# Description of the Inclusion of Second Language Instruction in an Internal Medicine Course of a Medicine Undergraduate Program at a State University in Pereira

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**Licenciatura en Lengua Inglesa**

**2016**

## Contenido

*El conocimiento es un sempiterno que le corresponde a la humanidad.*
*Por los investigadores (2017)*

*...and just the beginning of a plethora of learnings.*
*By the researchers (2017)*

# ACKNOWLEDGMENTS

I can only express gratitude and love to my friends, professors and family and the people long gone that by any means helped me attain this achievement.

*Santiago Arias Ortega*

I want to thank my partners since from the very beginning we were committed to carry out this project in spite of the difficulties that were arising throughout the process. Also, I'm very grateful with the teachers that gave us support and advice such as Enrique Arias, Javier Vanegas and especially many thanks to Dolly Ramos because her such help and disinterested company all the time.

*Edwin Julian Galvis Patiño*

Including every single person to whom I should give my acknowledgments would not be such an easy task. In any case, thanks to my parents because of their unconditional support throughout this process; thanks to the professors that gave me their hand when I needed it: Enrique Arias, Dolly Ramos, Javier Vanegas and Rosa María Guilleumas; and last but not least, thanks to both my research partners and all my colleagues that at some point helped in this process. Finally, thanks to the universe for rewarding me in such a nice way, and thanks to me; without my commitment this would not have been possible.

*Nelson Andrés Giraldo López*

# 1. STATEMENT OF THE PROBLEM

An area of special attention in the field of ELT is how the language is included in the higher education classroom to be efficiently and purposefully learnt as the language becomes an international educational necessity that has greatly increased in recent years. The importance of the inclusion of English across the whole educational sector has been encouraged due to political, economic, social, and cultural breakthroughs, as well as the development of the United States as a world potency, and this has likewise led to the acknowledgment of English as the most important foreign language worldwide after World War II (Graddol 1997, 2006; de Mejía 2004). Therefore, as Graddol (2006) points out, the idea of English as a foreign language tends to disappear as it becomes more a lingua franca; that is, a language internationally used for instruction, communication, and research. The author adds that "one of the most important drivers of global English has been the globalization of higher education" (p. 74). In this sense, education, specifically higher education, is the most important sector for stakeholders to create new paradigms in the search of providing educational opportunities for higher education students to participate in this ever-globalizing world, and the inclusion of English is therefore a key aspect in the process.

In relation to the above matter, the UNESCO (2009) defined globalization in the 2009 International Conference on Higher Education as a reality of a world economy that is rather integral, and that involves the new technologies of information and communication (TICs), a global network of knowledge, the role of the English language and other issues that involve the control of academic institutions. Therefore, educational realities of the XXI century, predominantly at the tertiary level, highlight the importance of a global context rather than national or local contexts. It is in this way that English appears as the preponderant language of that international interaction, or the lingua franca as argued by Graddol [2006]. Graddol [ibid] advances on this issue suggesting that scientific communication occurs mostly in English, and that this has led to concrete the property of editorials, databases, and other essential resources in the hands of strong universities and a few multinational enterprises that belong almost exclusively to a developed world. Moreover, the author also suggests that institutions that adopt English as the language for communication can become institutions of excellence. Hence, it is evident that one of the major accomplishment of higher education institutions that pursue globalization is the effective inclusion of the English language to provide students with

the communication and academic language resources that they will need for their academic and professional growth, something that can be also considered as the provision of equal opportunities.

As for the case of Latin America, the Organization of Iberoamerican States for Education, Science and Culture (OEI) (2003) remarks that learning a foreign language is a key factor in the process of globalization. It states that the teaching of a foreign language at the higher level is aimed at achieving certain levels of proficiency for getting a university degree, a scholarship, an academic interchange, or for applying on postgraduate studies. Nevertheless, the focus on the teaching and learning of foreign languages at this level is limited to the development of the competencies that are necessary to address academic texts in the foreign language, a training in reading comprehension (OEI, 2003). Consequently, this inclusion of a foreign language at the tertiary level, mainly English, should be adjusted to students' necessities in relation to not only reading comprehension skills, but also to the other language skills that help students participate in the international sharing of knowledge. This is because the global market and academic context imply the use of the language not only to get acquainted about academic literature, but also to actively participate in the ever-globalizing world.

When narrowing this bilingual educational necessity to the Colombian national higher educational sector, and the way institutional practices are fostered so that the language is included in the classroom, the British Council (2015) argues that higher education in Colombia is decentralized, which means that universities and technical and vocational institutions are autonomous bodies. In this sense, institutional decisions are made based on the lines of action of each specific higher education institution (Ministry of Education, 1992). With regards to the inclusion of English at the curricular level, the British Council suggests that internationalization is a rather recent approach in Colombia that has not been fully adopted, and that the teaching of English varies from institution to institution. The British Council (ibid) comments:

> At the institutional level, English is recognized as the language of research and its importance for internationalization, study abroad, student mobility and academic partnerships is accepted. As internationalization at the tertiary level is a relatively new practice in Colombia, most universities do not have entrenched, top-down English programs that ensure students outside of the teaching or language faculties have access to the language. English language requirements and learning provision vary between institutions and faculties. Generally, those in teaching pre-service programs or foreign language faculties have free access to English classes, while those on other courses often must pay for this, if there are available places (p. 21).

As the previous comment suggests, since the teaching of English in Colombia is not to be placed in a long historical approach, there is still much to be done if the purpose of higher educational institutions is to effectively participate in the globalized academic communication. Furthermore, in a country that pursues internationalization as one of its national growth plans, students taking courses at private institutions out of their faculties, and where they must pay for their language instruction, is something that does not give account of effective institutional programs that foster the development of efficient and contextualized language instruction in the country. In this way, it is well noticed that the teaching of English of high quality is only inherent to the elite education; that is, middle and upper-middle classes (de Mejía 2004; Sánchez 2013, British Council 2015). In consequence, what these considerations seem to suggest is that the inclusion of English at the Colombian higher education sector is not only to be thought of as an opportunity for students to participate in the globalized world, but also as a matter of equal opportunities for Colombian university students.

Notwithstanding, the World Bank (2012) shows that the Colombian public sector also dares to implement bilingual programs as initiatives on the development of the country. The world Bank (ibid) argues that "a variety of programs aimed at fostering competences in a second language have been established in Colombia in recent years, although their effectiveness remains unproven" (p. 215). In this sense, the query would be why students do not accomplish foreign language competences if bilingual programs have been fostered by higher educational institutions. This may be because of the lack of attention from the Colombian government to the higher educational sector in comparison with the primary and secondary contexts (Granados, 2013). On view of what has been mentioned above, it is relevant to mention that even though tertiary education institutions in Colombia are autonomous bodies, so are primary and secondary education institutions, and they both rely on government funding and pre-established bilingual aims from the National Ministry of Education.

To elaborate more on this lack of effectiveness on the teaching of English in the country at the tertiary level, it is pertinent to mention the level of language proficiency evidenced by tertiary education students, which is tested and analyzed by experts in charge of the development of the National Bilingualism Program: Colombia Very Well (2015-2025). The program establishes standards that university students must meet as a graduation requirement, which is a B2 level of English proficiency, based on the

Common European Framework of References for Languages (2001). However, only 8% of the higher education students reach a B2 level or higher. 30% of university graduates have an English level of B1 or higher while in technical and technological programs the percentage is 12 % and 5%. Finally, more than 50% of university students and 80% of technicians and technologists graduate with an A1 level or lower. From this panorama, what can be concluded is that few students have reached the objectives that have been proposed in terms of bilingual policies in the country.

With regards to the teaching of English at the regional level, the Mesa Departamental de Bilingüismo (2007) has been fostering a project called "Risaralda Bilingüe 2017", led by the Secretaría de Educación Departamental. This project was created with the purpose of bettering the regional results in national standardized tests in relation to English. Some issues were identified and the importance of working on them acknowledged: low teachers' profile; incorporation of standards in the curricula; deficient appropriation and use of physical and technological infrastructure for the teaching and learning of foreign languages; dislocation between the academy, the state, the productive sector, and the civic society to assume this challenge; absence of research processes of bilingualism in the region and the inefficacy in the process of monitoring, control and evaluation [Mesa Departamental de Bilingüismo, 2007]. Therefore, it is evident that the effective inclusion of the English language inside the higher educational classroom demands the intervention of different stakeholders working from different positions that help regulate an efficient bilingual education.

Equally important is to mention the national policies that must be considered before each bilingual program in the country is implemented. First, the Constitución Política de Colombia (1991) establishes that Colombia is a decentralized country with autonomy concerning its territorial entities; that is, the State guarantees freedom of teaching, learning, research, and professorship. In this sense, each educational institution has the possibility to create or adapt bilingual projects considered to be effective in that specific context. Second, the Ley 30 de 1992, on the public higher educational sector, allows for institutional autonomy only if national education requirements are considered. Therefore, what these data seem to suggest is that the way to overcome bilingual education issues in the Colombian higher education sector would perhaps be to encourage each higher educational institution to experiment with their own bilingual methodologies in the search of better bilingual education, globalization and the provision of equal and good quality opportunities.

In relation to all the above mentioned, it is now pertinent to turn the focus onto possible solutions to the Colombian bilingual educational requirements in the pursuing of globalization and the provision of better educational opportunities to tertiary education students. Graddol (2006) suggests that "there is an extraordinary diversity in the ways in which English is taught and learned around the world, but some clear orthodoxies have arisen. English as a Foreign Language [was] a dominant one in the second half of the 20th century, but it seems to be giving way to a new orthodoxy, more suited to the realities of global English" (p. 82). The author seems to claim that, different from the 20th century, this century has brought more opportunities and realities in which English has become more important worldwide. Hence, the issue of teaching English as a foreign language is becoming more a methodological approach that seeks for the development of successful methodologies that integrate the teaching of English with the inclusion of more meaningful, realistic, and appealing use of the language. Nevertheless, if the purpose is to fully achieve a dynamic bilingual education in the country, one that allows for the integration of several languages in the classroom, or the use of translanguaging, language teaching methodologies that agree with this goal need to be fostered.

In this sense, Graddol (2006) points out that CLIL (Content and Language Integrated Learning) has been adopted by many countries in Europe, as well as many other countries around the world as a successful approach that integrates the teaching of language and content at the same time, thus allowing a real and contextualized use of the language, and the integration of both the L1 and the L2 in the classroom. This can be doubtlessly taken as an opportunity for Colombian higher educational institutions to adapt a teaching methodology and foster a contextualized language instructional methodology. Furthermore, McDougald (2009) explains, "bilingualism is starting to take on a new role in Colombia. Schools and universities are not concerned with just learning English anymore, but are more concerned as to what students can do with the new language" (p. 44). Thus, there is a real need to reflect on the adoption and implementation of successful methodologies that contribute to the necessities of the higher educational sector of the country in terms of bilingual education. Consequently, this project identifies the need of the use of a methodology that involves the implementation of both translanguaging and CLIL to give higher education students in Colombia better opportunities in terms of bilingual education. The result of this mixed methodology is thus classrooms where the enhancement of both language skills and

content knowledge in both the L1 and the L2 is evident, and the provision of equal opportunities in the search of globalization is crucial.

Garcia (2009) echoed this idea of bilingual instruction claiming that when students make use of a broader repertoire of linguistic features, (using the L1 and the L2 to communicate in the classroom) it allows for the teaching of content subject matter, in this case, the use of the CLIL approach. This is the one aspect taken into consideration for the present paper: the integration of a CLIL approach to teaching English and the use of translanguaging as to implement the teaching of both the content as well as the language necessary to communicate and get informed about academic matters. Additionally, the support of governmental entities involves that they focus less on standards and more on the general learning conditions to achieve the goal, as remarked by Sánchez & Obando [2008]. Consequently, adopting, adapting and implementing new methodologies to teach English at the tertiary level will particularly involve the teaching of English for contextualized purposes, and the predetermined inclusion of both the L1 and the L2 in the classroom to support the full development of content and language skills in the learner.

Three elements highlight why these methodologies are chosen. First, the integration of the L1 and L2 in the classroom (translanguaging) is presented by Garcia as a dynamic type of bilingual education, one that sees the individual as a balanced bilingual, with learning opportunities in both the L1 and the L2 (Garcia, 2009). Secondly, this proposal aims at the fulfilling of the National Bilingualism Program since it seeks for the fully achievement of foreign language competences in English, as well as a more contextualized use of the language. Thirdly, this project is aimed at describing the phenomenon that it is happening in a state university in Pereira. Thus, the implementation of this research proposal may contribute to new theories, pedagogical and didactic practices for the teaching of English at the Colombian tertiary level.

It is now pertinent to turn the focus onto the specific research purposes that frame the development of this study. The adaptation and implementation of this research project will lead to a detailed description of both students' and professor's perceptions of an Internal Medicine course from a Medicine undergraduate program at a State university in Colombia in relation to the inclusion of the English language for content subject matters. The following question will therefore frame the development of the present qualitative research project:

- What are students' and professor's perceptions towards the inclusion of English in an Internal Medicine course of a medicine undergraduate program at a State university in Pereira?

## 2. CONCEPTUAL FRAMEWORK

The purpose of this chapter is to explain in detail the several concepts that guided the development of this study. 4 constructs were the pillars of the theoretical basis for this study: Bilingual education, referring to how bilingualism can be fostered within the educational system. Translanguaging, that refers to the pre-determined use of both L1 and L2 in the classroom. The Content and Language Integrated Learning methodology to language teaching, which, as its name suggests, is the combination of both language as well as content inside the classroom. And finally yet importantly, reflective teaching, that refers to reflective practices carried out by teachers once they have concluded a teaching period in order to evaluate their performance and the effectiveness of their teaching approach.

These concepts provided the study with the necessary theoretical principles to organise the focus of enquiry. Baker (2006) and Garcia's contributions (2009) provided the study with considerations on the concepts of bilingual education and translanguaging. Content and Language Integrated Learning (CLIL) was included considering contributions by Coyle (1999, 2005), Marsh (2001), and Garcia (2009). Reflective teaching was explored based on authors such as Richards & Lockhart (1994), and Zeichner & Liston (1996). At the end of each theoretical concept, conclusions by the researchers will be provided, and contributions to the research study will be argued.

### 2.1. Bilingual Education

In this section, general theory about the term bilingual education will be firstly analysed, including some of its different types to contextualise the reader and progressively arrive at the specific type of bilingual education that is considered in the present study. After this, a brief historical overview of bilingual education in the Colombian context will be presented exploring some of the policies that the Colombian government has implemented to strengthen the bilingual development of the country.

Finally, some of the major achievements, as well as gaps and needs in this area of education will be analysed.

The term bilingual education can be defined in several ways according to each institution that aspires to adapt it. In broad terms, this concept refers to the methodology or practices adapted by the educational institution, which aims to foster bilingualism in its students. Therefore, it is also intertwined with the definition of bilingualism the institution chooses to adhere to. It is further argued that the final aims of the institution greatly affect the type of bilingual education that is adapted.

Both Garcia [2009] and Baker [2006] argue that bilingual education has to be differentiated from foreign language education because each has its own characteristics. The former involves the teaching of the L2 as an additional subject to the curriculum, while in the latter, students are taught specific content through a language, which is different to their L1. Therefore, the language class is not an additional subject of the school curriculum, but a medium of instruction that is fostered through a cross-curriculum approach. In this sense, the author explains, a bilingual education model provides general education using two languages, promoting a much broader appreciation of both language and cultural diversity, while foreign language education lacks this sort of exposure to the language. The author concludes this section by claiming that the main difference between these types of education is their main goal. While the restricted aim of foreign language education is simply to learn a foreign language, the aim of bilingual education is to provide general, meaningful and fair education, creating global students and responsible citizens, going further than the simply acquisition of another language (Garcia, 2009). In this sense, bilingual education is a rather more contextualized language instruction that also provides students with opportunities to develop themselves as integral and educated citizens of the world.

According to Baker (2006), the aim of a dual bilingual education program is to create both bilingual and bi-literate students. This means that by the end of their education, students acquire proficiency both in everyday communication and for academic purposes. In this sense, Baker (2006) argues, bilingual education is aimed both at: students who already speak two languages and it is wished to maintain and/or develop both languages, and at students who speak a majority language and it is wished to add a second or foreign language to their education. From these considerations, it can be concluded that the aim of bilingual education is to have students master content matters in both languages, rather than learning the second language as a communication tool, no

matter if the student is able to already handle the two languages or only the mother tongue.

It this case, however, this paper does not focus on a population of mixed language speakers, nor does it wish to separate or compartmentalise language use within the classroom. According to Baker (2001), this is a monoglossic approach to bilingual education, one that wishes to separate language use into two independent systems in the students. Therefore, it is necessary to explore bilingual education from the perspective of another author to develop a more appropriate definition for this research. For this purpose, it is necessary to turn to Garcia's (2009) contributions to the field by explaining different types of bilingual education. These set the parameters that are considered during the development of this paper.

