learning to its users was hard to tell. In regard to this, the analysis of such material would have been a great opportunity to find more ways in which the students could have felt invested, due to the fact that their EFL learning process was in a great extent supported by that material. All in all, the LMS that supported our students' EFL learning could have offered more cues and insights on the way our students invested in their learning, in case it had been possible to analyze it.

Regarding the former, for future works related to virtual education and its effects on students' involvement in their learning, this investigation may serve as a guide for the

design of effective instruction under these conditions. As such, it was evidenced that guiding communication and promoting interactions in these types of educative scenarios was essential to assure learning and involve students in their processes. With this in mind, it could be affirmed that finding alternative ways to make instruction more efficient, engaging and interactive when this one is mediated by VLE and supported by ICT resources may be possible through research, considering what has been stated in this work. Overall, this research may be a guide to develop alternative and more effective ways of instruction in virtual education.



### References

- Aleissa, D. (2017). *The effect of technology on saudi students learning english as a foreign/second language* Available from Dissertation Abstracts International. Retrieved from <http://www.pqdtcn.com/thesisDetails/94F519745AD754035F13C4ECD83F0A1C>
- Alfranca, A. (2012). *La desmotivacion en la asignatura de ingles de 4 ESO*
- Alves, P., Miranda, L., & Morais, C., (2017). The Influence of Virtual Learning Environments in Students' Performance. *Universal Journal of Educational Research*. 5. 517-527. 10.13189/ujer.2017.050325.
- Ana García-Valcárcel Muñoz-Repiso, Verónica Basilotta Gómez-Pablos, & Camino López García. (2014). Las TIC en el aprendizaje colaborativo en el aula de primaria y secundaria. *Comunicar*, XXI(42), 65-74. doi:10.3916/C42-2014-06
- Andersson, B., & Öhlén, J. (2005). Being a hospice volunteer. *Palliative Medicine*, 19(8), 602-609.
- Asociación Médica Mundial AMM. (2008). Declaración de Helsinki. Retrived 2020 from: <http://www.wma.net/s/ethicsunit/helsinki.htm>
- Avila Pardo, M. (2019). *Social structure, agency and second language learning : A study of the impact of contextual conditions on the desire to invest in language learning amongst undergraduate students in cancan* (Order No. 28130922). Available from ProQuest One Academic. (2430833695). Retrieved from <http://ezproxy.unbosque.edu.co:2048/login?url=https://www-proquest.com.ezproxy.unbosque.edu.co/docview/2430833695?accountid=41311>

- Balestrini, M. (1998) *Como se Elabora un Proyecto de Investigación*. Caracas: Editorial Consultores y Asociados
- Barcos, F., 2017. *El Uso De Las TIC En La Enseñanza Del Inglés*. [online] Universidad Cooperativa de Colombia. Available at:  
<<https://www.ucc.edu.co/prensa/2016/Paginas/el-uso-de-las-tic-en-la-ensenanza-del-ingles.aspx>> [Accessed 4 May 2020].
- Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *Qualitative Report*, 13(4), 544.
- Belda-Medina, J. (2020). EL APRENDIZAJE DEL INGLÉS (L2) MEDIANTE HERRAMIENTAS DIGITALES (TIC) POR ESTUDIANTES MAYORES DESDE UN MODELO ANDRAGÓGICO Y HEUTAGÓGICO. *Tonos digital*, (38), 1-24. Retrieved from <https://search.proquest.com/docview/2356813023>
- Berg, B. (2007). *Qualitative research methods for the social sciences* (6th ed.). Boston: Allyn and Bacon.
- Berzosa, C. (2004). *Elogio de la docencia universitaria*. Madrid, España.
- Biava, M. L. & Segura, A. L. (2010). ¿Por qué es importante saber el idioma inglés? . Retrieved from <http://www.cepjuanxxiii.edu.ar/wp-content/uploads/2010/07/Por-que-es-importante-saber-ingles.pdf>
- Blecua, B. (2013). *Plurilingüismo y enseñanza de ELE en contextos multiculturales*. [Málaga]: Asociación para la Enseñanza del Español como Lengua Extranjera.
- Blumenfeld, P., Rogat, T. & Krajcik, J. (2006). Motivation and Cognitive Engagement in Learning Environments. *The Cambridge Handbook of the Learning Sciences*.

