

# Identifying and Resolving CLIL-Specific Teaching Issues in a Private Brazilian Bilingual High School.

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Master's Thesis of Linguistics in Language and Communication Coaching

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August 28<sup>th</sup>, 2016

“Excellence is an art won by training and habituation. We do not act rightly because we have virtue or excellence, but we rather have those because we have acted rightly. We are what we repeatedly do. Excellence, then, is not an act, but a habit”

Aristotle

### Acknowledgements

I am very grateful for and much indebted to all of the people who supported me in carrying out my project. In particular, I would like to thank my supervisor Dr. C. M. de Vries, the anonymous bilingual school in Brazil, for their support, my husband Leonhardt G. Costa-Rau, my parents Luci S. Costa and Sebastião G. Costa, and my youngest brother, Jairo S. Costa, who have given me incredible support and strength throughout my academic life. In addition, I thank all the people who contributed to the execution of this project.

### Abstract

In this study CLIL-specific issues that were addressed by other authors were gathered in a systematic way, based on which a Needs Analysis was conducted that included questionnaires that were handed out to students and teachers at a private Brazilian bilingual high school. All issues that were encountered were then discussed and, by triangulating results, the most pressing issues identified. Among others, mixed linguistic abilities and teacher training were identified as the most pressing issues within this school.

Recommendations on how to address these issues and improve current teaching practice were given to the school. In order to give an idea of how these recommendations could be applied, two lesson plans and activities were designed that were supposed to serve as an inspiration to CLIL teachers how to plan their lessons and design activities.

*Keywords:* CLIL, Teaching issues, needs analysis, teachers training and mixed abilities groups.

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## **Chapter 1: Introduction**

### **The Development of English as the World's Number One Language**

English language has become more and more popular in the last century, making it the number one global language of our time. This status has been gained in a series of steps that include the colonization of different parts of the world by the British (Mesthrie & Bhatt, 2008), the development of English as a lingua franca in trade and science in non-native English speaking countries, and the development of a global culture. The status of English as the world's number one language led to the desire of many people around the world to learn English as a second language. In this context, bilingual education has received an increasing amount of attention. Many people hope that by learning English simultaneously with their native language, they can increase their intercultural communicative abilities, giving them an advantage in today's globalized world (Bourdieu & Thompson, 1991).

Schneider (2007) showed in his analysis about the spread of English around the globe that the colonization of many parts of the world by the British to a great part contributed to its current status as the world's leading language in intercultural communication. Apart from their customs and goods, British settlers also spread the English language to different parts of the world. The development and adaptation to English as a first language in the colonized countries happened gradually and can be divided into five steps which extended over a period of several generations until English as a native language was established in those countries. During the first stage, a stable English dialect was used by settlers and natives mainly for trading purposes. At the next stage, English became more prominent and formal English norms from the home country of the settlers were mainly pursued. During the next stage settlers and natives created a national identity and English became a stable L2. Later on in the next two stages English became more and more localized; a process accompanied by the formation of a new national linguistic identity.

After English was established as a native language in many countries, it became increasingly popular in non-native countries too. This development was to a great extent due to its establishment as a lingua franca. In a globalized and ever more interconnected world, often described as a “global village” (Phillipson, 2001), a common language to communicate between members of different countries has become increasingly important. Nowadays, governments in an increasing number of countries choose to establish English as a second language (L2). Even though English is becoming increasingly popular across the globe, big differences can still be found in fluency when comparing different countries. Kachru (1982) categorized all countries in which English is spoken into one of three circles. This “three-circle” model consists of an *inner circle*, which includes countries in which the residents are native English speakers (e.g., UK, USA, Australia); the *outer circle*, consisting of countries in which English is used as a second language and a large number of citizens speak it fairly fluently (e.g., Singapore and many Western European countries) and the *expanding circle* which includes countries in which English is taught as a foreign language and used as a foreign language in more formal contexts (e.g., Japan and Brazil).

According to Crystal (2003), nowadays, English as a lingua franca (ELF) interactions, meaning individuals from different L1 backgrounds communicating in English, happen more frequently than interactions between native English speakers. This astonishing development is accompanied by the rise of multinational companies who are increasingly choosing to create a corporate culture by implementing English as their corporate language in countries around the globe (Charles & Marschan-Piekkari, 2002; Piekkari, Vaara, Tienari, & Säntti, 2005). Adding to the rise of English as the world’s number one language is the ascent of a global consumers’ culture, which mainly uses English. Especially in cultures whose members speak English fairly fluently, the use of English often suggests a social stereotype and can

serve as a symbol of modernity, progress, sophistication and cosmopolitan identity (Krishna & Ahluwalia, 2008).

This process in which English has become the world's leading language has been accelerated by national administrations, competing for investments of global corporations in their markets. A country whose citizens speak English fairly fluently has advantages in attracting foreign investments. In line with that, García and Baetens Beardsmore (2009) argued that monolingual education does not meet the requirements of a globalized world and some form of bilingual education is necessary to implement into every national education system. Consequently, national administrations invest in their citizens English language education as a means to become more competitive on the global market (European commission, 2016; Parâmetros Curriculares Nacionais do Ensino Médio, 2000; Kirkgöz, 2009; Mar-Molinero & Stevenson, 2006). The same goes for individuals who want to increase their chances on the labor market by speaking English fluently. This motivation has led to the rise of many private English language schools around the globe.

In the context of privately and publicly financed education, bilingual education has received an increasing amount of attention (Cummins, 1980; Baker, 2011; May, 2014). English bilingual schools aim to teach general content in both the native language of the country as in English. The advantage of this form of education is that it gives students much more frequent exposure to the target language as traditional second language learning can provide. Due to some confusion in the definition of what bilingual education constitutes, the term bilingual education has received some criticism lately. Due to this criticism different terminologies have appeared across different countries reflecting their different approach to bilingual education. In the United States the terms English Language Acquisition and Dual Language Education have replaced bilingual education (García & Baetens Beardsmore, 2009) while in Europe the terms Content and Language Integrated Learning (CLIL) and

Enseignement d'une Matière par l'Intégration d'une Langue Etrangère (EMILE) are currently being used (Marsh, 2002). In Brazil, not much discourse has taken place on the subject of terminology of bilingual education, even though differences between certain types of bilingual education have been discussed by some authors (e.g., Moura, 2009). To simplify terminology and because this project was executed from the Netherlands, the European term CLIL will be applied consistently when referring to bilingual education.

In this thesis I wanted to firstly provide an overview of CLIL and how it is different in a cross-cultural context. Secondly, in order to contribute to a better understanding of how students acquire a second language, mental models will be addressed, which explain biologically how our human brain works when learning languages. After understanding what CLIL is and how students process a second language, I will explain what the situation of CLIL in Brazil is right now, which will clarify the necessity of implementation of materials in language teaching in Brazil. Teaching English as a second language in countries that are part of the expanding circle, such as Brazil, has its own challenges and is difficult to compare to teaching English as a second language in countries which are part of the outer circle. In countries such as the Netherland, which are nowadays seen as part of the outer circle due to its citizens' English language proficiency, exposure to English in everyday life is much more frequent. Subsequently, the specific issues of CLIL will be raised, based on which I conducted a Needs Analysis (NA). A NA is considered to be the key component of each development of materials in the context of Language for Specific Purposes (LSP) (Upton, 2012). Thus, needs analyses specify the real needs of the learners in the learning process (Dudley-Evans & St. John, 1998; Serafini, Lake & Long, 2015). The NA conducted in the context of this study consisted of questionnaires and tests which were sent to one specific school in Southern Brazil. These questionnaires and tests were based on the issues encountered in the literature and were triangulated, focusing on teachers' and students'

responses. After analyzing the responses by teachers and students, I was able to identify the specific educational issues encountered in this school. Based on solutions found in the literature to these issues, I was then able to give recommendations and design tailor-made materials, specifically adapted to the needs of this school. The process of NA and developing materials will be then critically discussed and a conclusion will be taken.

## **Chapter 2: Literature Review**

### **2.1 Defining CLIL**

Any attempt to define CLIL, first needs to address the issue of bilingualism. There is an ongoing discussion among researchers about who is to be called bilingual. The most basic definition is that bilinguals are individuals that are learning or have learned two languages simultaneously or not (Silva-Corvalán & Treffers-Daller, 2015). However, bilingual individuals can be further divided based on their proficiency level. Bilingual individuals that are able to speak two languages at a higher level are defined as balanced bilinguals (Butler & Hakuta, 2004; Grosjean, 1998; Lambert, 1981), while unbalanced bilinguals (Peal & Lambert, 1962) are individuals that have different degrees of proficiency in the two languages.

Bilingual education usually refers to a type of learning, in which students learn both languages simultaneously (García & Baetens Beardsmore, 2009). According to Baker (1993), bilingual education sometimes addresses pupils who are already speakers of two languages, and at other times, addresses those who are studying an additional language. These findings highlight that students in bilingual education are very diverse in nature leading them to be unbalanced or balanced bilinguals based on their level of proficiency.

Bilingual education has been defined in various ways. Hamers and Blanc (2000) see bilingual education as any form of teaching using two languages. Even though the term bilingual education suggests otherwise, bilingual education programs often encompass

learning more than two languages (Baker & Hornberger, 2001). They are different from traditional language education programs (García & Baetens Beardsmore, 2009) because most of these traditional programs focus on teaching a second language, whereas bilingual education programs use the language as a vehicle of instruction.

Bilingual education teaches the content of a specific subject through the additional language other than the individuals' native language. However, it can take two or more different forms. Sometimes the instruction is used purely in one language and sometimes mixed with the native language and both are considered bilingual education. According to García and Baetens Beardsmore (2009), "bilingual education provides meaningful and equitable education, as well as education that builds tolerance towards other linguistic and cultural groups" (García & Baetens Beardsmore, 2009, p. 106). In their view, bilingual education should provide general education, teaching in two or more languages, it should develop multiple understandings of languages and cultures, and foster appreciation for human diversity. Hence, bilingualism not only focuses on the acquisition of a L2, but also on helping students to become more global and responsible citizens as they learn to function across different cultural contexts and worlds that go beyond the cultural borders in which traditional schooling often operates.

As was pointed out earlier, differences in defining bilingual education can also be found across national borders. García and Baetens Beardsmore (2009) showed that the definition of bilingual education varies across countries by looking into bilingual classes in different countries. In the U.S. specific content is taught simultaneously in English and Spanish. In Japan, schools choose to gradually move from conveying content information in the students' mother tongue to doing so in English. Discussion about what bilingual education means and what standards and criteria need to be pursued led to the creation of a European-based definition, CLIL. Due to an increasing European integration, a high demand

for foreign language teaching built up in Europe. CLIL filled that gap by aiming to maintain the best practice that allow young learners to attain better skills in foreign languages. Due to the necessity for expansion and improvement in the field of foreign language learning, this teaching approach has grown across Europe (Marsh, 2002). In addition to that, the European Union (EU) proposed in 1995 that every European citizen is expected to speak at least two or more languages in addition to their native language according to the language policy (European Commission, 1995).

CLIL is defined in a number of ways. Marsh (2002) defined it as an integrated approach which unifies language learning to content learning. It is also defined as a dual-focused approach, which means that the specific content of a subject as well as the language mastery of the foreign language are getting equal attention and students are evaluated on both (Maljers et al., 2010). In CLIL programs both the students' L1 and the target foreign language get a high degree of attention. Commonly less than 50% of the content is taught in the foreign language, the rest is taught in the students' L1 (Dalton-Puffer, 2011). CLIL contributes to great results in a variety of groups, such as primary schools, secondary schools and high-schools (Admiraal, Westhoff, & De Bot, 2006; Alonso, Grisaleña, & Campo, 2008; Lasagabaster, 2008; Ruiz de Zarobe, 2008; Dobson, Pérez, & Johnstone, 2010), as language and content interact with each other, leading to deeper cognitive processing of content matter (Coyle, 2002). The benefits of this approach are, according to Marsh (2002), that it promotes social inclusion, egalitarianism and economic opportunities to students. While deeper cognitive processing of content matter, social inclusion and, of course, intercultural awareness are as central and important to CLIL as language learning, most schools' attention, however, goes primarily to language mastery in the foreign language (Dalton-Puffer, Nikula, & Smit, 2010). Another advantage of CLIL education is that students acquire a more positive outlook on language learning in general which

consequently manifests itself in learning other languages and not only the target language (Lasagabaster, 2011).

CLIL shares some of the characteristics with bilingual education, content-based instruction and immersion. It is, however, distinct in the way that it does not put more emphasis on either the language or the content part (Coyle, 2007). In distinction to immersion programs, in which content is learnt by using a minority or regional language, the focus in CLIL is teaching content in a foreign language (FL) (Lasagabaster & Sierra, 2009). Thus, a Spanish student from the Basque region learning content in Basque instead of or next to Spanish would be considered to be following an immersion-based program because Basque is in this context considered to be a L2. If he were to go to a school, in which content is taught in English or German, he would be following a CLIL-based teaching approach because these are FLs. Students of CLIL usually start to learn the FL at a later age than immersion students. While the language focus is the most prominent difference, also other differences between the two teaching approaches can be found. Lasagabaster and Sierra (2009) found that teachers in immersion programs usually are native speakers, while teachers in CLIL programs are often teachers with a good command of a L2/FL. Teaching materials in CLIL are usually accustomed to the needs of L2 speakers, while in immersion programs all teaching materials are designed for L1 students. Due to the different nature of these two bilingual education approaches, the goals are different too, meaning that students of immersion programs are expected to have gained a higher level of proficiency in their respective L2s at the end of secondary education than students of CLIL have gained in their FLs.

How CLIL is applied largely depends on the country in which it is used. It is placed on a monolingual, bilingual or multilingual continuum. That means that students' language proficiency differs from country to country, since it is influenced by the societal and contextual diversities along with language choice, learner's age and proficiency (Baetens

Beardsmore, 2007). Also Nikula and Marsh (1998) found that countries apply CLIL in very diverse ways, because of their sociocultural environment and educational policies. Differences in CLIL can be found within the same country and even between classes at the same school (Lim Falk, 2015; Sylvén, 2013). In order to illustrate cross-cultural differences, we can look at the ways CLIL is applied in the Netherlands and Germany. Dutch children learn English throughout all parts of their schooling, while in Germany, students only start learning it at later stages (European Commission, 2016).

To achieve a better understanding of CLIL approaches, Coyle (2007) proposed the 4CS Framework of education in CLIL, which describes an inter-relationship between content, communication, cognition and culture (see *Figure 1*). Content means in this model the subject matter and the learner's construction of knowledge related to it. Communication means the language that is used to convey the content information. In order to cognitively process both content and language-related information, the learner needs to think and learn. Ultimately, culture plays a role in the way that the learner interacts with his environment and sees himself as part of it. Cummins (2000) stressed the importance that culture plays in bilingual education, while little research has been conducted on the matter. The four parts of the model interact in various ways with each other. Certain content for example might be interesting for learners of certain cultures, while being irrelevant to others. The type of language that is used also might have different effects on learners from different cultural backgrounds. More discussion-based approaches might work well in low power distance cultures, while more directive language approaches might be more effective in cultures high in power distance (Hofstede & Bond, 1984).

Coyle (2007) described some principles that are relevant when trying to understand the 4Cs Framework. A learner always interacts with the content, leading to the construction of knowledge and skills related to it. This means that the type of content that is learnt and the

way in which it is learnt not only depends on the teacher but also on the students' interaction with the content (Mohan, 1986). Another important aspect is that language always interacts with content (Swain, 2000). The linguistic demands need to be analyzed and made adequate to the learners' abilities in order to make sure that content processing can take place. These cognitive processes largely depend on the students' maturity. Linguistic demands should match such age-related cognitive abilities.

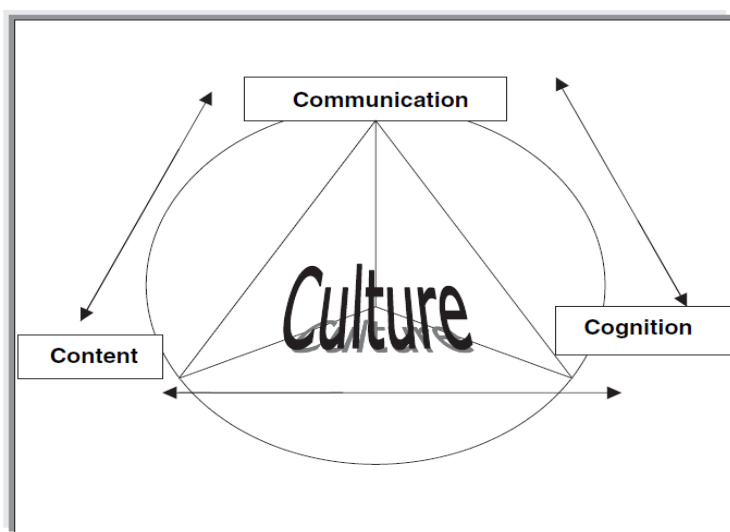


Figure 1: The 4Cs Framework for CLIL: Coyle (2006) extracted from Coyle (2007).

More cultural differences can be found when looking at Ball's (2008) notes on CLIL. According to him, two types of CLIL exist. In the first one teaching and learning focus primarily on the language, which means they are language-driven. This is often times called a "soft" or "weak" CLIL. In the second type teaching and learning primarily focus on the subject content, meaning they are content-driven. This type is called a "hard" or "strong" CLIL. In this definition, a "hard" CLIL (content-driven) approach is initially focused on subject teaching through English, whereas a "soft" CLIL (language-driven) approach aims initially at language learning objectives, in which a language syllabus is incorporated into the conceptual content. According to Ball (2008), a successful CLIL approach gradually moves from "soft" CLIL to "hard" CLIL to benefit students in accordance to their development in the target language.

Even though a “hard” CLIL approach is desired towards the end of students’ studying career, the speed of the gradual shift towards a “hard” CLIL approach varies across cultures, since countries vary in initial L2 proficiency of their students. In countries, such as Spain, in which students have a lower level of proficiency when first learning English, a more formal teaching approach, focusing on grammar-based teaching, might be the approach that promises more success, while in countries, such as the Netherlands, teachers might be able to shift more rapidly to a “hard” CLIL approach in which content is learnt through the use of a L2 (Ruiz de Zarobe, 2007).

## **2.2 Bilingualism and Second Language Acquisition**

After looking at the way CLIL is defined and applied in various countries, it is of great importance to understand how CLIL education works on a cognitive level. In order to get this deeper understanding of CLIL, I will first look into the way bilingualism and bilingual processing is understood nowadays and how it is achieved. This will give us a better idea on the aspects that Brazilian CLIL teachers should focus on when designing materials and the way they should approach students. Knowing a student’s age of acquisition, fluency and other issues that might come out of the NA will provide them with better ideas when designing high quality classroom activities.