### 2.1.1. Types of bilingual education

Just as there are different definitions for bilingualism and bilingual education, there are also different models and types of bilingual education. Hornberger (1991) explains that *model* refers to a "broad category having to do with goals with respect to language, culture, and society" (p. 113). While type, on the other hand, refers to more specific aspects that have to do with contextual characteristics such as students and teachers involved, and structural characteristics such as program structure, classroom language use, etc. However, models are generally criticised because they tend to be too broad and decontextualized from the reality of the students or institutions involved. For this reason, it is generally more accepted to refer to types of bilingual education since they include more specific aspects that can be adapted to situations or scenarios. Some general types of bilingual education are now presented, as proposed by Baker (2006), in order to present the one that guides this investigation.

### 2.1.2. Bilingual Education Frameworks

### 2.1.2.1 Monoglossic

Bilingual education in the 20th century was developed under societal bilingualism norms with diglossia as the main aim. However, those norms were based on monolingual values in both languages as the norm (Garcia, 2009). According to the author, this is referred to as a monoglossic belief, whereby it is aimed that the person, on the one hand, becomes proficient in two languages as separate entities; that is, they are

compartmentalised in the individual and evaluated based on monolingual standards. On the other hand, the individual becomes proficient only in the dominant language. In this sense, two types of monoglossic bilingual education are distinguished: subtractive and additive (Garcia, 2009).

*Subtractive*

The main aim of this type of bilingual education is a shift from the weak language to the dominant or more powerful language. The way it occurs is when learners come to the classroom knowing only their home language. Then, through temporary interchangeable use of both languages, the educational institution aims for the student to eventually only use the dominant language in the classroom. In this sense, the students begin to see their bilingualism as a problem because the language used in the classroom is the only one that is valued or assessed. Hence, the students begin to lose their home language, having only monoculturalism as their goal.

*Additive*

In this type of bilingual education, bilingualism is promoted in students in a compartmentalised way, maintaining diglossia. It differs, however, in the sense that it reflects Fishman and Hornberger's (as cited in Garcia, 2009) maintenance and enrichment models. Therefore, it sees bilingualism as an enrichment possibility for student's education at a cognitive level, while working from monolingual standards. In this case, the students know a home language, and go to the classroom and are taught a second or foreign language. Consequently, they end up speaking both languages.

## 2.1.3.2. Heteroglossic

Due to globalisation and various other factors in the last couple of decades, there has been a shift in bilingual education that considers the vast linguistic complexity of some contexts. Places such as the East of Africa where many language communities live amongst each other and obviously need to communicate, or even the Deaf community, have shown that there is great complexity when it comes to defining bilingual practices in certain individuals. This has led to the view that there are multiple co-existing norms,

which characterise bilingual speech based on their context, and these have started to compete with already established monoglossic ideas (Garcia 2009).

In view of this situation, educational institutions and society have begun to adapt their education systems to their needs. They have started to consider the fact that students are bilinguals as an advantage to their education to help each other develop linguistically – treating languages in contact as intertwined and codependent. Garcia (2009) comments on this issue: *"The relationships between two languages are never competitive, but are strategic, responding to functional needs"* (Garcia 2009, p117). Thus, applying this set of assumptions to the context of this paper, effective bilingual education, different from foreign language education, must treat both Spanish and English equitably, and must allow for the coexistence of both inside the classroom.

In this sense, it must be recognised that there are certain types of bilingualism that can be fostered to compete with traditional diglossic models. Garcia (ibid) proposes two new types of bilingual education that adhere to a more realistic version of society: recursive and dynamic.

### *Recursive*

A recursive type of bilingual education refers to using the language as a resource, and its main aim is at language revitalisation through education (King 2010). In this model, bilingualism is not seen as the final goal, but it is rather used as the basis of all practice, recognising the right of the students to preserve their ancestral language. Here, the students come to the classroom seeing their bilingualism as a right, and it is sought for them to claim acceptance over their linguistic and cultural difference. This type of bilingual education is not about going back to prior linguistic states, but about recapturing a lost language, seeing how the students feel a strong ethnic connection to it due to their culture or contact with community elders. In this sense, the students are not seen as second language learners, but as emergent bilinguals (Garcia, 2009).

### *Dynamic*

The last type of bilingual education, as proposed by Baker (ibid), is dynamic, and it is presented here as the one that will guide the development of this paper. As explained by Garcia (ibid), a dynamic bilingual education framework is characterised by its multimodalities, which eventually lead to an interrelationship of the languages involved, taking into consideration that there are individuals involved who are at different stages of

the bilingual process. The development of bilingualism when this framework is adapted takes into consideration the different cultural input that each individual brings creating multiculturalism in the classroom through the continuous development of both languages.

One of the main characteristics of a dynamic type of bilingual education is that it allows for the coexistence of different languages in the classroom – whether they are used as means of instruction or simply for communication. In other words, it allows for translanguaging to occur inside the classroom. This concept refers to the use of both the L1 and L2 at specific points of the lesson. This means that students will develop both languages simultaneously; it is for this reason that this framework is seen as the most appropriate to analyse throughout this research project, as it agrees with the realities under which the study was implemented. In this sense, the learning experience becomes more meaningful for students inasmuch as they have the opportunity to develop content knowledge in both the L1 and the L2.

Furthermore, the use of both Spanish and English in the classroom not only allows for both languages to be developed at the same time, but it also allows for the most dominant one, in this case Spanish, to be able to compensate for students' lack of knowledge in the foreign language, in this case English. Consequently, the aim of a dynamic bilingual education framework is to develop both languages and students' content knowledge simultaneously thus providing students with fair opportunities to actively participate in this ever-globalising world.

### 2.1.4. Bilingual Education in Colombia

In this section, the situation of Colombia as a bilingual country will be firstly explained. Then, the way the English Language Teaching (ELT henceforth) was first fostered at the national level will be exposed by analysing the different government policies that have been implemented hitherto. After that, the focus will be turned into the analysis of the progress on the bilingual educational context in Colombia, speaking of English, from the times bilingual programs were firstly fostered in the country. This will be done by examining the different features of the several bilingual education programs that the Colombian government has implemented during the last couple of decades. Finally, the issue of the search of effective ways to teach English in the Colombian context will be provided as a conclusion.

### 2.1.4.1. Bilingual Education at a national level

Bilingual education in Colombia has gone through several changes over the past few decades, and this has played a vital role in its current perception. It must be noted that, being a South American indigenous zone, bilingual education does not exclusively refer to western languages such as English, French and German, but it should also include native indigenous languages, as suggested by de Mejia (2004). However, since the present paper is focused on the teaching of English in the country, it is this aspect what will be looked at in detail. According to De Mejia (ibid), since World War II in 1945, English became the most important foreign language in many European countries (as in many other countries), due to elements such as social, political and economic influences, as well as technological advances of the United States. Until this point, English was taught in Colombian secondary schools, alternating in use with French, because of a decree issued in 1979, which made it mandatory to teach English in Grades 6 and 7, French in 10 and 11, with a free choice between the two in Grades 8, 9. This naturally ended up with schools teaching English for the first four years and switching to French in the final two.

However, particularly speaking of the situation of English, the British Council (1989) stated that the bilingual programs that were firstly fostered in the country were framed under political pressures rather than academic considerations. In relation to this, the British Council [ibid] comments that "the Colombian Ministry of National Education has no firm foreign language policy for the secondary school curriculum … [and its] decisions [are] being made as a result of political pressures rather than educational considerations" (British Council, 1989: 7, cited in De Mejia, 2004). It is in this sense evident that the main issue in Colombian bilingual education has been the adoption of effective methodologies to fulfil bilingual education requirements of the country.

Notwithstanding, although foreign languages were being included in the secondary curriculum, it was not until the General Education Act of 1994 that foreign languages, mainly English, were introduced at the primary school level, usually from third grade onward with a focus on conversation and reading. In order to support this initiative, the government implemented the National New Technology and Bilingual Programme (1996-7) which sought to promote the setting up of multimedia classrooms with internet connection aimed at helping students to use scientific and technological information in English. Nonetheless, the government found it necessary to create and

implement real bilingual education programs for the different educational sectors to become proficient in the communicative competence in English. These Colombian bilingual education programs are what will be explored next.

### 2.1.4.2. Colombian Bilingual Education Programs

*PNB: Programa Nacional de Bilingüismo 2004-2019*

The first rigorous program of bilingualism and bilingual education proposed by the Colombian government was entitled Programa Nacional de Bilingüismo (PNB henceforth, 2004-2019). This program was based on the Common European Framework of Reference for Language Teaching (2001), and aimed at establishing bilingualism across the whole country, particularly through strengthening the education system. As it was a new education program, it was essentially a proposal at the beginning, and it had to go through several instances before being implemented.

In this sense, the program was framed by four main lines of action. The first line was the formulation of the basic standards to be used to gauge students' language proficiency. These standards were the instrument for learning, teaching, and assessing language. They were titled Estandarés Básicos de Competencias en Lenguas Extranjeras (2006). Those standards are also referred to as the Guía 22 since it makes part of a whole series of standards guides for core academic subjects in primary and secondary education that belong to the national development plan. This guide is based on the Common European Framework of Reference for Language Teaching (2001).

The next line of action was the publication of the program, which was done in December 2006. Finally, the last two lines of action had to do with two socialization phases in which policy makers, educational institutions staff, and teachers in general could have access to the document and analyze it. Lastly, the last line of action was concerned with the approbation phase in which the document was adopted (2007-2008).

*PDFCLE: Proyecto de Fortalecimiento al Desarrollo de Competencias en Lenguas Extranjeras 2010-2014*

It was not long after the PNB was first implemented when the government published a new document socializing a new bilingual program for the country. This new project sought to strengthen the communicative competences in the use of English across

the country and was thus more objective than the PNB. The project was called Proyecto de Fortalecimiento al Desarrollo de Competencias en Lenguas Extranjeras (PFDCLE henceforth, 2010-2014). This new document was not a new program of bilingual education; however, it was rather a proposal to strengthen the implementation and increase the effectiveness of the program that was already in action.

The project aimed at guaranteeing that Colombian students develop better communicative competences in a foreign language throughout the entire educational cycle. This in order to educate citizens that could act effectively in a globalised world, and contribute to the competitiveness of the country. To achieve this, the project was based on four main lines of action. First, training and support for teachers was promoted with the aim of guaranteeing the suitability of the professionals who are directly in charge of the development of bilingual competences in children, and teenagers. This was done with permanent pedagogical practices and sustained improvement on the level of English of educators using differentiated programs aimed at fostering their continuous professional development.

Second, pedagogical aspects were considered as a complement to the educator professional development. In this line of action, the Ministry of Education worked to provide the educative community with high-quality pedagogical materials that supported the strengthening of the practices inside the classroom. Similarly, this line sought for the appropriation of the Guía 22, and it also aimed at an improvement in the curricula.

Third, evaluation and monitoring were used as a cyclic process for observation and decision-making on the development of the bilingual program. This was done with a contextual analysis and a prioritization of the needs, the elaboration of improvement strategies, the determination of their scopes, and the creation of progress indicators with which to evaluate both the process and its products.

Finally, institutional strengthening was implemented for the articulation of the strategies from the three previous lines of action. It was established that the Secretarias de Educación and the Escuelas Normales Superiores had the capacity for the formulation, implementation and monitoring of contextualized initiatives that were pertinent and sustainable for the development of competences in foreign languages aligned with the orientations that were defined by the Ministry of Education.

### Colombia Very Well: Programa Nacional de Inglés 2015-2025

Though the efforts that were made in the PFDCLE were of significant relevance, a couple of years later, and after rigorous evaluation and documentation of data taken

from interviews, state exams like ICFES, and individual studies, the need for a new project was evident. The new bilingual program is entitled Colombia Very well: Programa Nacional de Inglés (2015-2025). The government now wishes to improve the English language competences among the whole country. Therefore, the new project seeks to strengthen English language competences in primary, secondary and tertiary education; and labour force. Thus, this new project is built upon an intersectoral approach and it is considered as a state policy.

The new program highlights the reasons why English is important in the country by exposing three main reasons why Colombian citizens should become bilingual. First, English is a benefit for personal development that is evident in cognitive development, labour opportunities, opportunities for studying abroad, and access to information. Second, English is a tool to social development in equity, inclusion, homogeneity, and cultural interchange. Finally, English is necessary to improve the economic development of the country in foreign investment, growth for local enterprises, and income increment.

The lines of actions used in the new program are like those that were used in the PFDCLE. A rigorous analysis and evaluation of data taken from the project since it was first implemented up until its conclusion (2010-2014) yielded results that were to become the pillars of the new bilingual program. The evaluation committee considered five aspects for the evaluation of the collected data: 1. Relevance and effectivity; 2. Goals accomplishment; 3. Financial and physical resources; 4. Communication strategy; and 5. Articulation with other initiatives. Some general results from this analysis are to be analysed now.

The results that were obtained from the data analysis show the corresponding evidence of progress for each of the four lines of action from the PFDCLE. First, in teacher training, more than 9.500 teachers have been educated in language and methodology. Second, in pedagogical aspects, different pedagogical models for different educational contexts have been implemented: English, Please!, Bunny Bonita, and My ABC English Kit are some of those examples. Third, in institutional strengthening, 65 departments of education have been monitored throughout the process. Finally, in evaluation and monitoring, methodologies such as teaching diagnosis, and studies such as the Teacher Challenge Study have been means to gauge the educators' development. It is also of great of importance to mention that these results have led to the adoption of a new law for bilingual education: Ley de Bilingüismo (Ley 1651 de 2013).

As already mentioned above, therefore, Colombia Very Well not only seeks for the continuation in the development of the four main pillars of the PFDCLE, or its lines of actions, but it now goes to providing educational opportunities beyond the education system. Thus, the general framework for the new bilingual program consists on the development of English competences in the entire educational system as well as in the labour force. The project is an initiative that goes along with other programs driven by the Ministry of Education to favour the strengthening of education quality. Colombia Very Well aims at the fostering of English as a public policy in a national compromise, foreseeing the project in a long term, as National Minister of Education Maria Fernando Campo Saavedra proposes:

> From the Ministry of Education, we are convinced that the implementation of the Programa Nacional de Inglés and the convergence of all stakeholders in the development of their strategies, will allow to reach results in the betterment of the competences in English of Colombian people. With this program, we will contribute to achieve the goal of converting Colombia as the most educated country in Latin America and the country with the best English level in South America in 2025. For this reason, we have decided to identify the Programa Nacional de Inglés as Colombia Very Well! (MEN, 2014, p. 4).

In view of all of this, the Colombian government, apart from being aware of the importance of fostering strong bilingual education policies, highlights the responsibility of stakeholders in the phenomenon, and suggests the adaptation of effective strategies to improve and reach the goals established. Moreover, The Ministry of Education recognises the nature of the issue as being a long-term process. Former Minister of Education said Colombia is expected to not only be the most educated country in South America by 2025, but also the one with the best level of English proficiency. In this sense, the main issue here continues to be the lack of effective strategies to efficiently position Colombia as the South American country with the best English proficiency across its educational and professional sectors. It is this consideration what will be explored next.

### 2.1.4.3. The search for betterment

Considering all the above mentioned, there is now a need for the development of efficient ways to teach English to fulfil the national bilingual goals, particularly in the public higher educational sector. However, according to De Mejia (2004), foreign language teaching in the country has up to now been efficiently fostered in the middle and upper middle-classes due to economic factors. For this reason, it is necessary to find

the most effective ways to truly achieve bilingualism and forget about foreign language education through the public education system regarding not only those basic and medium educational contexts, but also those higher education institutions as well as the labour force, if the country is looking to be ranked as the one with the best English language proficiency level in South America.

In view of all of this, this is where the present paper bases itself; and considering that the aim is to implement an effective bilingual program in the tertiary education, the dynamic model of bilingual education, the one that allows for the coexistence of both the L1 and L2 in the classroom, is analysed in detail. This is because it takes into consideration the possibility of "assessing different linguistic features or various modes of what are described as autonomous languages, in order to maximise communicative potential" (Garcia 2009, p. 140) allowing then for using translanguaging in the classroom in order to scaffold a more significant and achievable learning experience. Therefore, the inclusion of both the L1 and the L2 inside the classroom is regarded as a possible solution to the Colombian bilingual aims. It is this concept of translanguaging what will be explored next.

## 2.2. Translanguaging

In this section, a conceptualization of languaging practices (as precedent of all translanguaging practices) will be provided before explaining what translanguaging involves itself. Then, different concepts that have been coined by different authors and that have a similar connotation with that of translanguaging will be broadly exposed in order to demystify the term and better arrive at a full definition. After that, the term translanguaging will be defined and contextualized, and some implications as well as limitations on its implementation will be provided to the reader. Finally, a conclusion will be stated in such a way as to link translanguaging with the corresponding type of bilingual education that fits the most with this research project.

### 2.2.1. Theorizing Languaging

In order to theorize translanguaging, it is pertinent to first focus on languaging practices. In the early 70s, Maturana and Varela referred to the idea of languaging as an action that is directly connected to a term they referred to as autopoesis, meaning that

"we cannot separate our biological and social history of actions from the ways in which we perceive the world" (Garcia et al 2014, p. 201). Thus, what they suggested is that there is an ever-lasting interaction between the experience we have about the world and the way in which we perceive it and act towards it. In other words, an interaction between what we know, and how we use what we know to act and behave (Maturana & Varela, 1998).