- Bonner, D. (2014). *Multimodality and learning: Exploring concept development and student engagement in a physics classroom* Retrieved from <http://www.riss.kr/pdu/ddodLink.do?id=T13681344>
- Booth, T. & Ainscow, M. (Eds). (1998). *From them to us. An International Study of Inclusion in Education*. London: Routledge.
- Bourdieu, P. (1991). *Language and symbolic power* [Trans. G. Raymond and M. Adamson].
- Brown, D. (2014). Agency and motivation to achieve language-learning objectives among learners in an academic environment in france. *Apples – Journal of Applied Language Studies*, 8(1), 101-126. Retrieved from <https://hal.univ-lorraine.fr/hal-01524936>
- Buriro, A. G., Awan, J. H., & Lanjwani, A. R. (2017). *Interview: A research instrument for social science researchers*
- Cambridge. (2020). *Teaching*. Retrieved 22 September 2020, from <https://dictionary.cambridge.org/es/diccionario/ingles/teaching> Cambridge: Polity Press and Harvard University Press.
- Carrera B, & Mazzarella, C (2001). Vygotsky: enfoque sociocultural. *Educere*, 5(13), 41-44. [Fecha de consulta 5 de Septiembre de 2020]- ISSN: 1316-4910. Disponible en: <https://www.redalyc.org/articulo.oa?id=356/35601309>
- Carretero, M. (1997). *Desarrollo cognitivo y aprendizaje* "Constructivismo y educación México. Progreso.
- Cenich, G. y Santos G. (2005). Propuesta de aprendizaje basado en proyectos y trabajo colaborativo: experiencia de un curso en línea. *Revista Electrónica de Investigación Educativa*, 7 (2). Consultado el 7 de junio del 2005 en: <http://redie.uabc.mx/vol7no2/contenido-cenich.html>

- Chandia, C. (2015). *Enseñanza de las habilidades lingüísticas en el segundo idioma: Un estudio a partir de los relatos de los actores participantes de la clase de inglés comunicacional de una institución de educación superior* Retrieved from [http://repobib.ubiobio.cl/jspui/bitstream/123456789/1154/1/Chand%C3%ADa\\_Cabas\\_Jimena.pdf](http://repobib.ubiobio.cl/jspui/bitstream/123456789/1154/1/Chand%C3%ADa_Cabas_Jimena.pdf)
- Chávez-Zambano, M. X., Saltos-Vivas, M. A., & Saltos-Dueñas, C. M. L. (2017). La importancia del aprendizaje y conocimiento del idioma inglés en la enseñanza superior. *Dominio de las Ciencias*, 3(3), 759-771. Retrieved from <https://dialnet.unirioja.es/servlet/oaiart?codigo=6234740>
- Clavijo Olarte, Amparo, & Quintero, Luz Mary (2012). Una experiencia de formación inicial de docentes de inglés para la inclusión de las TIC en la enseñanza de lenguas. *Revista Folios* (36),37-49.[fecha de Consulta 11 de Septiembre de 2020]. ISSN: 0123-4870. Disponible en: <https://www.redalyc.org/articulo.oa?id=3459/345932039003>
- Clavijo, A., Ramirez, A., & Quintero, L. (2011). *Enseñanza de inglés y medios Digitales, nuevos retos y posibilidades para la escuela* . Bogota: Imprenta UD. Retrieved from <https://search.proquest.com/docview/1927525204>
- Cohen, L, & Manion ,L. (1986)*Research Methods In Education* .London: CroomHelm.
- Congreso de Colombia (12 de Julio, 2013) Ley de bilingüismo [Ley 1651 de 2013]
- Congreso de Colombia, (8 de febrero, 1994) Ley General de Educación [Ley 115 de 1994].
- DO: 41.214
- Constitución Política de Colombia [Const]. Art. 67. 7 de julio de 1991 (Colombia).

- Correa, A., & Correa, W. (2017). *EL USO DE LAS TIC PARA MOTIVAR EL APRENDIZAJE DE INGLÉS EN LOS ESTUDIANTES DEL GRADO SÉPTIMO DE LAS INSTITUCIONES EDUCATIVAS SIMÓN BOLÍVAR Y RAFAEL URIBE URIBE DEL MUNICIPIO DE PUERTO LÓPEZ - META, AÑO 2017*. UNAD). *Estilos De Aprendizaje. Investigaciones Y Experiencias*, Retrieved from <https://dialnet.unirioja.es/servlet/oaiart?codigo=4679449>
- Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Sage Publications, Inc.
- Crystal, D. (2003) *English as a global language* (2nd edition). Cambridge University Press.
- Darvin, R., & Norton, B. (2015). Identity and a model of investment in applied linguistics. *Annual Review of Applied Linguistics*, 35, 36–56.
- Darvin, R., & Norton, B. (2016). *Investment and Language Learning in the 21st Century*. *Langage et Société*, 157(3), 19. doi:10.3917/lr.157.0019
- Dawidowicz, P. (2020). With scholarship & practice in mind: The case study as research method. *The Journal of Applied Instructional Design*, 1 Retrieved from <https://libguides.wmich.edu/scholarworks>
- De Smet, M., Van Keer, H., & Valcke, M.(2008) Blending asynchronous discussion groups and peer tutoring in higher education: an exploratory study of online peer tutoring behavior. *Computers and Education*. 50, 1 (Jan. 2008), 207- 223.
- Díaz Barriga, Angel. (1998). *Evaluación Académica: Organismos Internacionales y Política Educativa*. México: UNAM.