Bilingual education as a form of teaching has become increasingly popular in the last couple of years (García & Baetens Beardsmore, 2009). This is partly due to the fact that in an increasingly globalized world, more than half of the world’s population can be called bilingual (Grosjean, 2010). Schwieter and Tokowicz (2015) argue that no clear definition has been found yet and that there is still an ongoing debate among researchers about what bilingualism means. Language proficiency plays a key role in this discussion, as does the age of acquisition of the L2 and the language function. Precise definitions are, however, of great

importance when trying to identify the underlying mental processing structures of bilingual individuals.

Some definitions of bilingualism are narrower, meaning that few speakers of two languages are included, while others are broader, meaning that many speakers of two languages fall within that definition. Early definitions, like the one by Bloomfield (1933), were narrow and only encompassed speakers whose mastery in the L2 was native-like. In more recent times, the focus has shifted and more speakers of two languages were included in the definition. Linck, Kroll and Sunderman (2009), for instance define bilingualism as the ability to speak two languages to some extent and not necessarily native-like, regardless of the age of acquisition. They further distinguish between unbalanced bilingual individuals whose proficiency in one language dominates over the other and balanced bilinguals whose proficiency in both languages is similar. Notably, in this broad definition of bilingualism both balanced and unbalanced bilinguals are called bilinguals. Baker (2011) argues that, since balanced bilinguals with high abilities in two languages are rare, bilingualism should not be seen as a bipolar concept but as a continuum based on a speaker's abilities.

At the heart of the discussions about language mastery is the ability to achieve native-like proficiency. Some linguists claim that native-like proficiency can only be achieved in a critical period. The consequence of that is that older learners would rarely be able to become bilinguals according to the narrow definition of the term (Bloomfield, 1933) and balanced bilinguals, according to the broader definition of the term (Linck, Kroll & Suderman, 2009). This view is supported by a study conducted by Johnson and Newport (1989) who found that, provided the right amount and quality of input, native-like language proficiency is relatively easily acquired until the age of 10-15. After this critical period, native-like language skills are nearly impossible to acquire. However, Bialystok and Hakuta (1994) found that even after the age of 17 students ability to master a foreign language decreases, contradicting previous

studies that showed that a critical period exists, after which a learner's age would be irrelevant.

Another issue about the previously named theories is that native-like abilities vary greatly across different societal backgrounds. That means that a supposedly lower level of proficiency might be completely appropriate in one situational context in which a person frequents, whereas in another situation the same proficiency level would be inadequate. Consequently, Grosjean (2008) defined bilingualism more holistically and did not concern himself much with proficiency or age of acquisition but with the use of the language. Bilingualism in his view is “the regular use of two or more languages (or dialects), and bilinguals are those people who use two or more languages (or dialects) in their everyday lives” (Grosjean, 2008, p. 10), since different purposes and contexts elicit different levels of competencies. He argues that a bilingual uses two languages for different reasons, in different situations and with different other interactors at the same or at a different time. In line with that, Mohanty (1994) argues that “bilingual persons or communities are those with an ability to meet the communicative demands of the self and the society in their normal functioning in two or more languages in their interaction with the other speakers of any or all of these languages” (Mohanty, 1994, p.13).

As discussed before, differences in how we define bilingualism and what we think has the biggest impact on achieving mastery have implications on the way we think the underlying mental processing structures are. According to Weinreich (1953), the age of exposure plays the key role based on which the mental processing structures differ greatly from one individual to another. Weinreich (1953) divided bilinguals into three different subtypes, each possessing a different type of bilingual lexical organization. An individual who acquired a L2 at a young age developed one semantic system and two linguistic codes and is called a compound bilingual. Such a bilingual individual has one visual representation

of an apple but two distinct words for it, one of the L1 and one of the L2. This individual would most likely have achieved mastery in both languages and more so, have acquired the L2 at a young age simultaneously to the L1. A bilingual individual that has acquired its language skills in distinct locational and temporary contexts is called a coordinate bilingual. This individual operates in two different semantic and linguistic systems, giving him one visual representations of an apple associated to the L1 and a different visual representation associated to the L2. The third type of bilingual lexical organization can be seen in subordinative bilinguals. Similarly to the compound bilinguals, these bilingual individuals also have one semantic system and two linguistic systems. In contrast to them, however, they access semantic content through their L1 (or in case of multilinguals through the stronger language) when receiving L2 stimuli. Such a view that surrounds around the idea that, based on a learner's age of acquisition, different processing structures are at play, is supported by observations made by DeKeyser and Larson-Hall (2005). They found that late learners tend to rely on explicit learning while younger learners outperform them in implicit learning.

However, this view on bilingualism, with age of acquisition at its heart, has received some criticism lately. Bialystok and Hakuta (1994) found that, even after the age of 17, learning effects vary and one critical period does not exist. Similarly, Draganski and colleagues (2004) and Boyke, Driemeyer, Gaser, Büchel, and May (2008) showed that acquisition must not necessarily occur within a critical period but even after that native-like proficiency can be achieved. Due to such criticism, Kroll and Stewart (1994) further developed Weinreich's model (1953) and painted a less deterministic and more nuanced picture. According to their Revised Hierarchical Model, not only learning at a young age during a critical period is relevant to a bilingual's lexical processing but also language learning at a later age. They argue that there is one underlying semantic representation for different linguistic representations. Low proficiency L2 speakers would, similarly to the

subordinative bilingual in Weinreich's model (1953), process L2 linguistic representations through L1 linguistic representations to access semantic representations. Kroll and Stewart (1994) state that, by improving L2 proficiency, a bilingual speaker can establish and strengthen a direct route from L2 linguistic representations to semantic representations and thereby making indirect processing unnecessary. Once that direct route has been established, this individual would possess a similar processing style as the compound bilingual in Weinreich's model (1953).

Recently, neuroimaging techniques have helped to increase our understanding of how language is processed. In a study about neuroplasticity in language-related brain regions, Krizman and Marian (2015) showed that language experience leads to improvements in auditory and executive systems, located at both cortical and subcortical levels. The extent to which such improvements occur depends on a person's age of exposure and use of the language, giving partial support to both views earlier discussed on how bilinguals process a L2. Further evidence that bilinguals' neural structures are different to monolinguals' was found by Mechelli and colleagues (2004). Bilinguals' gray matter density was higher in the left inferior parietal cortex than monolinguals'. Within the group of bilinguals, young learners' gray matter density was higher than late learners'. In accordance to those findings, Stein and colleagues (2012) found that due to an increased proficiency gained by students in an immersion program, structural changes in gray matter density in the left inferior frontal gyrus could be observed. Surprisingly, age of exposure did not seem to play a role, giving support to the notion that learners are able to gain high proficiency at all stages of their life. In contrast to that, Kim, Relkin, Lee, and Hirsch (1997) found that L1 and L2 were localized in the same brain region in early bilinguals. In late bilinguals, on the other hand, distinct areas were responsible for L1 and L2 processing. Mårtensson and colleagues (2012) showed that the environment in which learning takes place does not seem to matter. Cortical changes

could be observed for learners who studied in a naturalistic environment and for learners who studied in a classroom environment. This is surprising, since the importance of a naturalistic over a formal environment is emphasized in CLIL literature (Ruiz de Zarobe, 2007).

As a conclusion to this subchapter about bilingual processing, I want to discuss the implications of the divergent findings that were discussed for CLIL teachers and their development of teaching materials. First of all, it seems like the most promising approach to teach any foreign language at an early age, since neuroplasticity is highest at this age, leading to the development of a higher density of gray matter in several brain regions and the observation of better results. Notably, this does not rule out the possibility that late learners might also be able to achieve native-like mastery, the chances for such a development to occur just seem to be slimmer. The exact age frame is, however, hard to define, since the arguments in favor and against a critical period are both valid. However, it seems that success in learning a second language is most likely when language learning starts before the age of 15.

Secondly, it seems reasonable to assume that late starters benefit more from a formal approach, which focuses on syntax of the language, while younger starters might be better able to learn language through the means of content (Lambert, 1969; Vaid, 1984). The implications are that in order to successfully participate in “hard” CLIL classes that do not focus on the language itself but in which language learning occurs more incidental as a side effect to content learning one must start learning the language at a fairly young age. “Soft” CLIL classes in which language learning is more structured might be more successful when applied to students who started learning the language at a later stage. However, as described in the Revised Hierarchical Model, even later learners can achieve native-like abilities if they are exposed to the language for a longer time and reach a certain proficiency. So, next to the

age of onset of language learning, proficiency predicts success of a more formal or a more incidental language learning method.

Finally, whether the learning environment is more naturalistic or more formal does not seem to have big consequences on learning. However, it is likely that a more naturalistic environment might trigger a higher motivation in students which ultimately might lead to more success in learning the content.

### **2.3 CLIL in Brazil**

After discussing the definition of CLIL and how bilingualism and second language acquisition play a role, I want to focus now on the Brazilian setting. As discussed in the introduction, bilingual education has grown around the world as a result of the expansion of the English language. In Brazil bilingual education first emerged in the 20<sup>th</sup> century (Moura, 2009), when the massive, mostly European, immigration of Portuguese, Japanese, Italians, Germans, Spanish occurred. The type of education students received was based on their countries of origin's school system, providing the immigrants with the same type of education as in their countries of origin while living and studying in Brazil (Moura, 2009). This type of education which is based in content and language on the immigrants' countries of origins' educational system can nowadays still be found in international schools. Such schools teach content in English, Spanish, German, Italian, French or Japanese and teach Portuguese, the only official language of the country, as a foreign language. This type of education is distinct to other types of bilingual education in the way that it does not follow the national educational board's curriculum and strongly emphasizes the learning of another language over Portuguese.

In the last years, a new type of bilingual education has emerged and got a great deal of attention - bilingual education teaching indigenous languages. The reason for that development is that Brazil, among many other countries that were colonized by Europeans,

has been wrongly called a monolingual country, being in reality a multilingual country in which many people still speak many indigenous language (Bortoni-Ricardo, 1984; Cavalcanti, 1996; Bagno, 1999). The situation of indigenous languages in Brazil is perceived by the Brazilian constitution of rights as a cultural value that needs to be preserved. In the year 1500 around 1300 languages were spoken in Brazil but since then that number has shrunk to merely 170 languages that are estimated still to be spoken by around 250.000 people, 0.2% of the Brazilian population (Moura, 2009). Including other languages, such as the ones brought in by the immigrants, Maher (2013) showed that in total 222 minority languages are still spoken in Brazil, next to Portuguese. This decline in indigenous languages and the attention that these languages get nowadays, might be a reason that the Brazilian government gives more attention to them than the minority migrant languages. As a result of that, bilingual schools were created which allowed the indigenous people to access their rights to maintain their culture and language and give them the opportunity to integrate with the non-indigenous society. This way the indigenous population was able to keep their native language and learn Brazilian Portuguese at the same time (Brazil, 1988).

However, next to bilingual education teaching indigenous languages, also other types of bilingual education can be found. Moura (2009) showed that the school of LIBRAS (the Brazilian sign language), frontier schools and international schools are nowadays found in Brazil. Frontier schools are located at the border to Argentina, Bolivia, Chile, Paraguay, Uruguay and Venezuela in which next to Portuguese also Spanish is taught. In international schools content is taught almost entirely in a foreign language, and mostly but not exclusively in English. Other types of international schools teach other languages related to the country of origin (e.g. German schools teach in German, Japanese schools teach in Japanese and so on). These schools are allowed in the Brazilian educational curriculum, as long as they implement Portuguese in their curriculum, which is normally taught as a second language to

the students. According to De Mello (2002), these schools should not be called bilingual schools, since they do not teach in two languages simultaneously but choose another language, mostly English as their focus language. A last type of bilingual education in Brazil is the prestige bilingual school that is a regulated school by the ministry of education which integrates English into the regular school core curriculum. Prestige bilingual schools are mainly private schools, paid by the parents whose reason to enroll their children at this type of school is mainly to maintain their children's social status within the Brazilian middle and upper-class. By doing so, parents increase their offspring's chances to compete in the labor market (Moura, 2009). This type of school comes closest to what CLIL is in Europe, since content teaching takes place in two languages which both get the same attention. The increasing demand for English bilingual education is, therefore, mostly based on parents' desire for their children to gain a respectable place in society and acknowledges the fact that English has become the number one language in world.

The recently emerged CLIL approach has been implemented only in a few prestige schools in Brazil, one of which is the school that is taking part in this project. Though with a promising potential for growth in Brazil, as bilingual education is a flourishing business and the media is carrying the message that the ability to speak English is crucial for a better life (Rajagopalan, 2005), still only a fairly small number of schools follow a CLIL approach. Liberali and Megale (2016) have pointed out the difficulty in estimating the right number of bilingual schools in Brazil, since some projects have also been introduced in public schools, trying to bring bilingual education to other segments of the Brazilian population. However, when excluding such projects, there seems to be a significant regional imbalance in the places these bilingual schools are located. The expansion of bilingual education, according to Liberali and Megale (2016), is biggest in the state of São Paulo, which hosts a total of 104 bilingual schools. In second place comes the state of Paraná with 23 bilingual schools, then

comes Rio de Janeiro with a total number of 20 bilingual schools and then Santa Catarina that hosts 15 bilingual schools. Not surprisingly, most of these states, apart from Rio de Janeiro, lie in the South or Southeast of the country. The population in this part of Brazil is considerably richer in comparison to the population in other parts of the country. The elitist nature of English bilingual education in Brazil can also be illustrated when looking at the tuition fees parents need to pay for their children's enrolment. In the Sao Paulo region, only three English bilingual schools have a monthly tuition fee of less than R\$1000 (Folha de São Paulo, 2016) - already more than the minimum salary for a full-time job in the country.

One of the main reasons for the popularity of private English bilingual education nowadays in Brazil is, as Gimenez (2013) and Finardi (2014) noted, an evident void in the public education service, meaning and inability of these to form fluent English speakers. Cavalcanti (1999) pointed out that there is a certain imbalance in terms of the importance that is given to by government officials to bilingual education which include indigenous languages and those which include other languages, such as English. One of the reasons for that is that political power in recent years was in the hands of a government that criticized the growth of U.S. American culture in the world. This resistance to U.S. American influence was accompanied by negative attitudes of policy makers towards English in education. The priority for government-financed access to the former has, according to Gorete Neto (2014), also historical reasons. The imposition of the Portuguese language on native tribes has eradicated many indigenous languages from the linguistic landscape. Preserving the still existing languages is, therefore, seen as a priority by Brazil policy makers.

The political situation, as described by Cavalcanti (1999), shows that English language education is not high up on the list of priorities of Brazilian government officials. The lacking ability of the Brazilian educational system to form fluent speakers of English, as described by Gimenez (2013) and Finardi (2014), leads to a country whose citizens only have

a very low proficiency in English. Studies conducted by the British Council in 2015 and EF English Proficiency Index in 2014 showed that merely 5% of the Brazilian population speaks English fluently. In a recent study by EF English Proficiency Index (2015), Brazil came in 41<sup>st</sup> in the ranking of English proficiency in different countries. From personal experience as an English language teacher in Brazil I can say that most public school students are not able to speak English in an even basic way. They are used to speaking about the English language instead of using it and are demotivated by the lack of quality of the English language classes. Small public investments towards the implementation of a satisfactory quality of English language teaching in all schools and a high demand for English language education by the middle and upper-class has led to a gap which has been filled by private language institutions and a growing number of private English bilingual schools.

Access to these private English bilingual schools is, however, limited to those with more financial resources. Students of these schools are thus usually privileged individuals in the sense that their parents give a high value to education and have the financial resources to give their children access to such types of education which most Brazilians do not have access to. The Brazilian public system's failure to provide free access for all students to learn a second language in a satisfactory manner has created a socioeconomic gap in English language proficiency (De Mello, 2011). Not surprisingly, as was shown in the most recent report of the British Council from 2015, 61% of Brazilians claim not to have learnt English because it was too expensive. In the same report it was, however, shown that in the economically weak classes, interest to learn English was not very high because members of these classes did not feel the necessity to know English in their jobs. These differences in motivation add to an increasing socioeconomic gap which is maintained by the ones who are able to afford better education in private institutes. My aim is not to go into the socio-political aspects of the Brazilian education, but to put this study into a sociological context. It needs to

be acknowledged that, since access to English bilingual education is a matter of financial resources, the population of students that is participating in this study is a very select group of individuals with a higher socioeconomic background than others and do not represent Brazilian students in general who are mostly part of the traditional public educational system. It also means that any recommendations that are given as a result of this study, cannot be generalized to a bigger population but can only serve as recommendations for schools with a similar approach and population of students.

Another important aspect that needs to be acknowledged when talking about the Brazilian education system, is the quality of English language teaching. Treated for many years as the ugly duckling in school curricula, it has become very unattractive to be an English language teacher in the Brazilian education system. This situation has led to another unfavorable outcome, a shortage of well-trained English teachers in Brazil. The British Council (2015) evaluated the quality of English education in Brazil and considered it to be “poor” and “not sufficient”. Reasons that were named included observations such as that teachers were overworked, undertrained and underpaid. In private schools the situations seems a bit brighter but, as mentioned before, access to them is restricted and only available to the richer part of the population.

Even though, CLIL is a new concept in Brazil and hardly any studies have been conducted to show its efficiency there, its potential seems to be high. Among prospective teachers, an acknowledgement of the poor current situation of English language teaching and a desire to change seems to have taken place. Pre-service teachers’ motivation to implement CLIL and teach it seems to be high. They seem to be open to it and find it an appropriate alternative to overcome problems of the education system (Finardi, Leão, & Pinheiro, 2016). Both English-learners and non-learners give a high value to the ability to speak English (British Council, 2015). A perceived higher employability was named as the foremost reason

to learn English among employees and employers. In an environment in which such a big gap exists between status quo and demand for English language learning, CLIL can occupy a space and give new opportunities to all stakeholders. From an investor's perspective, the growth potential of this market is immense and business success very likely. Teachers who specialize in the field today might be the experts of tomorrow and students can be part of a young and fluent elite of English speakers.

## **2.4 Teaching Issues in CLIL**

Teaching a foreign language is not an easy task for teachers across different countries. CLIL teaching shares some of the difficulties with traditional foreign language teaching but also has its specific issues that need to be acknowledged. This is why I will delineate here some issues encountered in the literature in order to investigate and provide a better understanding of CLIL- specific issues and how CLIL practices in general vary across countries. This might shed some light on how CLIL can be successfully implemented in a Brazilian context. The issues encountered in CLIL are mostly taken from the European context, since CLIL is a European project (Marsh, 2002). Europe already is a very diverse setting and depending on the country in which CLIL is taught, differences in cultures and educational policies lead to different applications of this teaching method (Nikula & Marsh, 1998). Sylvén (2013) depicted four factors which she found to be decisive for success when implementing CLIL. These factors include a policy framework, teacher training, age of implementation, and extramural exposure to the target language, which are all very different across countries. In a cross-cultural study Sylvén (2013) investigated these four factors of CLIL by comparing the Swedish situation to the ones in Finland, Germany and Spain.