Nevertheless, this definition is not as suitable for the context of this paper as it should be. Swain (2006) proposed an interesting connotation for the word languaging when he used it in reference to input and output. According to Swain (ibid), languaging is a "means to mediate cognition" and "a process of making meaning and shaping knowledge and experience through language" (p. 98). In this sense, languaging is both a means and an end at the same time since it helps build up our cognition as we perceive it (input), and it also helps others understand our sets of thoughts as we produce it (output). Consequently, languaging involves both our receptive and productive skills through which we perceive from and bring to our interactions with others. To conclude this discussion about languaging, it is valid to bring into mention some last words by Maturana and Varela (ibid):

> It is by languaging that the act of knowing, in the behavioural coordination, which is language, brings us forth. We work out our lives in a mutual linguistic coupling, not because language permits us to reveal ourselves, but because we are constituted in language in a continuous becoming that we bring forth with others (pp. 234-235).
> Based on these authors, languaging is merely communication and representation.

Languaging involves the use of language. Language is the behavioural way in which we as humans share and get information in each human encounter. It plays two roles that are dependent on each other, the sharing and the understanding of information, either in its written or oral form.

### 2.2.2. Theorizing Translanguaging

Now that the concept of languaging has been already defined, it is time to introduce the term translanguaging, which involves a rather more dynamic idea of how humans interact and get informed about the world. As the term suggests, translanguaging involves the fair use of several languages to participate in every-day communicative encounters. Thus, translanguaging in its own is across-languaging, which is broadly perceived as the idea of everyday language practices of bilingual people (Garcia et al 2014).

However, before attempting to define translanguaging itself, it is necessary to expose different perspectives or terms that different authors have coined about this idea of using various languages dynamically in everyday communicative events. In the 1940s, the Cuban anthropologist Fernando Ortiz introduced the term of transculturación to refer to the complex and multidirectional process in cultural transformation (Ortiz, 1940). However, the author narrowed his hypothesis to rather general cultural issues and did not emphasize on the how language was used during those cultural transformation. Hence, though language is undoubtedly a key factor in those transformations, this is just a general definition of transcultural practices, and not one that gives account of the whole process that the concept of translanguaging involves.

More specifically, Jørgensen (2008) refers to the combination of resources that are not discrete and complete languages as polylingualism. Jacquemet (2005) speaks of transidiomatic practices to refer to the communicative practices of transnational groups that interact using different communicative codes. Otsuji and Pennycook (2010) refer to fluid practices in urban contexts as Metrolingualism, rejecting the fact that there are discrete languages or codes. Canagarajah (2011) uses Codemeshing to refer to the shuttle between repertoires in writing for rhetorical effectiveness. Thus, what all these considerations yield is that every time in which two languages are in contact a translanguaging practice is occurring., one that allows for the delivering of communicative goals as a dynamic practice that makes use of several languages at the same time with a set purpose.

Considering all the above mentioned, it is now pertinent to define translanguaging. The term translanguaging was first coined by Williams (1994), referring to a pedagogical practice where students are asked to alternate languages for the purposes of reading and writing or for receptive or productive use (Williams cited by Baker, 2001). Therefore, there was a notorious set purpose under the use of translanguaging, which implied the use of a language for one type of task, and the use of another language for a different communicative task. In a similar fashion, Garcia et al (2014) introduce the concept "translanguaging" as one of the main characteristics of the dynamic type of bilingual education since it refers to the use of several languages in the classroom at different points in the lesson with the objective of simultaneously developing content knowledge in both the L1 and L2.

More specifically, Baker (2006) defines translanguaging as the parallel use of two languages in the classroom with the aim of developing language skills in both languages

and contributing to a deeper understanding of the subject matter being studied. Baker (ibid) cites Williams (1994) who argues that the amount of each language in the classroom is not the relevant issue in translanguaging, but rather the purpose and the activities carried out in each language. In addition, the aim of translanguaging should be the development of Academic Competence (CALP) in both languages, which means that students should be exposed to the same concepts in both languages so as for them to acquire content knowledge in L1 and L2. Hence, though both languages are to be used at different points in the lesson and for different purposes, the academic knowledge that the students are exposed to developed should be the same in both languages.

Additionally, Baker (ibid) states that for translanguaging to develop students' academic competence and make progress in both languages, it is necessary to include a strategic classroom language planning. This takes place when input and output tasks are deliberately included during classroom activities. Generally, reading or listening are carried out in one language and then a production activity about the same concept being studied is made in the other language and vice versa, something that echoes Williams (ibid) conceptualization of translanguaging.

The inclusion of translanguaging inside the foreign language classroom can provide many advantages to both the teacher and the students. Baker highlights that translanguaging has four potential advantages when used in the classroom. They are described below:

- It might help students to have a deep and full understanding of the content being studied, since they must analyse concepts before elaborating in an exercise or activity by understanding in one language and producing in other, rather than simply copying and adapting text chunks into answers.
- Translanguaging might promote the development of skills in the students' weaker language. This is because translanguaging attempts to develop academic language skills in both languages and full bilingualism; thus, students may carry out the main part of the work in their stronger language and then undertake less challenging related tasks in their weaker language.
- Translanguaging happening in a classroom with native speakers and language learnings might support the development of second language ability along with content learning.

- Translanguaging happening in a context where the minority language is the one used by the parents allows for their support for assignments.

Although not all the advantages mentioned here apply for the context where the present study is developed, it is evident that when translanguaging is applied, the students can develop both linguistic and content-related knowledge in both languages and not only as a translation of chunks of language from one language to the other, but a thorough analysis of content matters with a fair inclusion of both L1 and L2. Finally, the author makes important contributions regarding limitations when managing, allocating and organising the use of both languages in the classroom. However, he highlights that the effectiveness of the inclusion of translanguaging in the classroom is that the teacher comes prepared to the class, having thought critically of how to include both languages in the classroom, reflecting about the different events that might occur, and provoking students with this type of lessons in which the language is diversified or provocative.

### 2.2.3. Implications and limitations on the use of translanguaging

The limitations on the use of two languages in the classroom have to do with aspects related to the aims of the institution in terms of second language competence and language preservation; the nature of the students themselves: their ages, academic levels, and language development stage; policies regarding the integration of languages in different dimensions such as curriculum, classroom, lessons, and levels of organisation; the language balance of the class; students' exposure to the languages out of the university; the use of bilingual materials; and the management skill required by teachers to monitor and reflect upon a complex language use situation.

The contribution made by Baker (2006) provides the study with important information regarding the use of translanguaging in the classroom, and the beneficial aspects that its inclusion in the classroom has to achieve language and content objectives at the same time, which is the essence of the bilingual model carried out during this planning stage. In addition, light has been shed over the relevance of each language amount to be addressed in the lessons, and the importance of planning for allocating both languages in the classes in such a way that students develop their cognitive academic language proficiency in L1 and L2 at the same time.

**2.2.4. Translanguaging from the Dynamic Type of Bilingual Education**

An additional definition of translanguaging that needs to be included in the current study is the one presented by Garcia (2009), the author of the dynamic type of bilingual education, and it is this definition the one that requires the co-existence of both languages in the classroom from a methodological perspective. Translanguaging, therefore, is defined as the access to different linguistic features of autonomous languages by bilinguals with the aim of maximising communicative potential. The author explains that translanguaging goes beyond what has been termed code-switching, although it includes it (p. 140) and that it extends what Gutierrez et al. (2001) have called hybrid language use, which is a systematic, strategic, affiliative, and sense-making process.

In order to state a difference between translanguaging and code switching, it can be said that the differentiation is ideological, because code switching refers to the mixing or switching of two static language codes. Translanguaging, resting on the concept of transculturación, "is about a new languaging reality, original and independent from any of the patterns or codes, a new way of being, acting, and languaging in a different social, cultural, and political context" (Garcia et al 2014, p. 204). Therefore, it can be argued that translanguaging differs from code switching in the sense that the former is used as a natural act of bilingual individuals, while the latter is used consciously with a pre-established purpose.

It is further explained that translanguaging makes part of an increasing tolerance at a classroom level towards multiple languaging practices as part of the linguistic range in the classroom allowed by new types of bilingual education. Garcia (2009) illustrates that translanguaging is a responsible communicative practice that offers communicative and educational possibilities to all, but that it should respond to separate language arrangements, which means that it should be included in certain points of the lesson for previously well-planned purposes. Additionally, it is stated that there has to be a social practice principle that places learning as a result of collaborative social practices in which students try out ideas and actions, and thus socially construct their learning (p.153). Translanguaging in linguistically heterogeneous collaborative groups helps students to try out their ideas and actions with the aim of learning and developing literacy practices. This is done by using languages flexibly to support understanding and building conceptual and linguistic knowledge. In this sense, the inclusion of translanguaging

inside the classroom is considered in the present study because of the possibility of introducing English in the content lesson for a rather strategical purpose in a lesson in which both languages are treated fairly.

In relation to the previous comment, Garcia (ibid) refers to translanguaging as "a space that creates a new reality because not one part of the equation is seen as static or dominant, but rather operates within a dynamic network of cultural transformations" (Garcia et al 2014, p. 203). Hence, translanguaging is not only about allowing the use of two or more set of linguistic features or languages in the classroom, but it is about balancing the process in such a way that both of those languages are used with the same purpose, and the same prestige.

As a conclusion, translanguaging in the classroom allows bilingual education to happen while a constructive learning is taking place. The authors' definitions on the concept clarify the use, importance, benefits and influence of translanguaging and its role in the dynamic type of bilingual education as defined by Garcia (2009) and which frames this paper in terms of a professor use of both the L1 and the L2 for the analysis of content related topics in an Internal Medicine course. Consequently, the next construct that is relevant for this paper highlights how content is included in translanguaging classrooms.

## 2.3. Content and Language Integrated Learning

Since a dynamic type of bilingual education has been chosen to guide the development of this research project, integrating the concept of translanguaging, and that this paper focuses on the tertiary education. It is necessary to now shift focus onto how language learning can be merged into the everyday classroom through the teaching of a core subject. Hence, the next construct that is relevant to this study is that of Content and Language Integrated Learning (henceforth CLIL).

The purpose of this section is to provide the reader with some general background information and theory about CLIL. Firstly, a couple of approaches for ELT in higher education will be analysed. Secondly, CLIL will be theorized taking into account contributions by Marsh (1994, 2001, 2002, and 2011) and Coyle (2007). After that, some of challenges that teachers face when attempting to apply CLIL will be analysed.

### 2.3.1. Approaches for ELT at the tertiary level

the implications on the use of CLIL will be provided to the reader. Finally, four big

Different notions or approaches for teaching foreign languages at the higher educational context have emerged in recent years. For instance, universities around the world have used the traditional ESP approach (English for specific purposes). This is based on the consideration of focusing the students' attention on the linguistic peculiarities of professional communication and the professional language for that communication Tarnopolsky (2013). The problem with this approach is that the students learn the language for professional communication and do not have the access for really using the language in such communicational settings Tarnopolsky (2013). Hence, the main limitation would be that students are learning the language for the specific purpose of being proficient at communicating in their particular professional fields, but they are not provided with the real opportunities and environments to get involved in such communication.

However, different from the traditional ESP teaching approach, is the integrated ESP learning approach which is concerned with the shift from "learning the language to learning in unison both the language for professional communication and the professional content matter of that communication" (Tarnopolsky, 2013, p. 2). It is this integration of learning the target language and professional content what unites and constitutes a Content and Language Integrated Learning approach for teaching languages. This is a relatively recent approach to language teaching that is based on the notion that language is better taught through another academic subject than through merely communicative notions. In other words, this approach is about teaching a curriculum subject in the foreign or target language, in this case English.

### 2.3.2. Theorizing CLIL

CLIL is usually confused or used with the same definition as CBI (Content-Based Instruction), but there is an evident difference between the two methodologies. The difference between CLIL and CBI relies on the concept of bilingual education that each of them is based on. Different from CBI, CLIL is framed under a heteroglossic ideology of bilingual education, thus allowing the existence of both the L1 and the L2 inside the classroom, something that CBI does not address focusing more on a monoglossic ideology. Moreover, according to Marsh (2002) CLIL must be regarded as "every kind of language learning in which a target language is also used for teaching students non-linguistic content" (p.15). This means that there is partly explicit language teaching within the content being taught. Marsh (2001) coined the term describing it as

teaching a language by means of a specific content and vice versa, that is, one process supports the other. According to Marsh (ibid), this increases achievement by students in both the language and the subject being taught as it improves their confidence due to the fact that they feel they are learning more than language-related topics.

Marsh (ibid) further explains that this could be referred to as dual focused education because there are usually two aims: one based on the theme or topic, and the other based on the language. He explains that this becomes a successful learning process when the learner is encouraged to use the language and push beyond the "challenge of waiting until I (the student) am good enough in the language to use the language" (p.8). This means that motivation and encouragement play a big role for CLIL to be effective; students must feel that they can use the language, which will concurrently have a positive effect on the content being discussed. The main foundation of this theory is that language is developed as it is used, that is, being used in a real-world context.

Following this line, Coyle (2007) exposed specific advantages that CLIL can provide to a tertiary educational context. Those advantages are listed below:

- Raise learner linguistic competence and confidence;
- Raise teacher and learner expectations;
- Develop risk-taking and problem-solving skills in the learners;
- Increase vocabulary learning skills and grammatical awareness;
- Motivate and encourage student independence;
- Take students beyond 'reductive' foreign language topics;
- Improve L1 literacy;
- Encourage linguistic spontaneity (talk) if students are enabled to learn through the language rather than in the language;
- Develop study skills, concentration – learning how to learn through the foreign language is fundamental to CLIL;
- Generate positive attitudes and address gender issues in motivation;
- Embed cultural awareness and intercultural issues into the curriculum (p. 104-105)

What this list of advantages shows is that CLIL not only allows for the development of both linguistic and academic proficiency in the students, but it also permits the development and improvement of cognitive skills, personal attitudes and cultural issues. Additionally, one essential aspect about CLIL, according to Marsh (2001), is that "CLIL offers opportunities to allow learners to use another language

naturally, in such a way that they soon forget about the language and only focus on the learning topic. It is this naturalness what appears to be one of the major platforms for CLIL's importance and success in relation to both language and other subject learning" (p.6). Consequently, the use of CLIL for the teaching of a foreign language inside the tertiary education classroom can be regarded as a fruitful strategy as it implies the development of cognitive, academic, personal, cultural, and motivational aspects that a traditional methodology for the teaching of languages does not address.

In this sense, the success of CLIL relies on whether the students are able to use the language for a real-world purpose – their development in university, which in turn also increases their interest in learning the language. Marsh has stated a very effective approach to language teaching, bringing into the argument various aspects of Second Language Acquisition. It is difficult to truly know how realistic it is to set equally challenging linguistic and content-based objectives in terms of student achievement, as this varies in each context. However, for this research it is expected that because a translanguaging methodology of language use is considered whereby students can use their L1 to compensate for lack of knowledge in L2, this challenge can be overcome.

### 2.3.3. Implications on the use of CLIL

Now that the concept of CLIL has been already analysed, it is time to provide the reader with some of the implications that are involved in the use of this approach. Coyle (1999) suggests that CLIL is not a set procedure for teaching either language or content, but that it is a flexible approach that can be moulded to best fit the situation where it is needed. These situations can range from all teachers across a subject area agreeing to integrate language within their subjects to language teachers aiming to include some form of content in their lessons, or by simply having extra-curricular projects where a fundamental content topic is chosen, but language development is also considered. In this sense, CLIL is an ever-developing approach that becomes adapted to particular academic circumstances.

Coyle (1999) further explains some of the aspects that must be considered in order to adapt CLIL to different contexts; these, she referred to as "the 4C's of CLIL" – content, communication, cognition and culture. She argues that these are factors that are intertwined in each other and in language teaching. Therefore, they must all be considered in order to create an appropriate CLIL based activity. Firstly, content is the

starting point and from here it is decided what is going to be taught and what language considerations are necessary; content is subject to the theme of the project.

Secondly, cognition is important because in order for CLIL to be effective, it must challenge students in some way and go slightly beyond their current level in order for them to have to think and analyse the information provided. Here, there should be consideration for Bloom's taxonomy (1956), which states different levels of cognitive processes that range from low to high order thinking skills, or, more precisely, ranging from knowledge, and comprehension; then to application and analysis. Finally, reaching the higher scales in cognitive domain: synthesis, evaluation and creation. Furthermore, it is also essential to take into account Krashen's Input hypothesis (1985), which states that in order for input to be effective, and for having a successful process of learning, the input must go further than the current level in which the learner is: i (input) + 1 (next level). In other words, an effective input would have the formula: i + 1 (effective improvement: motivated learners), but not i + 0 (no improvement: bored learners), nor i + 2 (exaggerated improvement: frustrated learners).

Thirdly, communication is also considered important in CLIL as it has been stated that language in use is the best way to learn it. This means that in order to have a successful CLIL experience, learners must be able to interact when they are learning the language.

Lastly, culture is a factor that is embedded in the whole process. Hence, according to Coyle (1999), culture sits in its rightful place in the centre of this approach. This refers to our awareness of self and others; in other words, our sense of citizenship, which undoubtedly makes part of the language and the content being taught to the students. These aspects, and how they are handled, must be considered in order to plan successful CLIL-based lessons.