Dörnyei, Z., & Ushioda, E. (eds.). (2009). *Motivation, language identity and the L2 self*.

Bristol, UK:

Duarte, J. (2003). "Ambientes de aprendizaje: una aproximación conceptual". *Estudios*

*Pedagógicos*, 29, 97-113. <http://doi.org/10.4067/S0718-07052003000100007>

Duran, A., & Barrio, J. (2007). Disposición y uso de recursos informáticos para la enseñanza-

aprendizaje del inglés: Una descripción a partir de una muestra en cien centros

públicos de educación infantil y primaria de la comunidad de madrid. *Porta Linguarum*, ,

193-223.

Escobar Alméciga, W. Y. (2020). *Ethnography of multimodal communication in an English-*

*medium university-level classroom: A social semiotic perspective on learning* (Order No.

27997131). Available from ProQuest One Academic. (2421532419). Retrieved from

[http://ezproxy.unbosque.edu.co:2048/login?url=https://www-proquest-](http://ezproxy.unbosque.edu.co:2048/login?url=https://www-proquest-com.ezproxy.unbosque.edu.co/docview/2421532419?accountid=41311)

[com.ezproxy.unbosque.edu.co/docview/2421532419?accountid=41311](http://ezproxy.unbosque.edu.co/docview/2421532419?accountid=41311)

Escobar, J., & Bonilla-Jimenez, F. (2017). Grupos focales: Una guía conceptual y

metodológica. *Cuadernos Hispanoamericanos De Psicología*, 9(1), 51-67.

Evnitskaya, N., & Morton, T. (2011). Knowledge construction, meaning-making and

interaction in CLIL science classroom communities of practice. *Language and Education*,

25(2), 109-127. doi:10.1080/09500782.2010.547199

Eyisi, D. (2016). The usefulness of qualitative and quantitative approaches and methods in

researching problem-solving ability in science education curriculum. *Journal of Education*

*and Practice*, 7 Retrieved from <https://files.eric.ed.gov/fulltext/EJ1103224.pdf>

- Fairclough, N. (2011). Semiotic aspects of social transformation and learning. In Rogers (Ed.), *An introduction to critical discourse analysis in education* (pp. 147-155). New York-London: Routledge.
- Feiman-Nemser, S. (1991). Conceptual orientations in teacher education. Issue paper 90-2, RIE. Lansing, MI: national center of research on teacher education.
- Feldman, R. S. (2009). *Psicología con aplicaciones en países de habla hispana* (Octava ed.). México DF: Mc Graw Hill.
- Felix, U. (2005). Analysing recent CALL effectiveness research-towards a common agenda. *Computer Assisted Language Learning*, 18(1-2), 1-32. doi:10.1080/09588220500132274
- Ferreira, Y. (2016). *El aprendizaje cognoscitivo social de albert bandura y la teoría psicogenética de jean Piaget*
- Flórez, R., Castro, J., Galvis, D., Acuña, L., & Zea, L. (2017). *Ambientes de aprendizaje y sus mediaciones en el contexto educativo de bogota* (1st ed.). Bogota, Colombia: CI WARRIORS.
- Forero de moreno, I. (2009). La sociedad de conocimiento . *Revista Científica General José María Córdova* ISSN: 1900-6586, 5(7), 40-44. Retrieved from <https://www.redalyc.org/pdf/4762/476248849007.pdf>
- Fullan, M. (1993). *Change Forces: Probing the Depths of Educational Reform*. London: Falmer Press.
- Fusco, E. (2012). *Effective questioning strategies in the classroom: A step by step approach to engaged thinking and learning, k-8*. New York, New York: Teacher's College Press.