**2.4.1 Policy framework.** The policy framework seems to be an important aspect, since the way CLIL is defined varies significantly across countries, affecting its application. Official regulation and ongoing research in CLIL helps to ensure the quality of these

programs. Spain stands out positively in the way that large investments have been made in CLIL that led to strong regulation and high-quality research based on which CLIL programs can be improved. In the case of Brazil, investments in prestige bilingual schools could be an option. However, there is no clear plan about government investment in CLIL, at least not until today.

**2.4.2 Teacher training.** Another aspect that helps the successful application of CLIL is CLIL-specific teacher training, since teachers need to have an understanding of how to teach content in a language-enhancing way (Ball & Lindsay, 2010). Important for successful CLIL teaching is for teachers to achieve a balance between teaching language and content, which eventually leads to learning success in both areas. Many content teachers stress content achievements over language achievements. The foremost reason for that is, in many cases, their own low command of the target language. Di Martino and Di Sabato (2012) found in a study about CLIL in Italian high schools divergent statements by official sources about the proficiency of teachers. Some claim that less than 10% of teachers starting to work in CLIL schools possess a language proficiency of at least C1 (CEF) (Common European Framework of Reference for Languages, 2016). Others claim that no teachers possess a proficiency level of C1 (CEF) and only a few possess a proficiency level of B2 (CEF). Such low levels in teachers' English language proficiency can have a detrimental effect on teaching. Unsworth, Persson, Prins, and De Bot (2014) showed in a study about the factors that contribute to early language learning that teachers' language proficiency was the best predictor of children's scores. Children of early English schools in the Netherlands who were subjected to non-native English teachers with an English language proficiency level of CEF-B, scored significantly lower than children subjected to teachers with a higher proficiency.

For that reason, Italian CLIL teachers who possess an initial B1 proficiency level (CEF) are required to take part in a four-year language course set up by universities and

teachers with a B2 proficiency level (CEF) need to take part in a two-year language course. In Germany, only teachers with a C1 level (CEF) can teach in CLIL programs (Sylvén, 2013). However, recent data gathered by Di Martino and Di Sabato (2012) reveal that English language courses for teachers do not always lead to the desired results. Upper-secondary school teachers of CLIL reported to have little trust in their colleagues' English language proficiency. Especially older colleagues' ability to raise their communicative competences in English to a satisfactory level was doubted. Implementing CLIL successfully and raising content teachers' communicative competences thus is a challenging task which might take a new generation of teachers to resolve. Nevertheless, these findings underscore the importance of adequate teacher language training courses.

Another reason for CLIL teachers' emphasis of content over language achievements is that, even though they might have target language skills that are above those of their colleagues, these teachers are primarily trained to teach and evaluate the content they have studied for and not the language (Sylvén, 2013). In line with that, many authors (Lyster & Ballinger, 2011; Pérez Cañado, 2016) have argued that one of the reoccurring issues in studies concerning CLIL is that professional development is urgent, since teachers are either experts in English or in the subject matter but not both. Lyster and Ballinger (2011) argue that due to this lack in either language or content expertise, professional development of teachers is a central concern in CLIL. The authors argue that the Sheltered Instruction Observation Protocol (SIOP) model for professional development would be most appropriate to meet the needs of CLIL teachers. It provides them with guidance and technical help on how to implement subject matter curricula into second language learning by taking into account the specific demands of different grade levels. According to the SIOP model, any CLIL lesson needs to have separate content and language objectives with a review of key vocabulary and content concepts at the end (Echevarría, Vogt, & Short, 2008). Short,

Echevarría, and Richards-Tutor (2011) showed that students whose teachers had been trained in the SIOP model outperformed students whose teachers had not been trained in the SIOP model in reading, writing and oral proficiency. Also in this aspect, Spain stands out as a positive example, providing in-service and pre-service teachers with many opportunities for professional improvement (Sylvén, 2013). The issues of teachers' language proficiency and specific training that were discussed here, are likely to also apply to the Brazilian situation. Brazil, too, has a teaching workforce that is undertrained, as the British Council (2015) stated in their last report and its population's overall English language proficiency is also rather basic (English First, 2014).

**2.4.3 Students' age of introduction to CLIL.** Early introduction of English in school is, as Sylvén (2013) described, another important factor in becoming a proficient speaker. In Spain many CLIL programs are introduced fairly early, on a primary school level. In Sweden the importance of English education is already stressed in regular primary schools and CLIL is mostly introduced at an upper secondary school level. Central to this notion is that early learning of the language together with high amounts of exposure to the language at a young age ideally leads to the development of near-native language skills.

Another issue about introducing CLIL at a late stage is that students' cognitive and language levels then do not always match (Coyle, Hood, & Marsh, 2010) and their cognitive skills often exceed their language skills. In such cases CLIL can have detrimental effects on subject matter knowledge compared to traditional monolingual content teaching. While, as Van de Craen, Mondt, Allain, and Gao (2007) argued, in primary education CLIL might even have beneficial effects on subject matter learning, in secondary education effects seem to indicate the opposite. These results were confirmed in a study by Piesche, Jonkmann, Fiege, and Keßler (2016) in which monolingual and CLIL German secondary-school students were compared. The authors found small detrimental effects on science learning of CLIL

compared to monolingual learning. These effects were, however, small and only short-term in nature - six weeks after learning, the initial effects disappeared, indicating that short-term detrimental effects of impaired understanding might be compensated by CLIL students' higher cognitive and neuronal flexibility and less cognitive effort they need to put into solving other task, giving them more cognitive resources to process information at a later stage (Van de Craen et al., 2007). Whether effects in Brazil would be similar needs to be seen. However, it can be expected that due to the low overall English language proficiency of Brazilians (English First, 2014), Brazilian students who enter CLIL in secondary education would need a longer time to adapt and longer-term detrimental effects on subject matter knowledge could not be ruled out.

The last issue about starting CLIL education at a later age that I want to address here is that of differences in students' linguistic abilities (Klimova, 2012). Extramural exposure to English, quality of English language learning at earlier stages of education, extracurricular language courses taken and, of course, individual differences in the ability to learn a L2 vary greatly between students. Close (2015) described some of the challenges that students in a Japanese university had when being exposed to courses in English. Even though not a primary or secondary school context, some of the challenges are likely to be found equally in such environments. Weaker students described problems with the level of the reading materials, since all of them required a native academic proficiency level. They felt a lack of ability to express themselves in debates and especially in large classes of up to 60 students in which their reluctance to speak only got enhanced. Additional challenges were the speaking pace of the lecturer and the difficulty of the content vocabulary. Stronger students described classes often as too simple and boring because of the slow pace, level of vocabulary and the amount of content that was covered. In group works putting students with similar abilities in same groups worked better because they shared the workload more equally. In groups of

students with different linguistic abilities stronger students often had a much higher work load than weaker students because of their higher language proficiency.

These issues are also likely to occur in the Brazilian context, especially in secondary schools with a CLIL approach. Attention needs to be given to the proficiency constellation of students when putting them into groups and also issues about encouraging students with a lower English language proficiency to participate in classroom activities.

**2.4.4 Extramural exposure.** As a last aspect, Sylvén (2013) named that extramural exposure also has a large effect on the success of language learning. English is omnipresent in Nordic countries in media and daily life. The same cannot be said about Germany and Spain. Since we cannot shape the environment that students live in outside the classroom, it is especially important in acquisition-poor environments like Spain or Brazil to provide them with as much naturalistic exposure within the classroom as possible. The fact that CLIL programs provide students with lots of opportunities to interact in a naturalistic environment in the target language within classroom makes them the ideal platform to even out such cross-cultural disadvantages.

This notion finds support in Halbach (2002) who points out that the major reason why Spanish students have difficulties to acquire a satisfactory level in English is that in traditional foreign language learning they have insufficient opportunities for naturalistic language use due to primary and secondary education teachers' tendency to teach students about the language but not how to use it. This teaching style has led to unsatisfactory and quite disappointing results. This leads students to enter secondary and university without being able to communicate in the target language, which they need to learn then at this late stage. The way language should be presented differs between age groups. Vaid (1984) showed that naturalistic exposure to the target language is most efficient at a younger age. Late learners, on the other hand, benefit more from form-focused instruction-based

approaches. According to Halbach (2002), the focus on form in traditional language teaching in Spanish primary schools also leads students to experience difficulties using it once they enter secondary school CLIL education.

To sum this part up, we can state that naturalistic exposure to the target language in CLIL might be especially fruitful in acquisition-poor environments. When students enter CLIL education at a later age, language learning occurs more structured and students benefit more from form-focused approaches. Such students might be helped with form-focused language teaching elements, preceding content teaching. Especially at the initial stage of entering CLIL education, in order to decrease sensations of frustration, teachers should use a great deal of visual materials combined with texts to provide students with a richer input to acquire language and content knowledge at a higher level. Later on, with a more advanced level of proficiency, less attention needs to be given to linguistic development and students prefer independent writing tasks (Eurydice, 2006).

**2.4.5 Motivational aspects.** In addition to the factors contributing to the success of CLIL, named by Sylvén (2013), one major advantage of CLIL seems to be that it increases students' motivation for foreign language learning. Marsh (2002) introduced CLIL in a Swedish secondary school in an attempt to increase motivation to learn German as a second foreign language, next to English. The program's results were promising; students achieved better results in all four competence areas and dropped out significantly less (0% drop out) than their counterparts who were following traditional foreign language classes (35% drop out). These results are especially remarkable, since students in these classes started off with different proficiency levels. One reason why this program was so successful might have been that students had lots of opportunity not only to get acquainted with the German language but also with its culture by taking part in two school visits in Germany and hosting German students each year who came over to visit. These interactional exchanges seem to be an

important aspect when trying to enthuse students about learning a language and should be included, whenever possible, in the CLIL curriculum.

Another aspect regarding motivation to learn a foreign language was pointed out by Dörnyei (1994). He emphasized the importance of students' intrinsic over their extrinsic motivation when learning a language. Extrinsic motivation in this context refers to the motivation for a certain behavior that is based on the expectancy of a reward given by an outside source (e.g. good grades, money from parents) or the avoidance of punishment. Intrinsic motivation refers to the motivation that is based on the expectancy of internal rewards such as the pleasure that performing an activity can give to a student or the satisfaction of natural curiosity. Intrinsic motivation can be enhanced when the actor perceives an activity to be self-determined (Deci & Ryan, 1985). Activities in school should thus be built up in such a way that they give students lots of opportunities to use their own creativity to perform tasks. This way intrinsic motivation can be enhanced.

**2.4.6 The implications for Brazil.** As discussed earlier, not much research has been conducted on the matter in Brazil. However, to become a successful nationwide project, Brazil should take Spain as an example for the implementation of CLIL in a national curriculum. In terms of extramural exposure, Brazil probably resembles Spain in comparison to the other countries most. An implementation of CLIL at an early age, therefore, seems to be most fruitful. Spain has proven that investments and research in the area can lead to promising results. The creation of national policies on how to implement CLIL and many opportunities for teacher training are essential for successful implementation. Frequent exchange programs with English speaking countries can improve students' motivation to increase their linguistic and intercultural competences. Differences in linguistic abilities remain an issue but effects can be decreased if CLIL is introduced at an early age. At this age, pure naturalistic exposure to the language has the most impact. However, if only applied at a

later level, form-focused approaches should be part of a successful CLIL class at least until English language competences are raised to a sufficient level.

### **Chapter 3: CLIL at Paul International**

The school to be investigated will be kept anonymous in order to protect their privacy rights and the fictitious name assigned to the school is Paul International to which I will refer consistently. The school is part of the biggest franchising networking of private schools in its state which consists of fifty- three franchises around the country, of which only five provide bilingual education applied in a CLIL manner.

Paul International was founded in 2013 and offers a wide range of activities and facilities to students, which include international experiences that comprises the participation in international events, such as lectures in or out of school with the participation of international students. After the core classes in the afternoon, optional workshops are given during which students have the opportunity to participate in extracurricular activities given as a complement to their curricula, for instance, theatre, cinema, drawing, dancing, math clubs, sports and others. The language lab is offered as a plus to their English classes. Here students have the opportunity to improve their command of English. In addition, Portuguese is offered to foreign students. After all, classes of Spanish, French and Italian are also available throughout the academic year. International certification preparation is provided during the academic year in which students are encouraged to take tests that give them an international certification such as a TOEFL or Cambridge certificate. Above all, students have an exclusive industry experience which most of the private schools in Brazil do not offer. In this industry experience students are allowed to take part in courses which are offered for professionals of the respective area. These are organized in short courses, online courses, workshops and events during which students get into contact with professionals. The aim is for students to develop specific skills in e.g. entrepreneurship and to develop a business vision of the world.

The physical space plays an important role to provide students with the convenience of an educational environment which consists of a modern library that students have access to, a diversity of books and materials in Portuguese and English, a common room, and catering and security services for students.

Since CLIL is still in the early stages of development in Brazil and since this school is newly founded, I reckoned that there were still some issues regarding their teaching that they needed advice on how to address. The first time I contacted Paul International, they were enthusiastic about being able to get advice and instruction that would help them to improve their school program to the needs of a CLIL-based learning environment. I received an overview of Paul International's way of applying their methodology by the pedagogical director of the school and her initial assessment of what needed to be improved. Specifically, she mentioned issues of students having mixed abilities leading to some students not being able to follow instruction in English and issues regarding content and language assessment needing improvement. However, she was open to all types of advice leading to the improvement of their current teaching practices.

To achieve a better understanding of their needs it was crucial to understand their way of teaching. The centerpiece of their teaching methodology are the so called "workshops". During these "workshops", the whole school works together on a specific project. Each "workshop" is given for one term, consisting of two months. As an example of how the classes are organized in a curriculum, I attached the students' timetable for the first term in appendix A. Typically for CLIL, half of the classes are held in English and the other half in Portuguese. The topic of this workshop was Piggy Banks and the question to be solved in the project was the following: "Bearing in mind all the adverse possibilities brought by the easy credit, tendentious media, high living cost and the instability and insecurity of world's

economy, how should you plan your personal economies in order to achieve your short, medium and long term goals?"

After defining the question, teachers elect a core national base of content that will help students meet the challenge of this project. For instance in math classes teachers would engage students in financial mathematics, in geography they would work with Malthus theory. Although the subjects don't change, designing these workshops creates a different challenge for students and teachers. Based on the school working with real world situations and being an authentic school in Brazil, I understood that the subjects of these projects change every year, due to different current issues. Appendix B serves as an additional example of a typical "workshop". The overarching topic here was black history in Brazil. All teachers from different subjects and areas find content related to this topic and teach it in class. This way students develop abilities to look at a subject from different perspectives.

In Appendix A I have attached the timetable of the first term in order to give an idea of a students' regular school day. Fifty percent of the classes are held in English and highlighted in blue, another fifty percent are held in Portuguese and show no highlighting color. Most classes are mandatory for each school to include in the curriculum based on the national education board's core curriculum. However, some like the as elective presented subjects are chosen by the school board. The subjects sociology, mathematics, physical education, history, arts and geography are taught in both languages. However, in each different parts of the content matter is taught. Classes solely offered in Portuguese are biology, Portuguese, chemistry, physics, writing and philosophy. Classes highlighted in orange represent guided studies held to help students to structure their studies in English. The green squares represent Spanish classes which are also held in Spanish. In this timetable it can be seen that students study full time from 8 a.m. to 4 p.m. which is different to most high schools in Brazil which have an effective school time from 7:30 a.m. to 12:30 p.m. and only

cover the core curriculum classes. The physical space in which students study creates a cooperative atmosphere. Students sit at tables that enable them to work in groups of four or five students until the end of the term. By virtue, there are no individual desks in classroom. This way students are able to develop their interactional skills that are considered essential in the 21st century. Each class is held in front of 25 students.

With regard to these characteristics of Paul International School, I got information on the most pressing issues that needed to be solved by the pedagogical director which could be seen as a less dense pre-needs analysis. I was presented with three main issues that were described to me as their most urgent needs that needed be resolved quickly. According to the pedagogical director, these issues that I will mention here were very often brought up in their meetings. (1) With regard to their workshops, the teachers have noticed that their students carry different levels of proficiency which manifest themselves in group work and during individual activities. Teachers struggled with this issue and asked themselves what strategies they could apply in order to give all the students the benefit of content and language learning. (2) Teachers also claimed to find it difficult to adapt to their evaluative instruments. Specifically, they asked what different types of evaluative instruments they could use to evaluate their students' achievements in this type of environment. (3) The third issue that was named was again related to different proficiency levels of the students in class. Teachers were confronted with the problem that while they were outlining an activity to students, parts of them did not understand the instructions. Even though not considered a good method, many teachers resorted to giving additional explanations in Portuguese. Teachers asked themselves what alternative methods they could use to give understandable explanations in English without having to explain again in Portuguese.

As I am aware that these issues were brought to me by the pedagogical director directly, and that other stakeholders, namely students and teachers, might see issues

elsewhere, I triangulated these with students' and teachers' perceptions of the real daily issues encountered in classroom and the three issues will be taken part into the questionnaire to find out where the most pressing issues for teachers and students lie when being presented with CLIL. On the basis of these, I will then give teachers advice on their teaching and provide an example of a lesson plan that they could use as an illustration of material design and lesson planning.

## **Chapter 4: Needs analysis**

### **4.1 Methodology**

In this chapter I outline the way I found out what the school's issues are and which types of participants took part in the study. I also highlight the importance of a structured approach like Needs Analysis based on which I derive advice on how to improve current practices in the school.

**4.1.1 Theoretical framework of Needs Analysis.** In order to find out what Paul International's specific needs are, I used the method of Needs Analysis (NA), a method that became popular in the 1970/80s in the field of English for Specific Purposes (ESP) (West, 1997). According to Dudley-Evans and St. John (1998), NA is one of the centerpieces of each ESP course and syllabus design and helps to select and create adequate materials for specific language learners' needs. West (1994, p.1) defined NA as finding out "what learners will be required to do with the foreign language in the target situation, and how learners might best master the target language during the period of a training". Dudley-Evans and St. John (1998) named eight aspects that any NA is supposed to determine:

(1) It should determine professional information about the learners and the target situations they will use English in.

- (2) It should determine personal information about learners and the factors affecting the way they learn (e.g. previous learning experiences, motivation, or attitude to English).
- (3) It should determine learners' current English language proficiency.
- (4) It should determine learners' English knowledge gaps in the target situations they want to use English in.
- (5) It should determine language learning needs and help identify effective ways of learning skills and language to close those gaps.
- (6) It should determine information about the professional communication skills needed in the target situations.
- (7) It should determine what learners expect from the course.
- (8) It should determine the environmental situation of the course.