Coyle (1999) explains: "…the 4Cs framework suggests that it is through progression in knowledge, skills and understanding of the content and engagement in associated cognitive processing, interacting in the communicative context, developing appropriate language knowledge and skills as well as acquiring a deepening intercultural awareness through the positioning of self and "otherness", that effective CLIL takes place" (p.4). Consequently, CLIL must be considered as an approach that supplies not only the learning of a target language while developing content knowledge, but also an approach that aims at an improvement on learners' cognitive processes as well as cultural awareness.

In view of these ideas, Coyle (1999) suggests a very clear argument on the different aspects to consider when developing a CLIL approach. It is without doubt that the 4Cs are of great importance as they cover a wide range of issues that may present themselves during a language learning process based on CLIL. If all of these are accounted for, students are more likely to have a significant learning experience. However, having defined and explained the pillars of the CLIL approach, it is necessary to include some of the real-life challenges faced when attempting to apply this methodology.

### 2.3.4. Challenges on the Application of CLIL

As the CLIL approach became more popular in Europe, some challenges began to emerge, as Garcia (2009) points out. The first challenge is that there is a lack of specific training for teachers who wish to combine language and content. This led to them having to cope with how the approach works there and then in the moment, meaning that obviously, each teacher adapted it to their own teaching style and there was no unanimity amongst them. Furthermore, very few teachers were qualified in both the content and the language they had to teach, most having specialised in one or the other.

For this purpose, it was originally thought that a native speaker of the foreign language who was qualified in a content area would be the most suitable for the job. However, it soon became apparent that these speakers from other countries were neither familiar with the education system or teaching practices of the country, nor were they familiar with the culture and citizenship, this aspect being one of the 4 C's of CLIL, as previously stated. In light of this situation, it has begun to be thought that perhaps the most appropriate teachers for the job are normal content teachers who are trained in the foreign language since it is not necessary for them to have native like proficiency in order to carry out successful CLIL lessons (Garcia, 2009).

The second challenge pointed out by the author is that there is a lack of appropriate material available for teachers who wish to integrate language teaching into their average subject matter lesson. This is a huge challenge as creating new material is not only difficult, but also very time-consuming, something most teachers simply do not have. Although there may be material from teachers who have already attempted to adapt CLIL to their classroom, this may not be appropriate for every specific context. This is because this approach is so intertwined with the specific content matter being taught.

A third challenge addressed by the author is one that is mostly outside of the teachers' hands. This refers to assessment administered to students, especially exit exams. Due to the fact that most examinations, particularly talking about language, are standardised, they do not take into account the approach that students were exposed to. In other words, a standardised test may not test what students really know, whether it be in content or in language. This has been the case when it comes to students who have gone through CLIL education and are expected to present, sometimes even national examinations, which are based around monolingual standards, completely ignoring their development of content in the foreign language. Therefore, results of these exams may not always be valid because they do not show exactly what the students actually know. This may lead to teachers adapting their classroom practices in order to comply with certification requirements. For this reason, teaching practices have been associated to a limitation of real life interaction in the foreign language where certain predetermined responses such as one or two word answers, or nods of the head show what students understand (Garcia, 2009). While this may be suitable for them to pass an examination, it does not truly reflect the purpose of integrating the foreign language into the subject matter classroom.

Finally, Garcia (2009) argues that because of low teacher training in the approach, there may be a misapplication of it in the classroom. This has occurred because teachers are told that they are allowed to use a small amount of code switching in order to explain certain points or for lexical precision. However, it has been found that teachers have misinterpreted this leeway, and ended up teaching the content matter mostly in their native language, while occasionally introducing certain key concepts in the foreign language. As a result, they end up teaching students a list of vocabulary in the foreign language, under the impression that they are integrating language into the subject matter.

One way in which it is aimed to overcome this problem, and to ensure that the sessions do not become simply vocabulary lessons in English, is taking into account the fact that (as previously explained), a dynamic bilingual model of education, which fosters the use of several languages in the classroom, is being implemented. For this purpose, professors will be switching back and forth between both languages at pre-determined points of their lesson, addressing different parts of the content in either language. They will not be translating what they say in Spanish to English, or vice versa, but rather have a continuous content lesson, which does not repeat itself at any point, but purposefully switches back and forth between languages purposefully. This is done taking into account

that neither the teachers, nor the students have a very deep proficiency in the L2. Hence, teachers and learners are able to return to the L1 in order to clarify points, explain complex ideas, etc., and this will increase learners' motivation and lower their anxiety when using the L2.

Overall, the process of either adapting or implementing CLIL lessons in tertiary education must be deeply studied. As CLIL stands for a dual-focused approach in which an additional language is used for the learning and teaching of both content and language (Marsh et al, 2011) what it involves must be accompanied by a reflection on the effectiveness of the approach. That is why the next relevant construct that will be analysed is that of reflective teaching.

## 2.4. Reflective teaching

At this point, three concepts have been defined in order to explain the theoretical foundations for this study. Bilingual education, which provides the approaches to carry out this research: heteroglossia and the dynamic type bilingual education. Translanguaging, which refers to the predetermined use of L1 and L2 in the classroom. Finally, Content and Language Integrated Learning, which is the specific practice implemented in classrooms in which the teaching of both content and language are integrated. The fourth concept that needs to be included is that of reflective teaching in view of the fact that practices of reflection help to explore the whole process in a teaching-learning continuum.

This section is aimed at providing the reader with a full understanding of reflective practices in ELT contexts. First, a description and general theory about reflective teachers and events will be explored. Second, the model proposed by Zeichner & Liston (1996) about the dimensions of reflection will be analyzed. Finally, some final considerations about reflective practices will be explored.

## 2.4.1. Describing and defining reflective teachers and reflective events

In view of the fact that the integration of both translanguaging and CLIL inside the classroom requires a thorough planning and other specific considerations mentioned earlier, there is a need for reflection on teaching practices in the sense that "teachers who are better informed as to the nature of their teaching are able to evaluate their stage of professional growth and what aspects of their teaching they need to change" (Richards

and Lockhart, 1994, p. 4). That is why several authors in the field suggest that there is a longstanding recognition in the field of language education that teachers must continually reshape their knowledge of teaching and learning (Bookfield, 1995; Elias & Merriam, 2005; Farrell, 2007, 2009; Heimlich & Norland, 1994; Mann, 2005; Rivers, 1970). Similarly, Richards and Lockhart (2007) also point out five considerations that need to be taken into account by those teachers who are willing to reflect:

1. An informed teacher has an extensive knowledge base about teaching;

2. Much can be learned about teaching through self-inquiry;

3. Must of what happens in teaching is unknown to the teacher;

4. Experience is insufficient as a basis for development;

5. Critical reflection can trigger a deeper understanding of teaching.

Nonetheless, taking these considerations as a basis for reflection, and according to Tice (2004) it should be said that reflection does not only involve thinking about negative aspects that happen in the class, but also about positive ones and how to take advantage of them.

Zeichner & Liston (1996) define reflective teaching as the teachers' action for questioning about the goals and values that guide their work, their assumptions and the context in which they teach. The authors make a distinction between the teacher as a technician, and the teacher as a reflective practitioner. The former refers to the situation in which a teacher thinks about a classroom issue, but her/his thoughts operate from a number of fixed assumptions that are not questioned. The latter describes a teacher's examinations of his/her own behaviours, the context in which a classroom issue occurs, and the restructuration of the examined activity with the purpose of improving student learning and involvement. Taking the latter type of reflective teachers, several authors agree with the idea that reflective practices occur when teachers consciously take on the role of a reflective practitioner, subject their own beliefs about teaching and learning to critical analysis, take full responsibility of their actions in the classroom, and continue to improve their teaching practice (Farrell, 2007; Jay & Johnson, 2002; Valli, 1997). In addition, according to Zeichner & Liston (1996), a reflective practice movement entails certain recognition of teaching goals, ends and purposes, playing leadership roles in curriculum development. They explain:

"Reflection also signifies recognition that the generation of new knowledge about teaching is not the exclusive property of colleges, universities, and research and development centres. It is a recognition that teachers have ideas,

beliefs, and theories too that can contribute to the betterment of teaching for all teachers". (p. 5)

Therefore, according to these authors, reflective teaching is not about a property of educative institutions, but it is rather an issue that takes part on the teachers' side. They face the challenges of providing successful and engaging lessons, so it is their responsibility to reflect about the different events that happen in their classrooms and to make decisions for future actions.

It should be also considered that the complexity of teaching is better understood by the teachers themselves as they are directly involved in the real classroom, and these perspectives and complexities cannot be totally detected by external researchers, no matter what methods of study are employed. For this reason, there is a need of including the knowledge of teachers and others who work in the educational research community. Schon (1983), states that the understanding of teachers as reflective practitioners involving their practices can be regarded as knowledge in action.

In addition, many years ago, Dewey (1933) recognized three attributes of reflective individuals that are still important for teachers today: open-mindedness, responsibility, and wholeheartedness. Farrell (2008) describes each of those attributes:

"Open-mindedness is a desire to listen to more than one side of an issue and to give attention to alternative views. Responsibility involves careful consideration of the consequences to which an action leads. Wholeheartedness implies that teachers can overcome fears and uncertainties to critically evaluate their practice in order to make meaningful change" (p. 1).

Thus, more than having the desire of reflecting, teachers must be equipped with certain specific values that help the reflective act to be successful. It is not only about reflecting and changing techniques for future actions, but also about thinking of how to react in those unforeseen situations.

Following the idea of the teacher as a practitioner, and taking into account those attributes that a good reflective teacher has, Farrell (2008) suggests two main forms of reflection: a weak form and a strong form. In its weak version, a reflective practice is said to be no more than thoughtful practice, where teachers, as Wallace (1991) suggests, "informally evaluate various aspects of their professional expertise" (p. 292). He informs that this type of informal reflection does not necessarily lead to improved teaching and can even lead to more unpleasant emotions without suggesting any way forward. However, a second, stronger form of reflection involves teachers systematically reflecting on their own teaching and taking responsibility for their actions in the

classroom (Farrell, 2007). Richards and Lockhart (1994) emphasize this stronger version when they say that teachers should "collect data about their teaching, examine their attitudes, beliefs, assumptions, and teaching practices, and use the information obtained as a basis for critical reflection about teaching" (p. 1). This latter type of a reflective teacher is no doubt the one that fits the most with the present paper, because it implies reflection on how the inclusion of English in the content classroom can benefit students' content learning..

The authors also explain that theory and practice are embedded in teaching, and there must be recognition of teachers as producers of theoretical knowledge about teaching through their practice. One of the practical theories that are mentioned is the one elaborated by Handal and Lauvas (1987), who describe three levels of practice that integrate teachers' practical theories and their actual daily action.

The first one is the level of action (P1) where the teacher carries out his lesson, explains, asks questions, gives assignments, monitors work and evaluates. The second level (P2) is planning and reflection in which teachers question their actions in the classroom, considering why they do what they do; it includes reflections on thoughts and preparation while planning, as well as reflections on actions after the teaching process trying to learn from those actions. Finally, the third level is the level of ethical consideration (P3), where teachers consider the moral and ethical basis of their actions, questioning whether they contribute to a caring classroom environment or not.

## 2.5. Analysing reflective practices

An additional definition regarding reflective teaching that is relevant to be included in the current study is the one proposed by Richards and Lockhart (1994), who emphasize on reflective practices in second language classrooms. The authors perceive reflection as the actions in which teachers and students collect data about teaching examining their attitudes, beliefs, assumptions, and teaching practices for using those data as basis for critical reflection about teaching. This will allow teachers to evaluate their teaching, decide if they need to change any teaching practice, develop strategies for change, and monitor the effects when implementing these strategies. The authors suggest six methods for reflecting and collecting data:

1. Teaching journals. Written or recorded accounts of teaching experiences.

2. Lesson reports. Written accounts of lessons that describe the main features of the lessons.

3. Surveys and questionnaires. Activities such as administering a questionnaire or completing a survey, designed to collect information on a particular aspect of teaching or      learning.

4. Audio and video recordings. Recordings of a lesson, or part of a lesson.

5. Observation. Tasks completed by a student teacher observing a cooperating teacher's class, or peer observation (i.e., tasks completed by a teacher visiting a colleague's class).

6. Action research. Implementation of an action plan designed to bring about change in some aspect of the teacher's class with subsequent monitoring of the effects of the innovation" (1994, p. 6).

In this sense, the process of critically reflecting on teaching requires to look objectively into teachers' practices and to reflect critically on what is discovered. This brings about the advantage of achieving a better understanding of own assumptions about teaching and specific teaching practices. The authors explain that "it can lead to a richer conceptualization of teaching and a better understanding of teaching and learning processes, and it can serve as basis for self-evaluation and is therefore an important component of professional development" (p.8).

As a conclusion, it must be argued that the inclusion of reflective teaching procedures in the current study are highly relevant due to the fact that they allow teachers to be more aware of their teaching practices for further changes that will eventually influence their students' improvement in learning. Moreover, the evidence collected from those reflections will help the researchers to have a better understanding of the perceptions that the teachers have towards the procedures being implemented in the classrooms, and that is exactly what is intended to explore in this study. Thus, the next concept that needs special attention is that of lesson planning in the sense that reflecting about the development of classes involves changes in further lessons carried out by teachers.

# 3. LITERATURE REVIEW

As reported by Graddol (2006), the idea of English as a foreign language is tending to disappear as this language is becoming more and more appealing worldwide. The author also suggests that as the importance of such language is increasing gradually, more new and successful methodologies should be used to teach English, especially in the higher contexts of education (2006). The same author argues that using CLIL for higher education to teach languages is becoming more effective worldwide since it is a new and flexible methodology that allows for the development of different cognitive dimensions in the learner, as well as the coexistence of several languages in the classroom. In this sense, Garcia (2009) states that one of the advantages of integrating the use of both the L1 and the L2 within the classroom is that it permits that the learners come to the classroom and use of a broader repertoire of linguistic features that, among other considerations, helps learners to understand and apply content subject matters more meaningfully.

Therefore, the studies mentioned here highlight the importance of using specific research methodologies to study how the English language is included in higher education in content subject matters and how students can be benefited from this practice. Some instruments that can be applied during the development of the present study are interviews, surveys, and tests. Moreover, general findings report that using CLIL and translanguaging within the classroom evidences a more meaningful and successful way to teach and learn languages at the tertiary level. Thus, focus is now turned onto the analysis of the state-of-the-art with regard to the theoretical concepts to be used in this study. First, two studies that focus on CLIL will be analyzed; and after that, two more studies related to practices of translanguaging will provide some examples of methodologies to be taken into account in the present research project.

Corrales & Maloof (2009) conducted a study aimed at investigating the effectiveness of CBI (Content-Based Instruction) on the development of oral communicative competences and the causes of this development on a Medical English program in an English as a foreign language context. The main objective of the study was to examine to what extent a semester of CBI instruction supported learners' ability to achieve communicative competences in a foreign language and how this was accomplished. Four instruments were used to collect data in this study: classroom observations, learning journals, surveys, and interviews. Regarding the procedures used in the study, a survey of the students' background in the use of English was firstly carried out. After that, four students from the whole group were selected and observed (with high, middle and low level of proficiency). These data were triangulated with information obtained from the learning journals. The participants involved in this research were 16 Colombian university students between the ages of 17 and 22 from various semesters in their academic medical program. Data collection occurred over a four-month period where learners from one section of level four of medical English participated in the study. This is because in the Medical English Program at this university the fourth semester is the first time students had received content-based instruction.

Corrales & Maloof (ibid) reported that the analysis of the results indicated that students developed their oral and discourse skills in English in a relevant, challenging, and meaningful manner since the approach implemented was based on the integration of language and content. Through these models, students were able to activate their prior knowledge, lessen anxiety, raise their self-confidence and become motivated towards language learning. The authors conclude by pointing out that Content-based instruction appears to be an effective language-teaching methodology for this context. Students are able to develop language skills at the same time that they review content. Finally, when learners focus on meaning rather than structure, they are less worried about making mistakes and concentrate more on expressing their ideas.

In contrast to Corrales & Maloof (ibid), Férnandez (2011) developed a study whose purpose was to compare integration (CLIL) and immersion based on an assessment of their efficiency at the tertiary level. Several data-collection instruments were used in this study: assessment questionnaires, academic evaluations, true/false exams and pair, oral presentations. Regarding the procedures implemented, the students were assessed and compared based on pedagogical practices such as lectures, academic activities, practice sessions, and exams. 102 students were analyzed for this project, and

they were divided into 3 groups. The immersion group was composed of 23 students receiving only instruction in the L2; the CLIL group was composed of 15 students for which the CLIL approach and the use of the L1 and L2 were implemented; and the control group was composed of 64 students. The Participants in this project included the students of the School of Psychology of the University of Granada (Spain) during the academic year of 2008-2010 who took the course Cognitive Neuroscience. Ages of participants were all in the range of 18-25 years.

Fernández (ibid) found that CLIL is an innovative proposal for the tertiary level and an approach that can be de-contextualized and then re-contextualized according to specific contexts and students' needs. The results also showed the academic convenience of the implementation of CLIL methodology as a compensation strategy for the loss of courses on English for Specific Purposes at the tertiary level.