- Gallego Rodríguez, A., & Martínez Caro, E. (2003). Estilos de aprendizaje y e-learning. Hacia un mayor rendimiento académico. *Revista De Educación a Distancia*, 3(7). Recuperado a partir de <https://revistas.um.es/red/article/view/25411>
- Garcia, M. (2020). *Teachers say they are not prepared for long-term remote learning*. Azfamily.com. [https://www.azfamily.com/news/continuing\\_coverage/coronavirus\\_coverage/teachers-say-they-are-not-prepared-for-long-term-remotelearning/article\\_cfbf3c9a-d6a9-11ea-bbd5-d7acd6d07d86.html](https://www.azfamily.com/news/continuing_coverage/coronavirus_coverage/teachers-say-they-are-not-prepared-for-long-term-remotelearning/article_cfbf3c9a-d6a9-11ea-bbd5-d7acd6d07d86.html)
- García-Sánchez, S. (2016). Educación a distancia, interactiva y ubicua para el aprendizaje de lengua inglesa. *Academia Y Virtualidad*, 9(1), 68. doi:10.18359/ravi.1706
- Gardner, R. C. (2005). Integrative Motivation and second language acquisition. Canadian Association of Applied Linguistics. London, Canada.
- Gee J, P. (2011). Discourse Analysis and Education: Discourse analysis: What makes it Critical? En Rogers R. (Ed), An introduction to critical discourse analysis education (pp. 23-45). New York, Estados Unidos: Routledge.
- Gee J. P. & Hayes E. R. (2011), *Language and learning in the digital age*, Oxon, Routledge.
- Gomez, O., & Mateus, C. (2019). *APRENDIZAJE PARA LA COMPRESIÓN MEDIADA POR TIC: UNA APUESTA PEDAGÓGICA DISRUPTIVA PARA EL DESARROLLO DE LAS COMPETENCIAS COMUNICATIVAS DEL INGLÉS PARA ALGUNOS COLEGIOS PÚBLICOS DE LA SECRETARÍA DE EDUCACIÓN DE BOGOTÁ*. Sabana). SUDEBAN - News, Retrieved from <https://www.emis.com/php/search/doc?pc=EC&dcid=661418981&primo=1>



Gonzalez, R. (2012). *Multimodality and english foreign language: Image-text interaction for enhancing students' reading comprehension*

Graddol, D., 2000. *The Future Of English?*. [online] Revista El Arcondecio. Available at:  
<<https://revista.elarcondecio.com.ar/el-ingles-la-globalizacion-y-la-ensenanza/>>  
[Accessed 4 May 2020].

Graddol, D. (2006). *English text: Why Global English may mean the End of the English as a Foreign Language?* United Kingdom: British Council

Guimarães Ninin, M. O., & Camargo Magalhães, M. C. (2017). A linguagem da colaboração crítica no desenvolvimento da agência de professores de ensino médio em serviço. *Alfa*, 61(3), 625-652. doi:10.1590/1981-5794-1711-7

Guitert y Siménez (2000). Aprender a colaborar. En Campiglio, A. Y Rizzi, R. (Eds.). *Cooperar en clase. Ideas e instrumentos para trabajar en el aula*. Madrid, Publicaciones del MCEP

Guo, C., Chen, X., & Hou, Y. (2019). A case study of students' participation and knowledge construction in two online discussion settings. Paper presented at the 45-49. doi:10.1145/3338147.3338177 Retrieved from <http://dl.acm.org/citation.cfm?id=3338177>

Hamui-Sutton, A., & Varela-Ruiz, M. (2013). La técnica de grupos focales. *Investigación En Educación Médica*, 2(5), 55-60. doi:10.1016/s2007-5057(13)72683-8

Harari, Y. N. (2014). *Sapiens. De animales a dioses: Una breve historia de la humanidad*  
ISBN 9788499924212

Harrel, M., & Bradley, M. (2009). *Data collection methods semi-structured interviews and focus groups*. Santa Monica, CA: RAND.

- Hattie, J. (2012). *Visible learning for teachers. Maximizing impact on learning*. New York, NY: Routledge.
- Heale, R., & Forbes, D. (2013). Understanding triangulation in research. *Evidence-Based Nursing*, 16(4), 98. doi:10.1136/eb-2013-101494
- Herrero Arnanz, S. (2013). *Retos en la integración curricular de las TIC en la enseñanza de inglés. una propuesta para el desarrollo de un aprendizaje social, personalizado y significativo* Retrieved from [https://www.openaire.eu/search/publication?articleId=od\\_1514::c461f861f1d8fe9b\\_bd556ee3b355fb34](https://www.openaire.eu/search/publication?articleId=od_1514::c461f861f1d8fe9b_bd556ee3b355fb34)
- Holland, D., Lachicotte, W., Skinner, D., & Cain, C. (1998). *Identity and agency in cultural worlds*. Harvard University Press.
- Izquierdo, J., de-la-Cruz-Villegas, V., Aquino-Zuniga, S., Sandoval-Caraveo, M., & Garcia-Martinez, V. (2017). La enseñanza de lenguas extranjeras y el empleo de las TIC en las escuelas secundarias públicas. *Comunicar*, 25 N. 50, 33. doi:10.3916/C50-2017-10
- Jenkins, J.(2006). Current perspectives on teaching world Englishes and English as a lingua franca. *TESOL Quarterly*, 40(1),157-181. doi: 10.2307/40264515.
- Jewitt, C. (2008). Multimodality and Literacy in School Classrooms. *Review of Research in Education*. 32. 10.3102/0091732X07310586.
- Jones R. H. & Hafner C. A. (2012), *Understanding digital literacies: A practical introduction*, Oxon, Routledge.
- Kawulich, B. B (2005) Participant Observation as a Data Collection Method *Forum: Qualitative Sozialforschung/Forum: Qualitative Social Research* [On-line Journal], 6(2), Art. 43. Available at: <http://www.qualitative-research.net/fqs-texte/2-05/05-2-43-e.html>