Even though not all aspects of the previously named information that need to be assessed in Needs Analysis in ESP are applicable to CLIL, there seems to be a considerable amount of overlap. Also in CLIL it is necessary to know learners' individual learning experiences, motivational aspects of learning, learners' language proficiency, their knowledge gaps, preferred ways of learning, skills needed, expectations and other stakeholders' interests.

**4.1.2 Procedure of Needs Analysis in this study.** In order to find out what the different stakeholders' interests and needs were, I created two questionnaires, one for students (Appendix C) and one for teachers (Appendix D), and sent them to the pedagogical director of Paul International to hand out to students and teachers. Both questionnaires contained a number of questions in the first part and a short lexical English test in the second part that was used to assess English language proficiency. The questionnaires were filled in by both groups in school on a regular school Wednesday in the second week of a new term.

Students were asked to fill them in independently at the end of a class and complete them within 20 minutes. Teachers were asked to fill in their questionnaires at the same time as the students for which they had the same amount of time. As a third stakeholder source, I got responses from a previously from the pedagogical director of the school to questions about the school's current most pressing teaching issues. These different types of information were then triangulated and served as a source for improvement advice given to the school.

**4.1.3 Students' questionnaire.** Based on the issues found in the literature that I thought to be relevant for students, I created a questionnaire that was handed out to the students.

*Biographical information.* Firstly, I wanted students to answer some biographical information questions in order to get a good picture of the school's population of students. I asked them about their gender (Q1), their parents' highest level of education (Q2), their age (Q3), their current grade (Q4), and for how long they had been studying at the bilingual school (Q5). I expected most of them to have a rather educated parental background as this is linked to higher financial means that are needed to pay for the schools' rather high tuition fees.

*Language experience and exposure.* I was also interested in the specific language experience and exposure students had. For this purpose, I asked students questions about whether they spoke any languages other than Portuguese (Q6), whether they had any experience studying abroad (Q7), their parents' nationalities and the languages they spoke (Q8), and the years they had been studying English for (Q9). I expected most students to come from a monolingual background, since most Brazilians have a monolingual family background. Whether students had any experience abroad was interesting to the study, since I identified intercultural experience as one of the factors increasing motivation to learn. The years they had been studying English should give us an indication of how well prepared they

were before entering bilingual education and whether these still form an advantage, respectively disadvantage to their current linguistic abilities.

***Motivation to learn.*** Furthermore, I was interested in students' motivation to learn English. For this purpose, I firstly asked them whose wish it was that they started studying at this school, their parents' or theirs (Q10). I also asked them to rate on a scale from 1 (completely agree) – 5 (completely disagree) to what degree their parents reward them for good grades (Q11s) and to what degree good grades were important to them (Q11t). This way I wanted to find out their level of extrinsic motivation to learn. In order to find out their level of intrinsic motivation, I asked them to rate on a scale from 1 (completely disagree) – 5 (completely agree) the degree to which they thought that studying there would increase their future working opportunities (Q11a) and their intercultural communication skills (Q11b).

***Students' attitudes towards classes in English and Portuguese.*** Another aspect that was interesting to me was what attitudes students had towards classes held in English, respectively in Portuguese. I asked them to rate on a scale from 1 (completely disagree) – 5 (completely agree) the degree to which they liked classes in English (Q11e) and Portuguese (Q11f), the degree to which they would prefer to have all classes in English (Q11i) or Portuguese (Q11j) and the degree to which they thought classes in English were more interesting than classes in Portuguese (Q11l). As CLIL education can increase motivation, I expected students to have more positive attitudes towards classes in English than Portuguese.

***Students' attitudes towards classes in general.*** In a next cluster of questions, I wanted to find out about students' overall attitude towards the classes given in school. For this purpose, I asked them to what degree they thought that the teaching program of the school was interesting (Q11c), whether the content learnt in school was relevant to their future lives (Q11d) and whether the materials and discussions were realistic and relevant (Q11m). As one of the advantages of CLIL is that it provides a realistic and naturalistic learning environment,

I expected students to have, overall, positive attitudes towards the school and the classes given there.

***Students' preferred learning styles.*** In order to find out what students' preferred learning styles were, I asked them to what degree on a scale from 1 (completely disagree) – 5 (completely agree) they found classroom discussions important (Q11g), to what degree they liked the workshops given each term (Q11h) and group work (Q11o), and to what degree they agreed with the statement that they always did their homework (Q11r).

***Students' English language proficiency.*** Students' English language proficiency was another factor which was highly relevant to this study. As a primary measurement of students' English language proficiency served the number of correct responses to the lexical English test students did at the end of the questionnaire. As a second measurement, students were asked to evaluate their own English language proficiency. In order to find out how students evaluated themselves, I asked them to rate their English writing (Q14a), speaking (Q14b), listening (Q14c) and reading (Q14d) skills on a scale from 1 (very poor) – 5 (very good). I also asked them to rate on a scale from 1 (completely disagree) – 5 (completely agree) to what degree they were confident to speak English (Q11u) and Portuguese in classroom (Q11v).

***Other students' English language proficiency.*** Another factor that I thought to be relevant was how students evaluated their fellow students' English language proficiency. For this purpose I asked them to rate on a scale from 1 (completely disagree) – 5 (completely agree) to what degree they believed their fellow students had difficulties to do their assignments in English (Q11i) and how they estimated their fellow students' English language proficiency on a scale from 1 (excellently) – 4 (insufficiently) (Q13). I also asked them how they compared their own abilities to their classmates', more specifically to what degree they believed they had a higher proficiency than their classmates (Q11x). In line with

that and in order to find out whether they believed that differences in students' language abilities was an issue, I asked whether all students in class had similar English language skills (Q11n). I expected strong differences in proficiency, since students in this school all started CLIL education in secondary school with very different abilities based on differences in their previous English language learning.

***Consequences of differences in linguistic abilities.*** What effects possible differences in English language abilities in classroom had on students' and teachers' behavior, was the topic of a next set of questions that I asked students. Students were asked to rate to what degree they thought they helped other students in class when they had language difficulties (Q11p) and to what degree they thought others helped them when they had trouble to understand (Q11q). I expected students with a lower self-evaluation of their language skills to receive more regularly supporting behaviors and those with a higher self-evaluation of their language skills to give more often support to others. I also asked to what degree they agreed with the statement that their teachers regularly switched to Portuguese when misunderstandings arose (Q11z). I expected switching to Portuguese to be a commonly used method by teachers when misunderstandings arise.

***Teachers' English language proficiency.*** Another question concerned itself with students' evaluation of their teachers' language proficiency. I asked students to evaluate an average teacher's language proficiency on a scale from 1 (very poor) – 4 (very good) (Q12). The expectation was that students evaluated their teachers' proficiency as somewhere between sufficient and good, since English language proficiency among teachers in Brazil is not always adequate and teacher training not always provided.

***Students' ideas for improvement.*** As a last question, I asked students to name three things they would like to change about their classes if they were school principal (Q15). This way I wanted to find out what the most urgent ideas for improvement are among students.

*Expectancies regarding the interrelationship of factors.* In order to find out what factors contributed to success in English language learning, I had a number of expectations based on the literature discussed earlier. First of all, I expected parental education background to have an influence on study success. Students who come from a background of higher education should on average be more proficient English language speakers. Another factor that I thought would contribute to proficiency in English was the age of onset of English education. In order to get a measurement for age of onset, I deducted the years students had been studying English for from their age (Q3-Q9). I expected earlier age of onset in English education to contribute to the acquisition of more native-like language skills. Motivation to learn was another factor, I believed to be relevant. I expected students with a higher intrinsic motivation to have gained better language abilities than students who were more extrinsically motivated. Regarding preferred learning styles, I expected students with more positive attitudes towards group work, workshops and classroom discussions to have benefitted best from this program and have gained highest English language proficiency, as communicative activities enjoy a high standing in CLIL programs. In addition to that, I expected dedication to homework should improve linguistic proficiency. Regarding differences in linguistic abilities, I expected initial differences in proficiency to become less visible over time and students to become more confident speaking up and their English proficiency assessed with the language test and the self-evaluation to increase as they stay longer in school.

In addition, I had some expectations regarding the interrelationship of some other factors. Firstly, I thought the extent to which students held positive attitudes towards classes held in English to be relevant. Positive attitudes should increase with higher English language proficiency. The opposite should be true for students with a lower English language proficiency. These students were expected to have relatively more negative attitudes towards

English. Regarding their confidence to speak up in classroom, I expected students with a lower evaluation of their own proficiency to be less confident to speak up in English during class. I also expected teachers' use of Portuguese to become less over time, as the necessity of using Portuguese as a language of instruction decreases.

**4.1.4 Teachers' questionnaire.** Based on the issues found in the literature that I thought to be relevant, I created a second questionnaire that was handed out to the teachers.

**Biographical information.** Similarly to the students' questionnaire, I firstly asked teachers some biographical questions in order to get a good idea of the overall characteristics of this population at this school. I asked them what their gender was (Q1), their level of education (Q2), their age (Q3) and the studies they had followed in university (Q4). I expected teachers' level of education to be mostly at a bachelor's level, as this is the required competency teachers need to possess to teach in Brazilian schools. Furthermore, I expected teachers to be of a relatively young age as CLIL is a new field and new teachers might be better able and motivated to adapt to such an environment than their older colleagues. I expected most of them to have studied other subjects than English as most teachers of CLIL are primarily content teachers.

**Teaching experience.** A second topic I was interested in was teachers' professional experience in this school and other schools as teachers. For this reason, I asked them how long they had been teaching at the school for (Q5), which subjects they taught there (Q6), how long they had been teaching their subject(s) for (Q10), how long they had been teaching their subject(s) in English for (Q11) and if they were familiar with the concept of CLIL (Q12). I expected teachers to be relatively new at the school, as it only exists for less than 3 years. I expected most of them to be content teachers of various fields with relatively little experience in teaching their subject(s) in English. Since CLIL is a term mostly used in the

European context, I was not sure whether they had heard about it but I expected most of them to at least have rudimentary knowledge of it.

***Language experience and exposure.*** In order to get to know more about their language experience and exposure which I found relevant to their competence to teach their subject(s) in English, I asked them questions related to that. Firstly, I wanted to know what languages they spoke other than English or Portuguese and with which proficiency (Q7). Secondly, I asked them whether they possessed any English language proficiency certificate and if so of which proficiency level (Q8). I also asked them whether they had ever lived abroad and if so where and for how long (Q9). I expected teachers to have a language proficiency of about B2 to C1. However, as I discussed in the literature review, a reoccurring issue in CLIL is that teachers do not always have the proficiency needed to teach in English and Brazil's teaching force has the tendency to be undertrained and along with the overall population has a rather low English language proficiency. I expected not many teachers to have made any experience abroad, since living abroad is usually cost-intensive and teachers are not among the best-paid professionals in Brazil.

***Workload and classroom size.*** Another factor I found relevant to study that could seriously impede the quality of teaching was teachers' workload and classroom size. I asked teachers to answer how many classes they gave and how many working hours they had including preparation, correction, etc. per week (Q13). I also asked them how many students were on average in one classroom (Q15) which next to the workload was supposed to give me an estimation of how much time a teacher could dedicate to the individual improvement of each student. I expected teachers to give around 18 classes amounting to a total of at least 40 working hours per week. I expected classroom sizes of around 25 students, since that was what the pedagogical director told me.

**Teacher training.** As discussed in the literature review, teacher training on how to teach CLIL and meetings with other colleagues to discuss activities and latest developments are essential for a good teaching force. In order to find out if training on CLIL was given to teachers, I asked them if they had ever received any specialized training on how to teach in a bilingual school and if so, how often this had taken place (Q16). In another question I asked whether teachers ever have meetings with colleagues and if so how often these take place (Q17). I also asked teachers to rate on a scale from 1 (completely disagree) – 5 (completely agree) to what extent they kept up to date on latest developments in bilingual teaching (Q18l) and felt that the school provided them with sufficient training opportunities (Q18n). I expected, as CLIL is fairly new in Brazil and as the tendency is that teachers are not well-trained, that neither many trainings nor meetings had been taking place and that teachers' knowledge of bilingual education would be rather rudimentary.

**Students' motivation.** Furthermore, I was interested in what the teachers thought of their students' motivation to follow classes in English. To find this out, I firstly asked teachers what they thought their students' motivation to follow classes in English was in comparison to Portuguese on a scale from 1 (much more motivated in English) – 5 (much more motivated in Portuguese) (Q14). I also asked them to rate on a scale from 1 (completely disagree) – 5 (completely agree) the degree to which they believed that students put more effort into doing assignments in English than in Portuguese (Q18f) and the degree to which teachers found it difficult to motivate students to speak English in class (Q18k). I expected teachers to estimate that students were more motivated to follow classes in English based on promising results discussed in the literature review which showed less drop outs in schools offering CLIL education than regular schools. However, it could also be true that if students' proficiency was very low, that motivating students to speak English would prove to be a difficult task resulting in less effort put into participating in learning activities.

***Students' English language proficiency.*** With regard to teachers' estimation of their students' ability to follow classes in English, teachers were asked to rate on a scale from 1 (completely disagree) – 5 (completely agree) the degree to which they thought their students were able to accompany classes taught in English (Q18a) and the degree to which students would be better able to accompany classes taught in Portuguese (Q18b). I also asked them to estimate their students' English writing (Q19.2a), speaking (Q19.2b), listening (Q19.2c) and reading (Q19.2d) skills. I expected that many students would have trouble to follow classes that were taught in English and that their overall English language proficiency would be rather low. However, some students might have, due to different extramural input, a higher proficiency than their fellow students. To find out whether this was the case, I asked teachers to estimate the similarity in their students' English language proficiency on a scale from 1 (completely disagree) – 5 (completely agree) (Q18d). I expected that differences in English language abilities were an issue in this school, due to different learning opportunities that students had prior to entering secondary bilingual education at this school.

***Consequences of differences in linguistic abilities.*** Differences in abilities might lead to a number of unwanted behaviors, such as that some students might be afraid of making mistakes and thus not participate or that classes switch unintendedly to Portuguese. In order to find out whether this was an issue, I asked teachers to estimate on a scale from 1 (completely disagree) – 5 (completely agree) the degree to which they believed students would not engage in classroom discussions due to a lack of confidence in their English language abilities (Q18j) and to what degree they thought that classes often switched unintendedly to Portuguese (Q18c). Based on literature discussed in the literature review, I expected that, if differences in English language abilities were a pressing issue, this could lead to avoidance behaviors regarding participation in classroom and language code switching. How teachers resolved misunderstandings was, was the topic of another question.

I asked teachers to write down the strategies they used when students had difficulties to understand the content (Q20). This way I wanted to know what strategies were currently applied to address such issues and if they were appropriate in that context.

***Teachers' attitudes towards classes in English and Portuguese.*** In another set of questions I wanted to address the issue of attitudes teachers at this school had towards giving classes in English and Portuguese. In order to find out teachers' attitude towards classes in English, I asked them to rate on a scale from 1 (completely disagree) – 5 (completely agree) the degree to which they thought English language proficiency was getting too much attention at the school (Q18e), the degree to which they believed that classes in English were more productive than classes in Portuguese (Q18h) and the degree to which they preferred giving classes in English (Q18o). In order to find out teachers' attitudes towards classes given in Portuguese, I asked them to rate on a scale from 1 (completely disagree) – 5 (completely agree) the degree to which they thought classes in Portuguese were more productive than classes in English (Q18i) and the degree to which they preferred giving classes in Portuguese (Q18p). I expected that teachers would have a positive attitude towards English given classes, since studies have shown that it can increase motivation among students. However, it might be the case that, due to an overall low proficiency of students, classroom discussions would not lead to the expected results leading to demotivated teachers.

***Teachers' language proficiency.*** As was discussed in the literature review, teachers' language proficiency has a strong impact on students' later acquired language proficiency in the target language. In order to address this issue, teachers performed the LexTALE test as a measurement of their proficiency. I also asked teachers to rate on a scale from 1 (completely disagree) – 5 (completely agree) the degree to which they felt more confident to teach in Portuguese than in English (Q18g) and the degree to which they felt the need to improve their English (Q18m). They then evaluated their own English language writing (Q19.1a), speaking

(Q19.1b), listening (Q19.1.c) and reading (Q19.1d) skills on a scale from 1 (very poor) – 5 (very good).

***Teachers' ideas for improvement.*** As a last question, I wanted to know what teachers would change about the school's teaching concept if they were school principal (Q21). This way I wanted to get to know the ideas for improvements that teachers had.

**4.1.5 English language proficiency test.** At the end of the teachers' questionnaire as well as the students' questionnaire both groups were asked to do a language proficiency test. This way I wanted to find out what the true language proficiency of the students and teachers was. I used the LexTALE test (Lemhöfer & Broersma, 2012) because it is easy to administer and takes only 3.5 minutes to complete. The LexTALE test consists of 60 items which are either correct English words or non-words. Participants needed to decide whether a word was a correct English word or not. For each correct response 1 point was given, for each incorrect response none, resulting in a minimum score of 0 and a maximum score of 60. Lemhöfer and Broersma (2012) reported that, based on results of a Dutch sample, a LexTALE score of 35 or lower (59% of correct responses) indicated a proficiency level of B1 (CEF) or lower. A score of 36 to 48 (60-80% of correct responses) indicated a proficiency of B2 (CEF) and a score of 48 or higher (80-100% of correct responses) indicated a proficiency level of at least C1 (CEF). In a large study with a Korean and Dutch sample of advanced learners Lemhöfer and Broersma (2012) found that the test, even though not naturally a proficiency test, highly correlated with proficiency tests such as the TOEIC or the QPT. Therefore, even though not an extensive test of all aspects of proficiency, it can still be taken as a good indication of language proficiency. To measure this test's validity in this study, I compared the results of the LexTALE test with students' and teachers' self-evaluations of their English language proficiency. This should give us a better idea of their true abilities.

Before applying the test to students and teachers at the school, I administered an online pre-test to five Brazilian English language teachers and five native English speakers. The Brazilian English language teachers had scores ranging from 47 to 52. Native English speakers' scores ranged from 57 to 60. After successful application of the pre-test, I administered the test to students and teachers at the school. One challenge that I came across when scoring the tests, was that some students might have misunderstood the instruction, thinking that they should leave items blank they were not sure about. In order to deal with this problem, I decided to grant 0.5 points for items that were left in blank, since this would be the guessing chance for a correct response.