Up until this point, two studies have been analyzed in terms of their relation with the teaching approach to be taken as examples for the development of this study. Now the focus is turned onto an exploration of two more studies related to the methodology of using both the L1 and the L2 in the classroom: translanguaging. Fortune (2012) analyzed current perceptions and practices in terms of L1 use among teachers and students in the EFL, and ESL settings, based on the hypothesis that the use of the L1 to some degree could be beneficial to EFL. The data-collection instruments used in this study were surveys, classroom observations and interviews. The procedure carried out in this study consisted of students and teachers surveyed in order to establish current perceptions and practices, which in turn would act as a basic needs analysis for any future action at the institution. In addition, three classroom observations were carried out aimed at analyzing translanguaging practices of both students and teachers. Students and teachers from the Universidad Externado, a private university in Bogotá, Colombia composed the participants for this study.

The author suggested that the findings confirm that L1 use could indeed be beneficial to EFL learners, particularly at the lower levels of language proficiency, but that teachers may need to revisit their reasons for using the L1, as well as their repertoire of pro-L2-use strategies. In addition, these results showed that despite of the fact that the study was executed in a private university, and the majority of Professors were English speakers, the use of the L1 was effective in many instances: when addressing academic issues, when taking notes. However, this use of the L1 was more evident at lower levels since students of the higher levels used the L2 even to take notes. Finally, the author also

pointed out that teachers should use more L2 teaching strategies to teach vocabulary, rather than translation strategies.

In the same line of Fortune (ibid), Mazak & Herbas (2014) examined the use of Spanish and English in college science classrooms at a land-grant university in Puerto Rico. The data-collection instruments that were used in this study were classroom observations, and interviews. The methodology that they followed was based on an analysis of 15 science classes in a range of scientific disciplines including soil sciences, biology, mathematics, engineering, and chemistry at the UPRM (University of Puerto Rico). They were observed using an observation protocol in which researchers recorded the language of activities, materials, and student note taking. Every observation was followed by an interview with the corresponding professor. Data were coded, organized and analyzed based on spreadsheets and using critical discourse analysis. The participants were students from 15 university courses on sciences. Of the 15 professors interviewed, 12 were Puerto Rican, one was Peruvian, one was Chilean, and one was North American.

The analysis of these studies yields the necessary considerations to be taken and applied by tertiary level educators for the English language teaching in higher education professional contexts, which is what the present paper is about. Thus, this literature contributes largely in the field of English language teaching at the tertiary level in the sense that it can be applied and contextualized to different contexts of education. Consequently, teaching a subject in the L2, as suggested by Corrales & Maloof (2009), can be very influential on the learners' use of oral discourse. Additionally, Fortune (2014) expressed that using both the L1 and the L2 in tertiary classroom helps students with low levels of language proficiency in the learning of subject matter.

Notwithstanding, some overall weaknesses of the existent literature need to be included in the present analysis. Being one of the most important of said drawbacks, the inclusion of the two productive skills (speaking and writing), is not evident in any of the studies analyzed. For instance, Corrales & Maloof (ibid) suggest that teaching content through the use of the L2 supports learners' achievement of oral skills, but they do not mention writing skills as well. Additionally, Mazak & Herbas (2014) exposed that using both the L1 and the L2 encourages learners to read texts in English and use L2 terminology to address specific content topics. However, the author did not mention the influence of the methodology on the learner's' use of oral communicative skills.

Fernandez (2011) explained that the main implications of the existence literature regarding the CLIL approach are: the limitations of the language to be learned regarding

the content to be addressed in class, in addition to the design of the input that is manipulated according to the context; and the mastering of the language and the knowledge of the subject into practice in order to put the language in function. Thus, the design of a cohesive program that covers the good planning and implementation of the teaching of both language and content is necessary. This in order to foster learners' development of language skills and subject learning. In addition, the inclusion of more new and effective strategies to develop students' writing and oral skills are also important, as a mere reading comprehension approach to learn languages is not enough if the purpose is to participate in the international ever-globalizing communication.

Overall, next steps for research will include an examination of learning standards for both higher professional education, as well as the language knowledge, both in the L1 and L2 that students will need to fulfill their academic needs. In the same line of thought, some future research will need to include a structured analysis on the use of both the L1 and the L2 for the teaching of content at the tertiary level. An additional step in research would involve the analysis of both learners and professors' perceptions on how the English language could be purposefully included in the tertiary education classroom. Consequently, in the present study, interviews will provide more considerations at the time of designing and planning for teaching language and content in higher educational contexts, as well as a critical position from the participants involved in the teaching-learning context.

The analysis of the studies mentioned above has provided the present research project with the necessary methodologies as well as lines of action to be included in its development. Focus is now turned onto the methodologies to be used when implementing the project.

# 4. METHODOLOGY

The purpose of this chapter is to fully inform the reader about the methodology under which the present study was conducted. More specifically, it will cover the type of study carried out, the context and setting in which it was developed, and the participants involved. In addition, the researchers' roles during the implementation of the study, and the methods used to collect and analyze data are to be explored. Finally, some specific ethical considerations taken by the researchers during the implementation of the study will be analyzed.

## 4.1 Type of Study

Due to the nature, as well as the steps followed during the implementation of the present study, this research project follows a qualitative research approach. The theoretical considerations that frame the present study focus on a qualitative design that, as suggested by Merriam (2009), seeks data on meaning that is linked to experiences. This conception is likewise related to Van Maanen's (1979) definition of qualitative research: he argued that qualitative research "seeks to describe, decode, translate, and otherwise come to terms with the meaning, not the frequency, of certain more or less naturally occurring phenomena in the social world" (p. 520). Hence, this study is qualitative because it covers an issue, and the use of data gathering as to understand and interpret the situation and finally arrive at a conclusion based on the interpretations that were drawn from the data gathered.

In addition to its general nature, the intention of this study is to use qualitative data instruments to collect data from the people directly involved and interpret such data not because of its frequency, but its contribution to the development of meaning from

setting. Merriam (2009) comments that studies done under this qualitative inquiry focus on "meaning in context, [that] requires a data collection instrument that is sensitive to underlying meaning when gathering and interpreting data" (p. 2). In this sense, because the researchers' intentions in the developing of this study are based on observations, perceptions, beliefs, thoughts, interpretations and conclusions, this qualitative type of research is adopted.

Additionally, the present research project is labeled as a case study because the underlying purpose is to get insight on the data that is gathered from a specific setting, or a "bounded system" (Merriam 2009). A bounded system is "a single entity, a unit around which there are boundaries" according to Smith (1978) cited by Merriam (2009, p. 40). Therefore, the present study is assumed as a case study since it has a limitation on the context, setting and population in which it is developed. In this sense, this study aims at describing the inclusion of English in an Internal Medicine course of a Medicine undergraduate program at a state university that is located in Pereira, Colombia.

A final distinction on the type of study that needs to be included in this chapter has to do with the individual nature of this qualitative case study. In this order of ideas, the present study is to be thought of as a phenomenon that is studied from the data recollected and the researchers' interpretation of such data. Hence, this type of qualitative case study is framed under an interpretive type of case studies, as suggested by Merriam (2009). Based on the above mentioned, it is pertinent to say that this study describes the inclusion of English in a medicine program at state university in Pereira, and the students' and teachers' responses towards such pedagogical methodologies. Thus the researchers' roles are concerned with the interpretation of the phenomenon by means of focus groups, interviews with the professor and students, and tests.

## 4.2 Context

This section presents relevant information about the context where the study took place, its location, type of institution, faculties, programs, teachers, students, etc. First, the university in which the study was carried out is a public, state university. The university holds a variety of undergraduate programs that are situated in 9 faculties: Faculty of Fine Arts and Humanities, Faculty of Environmental Sciences, Faculty of Basic Sciences, Faculty of Education Sciences, Faculty of Health Sciences, Faculty of Industrial Engineering, Faculty of Mechanical Engineering, Faculty of Engineering, and

Faculty of Technologies. Additionally, 32 undergraduate programs belong to these faculties ranging from technological programs, engineering programs, professional programs, and licenciatura programs.

Turning the focus onto the institutional population, the professorate is composed of 308 full-time professors, 196 transitory professors, 787 part-time professors, and 172 overload professors. Thus, the total number of inscribed professors teaching at undergraduate programs is 1463. Moreover, there are 17.613 students studying in undergraduate programs. The number of students per classroom varies according to each program, but in general, it can range from 15 students to 35, and sometimes more.

Concerning the university infrastructure and resources, the university has a total of area 501.214m2; and only 71.906m2 of built area from which only 31.181m2 is occupied. The university is located at the southern-east area of the city. Moreover, regarding economic issues of the university, $150.315.127.997 were spent in 2014. Moreover, the institution classifies its investments in four categories: teacher's consumption 78, 6%; extension consumption 14, 8%; investigative consumption 5, 5%; terrain 1, 1%. The university resources come from different sources: own resources 20.27%, student's tuition 21, 13% and state contribution 58, 6%

The study was narrowed to a single faculty. The faculty in question is health sciences, that counts with 600 students, 13 semesters. It also holds 58 professors. In terms of infrastructure, the faculty counts with a medical center where both academic and professional practices, as well as research are conducted. The students start their practicum from their fifth semester onwards. The students selected for this research are in their seventh semester. Finally, the professor oversees the internal medicine course which is taught at this semester.

## 4.3 Setting

This section contains information concerning conditions of both instruction and research practices inside the health sciences curriculum. Such conditions involve general curricular information, economical investments, and information about the professors' academic and professional practices.

The faculty of health sciences counts with 4 undergraduate programs, 11 postgraduate programs, and a Bachelor program. The program to which the subject matter that was studied in this research project belongs is the Bachelor degree in

medicine that, as mentioned above, lasts 13 semesters, and the students start practical and research practices from the 5th semester onwards. The students receive a major degree as General Practitioners in health sciences.

(to be discussed with thesis advisor after getting institutional permissions and deeper information).

## 4.4 Participants

In this section, we will discuss how and why the participants were chosen, and their academic background. The actual project is being carried out by students from an English Language Teaching program that attempt to gain insight on the analysis and interpretation of qualitative data from a specific population involving university students from a specific faculty in which English is not part of their language of instruction. The participants all share the same mother tongue. All participants belong to the same faculty and are taking the same subject. In addition, all participants have accomplished the requirements regarding the course of English carried out at the university .

The sampling was made in this way because, according to Lodico et al (2010), purposeful sampling should be employed in qualitative research because it allows for the selection of individuals with specific knowledge and characteristics related to the field of study. Merriam echoes this characterization of sampling highlighting that there are mainly two types of sampling: probability and nonprobability sampling. Probability involves selecting the sample at random, and non-probability, similarly to Lodico's conception of purposeful sampling, involves the answering of research questions, the interpretations of results and the sampling by choice rather than at random. Therefore, the present study makes part of the big umbrella term of purposeful sampling, which is concerned with the assumption that "the investigator wants to discover, understand, and gain insight and therefore must select a sample from which the most can be learned" (Merriam 2009, p. 77). In this sense, this study used non-probability sampling as randomness does not meet the conditions that were set in this specific case due to the nature of the research questions that were proposed. The participants were chosen because they fully met the conditions of the present study, and analysis of data and reflection are directed towards the insights displayed by this population.

In the following sections, characteristics about the Internal Medicine professor and the students are to be analyzed.

### 4.4.1 Internal Medicine Professor

One professor belonging to the area of internal medicine of the health sciences faculty, and who is likewise the coordinator of such area, participated in the development of the present study. The professor is a native Spanish-speaker who is a specialist in internal medicine and cardiology, and teaches at sixth and seventh semester. He is approximately between 48 and 55 years old. As his professional practices require, he has a B2 English level, meaning an independent user of the language.

### 4.4.2 Internal Medicine Students

Four students participated in the development of the case study. The students were in the same subject and semester; they also attended the subject of internal medicine with the same professor. The students' age is approximately between 20 and 23 years. All students have little differences in their proficiency of English level. Moreover, they accomplished the attainments required by the university in order to graduate, the course has 6 levels, and each level lasts 4 months. They all are native Spanish-speakers who have similar socioeconomic and academic backgrounds.

### 4.5 Researchers' roles

The researchers' role in this project is of non-participants, observers, which means that no implementation was carried out. They rather attempted to describe or diagnose the phenomenon that is been evidenced in a health sciences faculty of a State university.

As Hathaway (1995) described, quantitative research focuses on the objectivity; therefore, the researchers serve as detached observers and use a variety of instruments to attain the information that they need in the hopes of extracting something reliable in relation to what is investigated. Hathaway (1995) also stated that whereas to the quantitative researcher, the qualitative researcher is a participant during the process, he can carry out extensive interviews and observations. In addition, the researcher's analysis depends all from his or her prior knowledge so the results can be easily disclaimed.

In relation to the study, the researchers' follow a qualitative researcher's role since there is an interest to recollect as much data as possible to see in what grounds does the project stand in, and how reliable it can be regarding the professor and students' perspectives with the methodology that the professor implements.

## 4.6 Data collection methods

In this section, the different instruments used in the research are going to be presented. the purpose of collecting the data is to attempt and to make it clear to the reader how those methods were implemented.

Since in this phase of the investigation the focus is to describe the phenomenon that is evidenced in the faculty of medicine in a state university at pereira, in which the professor's uses academic readings in the field written in English with the students in a content subject matter. The data collection methods are used to collect data regarding professor's beliefs, attitudes, and perceptions towards the inclusion English during the students' professional development. Consequently, to obtain the required data the following instruments were used: a focus group, professor´s interview, and tests.

### 4.6.1. Focus groups

One of the methods that researchers are going to implement is focus group in the sense to answer the research question. Even though the question is based on students´ perceptions, this method according to Krueguer (2008) cited by Meriam (2009) is an interview with a group of people who have knowledge of a specific topic. It is a constructivist perspective because the data is constructed through social interaction. therefore, the main goal is to obtain students responses towards the phenomenon that they are exposed to. To conclude, the way that in which the researchers carried out the focus group is the following: participants are grouped in a round table in order for them to see each other faces and hear each order answers, and be able to discuss about it. The questions are addressed by the researchers regarding their perceptions, thoughts and beliefs about the inclusion of English in content subject matters in a medicine curriculum.

Having said this, as mentioned by Patton (2002) focus groups are different from interviews since the participants have to hear all the answers given by others and then comment their own perceptions based on what the others have said in regards to the topic. The main aim is not to disagree, but as Patton remarks (2002) it is to "consider other views in the context of the views of others" (p. 386). Following this line, the research wants to collect the students´ perceptions towards the inclusion of English in a content subject matter in a medicine program, in order to see how all students discuss

about their beliefs, thoughts and comments about the Inclusion of English in a content subject matter.

### 4.6.2. Interviews

The following instrument aims to answer the second question of this research study, which is aimed only to the professor's perceptions, thoughts and beliefs towards the inclusion of English in a content subject matter that he teaches. As Dexter (1970) cited by Merriam (2009), explains that interviews are common means of collecting qualitative data, and they are implemented when it is not possible for the researcher to observe behaviors, feelings or how people interpret the world around them. In other words, interviews are done in order to complement and obtain information that is not easy to observe so that it can serve as a bridge to fill the gaps of the data gathered through observations.

In this sense, interviews were carried out after the implementation process had finished. The purpose of this interview was to get an insight into the professor's experience through the implementation of academic readings in the field and the inclusion of English in general, how he felt and what he suggested in order to enrich this research. To conclude, as De Marrais (2004) cited by Meriam (2009) defines an interview is a "Process in which a researcher and participant engage in a conversation focused on questions related to a research study" (p. 55). Having this into account, the researchers took advantage of the interview at the outset of the study in order to provide this research with the professor's insights about the study.

### 4.6.3. Tests

Given the fact that most data collection procedures involve only the description of reality gathered by the researchers, it is necessary to include tests as a method for perceiving what students know in regards to content and language. Tests allow researchers to collect students´ knowledge and perceptions of the language. For this reason, the tests´ questions were open and close ended to facilitate gathering the information. Tests can take many forms as Westat (2002) explains:

> Tests provide a way to assess subjects' knowledge and capacity to apply this knowledge to new situations. Tests take many forms. They may require respondents to choose among alternatives (select a correct answer or select an incorrect answer or select the best answer), to cluster choices into groups, to produce short answers, or to write extended responses (p. 55).

In this order of ideas students were provided an article of internal medicine, and then a test with some open and close questions not only about the content, but also about the language.

Spalding (2004) argues that "reflective thinking is essential to identifying, analyzing, and solving the complex problems that characterize classroom thinking" (p. 1394), which means that tests enabled the researchers to understand classroom issues as perceived by the professors, and will allow researchers to draw conclusions that would be less biased. For this research project, tests were carried out with the objective of gathering information about how their language skills improved during their professional development, what aspects they needed to improve and how good were their reading comprehension in English; besides, how much they did know about the content itself.