- Keller, J. M. (2008). First principles of motivation to learn and e-learning. *Distance Education*, Vol. 29(No. 2), 175-178.
- Kendon, A. (1967). *Some functions of gaze-direction in social interaction. Acta Psychologica*, 26, 22–63. doi:10.1016/0001-6918(67)90005-4
- Kitchenham, B. (2004). Procedures for performing systematic reviews. Keele, UK, Keele University, 33(2004), 1-26. Recuperado de <http://testszingarelli.googlecode.com/svnhistory/r336/trunk/2-Artigos-Projeto/RevisaoSistematica/Kitchenham-Systematic-Review2004.pdf> Solana, M. Y
- Kitzinger, J. (1995). Education and debate Qualitative Research: Introducing focus groups. *Sociology of Health*, 311,299-302
- Kress, G. (2010). *Multimodality: A social semiotic approach to contemporary communication*. Routledge: New York, NY.
- Kress, G. (2011). Discourse analysis and education: A multimodal social semiotic approach. In R. Rogers (Ed.), *An introduction to critical discourse analysis in cultural worlds*. Cambridge, MA: Harvard University Press.
- Kress, G., & van Leeuwen, T. (2006). *Reading Images: The grammar of visual design*. (2nd ed.).
- Kress, G., Charalampos, T., Jewitt, C., & Ogborn, J. (2006). *Multimodal teaching and learning*: New York, NY: Routledge.
- Lachman, S. J. (1997). Learning is a process: Toward an improved definition of learning. *131(5)*, 477-480. doi:10.1080/00223989709603535

- Lane, S., Lacefield-Parachini, N., & Isken, J. (2003). Developing novice teachers as change agents: Student teacher placements against the grain. *Teacher Education Quarterly (Claremont, Calif.)*, 30(2), 55-68. Retrieved from <https://www.jstor.org/stable/23478469>
- Lantolf, J.P. and Thorne, S.L., (2006). *Sociocultural theory and the genesis of second language development* (Vol. 398). Oxford: Oxford University Press
- Leakey, J., & Ranchoux, A. (2006). BILINGUAL. A blended language learning approach for CALL. *Computer Assisted Language Learning: UCALL 2005 - Developing a Pedagogy for CALL*, 19(4-5), 357-372. doi:10.1080/09588220601043016
- López, A. & Gallardo, B. (2005). *Conocimiento y lenguaje*. Valencia: Universitat de Valencia.
- Louwrens, N., & Hartnett, M. (2015). Student and teacher perceptions of online student engagement in an online middle school. *Journal of Open, Flexible and Distance Learning*, 19(1), 27–44.
- Lucero, M (2004). Entre el Trabajo Colaborativo y el Aprendizaje Colaborativo. *Revista Iberoamericana de Educación*
- Mahyoob, M. (2020). Challenges of e-Learning during the COVID-19 Pandemic Experienced by EFL Learners. *Arab World English Journal*, 11 (4) 351-362.  
DOI: <https://dx.doi.org/10.24093/awej/vol11no4.23>
- Maldonado Pérez, M. (2007). El trabajo colaborativo en el aula universitaria. *Revista de la Educación*, 263-278.
- Martín Sánchez, M. A. (2009). Tejuelo. *Historia de la metodología de enseñanza de lenguas extranjeras*, 54-70. Matters