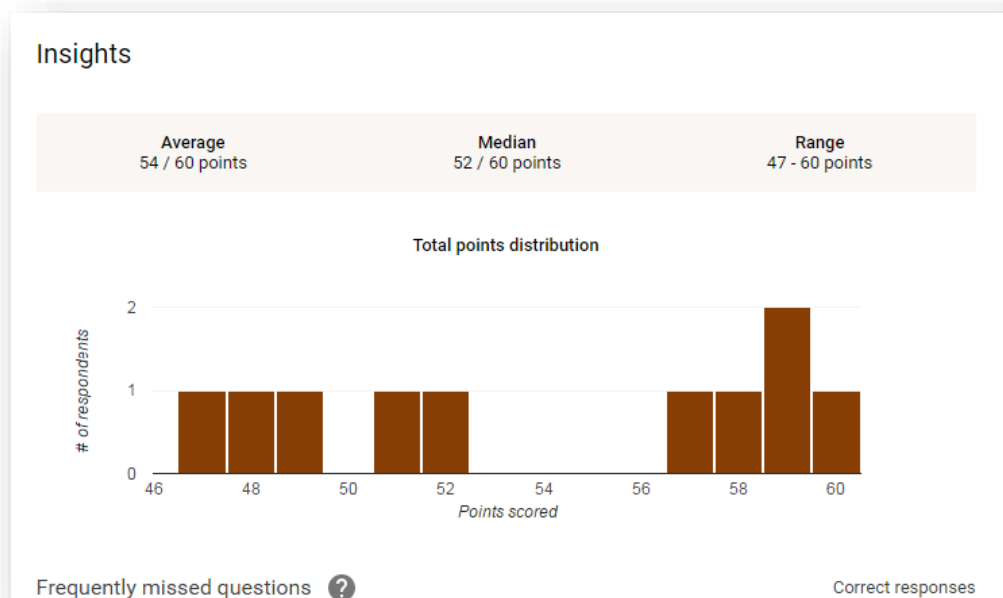


Figure 2: Results of Pre-test of the LexTALE.

## 4.2 Results

In this section I will report and analyze the data gathered from the students' and teachers' questionnaires and the language proficiency test. For statistical analysis I used IBM SPSS 23.

**4.2.1 Students' questionnaire and LexTALE test.** The questionnaire and the test were handed out to 166 students. Of these, 5 students had to be excluded from analysis due to

a response pattern that was detected and 4 students because they did not fill in the questionnaire and the test. Due to time constraints, 14 students answered the questions from the questionnaire but did not do the test. Left in the sample were 157 students who filled in the questionnaire and the LexTALE proficiency test and 143 students who only did the LexTALE proficiency test.

**Biographical information.** Results showed that 82 students were female and 73 male. One student did not reveal the gender (Q1). Their parents' highest level of education was on average rather high; 24 parents had a secondary education degree or lower, 47 a bachelor's degree, 69 a master's degree, and 12 a doctor's degree or higher. 4 students did not provide that information (Q2). The students' age ranged from 14 to 19 (Q3:  $M = 15.54$ ,  $SD = 1.01$ ). 67 of them were in 10<sup>th</sup> grade, 66 students were in 11<sup>th</sup> grade, and 24 students were in 12<sup>th</sup> grade (Q4). The average time they had spent studying in a bilingual school varied greatly and ranged from 1 week to 14 years (Q5:  $M = 18.60$ ,  $SD = 18.39$ ).

**Language experience and exposure.** Regarding the languages they spoke, most of the students spoke next to Portuguese other languages (Q6: 143 students). As to be expected, English was named first by 127 students who reported on average to have a "good command" of it ( $M = 2.11$ ,  $SD = 0.94$ ). Spanish came in second place, named by 34 students who reported on average to have a "sufficient command" of the language ( $M = 3.00$ ,  $SD = 1.02$ ). 16 students reported to possess on average a "basic understanding" to "sufficient command" of German ( $M = 3.44$ ,  $SD = 1.03$ ) and 14 students stated to possess on average a "sufficient command" of French ( $M = 3.21$ ,  $SD = 1.21$ ). Other languages that were named by 3 students were Russian, Japanese and Ukrainian. Regarding the places they had lived in, 19 students reported to have lived abroad in other countries of which 13 went to English-speaking countries like the U.S., the U.K., Australia or Canada, 4 students went to Spanish speaking countries like Mexico, Spain, Venezuela and Argentina, and only two went to other countries

being Germany and France (Q7). They spent on average around 6 months in these countries ( $M = 5.75$ ,  $SD = 10.16$ ). Regarding their parents' background, the parents of 153 students were Brazilian and only 4 had parents of other nationalities (Q8). Students had been studying English for about 6 and a half years on average (Q9:  $M = 66.26$  months,  $SD = 39.49$  months) and started learning English on average at the age of 10 ( $M = 10.01$ ,  $SD = 3.39$ ).

**Motivation to learn.** The decision to start studying at this school was mostly made by parents and students together. 74 students reported that they and their parents thought the school was best for them, while 42 reported it was their choice and 39 reported it was their parents' choice (Q10). Most of them reported not to receive rewards for good grades (Q11s:  $M = 2.38$ ,  $SD = 1.28$ ) but that good grades were very important to them (Q11t:  $M = 4.26$ ,  $SD = 1.01$ ). Most of the students strongly believed that studying there would increase their future working opportunities (Q11a:  $M = 4.46$ ,  $SD = 0.80$ ) and their intercultural communication skills (Q11b:  $M = 4.54$ ,  $SD = 0.76$ ).

**Students' attitudes towards classes in English and Portuguese.** As expected, students liked classes in English (Q11e:  $M = 4.13$ ,  $SD = 0.95$ ) more than in Portuguese (Q11f:  $M = 3.87$ ,  $SD = 1.06$ ). However, they would not prefer to have all classes in English (Q11i:  $M = 2.73$ ,  $SD = 1.14$ ) or Portuguese (Q11j:  $M = 2.33$ ,  $SD = 1.22$ ). They reported that classes in English were slightly more interesting than classes in Portuguese (Q11l:  $M = 3.36$ ,  $SD = 1.11$ ).

**Students' attitudes towards classes in general.** As expected, students had mostly positive attitudes towards the school's teaching program and reported to find it interesting (Q11c:  $M = 4.19$ ,  $SD = 0.95$ ). Most of them thought that the content was relevant to their future lives (Q11d:  $M = 3.90$ ,  $SD = 1.08$ ) and that materials and discussions were realistic and relevant (Q11m:  $M = 3.96$ ,  $SD = 0.81$ ).

***Students' preferred learning styles.*** Students preferred learning style seemed to be discussions which they found very important (Q11g:  $M = 4.32$ ,  $SD = 0.87$ ). Most of them also liked the workshops designed by the school (Q11h:  $M = 4.12$ ,  $SD = 0.87$ ) and group work (Q11o:  $M = 3.86$ ,  $SD = 1.08$ ). Homework was their least favorite part which most of them did not always do regularly (Q11r:  $M = 3.37$ ,  $SD = 1.11$ ).

***Students' own English language proficiency.*** Students' English language proficiency, assessed with the LexTALE test, was at a B2 level ( $M = 36.98$ ,  $SD = 6.06$ ). With regard to students' evaluation of their own English language proficiency, they rated their English listening skills best (Q14c:  $M = 4.04$ ,  $SD = 1.02$ ), followed by their reading skills (Q14d:  $M = 3.92$ ,  $SD = 1.06$ ), and their writing (Q14a:  $M = 3.58$ ,  $SD = 1.03$ ) and speaking skills (Q14b:  $M = 3.58$ ,  $SD = 1.12$ ). As a measurement of their overall self-evaluated proficiency, the individual skills scores in writing, reading, speaking and listening were added and divided by 4. Overall students rated their proficiency as close to good ( $M = 3.78$ ,  $SD = 0.89$ ). When it came to speaking up in the classroom, responses varied greatly in a way that some students felt confident to speak up in English and others did not (Q11u:  $M = 3.25$ ,  $SD = 1.44$ ). Speaking up in their native language, on the other hand, did not seem to trigger similar confidence problems (Q11v:  $M = 4.23$ ,  $SD = 1.11$ ).

***Other students' English language proficiency.*** Regarding their fellow students' English language abilities, most students were a bit critical and did not believe they had no difficulties to do their assignments in English (Q11i:  $M = 2.73$ ,  $SD = 1.14$ ). They estimated their fellow students' English language proficiency as "sufficient" to "well" (Q13:  $M = 2.56$ ,  $SD = 0.56$ ) and mostly did not believe they had a higher English language proficiency than their classmates' (Q11x:  $M = 2.69$ ,  $SD = 1.29$ ). Most of the students did, however, not believe that all students in the classroom had similar English language skills (Q11n:  $M = 2.24$ ,  $SD = 1.05$ ).

***Consequences of differences in linguistic abilities.*** Generally, low proficiency of some students seemed to have led to many cooperative behaviors among students. They regularly helped other students in class when they had language difficulties (Q11p:  $M = 3.73$ ,  $SD = 1.08$ ) and got help from others when they had trouble themselves to understand (Q11q:  $M = 3.61$ ,  $SD = 1.17$ ). These language difficulties also had an influence on language use. Teachers regularly switched to Portuguese in order to resolve misunderstandings (Q11z:  $M = 3.63$ ,  $SD = 1.12$ ).

***Teachers' English language proficiency.*** When asked about their teachers' language proficiency, students reported that teachers would speak English "well" to "excellently" (Q12:  $M = 3.33$ ,  $SD = 0.60$ ). In that respect, teachers' language proficiency exceeded my expectations.

***Students' ideas for improvement.*** As a last question, I asked students to name three things they would like to change about their classes if they were school principal (Q15). This way, I wanted to find out what the most urgent ideas for class improvement were among students. As I expected there were many different ideas for classroom improvements. Most of the students reported on some physical equipment, such as their desire to get back the swivel office chairs, better Wi-Fi connection, more power sockets and other issues that were not directly related to teaching. There were also some students who did not write anything as a response to this open question. The physical aspects should not be ignored because the school should provide a good learning environment to students. However, in this study I did not further consider those mentioned aspects, since my focus lies on teaching. In total there were 194 for this study relevant suggestions coming from 66 students. I clustered the responses based on their overall topics. The relevant topics that were named evolved around eleven different areas in which students wanted to see some change.

(1) In 51 comments students made suggestions about their preferred learning styles. Students asked for more conversation in English, more opportunities for practice, more use of technology in class, better group distribution, more debates, better explanation of the content (possibly instructions), more interesting classes, more videos, music and entertaining activities, and more use of visual materials such as writing on the board or text production. One student believed that the school should pay more attention to the diversity of students' preferred learning styles.

(2) 36 students suggested a change in the current practice of evaluating students. They proposed the elimination of their "achievement" test and the return of the divided test in which students were not tested on all subjects in one test but on only one subject on one day. They also suggested better scheduling of their test dates.

(3) 28 students made suggestions about the addition of certain subject matter. Mostly it was mentioned that sociology and philosophy classes should get more time and the number of outdoor classes should increase. Students also mentioned their wish for an increase in conversation classes in different languages, more interesting electives classes, more guided homework classes, more classes in English, more vocational projects, more workshops, more applied sciences classes, more guest lectures, more after school activities, and the implementation of English literature classes.

(4) 22 students made complaints about teacher's proficiency and their methodology. Students clearly demonstrated their desire for better English teachers with a higher proficiency. They commented on their fluency, spelling mistakes, ways of teaching in class and even asked for the appointment of an additional native teacher.

(5) 17 students made suggestions concerning the elimination of undesirable subjects. Students wanted elective classes 1 and 2 to be eliminated from their schedule. Students also

asked for the elimination of the learning projects. In addition, they asked for the elimination of Spanish, technological studies, and applied sciences classes.

(6) 11 students commented on the language use in classroom. Their comments were about increasing the use of English in the English classes, their wish for teachers to resolve language difficulties by speaking Portuguese and that in reality and not only in theory 50% of the classes should be in English.

(7) Fewer comments were made regarding students' desire to have more English classes. 10 students expressed their wish for more English classes, intensive English, official English proficiency test preparation courses, more emphasis on English classes and 100% of classes held in English.

(8) 9 students' suggestions concerned themselves with the use of certain learning materials. They disclosed that teachers should use the materials bought in the beginning of the year and that they would use preparation books that are related to the to the ENEM test (a test given to students after high school to assess their education level which is nowadays also used to select students for partial or full scholarships to study at private universities in Brazil) and the Vestibular test (a university entrance exam) which change each year and vary from university to university.

(9) Another topic that was placed ninth on the priority rank with 6 suggestions was that students wished to increase teachers' salaries.

(10) 3 suggestions were made regarding students' voice. Students wanted to be heard by their teachers. Students also wanted to be involved in the planning of their term projects.

(11) 2 suggestions were made regarding teacher training, in particular to improve their teachers' English. One student suggested a pronunciation training for teachers.

*Statistical analyses of the interrelationship of factors.* Firstly, I wanted to find out the validity of the two measurements of language proficiency. For this purpose, I executed a

linear regression analysis with self-evaluated language proficiency as a predictor of language proficiency assessed with the LexTALE test. Results showed that self-evaluated language proficiency strongly predicted LexTALE scores ( $\beta = .78$ ,  $t(107) = 5.67$ ,  $p = .000$ ,  $R^2 = .23$ ), adding to the validity of the measurements of language proficiency chosen in this study.

In order to address the research question whether parental educational level had an effect on English language proficiency, I performed a one-way ANOVA. Contrary to my expectation, parental education did not contribute to study success ( $F(102,3) < 1$ ,  $p = .81$ ). In order to find out whether the time students had been studying at the school had an effect on English language proficiency, I executed a linear regression analysis. The time that students had studied in the school predicted English language proficiency in a way that students who were longer at the school had a higher English language proficiency ( $\beta = .21$ ,  $t(102) = 2.16$ ,  $p = .033$ ). The effect size was, however, small ( $R^2 = .04$ ).

In order to address the question whether students' intercultural experience had an effect on their motivation to learn, I executed an independent samples t-test. Results showed that whether they had studied abroad or not did not have an effect on their motivation to do their assignments ( $t(154) = 1.40$ ,  $p = .163$ ). However, it needs to be noted that only 19 students reported that they had been studying abroad, of which only 13 in an English speaking country, resulting in a low likelihood to find effects.

In order to find out whether the time they had been studying English for and the age of onset of English language learning had an effect on English language proficiency, I executed two linear regression analyses. As expected, the time students had studied English for predicted English language proficiency. Students that had studied English for a longer time were much more proficient in English ( $\beta = .32$ ,  $t(98) = 3.34$ ,  $p = .001$ ). The effect size was medium ( $R^2 = .10$ ). Also the age of onset of English language learning predicted English

language proficiency. Students who had started studying at an earlier age were more proficient ( $\beta = -.29$ ,  $t(98) = 2.94$ ,  $p = .004$ ). The effect size was medium ( $R^2 = .08$ ).

In order to address the question whether students with a higher intrinsic motivation gained better language abilities than students who were more extrinsically motivated, I first computed a new variable, called motivation. Scores of the intrinsic motivation items (Q11a and Q11b) were added and scores of extrinsic motivation items (Q11s and Q11t) deducted – together they formed this new variable. I then executed an ANCOVA with the person whose decision it was to study at this school as a between-subject factor, motivation as a covariate and number of correct responses on the proficiency test as dependent variable. Results showed that neither measurement of motivation had an effect on English language proficiency (all  $ps > .1$ ).

In order to find out whether positive attitudes increased with higher English language proficiency, I executed a linear regression analysis. Contrary to my expectation, results showed that English language proficiency did not predict more positive attitudes towards English ( $\beta = .10$ ,  $t(107) = 1.07$ ,  $p = .287$ ).

In order to find out whether students' attitudes towards discussions, the workshops, group work and homework had an effect on their language proficiency assessed by the LexTALE test, I executed three linear regression analyses. As expected, students' attitudes towards discussions predicted English language proficiency in such a way that students with more positive attitudes towards discussions had a higher English language proficiency ( $\beta = .20$ ,  $t(107) = 2.09$ ,  $p = .039$ ). The effect size was small ( $R^2 = .04$ ). Also students' attitudes towards the workshops predicted English language proficiency in a way that students with more positive attitudes towards the workshops had a higher English language proficiency ( $\beta = .25$ ,  $t(105) = 2.60$ ,  $p = .011$ ). The effect size was medium ( $R^2 = .06$ ). Contrary to my expectation, attitudes towards working in groups did not predict English language proficiency

( $\beta = .07$ ,  $t(104) < 1$ ,  $p = .500$ ), neither did dedication to doing homework ( $\beta = .37$ ,  $t(106) < 1$ ,  $p = .467$ ).

In order to address the question whether students with a lower evaluation of their own proficiency were less confident to speak up in English during class and whether, as they stay longer in this school, become more confident speaking up over the years, I executed a linear regression analysis with confidence to speak up in English as a dependent variable and self-evaluated proficiency as a predictor. Results showed that their self-evaluated proficiency had a strong effect on their confidence to speak up in English during class, with students evaluating themselves as more proficient also having more confidence to speak up in English ( $\beta = .61$ ,  $t(154) = 9.61$ ,  $p = .000$ ,  $R^2 = .38$ ). Additionally, I executed a one-way ANOVA with confidence to speak up in English as a dependent variable and the grade they are currently in as a between-subject factor. Results showed that their grade had an effect on their confidence to speak up in English ( $F(153,2) = 3.59$ ,  $p = .030$ ,  $R^2 = .05$ ). Students in the 12<sup>th</sup> grade had a higher confidence to speak up in English ( $M = 3.67$ ,  $SD = 1.55$ ) than students in the 11<sup>th</sup> grade ( $M = 3.45$ ,  $SD = 1.38$ ) and students in the 10<sup>th</sup> grade ( $M = 2.91$ ,  $SD = 1.40$ ).

In order to address the question whether students improved their language proficiency over time, I conducted a one-way ANOVA. Confirming my prediction, the grade that students were in contributed to English language proficiency assessed by the lexical test ( $F(106,2) = 6.93$ ,  $p = .001$ ). Students who were in 12<sup>th</sup> grade had a higher English language proficiency ( $M = 42.07$ ,  $SD = 6.78$ ) than students who were in 11<sup>th</sup> grade ( $M = 36.49$ ,  $SD = 5.80$ ) and 10<sup>th</sup> grade ( $M = 35.85$ ,  $SD = 5.36$ ).