## 4.7 Data analysis

For this research project, three instruments for data collection were used: focus groups, interviews, and tests. This information gathered is systematically analysed in order to allow researchers to develop theory. This methodology is called Grounded Theory and it was proposed and defined by Glaser and Strauss (1967), who stated in "Developing grounded theory" that current research mostly verifies or develops theory by logical deduction, and it allows guiding research on behaviour. The authors propose a set of procedures in order to develop a grounded theory, which is an option for qualitative studies analysis; furthermore, Glaser and Strauss state that coding and analysis need to be combined to help build grounded theory. This combination is called The Constant Comparative Method of Qualitative Analysis, and it involves four stages: comparing incidents applicable to each category, integrating categories and their properties, delimiting the theory, and writing the theory. These stages were not strictly followed in the same order for analysing the data of this project as they had to be adapted according to the emerging theory. The data analysis for this research followed this sequence:

1. *Transcription*: The information gathered through reflective logs and observations was at first collected in a handwritten way, and interviews' answers were audio recorded. For this reason, it was necessary to digitally transcribe the data in order for it to be easily coded, grouped, edited and shared.

2. *Comparing incidents applicable to each category*: As stated by Glaser and Strauss (1967), the data collected is coded into different categories that are defined according to the information being found, and then more information that fits is added in an existing category. After transcribing the information collected through tests, and interviews, it was read and grouped into categories according to similarities in reflection, subject or conclusion. Each piece of information being grouped needed to be assigned a code so researchers could have a reference of its origin in case it was necessary to be checked at a later stage.

   Following this, some codes were assigned for the data included information about the type of collection method initial, plus the type of population initial (teacher or student), and the item number (question, for example). For interviews, the obtained codes had this format: "IPS1"; here, "I" stands for type of the data collection method "Interview"; "P" refers to the "Professor"; the "S" is the initial of "Sample"; and "1" refers to the number of the question in which this piece of information is found

3. *Integrating categories and their properties:* Glaser and Strauss (1967) explain this stage as the constant comparative method that evolves by comparing incidents to focus on emergent properties of the category. Here, the categories were assigned a title which described a general idea of what that category was about, so it was easier for researchers to continue assigning the information to the existing categories if they fitted according to its similar characteristics. If an emergent incident did not fit in any of the existent categories, a new one had to be created hoping to find new incidents to support the category. When a group did not contain enough incidents, it was deleted. During the grouping process it was necessary to change the titles to fit the categories better, and those that were similar had to be combined and defined in more detail.

4. *Delimiting the theory:* in this part, the researchers continue to compare incidents and the theory solidifies as each time there are fewer changes to make to the theory. It becomes necessary to take out irrelevant properties of the categories, and integrate details of properties for reducing the number of categories. The theory is delimited with a set of higher level concepts, and then it is generalised when researchers start to make constant comparisons against it.

5. *Writing theory:* researchers started writing the theory when they felt capable to so, and were convinced that it was what should be written in the project. The titles assigned to the categories and their definitions will allow the researchers to write their grounded theory based on the data previously analysed; hence, it can be stated that it is an inductive

rather than deductive approach. In this sense, it was aimed to directly answer the research questions using this type of data analysis.

## 4.8 Ethical considerations

Some ethical aspects were considered during the planning, execution, and data analysis of the present study. Researchers based on the considerations established by Merrian (2009) to proceed the qualitative research case study, which will be described below.

In our case, data was collected through the means of three instruments: focus group, interviews and tests. For each of these, a permission from the state university was needed to implement the methods mentioned above.

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Additional ethical considerations were taken into account when analysing data and drawing conclusions. The first aspect considered was the *anonymity* of our participants. This was taken into account when transcribing raw data by giving every participant a "code", rather than using their actual name. Further considerations of *confidentiality* were taken by not allowing anyone, other than the researchers, access the raw data collected, only they had access to observation and interview recordings. In terms of the actual analysis of the data, researchers had the responsibility to ensure to be objective, not allowing personal bias to be involved in the process; having in the findings both *validity*, and *reliability* as mentioned by Merrian (2009) "ensuring validity and reliability in qualitative research involves conducting the investigation in an ethical manner" (p. 209). As the author says regarding these two principles are concerns that should be taken into consideration when data is analyzed, collected, and interpreted and how the findings of a study must be displayed. By doing so the research study demonstrates discernments of truth to the readers.

Lastly, it is appropriate to mention all participants were notified that the official analysis of the data will was published as a public document, which is available to all those involved, as well as the general public.

# 5. FINDINGS AND DISCUSSION

It is now time to examine what the use of the different data-collection and interpretation methods provided the researchers with in the attempt to answer the research questions that were set for the present study. In this section, both the professor and the students' perceptions will be considered, described, interpreted, and supported by theoretical considerations about the inclusion of the English language in an Internal Medicine course from a medicine undergraduate program at a state university, and conclusions will be drawn based on this data analysis.

In this chapter, two findings will be analyzed on the grounds of the data gathered from interviews with the professor and a focus group with the students of an internal medicine course in a medicine undergraduate program, as well as a reading comprehension test that the students took to assess both their ability to understand content-related concepts and linguistic features. The purpose of this section is to answer the research questions that were provided at the beginning of this paper. The data gathered provided the researchers with insights to explore the inclusion of English in content subject matters from a medicine program at a State University in Pereira.

## 5.1 PROFESSOR'S PERCEPTIONS TOWARDS THE INCLUSION OF ENGLISH IN CONTENT SUBJECT MATTERS OF AN INTERNAL MEDICINE COURSE FROM A MEDICINE UNDERGRADUATE PROGRAM AT A STATE UNIVERSITY

Nowadays the inclusion of English at university-level classes has achieved high prestige. Its importance is perceived in the several ways in which it contributes to the learning of content and linguistic knowledge, as well as motivational factors that the methodology can trigger in both students and professors. In this case study, the professor identifies a relation between language and use describing how students are often exposed to English because of mere academic requirements for professional growth. In addition,

the professor points out that the students' responses to this methodology is positive and in this sense, he recommends other practitioners to include English in their lessons. The following samples from an interview with the Internal Medicine professor and its corresponding analysis confirm what has just been mentioned.

One of the first comments by the Internal Medicine professor shows his insights on the importance of the inclusion of English in the health sciences curriculum. He suggests that there is a specific type of academic English, which he refers to as "scientific English", and that the inclusion of English in students' academic subject matters can be advantageous for students. The following excerpt from an interview explores this comment in detail:

> **[IPS1]:** *Entrevistador: ¿para usted qué papel juega la lengua inglesa en un currículo universitario de medicina?*
> *Profesor: es fundamental…yo creo que sí, el inglés científico es muy importante y es una forma de que ellos aprendan y se familiaricen con el inglés.*

The Internal Medicine professor points out that the students can benefit from using the English language in their academic program since they are exposed to a "scientific English" which according to him is easier for the students to understand since they have been exposed to it as required by their academic field; thus, it is a good way to bolster learning and get more acquainted with the language. He departs from suggesting that English plays a fundamental role in the Health Sciences curriculum to considering the importance of a specific type of academic English, which he refers to as "scientific English". In this sense, the professor establishes a connection between the role of the English language at the curricular level and how "scientific English" is an important area of knowledge that students are usually required to be equipped with. Moreover, the professor also suggests that because of the importance and nature of this specific type of academic English, the students can be benefited and thus contribute to their overall learning process. This is because, according to the professor, "scientific English" is a good way for students to familiarize with the language in the sense that students are constantly exposed to readings in English.

In relation to the previous interpretation, Graddol (2006) remarks that scientific communication occurs mostly in English, and that this has led to a notorious appropriation of editorials, databases, and other essential resources in the hands of strong universities and a few multinational enterprises that belong almost exclusively to a developed world. Hence, the accomplishment of the attainments in the Internal Medicine

course go hand in hand with the effective inclusion of the English language in the Health Sciences classroom. This is done in order to provide the students with insights in relation to the academic language resources that they will need for their professional development. Moreover, Graddol (2006) states that universities are the stakeholders in providing the students with educational opportunities to participate in this ever-globalizing world, and he adds that English plays a key aspect in this process. This, therefore, provides this research project with an overview of the role of the English language in a health science program, and the advantages that the inclusion of English in content subject matters can bring to students in the tertiary education.

In the same line, the participant adds that there is a connection between the English language and what students do with it, or a connection between language and use. This is supported by the following excerpt from an interview:

> **[IPS2]***Profesor: yo pienso que el inglés médico, el inglés técnico de nosotros es un inglés relativamente sencillo. Yo no considero que haya dificultades en el entendimiento del inglés por parte del estudiante cuando se hace una clase, o se dicta una clase, o un seminario porque el inglés médico, pues es un inglés técnico donde es relativamente fácil de entender.* [UU1] *La gran mayoría de los estudiantes deben o tienen que leer el inglés durante la carrera ya sean artículos de revistas, de libros, etc…*

From this comment, it is evident that now the professor attempts to narrow the importance of the English language to the idea of "medical English", which is considered as the type of scientific English that is inherent to the health sciences field. Moreover, the professor argues that what makes this specific type of academic language easy to understand and learn is that it is a rather technical language, which means that it is a particular type of English that has characteristics that are only integral to a specific area of knowledge, which in this case is health sciences. Having said this, the professor adds that medical English is relatively easy to comprehend and assimilate. The professor also argues that the understanding of this specific type of English is easy to digest during a conference or a class due to the students' exposure to it throughout their professional development, thus reinforcing his perception of English as fundamental in the health sciences curriculum. In this sense, the professor establishes a relation between language and use, which relies on how the Internal Medicine students are required to be able to read magazines, articles and book articles that are always in English.

Therefore, on the grounds of these data, this constant interaction between learners and scientific English is perceived by the professor as one of the reasons that medical English does not represent difficulties for students. In this sense, McDougald (2009) explains that the education in general in Colombia is more interested in what the students can do with the language rather than just teaching it, so as a result the students are more engaged if they are given the necessary academic language resources in order to comprehend academic materials or as the professor determines, "scientific English", rather than just teaching the English language for communicative purposes; however, not undermining the fact that it is also pertinent for the students. Therefore, this data proves that the students deal with not only the understanding of the English language, but the appropriation of "scientific English", which plays a major role in their academic field and professional development. The language is therefore used more purposefully than just using it for general communicational aims.

As for the students' response to the inclusion of the English language in the Internal Medicine content subject matters, the professor mentions that it is an innovative and motivational practice. He states that his students have responded positively to his methodology and that it represents a breakthrough in the institution itself, a State university, thus recommending the inclusion of English in the medicine classroom to his colleagues. The professor states this in the following excerpt from an interview:

> **[IPS3]:** *Entrevistador: ¿cuál ha sido la respuesta de los estudiantes hacia la inclusión del idioma inglés en sus clases?*
> *Profesor: muy buena… yo pienso que el dar una clase en lengua inglesa pues [la hace] más innovadora y en este momento pues hace que el estudiante le ponga más atención, que el estudiante se motive un poco más por el tema que se está dando porque es algo innovador... que en una universidad como estas, pues se dicten clases, o seminarios en otro idioma en este caso el inglés…[aunque] la gran mayoría de mis clases son en idioma español, el propósito es pues porque ésta es una universidad con tendencia a ser bilingüe pero en el momento es fundamentalmente de lengua castellana.*
> *Entrevistador: La última pregunta sería: ¿qué consejos le daría a un colega que quisiera incluir el idioma inglés en sus clases?*
> *Profesor: que lo haga.*

According to the professor, the effectiveness of the inclusion of English in the Internal Medicine classroom has to do with the fact that receiving a class in English is something that the students have not experienced before, and so it would involve

breaking paradigms and establishing innovative ways to deliver classes. He argues that because of the innovative nature of this practice, the students are more engaged in the class and thus pay more attention to the contents being analyzed. In this sense, the professor establishes a relation between the use of the English language in the classroom not only for the students' learning process, but also for general motivational aspects. However, he also states that although the university has a bilingual tendency, something considered by Graddol (2006) as an increasing phenomenon, Spanish is the language of instruction and this does not allow him to give all his lessons in English. He rather gives few lessons in English, but the rest of his classes are given using Spanish. In addition to this, it is evident that the professor does not use a specific methodology in order to include the English language, but rather includes the language according to the students' abilities. Finally, when asked if he would recommend other colleagues to include English in their classes he would definitely say they should do it.

With regards to what has previously stated, Coyle (1999), (2007) explains that the use of innovative methodologies such as CLIL can bolster students' motivation since students do not have the pressure of learning additional content, but reinforcing previous concepts, so the professor echoes this when he highlights that the students are more interested when the class is given in another language. To conclude, the information given here enriches this research by providing more insights in how the students are more motivated with the inclusion of the English language during their professional development; moreover, this data clarifies that there is not a standard methodology regarding the implementation of the English language, thus opening the debate for the inclusion of an innovative methodology in a health science program and how professors are aware of this issue..

However, regardless of the professor's perception towards the university's bilingual tendencies, he suggests that if the university dares to foster the inclusion of English at the instructional level, it is fundamental to start thinking about how to include the language particularly in the content-related lessons. The following excerpt from an interview thus corroborates what has just been described:

> **[IPS4]**: *… casi que de todos los colegios privados, pues, son bilingües aquí el Liceo Inglés, el Liceo Francés por decir dos de los colegios, en el Liceo Francés hablan perfecto francés. Yo sé que en Bogotá en el Andino hablan perfecto alemán… bueno muchos colegios donde hablan perfecto la otra lengua, ojalá pudiera ser así esta Universidad, Una universidad bilingüe, donde se le exigiera*

*al estudiante y al profesor, pues lo que tú dices, dictar sus clases en inglés, o por lo menos si no todas, un porcentaje importante de ellas.*

It is crucial to emphasize here that the professor now moves from stating that English is essential due to the scientific literature that students interact with sharing specific considerations to make the inclusion of the English language inside the medicine classroom possible. In this comment, the professor compares the university's linguistic policies with other educational institutions where students achieve linguistic mastery in two or three languages. He highlights the lack of focus that the university has towards the English language. Thus, the professor identifies an instructional necessity in relation to the use of several languages inside the medicine classroom. This can be perceived as a way of providing students with equal opportunities in the search of globalization. In relation to this, Graddol (2006) explains that if an institution wants to become a center of international excellence they must adopt the English language as a medium of education, an institution that requires from both the teacher and students to master a second language, so as a result the institution in question has to start training teachers in order to cope with the pertinence of the students' professional growth. This, therefore, evidences the issues that the institution has to encounter in order to become a center of international excellence, and how to start demanding not only from its students, but from the professors as well since it cannot only focus on one of its population and pretend that the students by themselves will achieve the attainments required by the program.

In the same way, the professor goes further to bring into account specific examples of the different scenarios where he himself has been required to use English for different purposes, and how this has given him insight for arguing that professors need to receive training on how to effectively use the language to participate in different academic gatherings. The following excerpt from an interview with the Internal Medicine professor corroborates the previous comment:

> [IPS5] *Una cosa que siempre me ha parecido fundamental es que se capacite a los docentes, sobre todo, y a los estudiantes en dictar charlas, o conferencias en inglés… y estar en capacidad de poder responder preguntas que le haga el auditorio en inglés… ¿por qué? Porque nos va a tocar y nos ha tocado dictar charlas en inglés en Estados Unidos, en España, en Perú, en Brasil, en México… [una cosa importante] es capacitar a los docentes en poder responder las preguntas que le haga el auditorio en inglés.*

The Internal Medicine professor hereby emphasizes that it is vital to train professors to be able to give academic speeches in English. Even though students are also considered here to be able to do it, he says that professors should be the starting point due to the academic demands they should respond to. To justify this, the internal medicine professor recalls international academic encounters to which he himself has been invited and in which English has been the language used to both give the conferences and answer questions raised by the audience. In relation to this, Graddol (2006) argues that universities that are institutions of excellence attract professors and researchers from all over the world to enroll them in their academic encounters. To that end, the professors are required to use English in different academic settings. In this part, several Spanish-speaking countries are mentioned as examples where academic conferences have been held but where English has been used exemplifying the fact that the institutions of excellence are focused on using English as their language for communication. It can be concluded that English is perceived as the language of scientific communication, or, for this specific case, the norm for international academic speeches about health sciences matters. Finally, this exemplified how pertinent the mastery of the foreign language and the exposure of the content is for an undergraduate student and a professor from a health science program.

Overall, the professor highlights the importance of the inclusion of the English language in the curriculum of medicine not as a subject to be taught, but as an additional component of the Internal Medicine curriculum. This is echoed by Garcia (2009) who explains that bilingual education does not focus in the acquisition of another language; it rather provides fair education in order to create global students and responsible citizens. The professor also highlights how pertinent it is for the students and professors to master the English language in order to be able to use the language and the knowledge acquired during their academicals processes. In the other hand, the students play a fundamental role in the inclusion of English because of the fact that they are required to start using the language more meaningfully, and not just in order to communicate but giving more academic resources to comprehend and to be more in contact with their academic field. Finally, the professor highlights his desire to implement bilingualism at the university since in order to achieve higher academic results in the program of medicine it is pertinent to implement English as a medium to achieve the knowledge of the content subject matters; moreover, the professor implies the desire of being out looked by other

institutions in order to attract more people to take courses, and dictate conferences at a state university in Pereira

## 5.2 STUDENTS' PERCEPTIONS TOWARDS THE INCLUSION OF ENGLISH IN CONTENT SUBJECT MATTERS OF AN INTERNAL MEDICINE COURSE FROM A MEDICINE UNDERGRADUATE PROGRAM AT A STATE UNIVERSITY

Having already explored what the professor has to say in terms of the inclusion of English for academic purposes in the Medicine curriculum, it seems just right to advance on what the students perceive towards this practice. The purpose of this section is to use the data collected from both a focus group interview and a reading comprehension test applied to the students in order to explore their views as well as their content and linguistic comprehension capacity when it comes to content matters that are directly related to their academic fields. This careful analysis of data will provide the present study with key interpretations towards what the inclusion of English in the Medicine curriculum involves from the learners' perspective, and how their perceptions relate or not to what theoreticians have to say about this bilingual practice. Finally, yet importantly, this section will contribute to the understanding and answering of the research question that was set for this study.