- Martinez, M (1999). El enfoque sociocultural en el estudio del desarrollo y la educación REDIE. Revista Electronica de Investigación Educativa, 1 (1) 16-37. ISSN. Disponible en: <https://www.redalyc.org/articulo.oa?id=15501102>
- Mayer, R. E. (2000). Diseño educativo para un aprendizaje constructivista. En C. Reigeluth (Ed.), Diseño de la instrucción. Teorías y modelos (pp. 154-171). Madrid: Aula XXI Santillana.
- Mayotnera, M. (2017). *Una Aproximación Interdisciplinar a la Agencia Humana en Escenarios Educativos*. Universidad de Sonora).
- MEN (2016) Traducción de la Oede. Revisión de políticas Nacionales De Educación: Educación en Colombia OCDE 2016. Publicado Originalmente por la OCDE en inglés bajo el título : Education in Colombia 2016 OECD 2016 [www.oecd.ilibrary.org](http://www.oecd.ilibrary.org) - biblioteca en línea de la OCDE. <https://www.oecd.org/oeccdirect-> Servicio de alerta de la OCDE
- Menendez, J. (2013). *El uso de las TIC en la enseñanza bilingüe*
- Meneses Benítez, G (2007). Universidad: NTIC, interacción y aprendizaje. Pixel-bit- Revista de medios y educación, (29), 49-58 [fecha de consulta 5 de Septiembre de 2020]. ISSN: 1133-8482. Disponible en: <https://www.redalyc.org/articulo.oa?id=368/36802904>
- Merriam, S. (1998). Case studies as qualitative research. *Qualitative Research and Case Study Applications in Education*,, 26-46.
- Merriam, S., & Tisdell, E. (2015). *Qualitative research A guide to design and implementation* (4th ed.). San Francisco CA: Jossey Bass.
- Merriam, S.B. (1988) Case Study Research in Education: A Qualitative Approach. Jossey-Bass, San Francisco.

- Meza, A. (2013). Estrategias de aprendizaje. Definiciones, clasificaciones e instrumentos de medición. *Propósitos y Representaciones*, 1(2), 193-213. doi: <http://dx.doi.org/10.20511/pyr2013.v1n2.48>
- Ministerio de Educación Nacional. (2015). Programa Nacional de Inglés 2015-2025. Bogotá: Ministerio de Educación Nacional
- Ministerio de las tecnologías de la información y comunicación. (2019). La mitad de Colombia no tiene internet - Ministerio de Tecnologías de la Información y las Comunicaciones.
- Ministerio de salud de la Republica de Colombia (1993) Resolucion 008430. Retrived from : [https://urosario.edu.co/Escuela-Medicina/Investigacion/Documentos-de-interes/Files/resolucion\\_008430\\_1993.pdf](https://urosario.edu.co/Escuela-Medicina/Investigacion/Documentos-de-interes/Files/resolucion_008430_1993.pdf)
- Montenegro, A. (2016). *Apropiacion de tecnologías de información y comunicación (tic) en docentes de inglés del nivel beginner del centro de idiomas de la universidad de nariño para los procesos de enseñanza*
- Moreno, E. J., Vera, P. M., Rodríguez, R. A., Giulianelli, D. A., Dogliotti, M. G., & Cruzado, G. (2013). El trabajo colaborativo como estrategia para mejorar el proceso de enseñanza-Aprendizaje–Aplicado a la enseñanza inicial de programación en el ambiente universitario. *Univ.Nac.La Matanza Dep.Ing.E Investig.Tecnológicas GIDFIS–Grup.Investig.Desarro.Y Form.En Innovación Softw,*
- Morgan, D. (1997). Focus groups as qualitative research. Newbury Park, CA: Sage
- Morgan, D. L., & Spanish, M. T. (1984). Focus groups: A new tool for qualitative research. *Qualitative Sociology*, 7(3), 253-270. doi:10.1007/bf00987314

Murray, G., Gao, X., & Lamb, T. (2011). *Identity, motivation and autonomy*. Bristol, UK: Multilingual Matters

Newmann, F. (2021). Student Engagement and High School Reform Educators can motivate students to achieve if they fulfill students' needs for competence, extrinsic rewards, intrinsic interest, social support, and sense of ownership.

Norris, S. (2004). *Analyzing multimodal interaction a methodological framework*. New York USA: Routledge.

Norton, B. (2013). *Identity and language learning: Extending the conversation* (2nd ed.) Bristol: Multilingual Matters.

Norton, B. (2015). Identity, investment, and faces of English internationally. *Chinese Journal of Applied Linguistics*, 38(4), 375-391. doi:10.1515/cjal-2015-0025

Norton, B., & Toohey, K. (2011). Identity, language learning, and social change. *Language Teaching*, 44(4), 412-446. doi:10.1017/S0261444811000309

Núñez, L. A. (2019). *La educación inclusiva una mirada desde el modelo Biopsicosocial: análisis del caso de una enfermedad huérfana*. Recuperado de: <http://hdl.handle.net/10654/32291>.

Opdenakker, R. (2006, August). Advantages and Disadvantages of Four Interview Techniques in Qualitative Research [44 paragraphs]. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, 7(4)

Orjuela, M., & Cocoma, L. (2017). *Las tics como recurso pedagógico para la enseñanza del inglés*

Okoli, C. & Schabram, K. (2010). A Guide to Conducting a Systematic Literature Review of Information Systems Research. SSRN Electronic Journal. 10. 10.2139/ssrn.1954824.

Ormrod, J. E. (2005). *Aprendizaje humano*. Madrid: Pearson Prentice Hall.