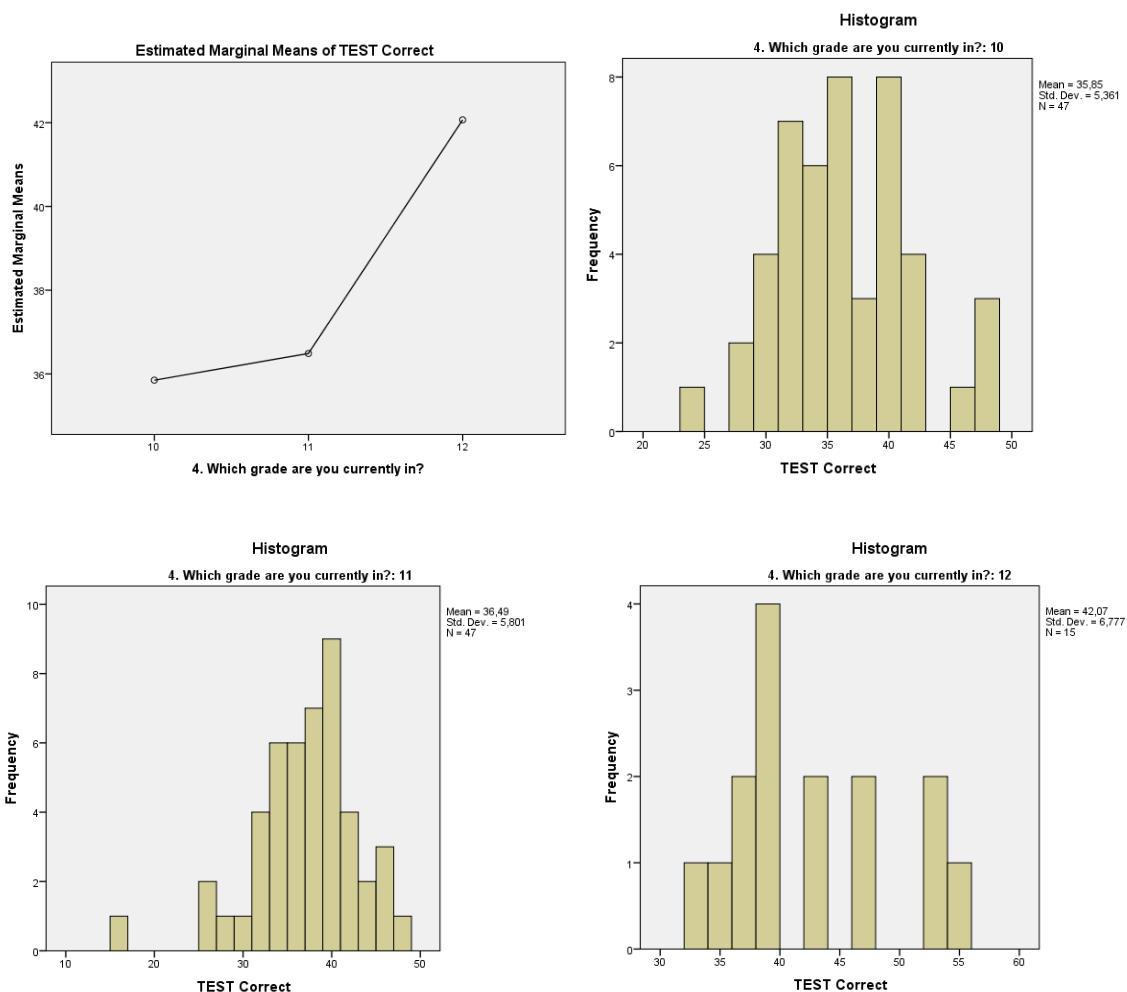


Figure 3: Results of LexTALE test divided by grades.

In order to find out whether self-evaluated proficiency also increases over time, I conducted another one-way ANOVA. As expected, results showed that students evaluated their own language proficiency better over time ( $F(154,2) = 6.56, p = .002$ ). Students who were in 12<sup>th</sup> grade had a higher self-evaluation of their English language proficiency ( $M = 4.23, SD = 0.69$ ) than students who were in 11<sup>th</sup> grade ( $M = 3.88, SD = 0.82$ ) and 10<sup>th</sup> grade ( $M = 3.53, SD = 0.95$ ).

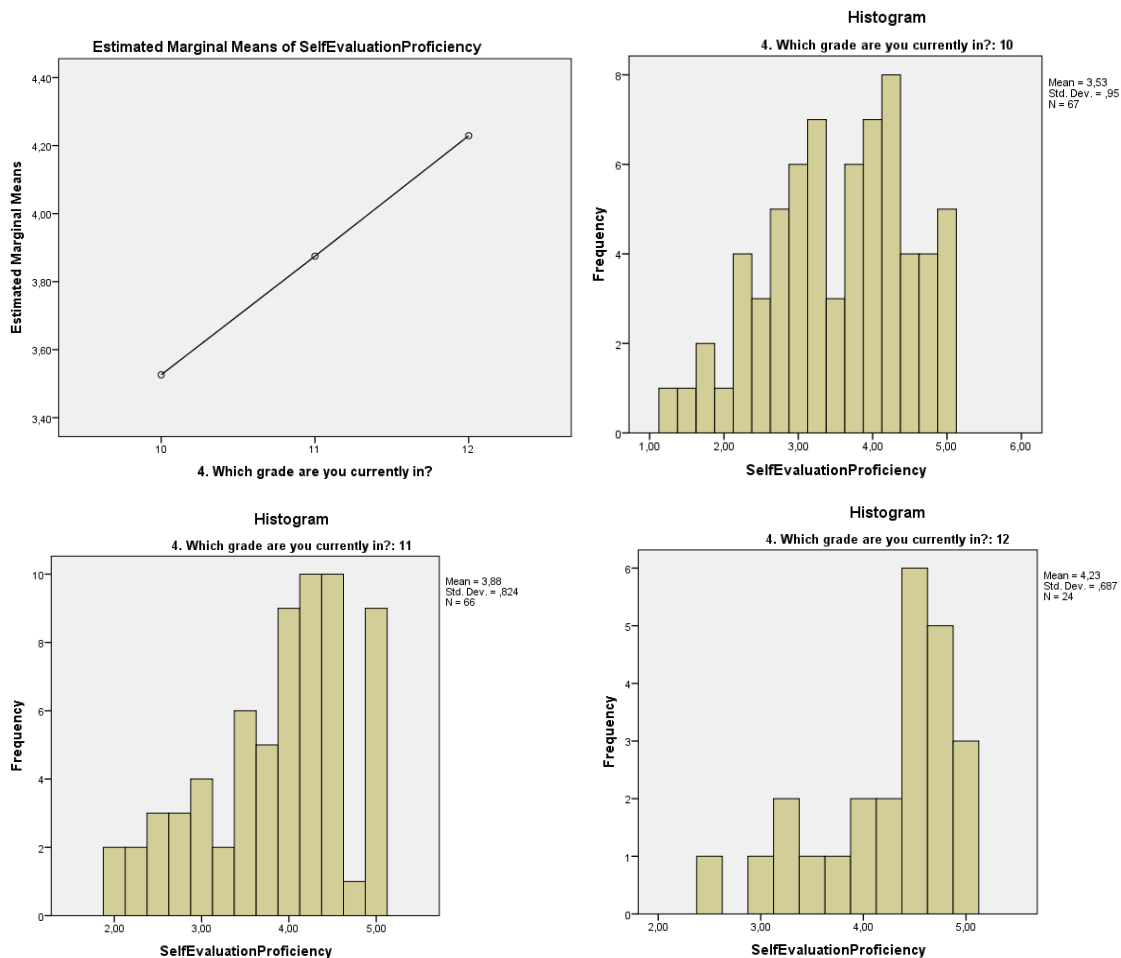


Figure 4: Results of self-evaluation of students' language proficiency divided by grades.

In order to find out whether students' initial perception of their fellow students' different language skills changed over time, I executed a one-way ANOVA. Contrary to my expectation, results showed that students did not have different perceptions of differences in linguistic abilities in the classroom in the 10<sup>th</sup> grade, 11<sup>th</sup> grade and 12<sup>th</sup> grade ( $F(154,2) < 1$ ,  $p = .444$ ).

In order to find out whether students who had lower language skills were more often on the receiving end of supporting behaviors in the classroom and students with higher language skills gave more often support to their fellow students, I executed two regression analyses. Results showed that language proficiency, indeed, predicted the amount of help a student received. Students with a higher proficiency in English gave more often support than students with a lower proficiency ( $\beta = .24$ ,  $t(107) = 2.61$ ,  $p = .010$ ). The effect size was

medium ( $R^2 = .06$ ). Also language proficiency predicted the amount of reception of supporting behaviors. Students who had a lower proficiency more often received support from their fellow students than students with a higher proficiency ( $\beta = -.19$ ,  $t(107) = 1.98$ ,  $p = .050$ ). The effect size was small ( $R^2 = .04$ ).

In order to find out whether the use of Portuguese in the classroom would decrease over time, I executed a one-way ANOVA with students' grade as a between-subject factor and teachers' use of Portuguese in classroom as a dependent variable. Contrary to my expectation, teachers did not decrease their use of Portuguese over time. Students in 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> grade reported the same amount of Portuguese language use by teachers in the classroom ( $F(154,2) < 1$ ,  $p = .399$ ).

**4.2.2 Teachers' questionnaire and LexTALE test.** 5 teachers answered the questionnaire and did the test that was handed out to them.

**Biographical Information.** One of the teachers was male and four were female (Q1). Their age ranged from 27 to 36 (Q3:  $M = 31.00$ ,  $SD = 4.30$ ). Three of them held a bachelor's degree and two of them a master's degree as their highest educational degree (Q2). One of them studied physics, one English and Portuguese, one English, Portuguese and English literature, one chemical engineering and philosophy, and one Portuguese, Spanish, translation, drama and design (Q4).

**Teaching Experience.** Regarding their experience, four of them were teaching at this school for 6 months or less, one did not answer (Q5:  $M = 5.00$  months,  $SD = 1.41$  months). They all taught different subjects; one was an English teacher, one a philosophy teacher, one taught Portuguese and English, one Spanish and English, and one physics and applied sciences (Q6). Their experience teaching their subjects ranged from 5 to 10 years (Q10:  $M = 6.80$  years,  $SD = 1.92$ ) but they taught their subjects in English for a relatively shorter time; one of them only taught his subjects in English for two weeks, another one for 5 months and

another one for 6 months. Two of them were more experienced, teaching their subjects for 5, respectively 7 years in English (Q11:  $M = 31.10$  months,  $SD = 38.34$ ). Teachers were in general not very familiar with the term CLIL. Three did not know what the term meant, one believed it meant “learning a subject through a foreign language sharing doubts and knowledge in teams”, another responded that she was not sure but “I believe that it is the concept of teaching different subjects using English as a first language” (Q12).

**Language experience and exposure.** Four of the teachers knew one or two languages next to Portuguese and English, one did not. Three of them spoke French on an either basic, sufficient or good level and two of them spoke French with an either good command or fluently (Q7). Three of the five teachers possessed a language certificate of some sorts, two did not. Among the certificates named were the TOEFL, Michigan, CAE and CAN (English private school in Brazil) tests (Q8). Three of the five teachers had been living abroad in an English speaking country – one for an unidentified time in the U.S., another one for two months in Canada and another one for one year in the U.K. (Q9).

**Workload and classroom size.** Regarding the workload, teachers reported that they gave between 20 and 26 classes per week with an average of 23 classes given per week (Q13:  $M = 23.00$ ,  $SD = 2.83$ ) and a self-reported amount of weekly working hours of 30 to 48 (Q13.1:  $M = 38.25$ ,  $SD = 7.68$ ). With regard to class size, most classes seemed to be taught in front of 20 -25 students. Three teachers responded that the average classroom size was between 20 - 25 students. One responded that it was between 15 - 20 students and one responded that it was between 25 - 30 students (Q15).

**Teacher training.** Four of the five teachers reported they had never received any specialized training on how to teach in a bilingual school. One reported having received once a training. One teacher even noted next to the question the wish for specialized trainings (Q16). With regard to collegial discussions, four teachers reported that they had discussions

once a week and one reported collegial discussions to be taking place twice a week (Q16). With regard to their personal initiative to keep up to date on latest developments, responses were mixed and ranged from completely disagreeing (1) to completely agreeing (5) to the statement of keeping up to date. The average response was, therefore, neither agreement, nor disagreement (Q18l:  $M = 3.00$ ,  $SD = 1.58$ ). With regard to the statement that the school provided them with sufficient opportunities to become a better teacher, they strongly agreed (Q18n:  $M = 4.75$ ,  $SD = 0.50$ ).

**Students' motivation.** Teachers reported that their students were relatively equally motivated but slightly more motivated following classes in English than in Portuguese. One teacher did not respond because she did not teach in Portuguese and could thus not compare the two situations (Q14:  $M = 2.75$ ,  $SD = 1.26$ ). All teachers felt that students put an equal amount of effort into their Portuguese as into their English assignments (Q18f:  $M = 3.00$ ,  $SD = 0.00$ ). On average teachers found it a bit difficult to motivate students to speak English in class, even though responses varied greatly with some reporting not having difficulties at all and others reporting strong difficulties (Q18k:  $M = 3.40$ ,  $SD = 1.52$ ).

**Students' English language proficiency.** In response to the statement that all students were able to follow the classes in English, three of them somewhat disagreed, one neither agreed nor disagreed and one strongly disagreed (Q18a:  $M = 2.80$ ,  $SD = 1.30$ ). However, teachers mostly did not agree with the statement that students would be better able to accompany classes if they were given in Portuguese (Q18b:  $M = 2.40$ ,  $SD = 1.34$ ). They estimated their students' English language skills as okay to good (Q19.2:  $M = 3.50$ ,  $SD = 1.05$ ). In detail, they estimated their students' skills in the following order: listening (Q19.2c:  $M = 3.80$ ,  $SD = 0.84$ ), speaking (Q19.2b:  $M = 3.60$ ,  $SD = 0.89$ ), reading (Q19.2d:  $M = 3.40$ ,  $SD = 1.67$ ) and writing (Q19.2a:  $M = 3.20$ ,  $SD = 1.10$ ). The individual language skills seemed

to vary greatly. Teachers responded to the statement that their students had similar language proficiencies with strong disagreement (Q18d:  $M = 1.40$ ,  $SD = 0.55$ ).

*Consequences of differences in linguistic abilities.* These differences in language proficiency seemed to have led to unwanted consequences. Teachers reported agreement with the statement that some students did not participate well in class because they were afraid of making mistakes (Q18j:  $M = 3.60$ ,  $SD = 0.89$ ). In the classes of three teachers, there also seemed to be the problem that discussions regularly unintentionally switched to Portuguese, only for two teachers this did not seem to be an issue (Q18c:  $M = 3.00$ ,  $SD = 1.41$ ).

In order to deal with the issue of differences in linguistic abilities, teachers used a variety of strategies. One teacher reported that she gave students before starting the actual class a vocabulary list with the most difficult words. Another one stated that he tried to “write down and make them write down the concepts [he showed them] in images or videos, so they can get other sources of explanation which allow them to work and develop their English skills”. Another teacher reported he had encouraged students to engage in discussions and had used different kinds of technology and topics that interested them to increase their motivation. Yet another one reported to have used synonyms and rephrased sentences to easier structures. The last one stated to do “research [for] different explanations and activities, ask other teachers and discuss strategies to improve students’ learning skills”.

*Teachers’ attitudes towards classes in English and Portuguese.* Teachers at this school seemed to have neither strong positive, nor strong negative attitudes towards English held classes in school. However, attitudes were slightly more positive towards English held classes than Portuguese held classes. They also did not strongly agree, nor disagree with the statements that English language proficiency was getting too much attention at the school (Q18e:  $M = 2.80$ ,  $SD = 0.45$ ). They believed that classes in English were a bit more productive than classes in Portuguese (Q18h:  $M = 3.20$ ,  $SD = 1.10$ ) and they preferred giving

classes in English over giving classes in Portuguese (Q18o:  $M = 3.40$ ,  $SD = 0.89$ ). On the contrary, classes in Portuguese were considered less productive than classes in English (Q18i:  $M = 2.00$ ,  $SD = 1.00$ ) and teachers were indifferent regarding a preference for Portuguese over English held classes (Q18p:  $M = 3.00$ ,  $SD = 0$ ).

**Teachers' language proficiency.** Regarding their own language proficiency, teachers reported to be rather confident. They did not feel more confident to teach in Portuguese than in English (Q18g:  $M = 2.60$ ,  $SD = 1.67$ ) and they evaluated their own language skills as "good" ( $M = 4.10$ ,  $SD = 0.74$ ). They evaluated their language abilities in the following order: listening (Q19.1.c:  $M = 4.40$ ,  $SD = 0.89$ ), reading (Q19.1d:  $M = 4.2$ ,  $SD = 0.84$ ), speaking (Q19.1b:  $M = 4.00$ ,  $SD = 0.71$  and writing (Q19.1a:  $M = 3.80$ ,  $SD = 0.84$ ). However, they felt the strong need to improve their English (Q18m:  $M = 4.60$ ,  $SD = 0.55$ ).

Results of the LexTALE test, administered to give an indication of English language proficiency, indicated that two of the teachers had a language proficiency level of C1 (CEF) and three teachers had a language proficiency level of B2 (CEF). Their scores ranged from 42 to 51 ( $M = 46.20$ ,  $SD = 4.55$ ).

**Teachers' ideas for improvement.** Results showed that teachers were rather content with the school' teaching concept and would only change a few things about it if they were school principal (Q21). Two teachers thought the school's teaching concept was modern and interesting and would not change anything about it. One teacher stressed the importance of visual materials that should be more implemented in the classroom. Another teacher would like to see some changes about the language lab for which more teachers should be hired and which should be improved and better organized. This teacher, however, also praised the level of competency at the school as previously unseen. One more teacher gave the idea of splitting classes in two groups based on English language proficiency; exchange students and high English language proficiency Brazilian students in one class, the others in another one.

### 4.3 Conclusion

In this part I want to highlight the most pressing issues that came out of the Needs Analysis. For this purpose I will triangulate the results gathered from students, teachers and the pedagogical director of the school and come to a general conclusion of what needs to be changed in this particular school.

**Differences in students' English language skills.** One issue that I identified as impairing teaching was that some students had a very low English proficiency. Differences in linguistic abilities in the classroom were named by teachers, students and the pedagogical director alike as an issue. The issue was confirmed for all grade levels with the language test and the self-evaluation. Students in 11<sup>th</sup> and 12<sup>th</sup> grade were on average on a B2 (CEF) level, while entering students in 10<sup>th</sup> grade were on average on a B1 (CEF) level. Test results confirmed, however, that the skills within each classroom varied greatly. A number of reasons can be named that contribute to those differences in skills. Since students started studying at this bilingual school not before the age of 14, their English language exposure up to then had varied greatly. I found that students at this school usually started learning English at the age of 10. That age, however, also varied significantly within this student group. This is important, since the age of onset of English language learning had significant effects on students' English language skills. Another factor seemed to be that students varied in the number of years they had been learning English for. I also found that students who were in the school for longer had better language skills.

These differences in linguistic abilities had a number of implications. First of all, I found that they led low proficiency students to be less confident to speak up in classes held in English resulting in them participating less and thereby getting less opportunities to train their language skills. These confidence issues seemed, however, to decrease with the time that students were at the school. Secondly, differences in students' English language abilities led

teachers to have trouble motivating all students to speak English in class and resorting to Portuguese in an attempt to include students who were not able to accompany classes held in English at all times. This was also named by the pedagogical director as an issue. One positive consequence of differences in linguistic abilities seemed to be that they led to an increased amount of cooperative behaviors. High proficiency students helped their low proficiency fellow students.