The actual finding will be divided into 2 sub findings based on a categorization made with regards to the 2 general ideas that the 4 students who were interviewed proved to agree with. First, from the students' perception, it seems evident that in order for the inclusion of English in an Internal Medicine course to be effective, instructional as well as structural or institutional policies within the Medicine program should be considered. In the second place, the students somewhat agree with the professor's perceptions in the sense that they also consider English as something relevant for their academic fields. It is now time to explore each of these sub findings in detail.

## 5.3 CONSIDERATIONS TOWARDS THE INCLUSION OF ENGLISH IN AN INTERNAL MEDICINE COURSE

It is crucial to know that in order to effectively include English in the Medicine curriculum, both professors and stakeholders must consider the policies that will guide their bilingual practice. In this sense, from the students' perceptions, both instructional as well as structural, or institutional issues must be addressed before attempting to include the English language in the Medicine undergraduate curriculum. According to the students, these aspects range from policies regarding bilingual aims, or more specifically in relation to the reasons surrounding the inclusion of the language at the higher educational level and how instructional practices adhere to this rationale. The students also recognize the importance of developing language skills more holistically and how the professors' professional development plays a key role in the issue at hand. The following excerpts from a focus group interview with students from the Internal Medicine course thus corroborate and explore these perceptions in more detail.

First of all, the students remark that there is a necessity in terms of the general bilingual aims of their program. They say that the inclusion of English should have a real focus related to their academic fields and that the way they are currently being taught the language is rather decontextualized. The following excerpt explores the students' comments when asked if their program requires a specific focus in the English language:

> *[FGIS1] Estudiantes: -Sí, por las mismas razones que hemos dicho, que muchas de los libros, muchos de los artículos están en inglés. Entonces si se necesita, de verdad es como una necesidad.*
> *-Pues yo considero que la segunda lengua que estamos viendo está totalmente mal enfocada… O sea, yo considero que nosotros tenemos que ver una segunda lengua, pues como requisito para graduar[nos], y necesitamos pues un nivel, pero lo que nosotros vemos de inglés es como muy conversacional; o sea, muy de cosas que de pronto no es lo que nos va a servir a nosotros en la carrera. Entonces pues en ese sentido si se está desaprovechando esa oportunidad, entonces lo que nosotros vemos del inglés científico y lo demás es empírico.*

The students express the need of a focus with regards to the English language in the Medicine program due to the fact that the instruments that are used in the subjects and the materials that the students are exposed to are almost all written in English, a current phenomenon pointed out by Graddol (2006) and Garcia (2009). One student then highlights the necessity of having to know English as a second language, and he is endorsed by another student who states that the current English language instruction within their program is not aimed towards the real needs of their academic fields. In addition to this, the same student continues explaining that the English language is more an obligation and that a certain level has to be achieved by the students as a requirement

to graduate, meaning that it is not seen as an academic resource for their professional growth, but a mere attainment that students have to obtain in order to culminate their academic program. The student finishes adding that they are exposed to a certain amount of English, but not as a complement for their academic program, but as a mere teaching of the language which is aimed towards achieving basic communication competences rather than a structured instruction in terms of the academic resources required by the students during their professional development. The student concludes by highlighting the lack of contextualization and the waste of opportunities to come into terms of instructing the pertinent academic resources of the language in order for students to have a formal academic formation towards the language and not an empirical learning.

In relation to the previous data and interpretations, it is evident that from the students' view, there is a lack of a purposeful methodology that really contributes to the students' needs in term of how and what for they learn English in their program. As an illustration of this lack of purpose at the tertiary level, Tarnopolsky (2013), when speaking of ESP, exemplifies the issue and suggests that the problem with this approach at this level is that the students end up learning the language for general professional communication settings and they are not provided with the specific academic language and opportunities that are required to really and purposefully use English. In this sense, there is a need of a dual-focused methodology that allows higher education students to learn the language both for general communicational needs and specific, academic purposes. It is in this sense that CLIL, according to Marsh (2001), can be regarded as an effective teaching methodology that involves teaching a language by means of a specific content and vice versa; that is, one process supports the other. According to Marsh (ibid), this increases achievement by students in both the language and the subject being taught as it improves their confidence due to the fact that they feel they are learning more than language-related topics. All things considered, the students express a need that relies exclusively on the effective inclusion of a language instructional methodology that allows for the learning of both language for general communication purposes as well as the academic language that Medicine students need to be equipped with in order to participate in the international scientific community.

Coupled with this "defocused" way of including the English language in the Internal Medicine classroom is, from the students' viewpoint, the absence of an instructional methodology that helps them develop their language skills more holistically; in other words, they express that they need to develop the 4 language skills, not only

reading and writing as it is generally thought. The Internal Medicine students were asked if the inclusion of readings in English was enough in their medicine curriculum, or the inclusion of the four language skills [speaking, writing, reading and listening] was needed as well. The following excerpt from a focus group interview deepens into what is mentioned here:

> **[FGIS2]:** ***Estudiantes:*** *- Yo considero que son importantes las 4, obviamente las más más importantes pues leer y la escritura si uno va a desarrollar artículos, pero ya dependiendo del enfoque, si uno va a desarrollar presentaciones, o congresos. Pero digamos que lo que más uno necesita es la lectura, que es lo más diario, y la escritura si uno se va a dedicar a escribir artículos o cosas así*

One of the student emphasizes that they need to learn the 4 language skills although reading and writing are more important for their professional fields, particularly talking about the need they as Medicine students have in terms of scientific writing (articles). The student advances saying that the importance given to each language skill at this context depends on what the language will be used for, or the "focus", which can be scientific reading and writing, or presentations or conferences. In this sense, it is evident that the student recognizes that scientific communication is merely, or almost completely done in English. This is because he identifies specific scenarios where the English language, and its 4 skills holistically integrated, are required to participate in the international scientific communication. Nevertheless, he concludes by highlighting the usefulness and importance of reading and writing in their program over the other skills since they are exposed daily to them in the academia. From these comments, it is evident that reading is the ability that Medicine students develop the most in their academic fields. However, as scientific communication is almost entirely developed in English, the students should be able to participate in international conferences or presentations in which the context itself will require for them to master the four language skills deliberately, in a more holistic fashion.

In the light of this data, Corrales & Maloof (ibid) express that when the 4 language skills are included in an integrated manner in the tertiary context, the students will be able to activate previous knowledge, lessen anxiety, raise their self-confidence and get motivated towards learning the language. In addition to this, they express that when the 4 language skills are included in the tertiary education classroom, language learning becomes more relevant, challenging and meaningful for the students. Corrales & Maloof (ibid) also highlight that a language teaching methodology that integrates the learning of both content and language appears to be an effective one for this context and

the conditions surrounding it, as well as for introducing the 4 language skills at the same time that the students review content related to their professional fields. As can be seen, if the purpose is to have Medicine students effectively using the English language in their academic program, there is a need of a teaching methodology that allows for the inclusion of the 4 language skills and the teaching of content and language at the same time, which will lead students to learn the language more meaningfully, and even contribute to handle affective factors influencing their learning process.

With the previous analysis in mind, it is now pertinent to explore the general conditions under which learners expect to receive instruction in English in their Medicine program. When asked how they would feel like in a class that is totally delivered in English, the students argue that the most important thing to think about is the professors' linguistic level, and how this might impact the students' learning process. The following excerpt from an interview and the interpretations below it explore these comments more deeply:

> **[FGIS3]: Estudiantes:**-*Depende de la destreza que también tenga el docente porque hay veces que tienen que dar muchas ideas y… o sea dar explicaciones de una manera que uno las logre entender. Pues son cosas complejas y un docente que se enrede mucho pues ahí también lo acaba de enredar a uno, pues tiene que ser uno que tenga buen dominio de inglés...es mucho más diferente ir a leer un artículo que uno tiene mucho más tiempo que a una clase que todo es así de corrido, se pierde uno en una cosita y ya….*
> *-Eso mismo estaba pensando yo, o sea si son nuestros profesores que de pronto no sean los mejores en inglés, pues puede que sea que nos esté confundiendo más si la dan en inglés que en español.*

The students express that their comfort in a class that is given in English depends on the ability that the professor has to deliver the lesson, especially when the practitioner has to express many ideas in a way that the students can understand. Additionally, some aspects have to be taken into account when a class is given in English: the topics might be complex, the professors have to explain many ideas inside a topic, and the mastery of each topic also comes into play in terms of the professor's knowledge and preparation. Moreover, adding to all this, if the professor does not have a mastery of the English language, it would be hard for the students to fully understand what is being taught. It follows that the students remark that time constraints is another important aspect when being in a class as they explain that keeping the engagement during the lesson is crucial because the complexity of such topics require a more straightforward process such as reading. Likewise, one student argues that if the professors do not master the language,

the students would not comprehend the topics. The students then conclude by saying that the lack of knowledge in regards to the English language by professors could cause the worsening of the students´ understanding.

In this sense, it is very important to consider that the professor's professional development plays a major role if English is to be included in the Internal Medicine curriculum. This not only relies on the professor's linguistic performance, but on other instructional aspects such us: the mastery of the content being analyzed, the ability to deliver complex ideas in an understandable way, and general motivational issues that students consider as important. The students point out that it is not only enough with knowing the language for general communication purposes, but the professor needs to have mastery of academic language, or CALP (Cognitive Academic Language Proficiency) (Cummins, 2000), which requires from the professor to convey complex meanings through the use of academic language. In other words, if teachers need to explain complex ideas of their area of knowledge, it is not enough with just using the BICS (Basic Interpersonal Communicative Skills) (Cummins, ibid), but a much deeper knowledge of the technical language that is necessary to do the task will be mandatory. In relation to this, and to the students' engagement, Marsh (2002) remarks that motivation and encouragement are essential when delivering CLIL lessons as students should feel they are using the language for real and in a purposeful way. In brief, the students recognize that when including language and content inside the Internal Medicine classroom, the professor should have a reasonable mastering of both content and content-related language, not only language that is used for general communication purposes.

Under these circumstances, it is evident that the students are aware of the fact that stakeholders and professors in general should consider several issues before attempting to include English in the medicine classroom. This is because as the methodology used to include the target language in the classroom should include both content and language in this specific context, policies regarding bilingual aims, learning conditions and professors' preparation must be considered before embarking on this practice. To put it more simply, the students consider that they would feel they are learning, and learning in a comfortable way, when the lessons match their needs in relation to their specific area of knowledge and professors are prepared enough in not only content, but language and methodological issues for delivering lessons in a foreign language. All of this should be considered as important in the Medicine tertiary context since the students themselves emphasize that English can be advantageous for their

professional fields. It is in this sense that focus is now turned onto the different perceptions that the students have towards the reasons for considering English as pertinent in their academic program.


## 5.4 THE INCLUSION OF ENGLISH IN AN INTERNAL MEDICINE COURSE IS ADVANTAGEOUS FOR THE STUDENTS' ACADEMIC FIELD

Together with the previous students' perceptions towards institutional and structural considerations encompassing the inclusion of English in the Internal Medicine classroom, are their comments on the importance of English itself in their academic lives. In like manner, the Internal Medicine students match the professor's perceptions on how English is important for Medicine students. The students argue that "scientific English" is relatively easy to understand, instruction in English is necessary for the academic demands of their program, English is very important for their professional fields, and motivation is usually raised when English is purposefully used in this context. With this in mind, it is now pertinent to move onto analyzing the several comments and interpretations that can be drawn from the students' answers to a focus group interview on this issue.

Clearly, the students share similar perceptions with the Internal Medicine professor when they highlight that "scientific English" is basically easier to understand than other types of English. In this way, the students also recognize that their academic field requires from them the mastery of a specific type of English. The following excerpt from a focus group interview corroborates and deepens into this comment by exploring the students' answers when asked if they were able to learn new concepts relevant for their professional fields when exposed to materials in English:

> *[FGISI1]: Estudiantes: Pues no  sé, la verdad no sé, pero uno tiene más vocabulario en inglés*
> *- Esa es la cosa, uno ha cambiado y ha mejorado porque uno sabía pero, los artículos tienen mucho contenido científico, y uno va aprendiendo mucho. Entonces ya es mucho fácil leer un artículo que ya entiende muchas más palabras a cuando uno leía al principio que uno no sabía.*
> *--Si, de pronto en ese sentido si, como más vocabulario científico...[además] La diferencia es que yo leo más fácil los artículos, pues si ponen los artículos en inglés  no se me dificulta mucho leer. Tal vez al inicio de la carrera si se me dificulta, tal vez un poco, pues más que en este punto.*
> *Entrevistador: bueno, ¿Se siente usted motivado cuando las lecturas son en inglés?*
> *Estudiantes:*
> *-A mi si*

*- Sí, cuando las lecturas son en inglés y las entiendo sí.*
*- Si*

As the students explain, there is an overwhelming use of "scientific English" in the instruments that they are exposed to in their professional experiences. Along similar lines, the students argue that the understanding of these materials becomes easier after they have gone through a reasonable process in their academic program rather than at the very beginning. In addition to this, one student remarks that there is an improvement in the recognition and appropriation of "scientific vocabulary", which can be paraphrased into "scientific English". From this, it can be argued that exposure to "scientific English" does improve students' conceptual knowledge. Having said this, another student reasserts that the reading of such instruments can be more suitable for his comprehension regarding his own learning style, and his exposure to "scientific English"; however, he highlights that it has been a procedural process rather than a oneself ability. Finally, the students share their perceptions towards such materials being used in their academic fields arguing that generally speaking, when readings fit their comprehension levels, they feel motivated to explore literature of their academic program in English. On the basis of this evidence, the students, just like the professor did previously, recognize that there is a direct relation between language and use, and that one benefits from the other. Hence, when the students are exposed to materials in English, and when such materials are appropriate and meaningful for them, motivation can be raised.

Coyle (2007) contributes on this when talking about CLIL and motivational factors at the tertiary level. The author explains that when both content and language are included inside the tertiary classroom, motivation can be raised and thus student independence can be triggered as well as positive attitudes towards learning the language. The author adds that the reason for this methodology to be such an effective one in terms of motivation and content and language learning improvement relies on the fact that the students do not feel the pressure of learning additional contents in a target language, but they rather feel they are reinforcing previous knowledge and drawing on new knowledge relevant for their professional fields. In short, the students establish a relation between language and use and express that the appropriation of this relation in their particular levels provides them with more motivation and engagement, and that the process betters as they interact more with "scientific language". All in all, there seems to be an everlasting, beneficial relation between language and use, and Coyle (ibid) argues that this is something that characterizes CLIL, which involves the relation between language

and content, and how one learning process benefits from the other. In this sense, in conceptual terms, and to put things in a simpler way, content and use can be regarded here as one single entity: it is the purposeful manner in which language is used so that students can improve their academic-related knowledge as well as their linguistic knowledge itself.

A final consideration by the students, and one which has been overanalyzed in this paper, is the importance of the English language for undergraduate Medicine students. It is pertinent to finish the discussion of these findings by analyzing this aspect since the students themselves are the ones who have critical criteria to comment on the importance of English for their programs. When asked about how important English is for an undergraduate medicine student, the students emphasize that it is of crucial importance, and they restate something that in like manner has been repeatedly mentioned in this paper: almost all scientific literature there is is in English, and it would take some time for them to get informed on upgrades of scientific literature in Spanish. The following excerpt from a focus group interview analyzes this aspect in detail:

> *[FGISI2]: Estudiantes:*
> *- Demasiado diría, toda la literatura importante está en inglés.*
> *-Sí, la mayoría de artículos actualizados están en inglés.*
> *-los libros actualizados*
> *-Y se demoran unos dos años en salir en español y dos años es mucho.*
> *Entrevistador: ¿Qué idioma es más importante en la medicina: inglés o español?*
> *Estudiantes:*
> *-El inglés*
> *-El inglés*

Just like the professor does in his interview, so the students acknowledge the importance of English over other languages in the international scientific communication. They likewise remark that scientific literature, in specific, is almost exclusively in English, ranging from articles to even books about this area of knowledge. They also point out that the reason why English is imperative in their area of knowledge is because scientific literature is constantly being updated and the translation of this literature into Spanish can take years. From this analysis, it is evident that English is of crucial importance for Medicine students and that there is no other alternative than getting acquainted with it in order to participate in the international scientific communication.