Orozco Pineda, P. A. (2016). Ecosistemas bilingües de aprendizaje: Innovación en el aprendizaje del inglés. *Revista de lenguas modernas*, 24(24), 391.

doi:10.15517/rlm.v0i24.24686 Retrieved from

[http://gateway.proquest.com/openurl?ctx\\_ver=Z39.88-](http://gateway.proquest.com/openurl?ctx_ver=Z39.88-)

[2003&xri:pqil:res\\_ver=0.2&res\\_id=xri:ilcs-us&rft\\_id=xri:ilcs:rec:abell:R05693785](http://gateway.proquest.com/openurl?ctx_ver=Z39.88-2003&xri:pqil:res_ver=0.2&res_id=xri:ilcs-us&rft_id=xri:ilcs:rec:abell:R05693785)

Ortiz Granja, D (2015). El constructivismo como teoría y método de enseñanza. Sophia, Colección de filosofía de la educación, (19), 93-110 [fecha de consulta 7 de septiembre de 2020] ISSN: 1390-3861. Disponible en:

<https://www.redalyc.org/articulo.oa?id=4418/441846096005>

Ostrower, F. (1998). Nonparticipant observation as an introduction to qualitative research, *Teaching sociology* 26 (1), 57-61

Parra, E. F., & Galindo, D. C. (2016). *Transformación de la práctica pedagógica de los docentes seleccionados en el marco de la globalización* Retrieved

from [https://www.openaire.eu/search/publication?articleId=od\\_3056::4434ea2b06](https://www.openaire.eu/search/publication?articleId=od_3056::4434ea2b06)

[658ad02e95e40a92a5d5bc](https://www.openaire.eu/search/publication?articleId=od_3056::4434ea2b06_658ad02e95e40a92a5d5bc)

Peirce, B. N. (1995). Social Identity, Investment, and Language Learning. *TESOL Quarterly*, 29(1), 9. doi:10.2307/3587803



- Penn-Edwards, S. (2004). Visual evidence in qualitative research: The role of videorecording. *Qualitative Report*, 9(2), 266.
- Pérez de A, María del C, & Tellerina M. (2012). Las TIC en la educación: nuevos ambientes de aprendizaje para la interacción educativa. *Revista de Teoría y Didáctica de las ciencias sociales*, (18), 83-112 [fecha de consulta 7 de septiembre de 2020] ISSN: 1316-9505. Disponible en : <https://www.redalyc.org/articulo.oa?id=652/6522671002>
- Pérez, J. (2008). Enseñanza. Retrieved 30 March 2020, from <https://definicion.de/ensenanza/>
- Priestley, M., Edwards, R., Priestley, A., & Miller, K. (2012). Teacher agency in curriculum making: Agents of change and spaces for manoeuvre. *Curriculum Inquiry*, 42, 191–214.
- Quintanilla Espinoza, A., & Ferreira Cabrera, A. (2010). Habilidades comunicativas en I2 mediatizadas por la tecnología en el contexto de los enfoques por tareas y cooperativo. *Estudios Pedagógicos*, 36(2), 213-231. doi:10.4067/S0718-07052010000200012
- Renou, C., & Lozano, J. (2010). “*aprendizaje colaborativo para acceder a la lengua castellana con alumnado extranjero*”. España:
- Revelo-Sánchez, O., Collazos-Ordóñez, C. A., & Jiménez-Toledo, J. A. (2018). El trabajo colaborativo como estrategia didáctica para la enseñanza/aprendizaje de la programación: Una revisión sistemática de literatura. *TecnoLógicas*, 21(41), 115-134. doi:10.22430/22565337.731
- Rodríguez, F. (2017). Reading the World: Increasing English Learners’ Global Literacy through International News. *Lenguaje*, 45(2), 305-329. <https://doi.org/10.25100/lenguaje.v45i2.5274>

- Roncado, D. (2014). *Desarrollo de competencias comunicativas en inglés mediadas por las TIC de un grupo de estudiantes entre los 12 y 15 años del colegio litecom del municipio de jamundí, valle del cauca*
- Sánchez Jabba, A. (28 de 08 de 2013). Bilingüismo en Colombia. Documentos de trabajo sobre economía regional, 3-3
- Sanchez, M., & Angel, M. (2009). Historia de la metodología de enseñanza de lenguas extranjeras / history of foreign language teaching methodology. *Tejuelo (Trujillo)*, 5(1), 54-70. Retrieved from <https://doaj.org/article/aafa5ea2cbab4629a8e8f6a421c595e7>
- Schunk, D. H. (1997). *Teorías del aprendizaje*. Pearson educación.
- Sherman, R. R. & Webb, R. B. (1990). *Qualitative Research in Education: Focus and Methods*. London: Falmer Press.
- Sherman, R., & Webb, R. (1988), *Qualitative research in education: Focus and methods* (pp.44-57). London: Falmer Press.
- Shimazoe, J., & Aldrich, H. (2010). Group can be gratifying: Understanding and overcoming resistance to cooperative learning. *College Teaching*, 58, 52-57.  
doi:10.1080/87567550903418594
- Sierra, J. (2016). Aprendizaje colaborativo del idioma inglés con software libre. propuesta investigativa implementada con aprendices de articulación con educación media. *Sennova*, 2, 207-229.
- Skyer, M. (2016). *Gunther Kress: Multimodality, Communication, and Education* [Ebook]. Retrieved from