Teachers suggested to overcome the issue of differences in linguistic abilities by splitting the classes into groups of students with different proficiency levels, and by providing an increased amount of visual aid and more and better English language classes in the language lab given by newly to be appointed English teachers. Students also made suggestions regarding better group distribution, more use of videos, music and visual materials.

**Students' motivation and attitudes.** Motivation did not seem to be a big issue among this student group. Most students reported high scores on extrinsic and intrinsic motivation. They liked the school and its program, they thought used materials were realistic, and that the school would teach them relevant skills for their future lives. Students were on average more motivated to follow classes in English than in Portuguese and found them more interesting. This was confirmed by results gathered from teachers. Consequently, among the things they would like to see changed was an increase in classroom discussions and workshops, more classes held in English and stronger bonds between the school and the industry, resulting in more vocational projects.

**Teachers' language proficiency.** Even though some teachers' low language proficiency might be an issue, we are not exactly sure about it. The issue here is that only 5 out of 18 teachers filled in the questionnaire and did the language test. Therefore, the only objective measurement of their abilities, the results of the language test, was based on 5

teachers' responses. Whether these teachers' language abilities represent the abilities of the whole teaching staff, is questionable. These 5 teachers were rather young and had a rather high proficiency level, ranging from B2 (CEF) to C1 (CEF) measured by the test. Confirming these results, teachers' language skills were evaluated by students and teachers as good. However, teachers reported that they felt the strong need to improve their English and also many students commented on teachers' English language proficiency and called it insufficient. One possible reason for this discrepancy in results could be that only the most advanced English speaking teachers had filled in the questionnaire and had done the test that was entirely held in English. Others might have felt intimidated by it and thus left it blank.

**Teacher training.** Another issue, not unrelated to the issue of teachers' language proficiency was the issue of teacher training. Most teachers were rather young with not much teaching experience. They reported they had never received any specialized training on how to teach in a bilingual school. Discussions among colleagues seemed, however, to be taking place regularly. Some of them seemed to be taking matters on how to educate themselves into their own hands by keeping up with latest developments in bilingual teaching, others did not seem to have that motivation. Even though teachers felt that the school provided them with enough opportunities for personal growth and improvement, it seemed that a lack of sufficient teacher training was an issue at this school.

***Teachers' attitudes towards English.*** The attitudes that teachers held towards giving classes in English seemed to be rather positive. They preferred giving classes in English over Portuguese and felt that they were also more productive.

**Workload and classroom size.** Even though expected as one factor hindering successful teaching, teachers did not report to be working overly much and classroom sizes were also modest. Additionally, neither students nor teachers made any suggestions to change

the current practice, indicating that workload and classroom sizes were not an issue at this school.

**Learning styles.** Students who enjoyed workshops and discussions had a higher proficiency level than students who did not enjoy these activities so much. This finding can most likely be explained by the focus of this school to interdisciplinary and collaborative work. Students with a liking for such a learning style seemed to be able to benefit from this school's teaching method better than students who enjoy working individually.

**Test taking.** Mentioned by many students, the way that language and content achievements were tested at the school did not seem to be very popular. Students complained about the amount of subjects that were tested on one day and suggested to spread this test over several smaller tests given on different days. Similarly, the pedagogical director made a claim that the school was having difficulties to properly evaluate their students.

## **Chapter 5: Recommendations**

In this chapter I will come back to the issues encountered in the NA and give recommendations on how to resolve them based on existing literature.

### **5.1 Mixed abilities**

The issue of differences in English language proficiency is a prominent one in this school named by teachers and students alike and was pointed out by the pedagogical director to be one of the most urgent and pressing issues that needed to be solved. Mixed abilities in general are to a certain degree natural and can be encountered in every classroom (Ur, 1996; Bremner, 2008). Bremner (2008) argued that they encompass not only differences in language proficiency but also in learning styles and preferences - students show strengths and weaknesses at different times depending on the topics and teaching styles used. Similarly, Ur (1996) stressed that mixed abilities not only encompass differences in language proficiency but also in potential to learn which depends on motivation to learn, previous teaching

experience and previous opportunities for learning. According to Ur (1996), the main issue of having large and heterogeneous classes is that it is challenging for all stakeholders. Students with a lower proficiency can feel frustrated due to an increased sensation of pressure to perform, leading to less confidence to speak which was also confirmed in this study. Students with a higher proficiency might feel frustrated because they get the feeling of being held back. Balancing those different needs can also be stressful for teachers which was also confirmed by results in this study in which teachers reported difficulties to motivate students to speak English. These differences in linguistic abilities can also lead to students resorting to their L1 in order to participate in discussions and their teachers using the L1 to resolve misunderstandings. This also seemed to be a reoccurring issue in the school studied here. Many discussions unintentionally switched to Portuguese and teachers often resorted to Portuguese to resolve misunderstandings. However, we should not only focus on the negative aspects of heterogeneous classes but also see their potential. Such classes provide a richer pool of human resources and students can learn from each other, widening their horizon. They also lead to more cooperative behaviors among students and can be especially interesting to teach, two aspects that were also named by students and teachers in this study.

**Scaffolding and differentiated instruction.** First of all, I will give recommendations on how to resolve issues that come along with differences in linguistic abilities in the classroom. According to DelliCarpini (2006), the systematic use of scaffolding is one way to make instructions also clear to low proficiency students. In this context the theory of instructional scaffolding put forth by Applebee and Langer (1983) is of special interest. According to this teaching method, a skilled language user which can be a teacher or a highly proficient student should assist a language learner by modelling the language and by asking questions in order to extend and elaborate students' existing knowledge. Important here is that instructional scaffolding is temporary and gradually reduced as students become more

proficient speakers. This is also in line with Ball (2008) who pointed out that in lower grades teachers should adopt a “soft” CLIL approach, focusing more on language and then gradually move towards a “hard” CLIL approach in which content becomes the focus and language specific instruction often redundant. According to DelliCarpini (2006), the way instructions are given should always be adapted to the specific needs of the students. She advocates the use of differentiated instruction. Teachers should move from a "one size fits all" teaching method to meeting the individual needs of learners. Differentiated instruction addresses not only the issue of differences in linguistic abilities but also the issue of differences in preferred learning styles and interests. Whole group instruction, small group cooperative work, and individual instruction should all make part of successful instructing to students.

**Grouping of students.** In line with that, Harmer (2001) suggested, to also pay attention to group constellations in tasks that require students to work together. Depending on the task, teachers can pair up weaker with stronger students. This has the advantage that stronger students are able to get a deeper understanding of the language while weaker students benefit from the help. The problem is, as discussed earlier by Close (2015), that it can also lead to a situation in which weaker students rely too much on stronger ones and thus get insufficient practice themselves. Therefore, when teachers decide on such a way of pairing or grouping up weaker with stronger students, they should keep a close eye on such dynamics. Another way is to pair or group up students with similar abilities and give them different tasks depending on their abilities. This resolves the issue of stronger students feeling held back and weaker students feeling pressured to perform and not confident to speak in the target language. However, creating such classes of two paces can lead to less cooperative behaviors which might lead students with a weaker proficiency to feel even less confident to speak up in whole-class activities. As a third way of pairing or grouping up students, Harmer (2001) suggested to do so based on participation rather than proficiency. That way students

who do not participate well can be put in one group and students who participate well in another. This approach has the appeal that all students get their fair share of speaking time. As participation is strongly linked to interest and knowledge in the subject matter, in the case of CLIL education, there is also the option to create groups not only based on linguistic capabilities but also on content knowledge and interest. Which type of groupings teachers in the end choose for should always be flexible and adapted to the specific needs and goals of the students.

**Differentiated materials.** As Harmer (2001) stressed, if teachers decide on pairing or grouping up students with similar language abilities, the linguistic difficulty of the materials should be adapted to the needs of these different groups. That means that students with a higher proficiency get linguistically more challenging materials and activities than students with a lower proficiency. Harmer (2001) suggested in that context that readings should be available for different language levels. As an example of a reading activity, students with higher linguistic abilities could read a newspaper article, students with moderate linguistic abilities could read a website article and students with low linguistic abilities could read a simplified version of the website article. Bremner (2008) suggested that teachers can also differentiate the types of questions students need to answer after reading texts. Higher level students can answer questions that require a richer vocabulary and higher thinking skills while lower level students can answer questions that do not require such fully developed skills. At the core of this idea is the theory of different levels of thinking by Bloom (1956). According to this theory, there are six levels of thinking: knowledge, comprehension, application, analysis, evaluation and synthesis. Lower level students could be asked more knowledge or comprehension questions while students with higher skills could be asked questions requiring analysis and evaluation of the material.

**Additional English language input.** One issue that was pointed out in earlier chapters, regarded students' age of onset of language learning and exposure to the language which differed greatly. As a result of that students with very different linguistic needs attended the same classes. Even though differences in linguistic abilities are a given in each CLIL classroom, the school should also work towards evening out such differences and bringing students of all proficiency levels to a common standard. As I understood, the school addressed the issue of some students' low English language proficiency by giving additional language support in classes called "language labs". However, the quality of these language labs seemed to be, as students reported, not very high. A reason might have been that students with a lower proficiency needed a more favorable student-teacher-ratio or even one-on-one tutoring to attend their specific needs. Depending on how many students were on average in one class, it might have been difficult for teachers to pay attention to the specific needs of their students. More teachers supporting students to attain their specific language goals in these "language labs", or additional tutoring for students with lower proficiency might help to solve this issue.

**L1 use in the classroom.** As described before, differences in linguistic abilities led to the frequent use of Portuguese by both teachers and students in the classroom. Students' L1 use in the CLIL classroom usually is chaotic and relatively difficult to control. Consequently, teachers in this study reported that many discussions unintendedly switched to Portuguese. Harmer (2001) described that one reason for students' use of mother tongue is that the language that is required to perform a task is too high in relation to the proficiency of the student. One way of resolving the issue of students' chaotic use of L1 in classroom is to adapt the linguistic level of the activities to the individual students' needs and thereby making L1 use unnecessary (Harmer, 2001). Teachers' use of L1 in CLIL, however, should not be demonized, as Lasagabaster (2013) stressed. He showed that Colombian teachers' attitudes

towards the use of L1 in CLIL classrooms were rather positive and they saw it as a viable teaching resource which they frequently made use of. Indeed, L1 can be used by teachers to scaffold language and content learning. However, many teachers use L1 in an unstructured and unreflected way based on their own intuition. Lasagabaster (2013) advocated a systematic use of L1 in the CLIL classroom, keeping in mind that maintaining L2 as the primary language of instruction is crucial. As Applebee and Langer (1983) stressed, for instructional scaffolding to be applied successfully, it needs to be temporary and gradually reduced as students become more proficient speakers. As I found out in this study, teachers at the school did not gradually reduce their use of Portuguese over time. Therefore, one key aspect of successful use of Portuguese as a way to scaffold language learning was not fulfilled, indicating the need for change and a more reflected use of Portuguese in the classroom.

**Additional guidelines on successful scaffolding.** A few other recommendations on a successful use of scaffolding in CLIL classroom were put forward by Belinchon (2008), a CLIL teacher at a Spanish bilingual school. She advocated to support all teaching content with visual input. As a starting point, teachers should draw on students' existing language and content knowledge and gradually input new chunks of knowledge. With regard to the preparation of classes, teachers should define what the key vocabulary is that is needed to fulfill a task and highlight such key vocabulary in class by pre-teaching it. In order to make sure they understood the key vocabulary, teachers can let students transfer vocabulary from one context to another. Teachers should always make sure students understand what is asked from them in an activity. This means that students need a clear framework and specific instruction. Additionally, a clear and gradual move from one stage to another needs to take place in which students are asked to apply different skills such as describing, classifying, evaluating, predicting or testing hypotheses. Whole-class, group, pair and individual activities

should all be included and vary frequently. A photocopy with some common expressions used in discussions such as (“In my opinion...”, “This is because...”, “May I start?”, etc.) can help students to engage in discussions and give them initially something to hold on to. Such a photocopy can be changed after some time and students should be encouraged to make use of the new expressions.

## **5.2 Attending different learning styles**

As was discussed earlier in this chapter, students are not only different in their linguistic abilities but also in their preferred learning styles. Some students are more attracted to visual learning materials, while others have a more auditory learning style, and yet others have a more kinesthetic learning style. For instance, many students in this study expressed their wish for more visual materials. Carbo, Dunn and Dunn (1986) found that approximately “20 to 30 percent of the school-aged population remembers what is heard; 40 percent recalls well visually the things that are seen or read; many must write or use their fingers in some manipulative way to help them remember basic facts; other people cannot internalize information or skills unless they use them in real-life activities such as actually writing a letter to learn the correct format" (p.13). Therefore, activities that are planned should ideally incorporate all three of these learning styles and thereby attend to different student needs and increase their motivation to focus in class. In addition to that, Clegg (2009) stressed the importance of incorporating all four language skills in activities – reading, writing, listening and speaking. Many students in this study also expressed their desire to have more conversation in class and engage in more discussion activities. These opinions should also be taken into consideration when designing materials and lesson plans. As an example for a good lesson, students could first read a short text explaining relevant vocabulary regarding a subject. Subsequently, they could watch a video with visual and auditory content included. Based on this, students could individually answer questions in written form which are then

discussed in class and in addition create a poster as a group with the most interesting facts they have learnt which they can then present in front of the class.

### **5.3 Examples of lesson plans and activities**

In order to give teachers some examples on how to create materials, I developed two lessons plans consisting of various activities that are based on the recommendations that were named in this section. The lesson plans were based in content on the “formation workshop” developed by the school and can be found in Appendix B and Appendix E.

### **5.4 Increasing motivation to learn**

Another important point that I wanted to stress in this study is that students get the opportunity for real-life application of their acquired knowledge. Intercultural experience in whichever form can give students a sense of real-life relevance of their language learning and increase their motivation to learn. Even though results in this study did not confirm the expectation that intercultural experience would enhance motivation to learn, it needs to be noted that methodological issues regarding the analysis might have led to these unexpected results. Studies discussed in the literature review came to the conclusion that intercultural experiences form an indispensable part of successful CLIL programs. That students reported their content with the industry experience and reported that they would like to see it becoming a bigger part of the curriculum indicated the need felt by students to use acquired knowledge in a real-life setting. Another way of enhancing students’ motivation which was named by students in response to the open question, concerned their wish to have more voice in which subjects they needed to learn. As was pointed out by Deci and Ryan (1985), self-determination regarding the activities individuals engage in has strong effects on their intrinsic motivation. Thus, letting students decide more on what they need to learn might be a *good* way to enhance students’ motivation to learn. This could be done by letting students

vote on a student speaker who could give voice to their needs, and by giving students a wider choice of courses they are interested in and want to attend.

### **5.5 Teacher training**

All these recommendations that were given to teachers can serve as a valuable source for the development of materials and give a guideline for teachers on how to improve their current teaching practice. These recommendations can, however, not substitute a specialized teacher training course. Teachers reported that they were not specifically trained in how to teach CLIL classes and were not always sure about what CLIL meant. Based on promising results named earlier, the school could hire an ESP trainer who could train teachers in becoming CLIL experts. Such a trainer could adopt the SIOP protocol as a basis to train teachers on how to integrate content and language in learning (Echevarría, Vogt, & Short, 2008). An adaptation of this protocol for the implementation in two-way immersion programs by Howard, Sugarman, and Coburn (2006) could form a centerpiece of a newly to be developed teacher training course. Such a teacher training course should be accompanied by encouraging teachers to take part in English language courses and financing teachers' participation in these by the school in order for teachers to improve their English language proficiency in general. Since teachers' English language proficiency was a commonly named issue by students hindering them to gain better language skills, the constant improvement of teachers' language skills should also get more attention and should be assessed regularly to make sure that teachers get all the support they need to be successful facilitators of language use in the classroom.

### **5.6 Test taking**

A last point I would like to address here is the way students' progress was tested. In response to open questions posed to students and the pedagogical director of the school, both reported that there was an issue about how the school was testing their students. Students

reported their discomfort about being tested on all subjects at the same day. However, since I did not get exact information on how the current practice of testing students at the school was, advice in this section could only be held rather general. Hughes (2003) argued that test developers and teachers should always take into consideration recommendations made by students if they want to develop a good test. Since the current practice of testing students was a concern shared by students and the school alike, I would recommend to divide the test into smaller parts and to give students the chance to prepare themselves better for the individual tests. This would also strengthen the reliability of the tests and minimize effects of some students getting low grades in all subjects simply because they were having a bad day. In order to achieve that, I would recommend the school to hire a test developer. This expert could help the school to develop valid and reliable tests. I would suggest for the school to implement progress achievement tests which are summative assessments (e.g. pop quizzes). These progress achievement tests should take place on different days regularly after each block of subjects.

### **Chapter 6: Final Conclusion and Implications**

In this study I wanted to find out what Content and Language Integrated Learning (CLIL) - specific teaching issues could be encountered in a Brazilian private bilingual high school and how these could be resolved. For this purpose I first gave an overview of existing literature on the subject of CLIL. I demonstrated where CLIL originated from, how it is seen today and how it can be distinguished from other forms of bilingual education. Subsequently, I explained how bilingualism is seen nowadays and its implications on CLIL. In the next section I highlighted the current situation of bilingual education, specifically CLIL, in Brazil. General issues regarding CLIL that were addressed by different authors were discussed in the next section in which the aspects that make CLIL successful were also highlighted. Special attention was paid to the situation of CLIL in different countries comparing their policy

frameworks, teacher training, students' age of onset of English language learning and introduction to CLIL, extramural exposure, motivational aspects of learning and the implications of all of these aspects for the Brazilian situation. In the next chapter I showed how the school that was the focus of this study operated and how their current practice regarding bilingual teaching was. The theoretical framework of Needs Analysis (NA) was discussed in the following chapter. NA is a technique used to find out the needs of different stakeholders and forms the backbone for the design of English for Specific Purposes (ESP) courses. Based on the aspects that are important to CLIL teaching, I designed two questionnaires, one for students and one for teachers, in which they were asked about how they saw current practices at the school. Additionally, the pedagogical supervisor was asked which issues she found most urgent to be addressed. These questionnaires were analyzed regarding the research questions that I had. Results from all sources were then triangulated and a conclusion drawn regarding the most urgent issues at this particular school. Based on these results, recommendations were given to the school on how they could improve their current teaching practice. In order to illustrate these recommendations, two lesson plans were designed that were supposed to serve as an inspiration for CLIL teachers figuring out how to plan their lessons and design activities.