According to Graddol (2006), the factors influencing the rise of English as the most important language in the world for scientific and academic communication in general have to do with the fact that the most influencing universities around the world

use English as the language of research and instruction. In this sense, both Graddol (2006) and Garcia (2009) emphasize on the need of more 21st century-like methodologies to teach the language in the ever-globalizing world. These methodologies, according to the authors, have to allow students develop several competences, not only the linguistic knowledge as it is expected with a traditional language teaching methodology. More specifically, the authors suggest that when the needs of the modern world are to be met, the students should be instructed in both language and content, and that the content should be relevant for their academic fields so that both motivation and self-efficacy are boosted inside the Medicine classroom. Therefore, in the present study, the need of a dual-focused methodology has been found as necessary to address Internal Medicine students' needs in terms of English language competences. For Graddol (2006), Coyle (2007), and Garcia (2009) an ideal language teaching methodology that can meet these needs is CLIL, which provides students with purposeful and meaningful learning experiences in which both language and content are boosted and motivational factors are impacted as well.

In order to solidify students' previous statements with regards to how scientific literature, and the inclusion of English in their academic field [books, journal, magazines, etc], have enhanced their language skills as well as their content knowledge, it is pertinent to show the tests that were carried out by the researchers in order to enrich this research with students' performance during the data collection process.

The students in question participated in the development of the following content and language test (image 2), that was carried out during the month of June of the year 2015. The test was separated in two different columns which correspond to content and language respectively. The main aim of the test, as Westat (2002) explained, is to assess how the students' assertiveness is in regards to real situations that they have to deal with in real life such as: reading from medical journals to be informed of up-to-date methods, thus giving insights to the research on the students' amelioration of their academic process. The test consisted on two pages, one page corresponding to the scientific literature that the students have to analyze, in this case a journal of medicine (image 1). The second page corresponds to the comprehension questions, which are distributed in multiple choice questions.

Candidate's name: _____    Score: _____.    Grade:

## BACKGROUND

1. This trial was designed to determine whether cardiac-resynchronization therapy (CRT) with biventricular pacing would reduce the risk of death or heart-failure events in patients with mild cardiac symptoms, a reduced ejection fraction, and a wide QRS complex.

## METHODS

2. During a 4.5-year period, we enrolled and followed 1820 patients with ischemic or nonischemic cardiomyopathy, an ejection fraction of 30% or less, a QRS duration of 130 msec or more, and New York Heart Association class I or II symptoms. Patients were randomly assigned in a 3:2 ratio to receive CRT plus an implantable cardioverter–defibrillator (ICD) (1089 patients) or an ICD alone (731 patients). The primary endpoint was death from any cause or a nonfatal heart-failure event (whichever came first). Heart-failure events were diagnosed by physicians who were aware of the treatment assignments, but **they** were adjudicated by a committee that was unaware of assignments.

## RESULTS

3. During an average follow-up of 2.4 years, the primary end point occurred in 187 of 1089 patients in the CRT–ICD group (17.2%) and 185 of 731 patients in the ICD-only group (25.3%) (hazard ratio in the CRT–ICD group, 0.66; 95% confidence interval [CI], 0.52 to 0.84; P=0.001). The benefit did not differ significantly between patients with ischemic cardiomyopathy and **those** with nonischemic cardiomyopathy. The superiority of CRT was driven by a 41% reduction in the risk of heart-failure events, a finding that was evident primarily in a prespecified subgroup of patients with a QRS duration of 150 msec or more. CRT was associated with a significant reduction in left ventricular volumes and improvement in the ejection fraction. There was no significant difference between the two groups in the overall risk of death, with a 3% annual mortality rate in each treatment group. Serious adverse events were infrequent in the two groups.

## CONCLUSIONS

4. CRT combined with ICD decreased the risk of heart-failure events in relatively asymptomatic patients with a low ejection fraction and wide QRS complex.

**Image 1**. a journal of medicine focused on cardiology.

# Comprehension test segment

Read the article and choose the best option for each of the following questions.

The main idea of the text is...

a. Patients with ischemic cardiomyopathy and those with nonischemic cardiomyopathy are keener to have heart-failure risks.
b. The use of different techniques reduces the risk of having heart-failure.
c. The decrease of the mortality in patients with ischemic and nonischemic cardiomyopathy.

2. Mark if the statement is true, false or not mentioned for the following statement: "physicians were assessed by a committee that was unaware of the assignments"

a. True
b. False
c. Not mentioned.

3. Mark if the statement is true, false or not mentioned for the following statement: "patients with nonischemic cardiomyopathy reduced the risk of a heart-failure due to the use of constant cardioverter–defibrillator."

a) True
b) False
c) Not mentioned

4. Mark if the statement is true, false or not mentioned for the following statement: "There were some deaths regarding the subjects of the study"

a) True
b) False
c) Not mentioned

5. In paragraph 2, line 18, the word "they" refers to:

a. Physicians
b. Patients
c. Heart-failure events

6. In paragraph 3, line 11, the word "those" refers to:

a. Patients with ischemic cardiomyopathy
b. Patients with nonischemic cardiomyopathy
c. Patients

7. What was the difference between the two groups in terms of risk of death?

a. The first group presented more risk than the second group
b. The two groups presented no significant differences regarding risk of death.
c. The second group presented less risk of death than the first group.

8. What was the percentage of mortality in the two groups?

a. 3%
b. 30%
c. 0%

9. The expression "serious adverse events" in paragraph 3, line 12, refers to:

a. favorable events for the study
b. unfavorable events for the study
c. a and b

10. Choose the best conclusion for the article.

a. CRT reduces the risk of heart-failure in patients with low ejection fraction and wide QRS complex.
b. The use of ICD can lower the heart-failure events in patients with a low ejection fraction and wide QRS complex.
c. The mix of the CRT and the ICD reduces the risk of heart-failure in patients with specific symptoms.
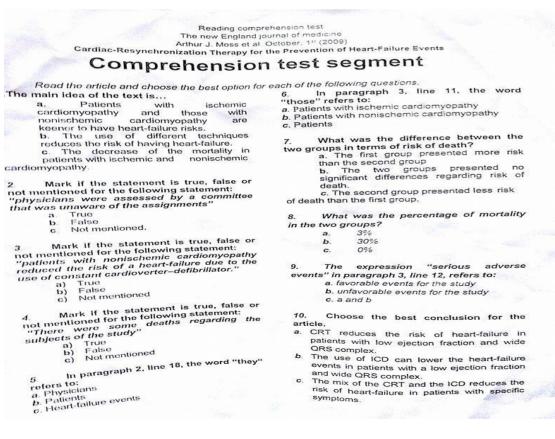
**Image 2**. Multiple choice question content and language test.

In this order of ideas, the test was graded as the following: the amount of positive answers related to 6 academic-based questions,, which means that there were only 6 questions that aimed towards reading comprehension skills in relation to content subject matters. Moreover, 4 Language-based questions were included in this test, which means that only 4 questions aimed towards language understanding. In consequence, the following table shows the students' assertiveness during the test. (figure1)

| Student | Language-based correct answers [out of 4] | Academic-based correct answers [out of 6] |
|---------|-------------------------------------------|-------------------------------------------|
| 1 | 4 | 3 |
| 2 | 2 | 6 |
| 3 | 3 | 2 |
| 4 | 2 | 3 |

**Figure 1.** Student's answer respectively.
*Taken from the results on the reading comprehension test done by the students*

As evidenced above, most responses were asserted towards language-based questions. Having this in mind, out of the 100% of the questions, 69% of them were answered correctly by the students. On the other hand, only 58% out of the 100% of the content knowledge questions were answered positively.

Upon analyzing the test thereby, despite of the fact that the individual answers from the students can vary from knowledge and content, it only grounded the notion that the students' exposure to English in scientific literature enhances students' reading comprehension and language skills. Thus, using the language for academic purposes can result an effective strategy to include in students' academic field of study. Following this line, as previously stated and as Cummins (2000) explains, the students use BICS as a way to complete the required task of identifying the meaning of a word or what a word can reference. This is also stated in Bloom's taxonomy (1954), which states different levels of cognitive processes, in this case, understanding a word's meaning can be attributed to LOTS (low order thinking skills) that explain how students can understand a language-related question. In addition to this, the students can distinguish between medical concepts related to the aims of the subject that the students were coursing; therefore, as Bloom's taxonomy (1954) states, people can also use HOTS (high order thinking skills) which stand for how the students can distinguish these concepts in English as well as in Spanish.

Concluding, the students develop both BICS and CALP in the Internal Medicine subject when they have to use their reading comprehension skills cementing on the

notion of language for academic purposes in the field of medicine. Although these results vary, they strongly support what has been analyzed so far, so they show that students' linguistic academic proficiency needs to be developed alongside with students' basic interpersonal                                         communication                                         skills.

To conclude, from all the interpretations and conclusions drawn from these data, the English language focus, or bilingual aims that the medicine program has should be rethought since the language that the students are being taught does not meet the demands of their academic field. The students need to be taught reading and writing skills more than oral skills due to the fact that the instruments that are used in the subjects and the materials that the students are exposed to are all written in English, but they also emphasize on the need of a more holistic language learning in order to effectively participate in different academic encounters. Moreover, learning resources such as books, journals and articles are constantly being updated in English, so the students must read these just after they are released. In this way, having an English language focus in the Medicine curriculum could not be an obligation, but a requirement in order for students to appropriately meet their academic demands.  Finally yet importantly, the comfort of the students in class generally depends on the professor's English proficiency as this will make students understand better and develop their competences in a more accurate way. In general terms, the results were very varied and the general conclusion that can be drawn from them is that though both communicative as well as academic language is necessary in the higher educational sector, the latter is the one that needs more attention.

## 6. RESEARCH AND PEDAGOGICAL IMPLICATIONS OF THE STUDY

This research project gave the researchers more insight in regards to the phenomenon that is happening in the faculty of medicine at a state university in Pereira. Throughout the process it is evident that there are many factors that affect and miscarry the overall process of the students' academic development, something that the professor as well as the students perceived. For this reason, further research has to be done in order to give more insights and to involve other professors of different content subjects matters in the research study. In addition, further research will imply the use of more data-collection instruments that evidence a more in-depth analysis of the educational practices in relation to the inclusion of the English language in the Medicine undergraduate program.

Another area of special attention, when talking about research implications, is that the overall research process can provide the researchers, and the readers, with vital insights on the topic that is analyzed. In this sense, the research experience is meaningful in the sense that it gives the researchers knowledge about the general topics that are studied in the paper, meaning that the researchers will be able to talk, discuss, and evaluate the different theoretical as well as practical considerations that have to do with the topics that were analyzed.

A final research consideration that is relevant to be mentioned here is in relation to future research considerations that the present paper can lead to. According to what is mentioned above, this research study aimed towards cementing the bases for further implementations of successful methodologies to teach English at the tertiary level in a Medicine program at a State university in Pereira. During the data-collection process, it was found that the professor did not use a specific methodology forcing the research to exemplify aspects from different methodologies in order to give meaning to the professor's and the students' perceptions. Having said this, the research is not aiming to implement any methodology in specific, but mere explaining the professor's actions and beliefs during his teaching process. Despite of the fact that the professor is not an expert in the language, he included the English language in the way that he believed that it was pertinent for students' academic development.

Moreover, it is pertinent to do a more detailed study in which other professors from the medicine program are to be included. During this process, the professors are to

be assessed in order to have a less biased result, and include and recognize what the state of all the personal that compose the academic staff is. The analysis can be done, for example, with interviews that can help to shed light on the background that each professor has during the process of their professional development, such as: conferences, seminars, post-graduate programs, etc. Moreover, language-based tests can be implemented in order to determine what the current level of proficiency in the language in which each professor stands is.

As for the pedagogical implications that the present research project yielded, it is important to have a standard level of language use by the students. This is in order to have students interacting with scientific texts in accordance to their linguistic and content subject matters knowledge. In addition, the inclusion of an integral methodology to include English in the tertiary classroom requires professors to purposefully reflect on how to include the language and its several skills so that students can efficiently participate in the international scientific communication. It is necessary to move from a mere focus on reading comprehension and start including the language so that students feel they use it for real communication purposes that are proper of their professional fields.

An additional pedagogical implication that needs to be mentioned relies on the overall professional development that professors hold. This is because in order for students to keep engaged in lessons that are given in English, the professor must be knowledgeable in both the content and the language, as well as general instructional issues that involve the explanation of complex content subject matters by using a foreign language. Thus, professors must master both language and content is their purpose is to effectively deliver lessons in a foreign language, in this case English.

# 7. CONCLUSIONS

In order to culminate this research study, the research question that was set for this study will be answered. The description of the inclusion of a second language instruction in a medicine undergraduate program conducted in the present study comprehended a descriptive research approach that gave insights on institutional, research and pedagogical implications that the researchers can analyze and present as contribution to the current phenomenon that is afflicting the academic development of better professionals in the field of medicine. Furthermore, it is cementing the bases for the inclusion of a future methodology in such setting.

In such matter, this paper does not intent to suggest or to exemplify successful methodologies to be implemented in the near future. In consequence, it is just describing and putting into light the practices thereby performed. Whereas its core interest is describing, it does not specify that the whole program follows the line of thought stated previously. Hence, further research should focus on more holistic results since it only took place during one semester and only focused on a single group.

The implementation of focus groups and interviews helped the researchers to have a more detailed and accurate response to what the classes and the undergraduates' perceptions were in regards to what was being researched. This goes hand in hand with the tests performed by the participants, which showed that students language and content skills were enhanced during their academic development, proving that the inclusion of the English language is essential for students to improve their proficiency in their academic field. Moreover, the procedural nature of descriptive research and the instruments used in the data gathering are vital for the researchers to understand what students' demands and needs are in regards to their academic program, and the role that the English language plays in conjunction to this. In addition to this, students and professors' attitudes are positive in terms of cooperation since the need to include the English language has become a necessity rather than a proposal.

From the professor and students' views, more innovative methodologies are to be included during the process of teaching in order to dwelt more effectively with the barriers that are present when including a second language. This is because the inclusion of the language has to meet the students' needs in relation to their academic fields rather than just a mere training in communication skills in the language. Moreover, the students

need to receive instruction in the four language skills, not only in reading comprehension, as they oftentimes have to deal with different communicative scenarios where they have to make use of other language skills to participate in the international scientific communication.

In relation to the abovementioned, an innovation in the classroom is the inclusion of a second language that aims to focus on language and content. As any innovative practice, both professors and students need to be eager to participate during the process of implementation of a successful methodology. However, the most important fact is the level of challenge that the students can show towards the inclusion of English in content subject matters. That is why the teachers are to be assessed and to be instructed during the process whether by an expert on the language or a volunteer that have the content knowledge and the language proficiency in order to start implementing and promoting the inclusion of the English language. With this, the aim is to promote the usage of the English language using more complex and meaningful language thus impacting the setting in question. Finally yet importantly, professors also play a key role in the development of a successful bilingual instruction at the tertiary level. They should have a considerable professional development that allows them to convey complex meanings of their subject matters while making use of the foreign language as the language of instruction.

# 8. LIMITATIONS OF THE STUDY

This research study has to mention its own limited nature due to the fact that it was carried out within a state university setting which made it difficult for the researchers to conduct a thorough research of further subjects that compose the medicine program. Only one professor was willing to participate in this research study since him and ourselves believed that that the phenomenon was pertinent to be study and analyzed. So as a result, only 4 students were selected because of the fact that the professor only had one group that satisfy the study's needs. Thus, the data collected can be very limited at times, and it could not be apply as easily in other faculties of health sciences in the region or in the country. Whereas some specific conclusions have been made in order to be further analyzed, and an eventual implementation can arise from these, they are specific of this faculty and only applied to it due to the free will that each university in the country has.

Having mention that, the first limitation that affected the current study was the amount of time that took to receive an answer from the faculty of medicine In order for the researchers to start recollecting the data, here, times refers to every formal administrative meeting in which the researchers had to participate in order to explain the reasons for the research study, meaning that, there were various meetings after the semester had started, thus limiting the time to recollect with more reasonable amount of time the data; furthermore, the time constraints to elaborate the data collection methods was shorten limiting the amount of time spent in the interviews. It also refers to the amount of time that the administrative branch took to give an appointment with the professor in question since he is not allowed to talk about the internal medicine subject without the permit of the administrative branch of the faculty of health science. Another limitation found in the study pertinent of mention is, the synchronization of schedules between the professor and the students since the amount of work both professor and students' are exposed to is excessive hence making it difficult to have longer sessions in which the students as well as the professor could express all their concerns in regards to the inclusion of English in the curriculum and the implications this can have. Meaning, that the professor and the students perceptions could only be limited to the questions that they were asked and no deeper analysis could spark from the sessions.

In a different line of thought, the lack of information regarding the information about the programs general bilingual policies and practices carried out in the different faculties in the university in question, leading the study to be restructured and refocused towards the real phenomenon that was taking place in the health science program of medicine.  This add up to the fact that the phenomenon of the present study is very specific, and the expected results or findings to be analyzed were very different to what was found. This implies that more information has to be shared between the different faculties that implement English in some degree in their practices, for more thorough studies to be carried on at the time of doing research.

To conclude, one important limitation that constraints the current study i the lack of motivation from the professors at the medicine program. Since the current study aimed to describe a phenomenon that is happening at the medicine program, a deal of participation from the professors is to be expected. However, the professors did not seem interested in having any involvement what so ever during the process, furthermore, the professors insisted on not letting observations to be carried out by the researchers arguing that there was no object of study in the program. This lack of entrepreneurship is what fuels sloppy researches, and do not credit the commitment of the students as well as the professors.

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