[https://www.academia.edu/32811730/Gunther Kress Multimodality Communication and Education Introduction and Context](https://www.academia.edu/32811730/Gunther_Kress_Multimodality_Communication_and_Education_Introduction_and_Context)

Telemundo. (2020). ¿Cómo el coronavirus afecta a los estudiantes universitarios? Retrieved 9 October 2020, from <https://www.telemundo47.com/noticias/salud/coronavirus/como-el-coronavirus-afecta-a-los-estudiantes-universitarios/2041374/>

Temprano, A. (2012). *Las tic en la enseñanza bilingüe*, Bogotá: Ediciones de la U.

*The rhetorics of the science classroom*. Continuum International Publishing Group

Torres Cajas, M. (2015). Aprendizaje cooperativo utilizando tecnologías de la información y comunicación (TICs) en una clase de idioma extranjero: Percepciones de los estudiantes universitarios. *Sathiri*, (8), 205. doi:10.32645/13906925.407.

Torres Cajas, M., & Yépez-Oviedo, D. (2018). Aprendizaje cooperativo y TIC y su impacto en la adquisición del idioma inglés. *Revista mexicana de investigación educativa*, 23(78), 861-882. Retrieved from <https://dialnet.unirioja.es/servlet/oaiart?codigo=6784539>

Torres-Cajas, M. & Yépez-Oviedo, D. (2018). APRENDIZAJE COOPERATIVO Y TIC Y SU IMPACTO EN LA ADQUISICIÓN DEL IDIOMA INGLÉS. *Revista Mexicana de Investigación Educativa*, 23, 861-882. Retrieved from Retrieved 18 March 2020, from <https://www.mintic.gov.co/portal/inicio/Sala-de-Prensa/MinTIC-en-los-Medios/100837:La-mitad-de-Colombia-no-tiene-internet>

Tu, C., Blocher, M., & Gallagher, L. (2010) Asynchronous network discussions as organizational scaffold learning: threaded vs. flat-structured discussion boards. *Journal of Educational Technology Development and Exchange*. 3, 1 46-56

- Van der Heijden, H. R. M. A., Beijaard, D., Geldens, J. J. M., & Popeijus, H. L. (2018). Understanding teachers as change agents: An investigation of primary school teachers' self-perception. *Journal of Educational Change*, 19(3), 347-373. doi:10.1007/s10833-018-9320-9
- Van der Heijden, H. R. M. A., Geldens, J. J. M., Beijaard, D., & Popeijus, H. L. (2015). Characteristics of teachers as change agents. *Teachers and Teaching: Theory and Practice*, 21(6), 681-699.
- Vanegas, G. J. & Gil, O. L. (2007) La discapacidad, una mirada desde la teoría de sistemas y el modelo biopsicosocial. *Revista Hacia la Promoción de la Salud*. 12, 51-61.  
Recuperado de <http://www.redalyc.org/articulo.oa?id=309126689005>
- Vélez-Rendon, G. (2003). English in Colombia: a sociolinguistic profile. *World Englishes*, 22(2):185-198
- Vygotsky, L. (1980). *Mind in society: The development of higher psychological processes*. Harvard university press, Boston, MA.
- Warschauer M. (2009), "Digital literacy studies: progress and prospects", in M. Baynham and M. Prinsloo (eds), *The future of literacy studies*, London, Palgrave Macmillan, p. 123-40.
- Warschauer, M. (2000). *Electronic literacies: language, culture, and power in online education*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Wilkinson, S. (2004). Focus group research. En David Silverman (Ed.), *Qualitative research. Theory, Method and Practice* (pp. 177-199). London: Sage Publications.
- Williams, R. (2020). *Special education teacher experiences and efficacy during a pandemic (covid-19)*

Zimmerman, B.J. (2000). Self-efficacy: an essential motive to learn. *Contemporary Educational Psychology, 25*, 82–91.

Zubialde, J. P. (2001). Leading change versus managing care: The role of change agent in family medicine. *Family Medicine, 33*(2), 133-136. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/11271742>