One downside of this project was that the cooperation with the school was not always easy. Getting information took very long due to certain formalities within the school that delayed the progress of this study. Additionally, not all information that I requested was given by the school and only 5 out of 18 teachers filled in the questionnaire. This has led to recommendations, especially regarding test taking and teacher training, that could not be formulated in a more specific way. Furthermore, due to this delay, the designed material could not be tested within a CLIL classroom. Therefore, a profound conclusion on the designed material and its effectiveness within the classroom cannot be drawn here.

The biggest strength of this study is that it can be valuable to different groups of people. Since studies about CLIL are rare in the Brazilian context, this study can shed light on the current situation of CLIL in Brazil and serve as a framework on how to conduct similar studies for other researchers. Even though this study was conducted within the context of a specific bilingual school in Brazil, many issues that were discussed here are likely to be found in a similar way in other Brazilian bilingual schools too. Furthermore, based on this study, the specific school that was studied here can improve its current practices by firstly getting an objective view of the existing issues within the school and secondly by applying the recommendations on how to address these issues.

### References

- Admiraal, W., Westhoff, G., & De Bot, K. (2006). Evaluation of bilingual secondary education in the Netherlands: Students' language proficiency in English 1. *Educational Research and Evaluation, 12*(1), 75-93.
- Alonso, E., Grisaleña, J., & Campo, A. (2008). Plurilingual education in secondary schools: Analysis of results. *International CLIL Research Journal, 1*(1), 36-49.
- Applebee, A. N., & Langer, J. A. (1983). Instructional scaffolding: Reading and writing as natural language activities. *Language Arts, 60*(2), 168-175.
- Baker, C. (1993). 1 Bilingual Education in Wales. *European models of bilingual Education*, Frankfurt Lodge, UK: Longdunn Press.
- Baker, C., & Hornberger, N. H. (2001). *An introductory reader to the writings of Jim Cummins*. Multilingual Matters. Clevedon.UK: Cambrian Printers.
- Baker, C. (2011). *Foundations of bilingual education and bilingualism*. Multilingual matters. Tonawanda, NY: McNaughton & Gunn.
- Baetens Beardsmore, H. (2007). *Language promotion by European supranational institutions*. In O. García (Ed.) *Bilingual Education: Multilingual and Multicultural Children and Youths in 21st Century Schools*. New York: Blackwell.
- Bagno, M. (1999). *Preconceito Lingüístico o que é, como se faz*: São Paulo: Edições Loyola, 2006. *Dramática da língua portuguesa*. Sao Paulo, Brazil: Loyola
- Ball, P. (2008). Language, concepts, and procedures: Why CLIL does them better! Retrieved from: <http://www.onestopenglish.com/clil/methodology/articles/article-language-concepts-and-procedures-why-clil-does-them-better/500731.article>
- Belinchon, F. (2008). An introduction to scaffolding in the CLIL classroom. *The Macmillian*

- Magazine Online*, 18. Retrieved from <http://macmagonline.macmillan.es/editions/archive/issue-18-summer-2009/clil-corner/an-introduction-to-scaffolding-in-the-clil-classroom/>
- Ball, P., & Lindsay, D. (2010). Teacher training for CLIL in the Basque Country: The case of the Ikastolas - An expediency model. In Y. Ruiz de Zarobe & D. Lasagabaster (Eds.), *CLIL in Spain: Implementation, results and teacher training* (pp. 162-187). Newcastle upon Tyne, U.K.: Cambridge Scholars Publishing.
- Bialystok, E., & Hakuta, K. (1994). *In other words: The science and psychology of second-language acquisition*. New York, NY: BasicBooks.
- Bloom, B. S. (1956). *Taxonomy of educational objectives, the classification of educational goals – Handbook I: Cognitive Domain*. New York: McKay.
- Bloomfield, L (1933). *Language*. New York, NY: Holt, Rinehart & Winston.
- Bortoni-Ricardo, S. M. (1984). Problemas de comunicação interdialetoal. *Tempo Brasileiro*, 78(79), 9-32.
- Bremner, S. (2008). Some thoughts on teaching a mixed ability class. *Scottish Languages Review Issue 18*, 1-10.
- Butler, Y. G., & Hakuta, K. (2004). Bilingualism and second language acquisition. *The handbook of bilingualism*, Oxford, U.K.: Blackwell Publishing.
- Bourdieu, P., & Thompson, J. B. (1991). *Language and symbolic power*. Cambridge, U.S.: Harvard University Press.
- Boyke J, Driemeyer J, Gaser C, Büchel C, & May A. (2008). Training-induced brain structure changes in the elderly. *The Journal of Neuroscience: The Official Journal of the Society for Neuroscience*, 28(28), 7031-5.
- Brazil, C. (1988). Constituição da república Federativa do Brasil. Retrieved from: [http://www.planalto.gov.br/ccivil\\_03/Constituicao/Constituicao.htm](http://www.planalto.gov.br/ccivil_03/Constituicao/Constituicao.htm)

- Carbo, M., Dunn, R., & Dunn, K. (1986). *Teaching Students to Read Through Their Individual Learning Styles*. Englewood Cliffs, NJ: Prentice-Hall.
- Cavalcanti, M. C. (1996). Collusion, resistance, and reflexivity: Indigenous teacher education in Brazil. *Linguistics and Education*, 8(2), 175-188.
- Cavalcanti, M. C. (1999). Estudos sobre educação bilíngüe e escolarização em contextos de minorias lingüísticas no Brasil. *Delta*, 15, 385-417.
- Charles, M., & Marschan-Piekkari, R. (2002). Language training for enhanced horizontal communication: A challenge for MNCs. *Business Communication Quarterly*, 65(2), 9-29.
- Clegg, J. (2009). Skills for CLIL. Retrieved from: <http://www.onestopenglish.com/clil/methodology/articles/article-skills-for-clil/501230.article>
- Close, N. (2015). Dealing with mixed-language abilities in an English-medium university content course. *International Journal of Learning, Teaching and Educational Research*, 11(3).
- Crystal, D. (2003). *English as a Global Language*. Cambridge, UK: Cambridge University Press.
- Common European Framework of Reference for Languages (2016). Retrieved from <http://www.cambridgeenglish.org/cefr/>
- Coyle, D. (2002). Against all odds: Lessons from content & language integrated learning in English secondary schools, in D. So & G. Jones (Eds.), *Education and Society in Plurilingual Contexts*. Brussels, Belgium: VUB press.
- Coyle, D. (2006). Developing CLIL: Towards a theory of practice. *APAC Monographs*, 6, 5 - 29.
- Coyle, D. (2007). Content and Language Integrated Learning: Towards a Connected

- Research Agenda for CLIL Pedagogies. *International Journal of Bilingual Education and Bilingualism*, 10(5), 543-562.
- Coyle, D., Hood, P., & Marsh, D. (2010). *Content and Language Integrated Learning*. Cambridge, UK: Cambridge University Press
- Cummins, J. (1980). The construct of language proficiency in bilingual education. *Current issues in bilingual education*, 81-103.
- Cummins, J. (2000). Immersion education for the millennium: What we have learned from 30 years of research on second language immersion. In M. R. Child & R. M. Bostwick (Eds.), *Learning through two languages: Research and practice. Second Katoh Gakuen International Symposium on Immersion and Bilingual Education*. (pp. 34-47). Katoh Gakuen, Japan.
- Dalton-Puffer, C., Nikula, T., & Smit, U. (2010). *Language use and Language Learning in CLIL Classrooms. AILA Applied linguistics series 7*. Amsterdam, the Netherlands: John Benjamins Publishing Co.
- Dalton-Puffer, C. (2011). Content-and-language integrated learning: From practice to principles? *Annual Review of applied linguistics*, 31, 182-204.
- Deci, E. L., & Ryan, R. M. (1985). The general causality orientations scale: Self-determination in personality. *Journal of research in personality*, 19(2), 109-134.
- DeKeyser, R. M., & Larson-Hall, J. (2005). What does the critical period really mean. *Handbook of bilingualism: Psycholinguistic approaches*, 88-108.
- DelliCarpini, M. (2006). Scaffolding and differentiating instruction in mixed ability ESL classes using a round robin activity. *The Internet TESL Journal*, 12(3). Retrieved from <http://iteslj.org/Techniques/DelliCarpini-RoundRobin.html>
- De Mello, H. A. B. (2002). O português é uma alavanca para que eles possam desenvolver o

inglês": eventos de ensino-aprendizagem em uma sala de aula de ESL de uma" escola bilíngue. Tese (Doutorado), Universidade Estadual de Campinas. Instituto de Linguagem. Campinas: São Paulo. Retrieved from:

<http://www.bibliotecadigital.unicamp.br/document/?code=vtls000283908>

De Mello, H. A. B. (2011). Educação bilíngue: uma breve discussão. *Revista Horizontes de Linguística Aplicada*, 9(1), 1-23.

Di Martino, E., & Di Sabato, B. (2012). CLIL in Italian schools: The Issue of Content Teachers' Competence in the Foreign Language. In R. Breeze, F. Jiménez Berrio, C. Llamas Saíz, C. Martínez Pasamar, & C. Taberero Sala (Eds.), *Teaching approaches to CLIL / Propuestas docentes en AICLE*. Pamplona, Spain: Servicio de Publicaciones de la Universidad de Navarra.

Dobson, A., Pérez, M., & Johnstone, R. (2010). Bilingual Education Project (Spain): Evaluation Report. *Madrid, Spain: British Council*.

Dörnyei, Z. (1994). Motivation and motivating in the foreign language classroom. *The modern language journal*, 78(3), 273-284.

Draganski B., Gaser C., Busch V., Schuierer G., Bogdahn U., & May A. (2004). Neuroplasticity: changes in grey matter induced by training. *Nature*, 427, 311-312.

Dudley-Evans, T., & St John, M. J. (1998). *Developments in English for specific purposes: A multi-disciplinary approach*. Cambridge university press.

Echevarría, J., Vogt, M., & Short, D. (2008). *Making content comprehensible for English learners: The SIOP Model*. Boston, MA: Pearson Education.

English First (2014). *English Proficiency Index 2014*. Retrieved from:  
<http://www.ef.nl/epi/regions/latin-america/brazil/>

European Commission (1995). *White paper: Teaching and learning, towards the learning society*. Brussels, Belgium: European Commission.

European Commission (2016, July 15). Languages, supporting language learning and linguistic diversity. Retrieved from [http://ec.europa.eu/languages/policy/strategic-framework/index\\_en.htm](http://ec.europa.eu/languages/policy/strategic-framework/index_en.htm).

Eurydice (2006). *Content and language integrated learning (CLIL) at school in Europe*. Brussels: European Commission. Retrieved from: [http://eacea.ec.europa.eu/education/eurydice/thematic\\_studies\\_archives\\_en.php#2006](http://eacea.ec.europa.eu/education/eurydice/thematic_studies_archives_en.php#2006) (April 2011).

Finardi, K. (2014). The Slaughter of Kachru's Five Sacred Cows in Brazil: Affordances of the Use of English as an International Language. *Studies in English Language Teaching*, 2, 401-411.

Finardi, K., Leão, R., & Pinheiro, L. M. (2016). English in Brazil: Insights from the Analysis of Language Policies, Internationalization Programs and the CLIL Approach. *Education and Linguistics Research*, 2(1), 54-68.

Folha de São Paulo (2016). Compare as mensalidades de 1.047 escolas privadas de São Paulo. Retrieved from: <http://www1.folha.uol.com.br/educacao/2015/10/1700562-compare-as-mensalidades-de-1047-escolas-privadas-de-sao-paulo.shtml>

García, O., & Baetens Beardsmore, H. (2009). *Bilingual Education in the 21st Century: A global perspective*. Malden, MA: Wiley-Blackwell.

Gimenez, T. (2013). A Ausência de Políticas Para o Ensino de Língua Inglesa nos Anos Iniciais de Escolarização no Brasil. In: C. Nicolaidis, K. A. Silva, R. Tílio, & C. H. Rocha (Eds.), *Política e Políticas Linguísticas*. Campinas, Brazil: Pontes.

Gorete Neto, M. (2014). Bilingual education, indigenous language and culture: the case of Apyãwa Tapirapé. *Revista Brasileira de Linguística Aplicada*, 14(2), 335-351.

Grosjean, F. (1998). Studying bilinguals: Methodological and conceptual issues. *Bilingualism: Language and cognition*, 1(2), 131-149.

Grosjean, F. (2008). *Studying bilinguals*. Oxford, UK: Oxford University Press.

Grosjean, F. (2010). *Bilingual: Life and reality*. New York, U.S.: Oxford University Press

Halbach, A. (2002). Developing secondary students' communicative competence: Politics and reality. *Estudios de Lingüística Aplicada*, 3, 49-68.

Hamers, J. F., & Blanc, M. (2000). *Bilinguality and bilingualism*. Cambridge, UK: Cambridge University Press.

Harmer, J. (2001). *The Practice of English Language Teaching* (3<sup>rd</sup> ed.). Harlow, UK: Pearson Longman.

Hofstede, G., & Bond, M. H. (1984). Hofstede's culture dimensions an independent validation using Rokeach's value survey. *Journal of cross-cultural psychology*, 15(4), 417-433.

Howard, E. R., Sugarman, J., & Coburn, C. (2006). Adapting the Sheltered Instruction Observation Protocol (SIOP) for two-way immersion education: An introduction to the TWIOP. Retrieved from: <http://www.cal.org/twi/TWIOP.pdf>

Hughes, A. (2003). *Testing for Language Teachers* (2<sup>nd</sup> ed.). Cambridge, U.K.: Cambridge University Press.

Johnson, J. S., & Newport, E. L. (1989). Critical period effects in second language learning: The influence of maturational state on the acquisition of English as a second language. *Cognitive psychology*, 21(1), 60-99.

Kachru, B. (1982). *The other tongue: English across cultures*. Urbana, Illinois: University of Illinois Press.

Kim, K. H., Relkin, N. R., Lee, K. M., & Hirsch, J. (1997). Distinct cortical areas associated with native and second languages. *Nature*, 388, 171-174.

Klimova, B. F. (2012). CLIL and the teaching of foreign languages. *Procedia-Social and Behavioral Sciences*, 47, 572-576.

Kirkgöz, Y. (2009). Globalization and English language policy in Turkey. *Educational*

*Policy*, 23(5), 663-684.

- Krishna, A., & Ahluwalia, R. (2008). Language choice in advertising to bilinguals: Asymmetric effects for multinationals versus local firms. *Journal of Consumer Research*, 35(4), 692-705.
- Krizman, J., & Marian, V. (2015). Neural consequences of Bilingualism for cortical and subcortical function. In J. W. Schwieter (Ed.), *The Cambridge handbook of bilingual processing*. Cambridge, U. K.: Cambridge University Press.
- Kroll, J. F., & Stewart, E. (1994). Category interference in translation and picture naming: Evidence for asymmetric connections between bilingual memory representations. *Journal of memory and language*, 33(2), 149-174.
- Lambert, W. E. (1969). Psychological studies of the interdependencies of the bilingual's two languages. In J. Puhvel (Ed.), *Substance and structure of language* (pp. 99-126). Berkeley, CA: University of California Press.
- Lambert, W. E. (1981). Bilingualism and language acquisition. *Annals of the New York Academy of Sciences*, 379(1), 9-22.
- Lasagabaster, D. (2008). Foreign language competence in content and language integrated courses. *The Open Applied Linguistics Journal*, 1(1), 30-41.
- Lasagabaster, D., & Sierra, J. M. (2009). Immersion and CLIL in English: more differences than similarities. *ELT journal*, 64(4), 367-375.
- Lasagabaster, D. (2011). English achievement and student motivation in CLIL and EFL settings. *Innovation in Language Learning and Teaching*, 5(1), 3-18.
- Lasagabaster, D. (2013). The use of the L1 in CLIL classes: The teachers' perspective. *Latin American Journal of Content and Language Integrated Learning*, 6(2), 1-21.
- Lemhöfer, K., & Broersma, M. (2012). Introducing LexTALE: A quick and valid lexical test for advanced learners of English. *Behavior Research Methods*, 44(2), 325-343.

- Liberali, F. C., & Megale, A. (2016). Elite bilingual education in Brazil: an applied linguist's perspective. *Colombian Applied Linguistics Journal*, 18(2), 95-108.
- Lim Falk, M. (2015). English and Swedish in CLIL student texts. *The Language Learning Journal*, 43(3), 304-318.
- Linck, J., Kroll, J., & Sunderman, G. (2009). Losing access to the native language while immersed in second language: Evidence for the role of inhibition in second-language learning. *Psychological Science*, 20(12), 1507-1515.
- Lyster, R. & Ballinger, S. (2011). Content-based language teaching: Convergent concerns across divergent contexts. *Language teaching research*, 15(3), 279-288.
- Maher, T. M. (2013). Ecos de resistência: políticas linguísticas e línguas minoritárias no Brasil. In C. Nicolaidis, K. A. Da Silva, R. Tilio, & C. H. Rocha (Eds.), *Política e políticas linguísticas*. Campinas, Brazil: Pontes.
- Maljers, A., Marsh, D., Wolff, D., Genesee, F., Frigols-Martín, M., & Mehisto, P. (2010). *Diverse Contexts-Converging Goals: CLIL in Europe*. Frankfurt, Germany: Peter Lang.
- Mar-Molinero, C., & Stevenson, P. (2006). Language policy in a changing Europe – Introduction. *Language Policy*, 5(3), 239-245.
- Marsh, D. (2002). *CLIL/EMILE-The European dimension: Actions, trends and foresight potential*. Brussels, Belgium: European Commission.
- Mårtensson, J., Eriksson, J., Bodammer, N. C., Lindgren, M., Johansson, M., Nyberg, L., & Lövdén, M. (2012). Growth of language-related brain areas after foreign language learning. *Neuro Image*, 63(1), 240-244.
- May, S. (2014). *The multilingual turn: Implications for SLA, TESOL and bilingual education*. New York, NY: Routledge.
- Mechelli, A., Crinion, J. T., Noppeney, U., O'Doherty, J., Ashburner, J., Frackowiak, R. S., &

- Price, C. J. (2004). Neurolinguistics: Structural plasticity in the bilingual brain. *Nature*, 431, 757-757.
- Mesthrie, R., & Bhatt, R. M. (2008). *World Englishes: The study of new linguistic varieties*. Cambridge, UK: Cambridge University Press.
- Mohan, B. A. (1986). *Language and content*. Reading, Boston, U.S.: Addison-Wesley Publishing Company.
- Mohanty, A. K. (1994). *Bilingualism in a multilingual society: Psycho-social and pedagogical implications*. Mysore: Central Institute of Indian Languages.
- Moura, S. D. A. (2009). *Com quantas línguas se faz um país? Concepções e práticas de ensino em uma sala de aula na educação bilíngue* (Master's thesis). Retrieved from <http://www.teses.usp.br/teses/disponiveis/48/48134/tde-06062009-162434/pt-br.php>
- Nikula, T. & Marsh, D. (1998). Terminological considerations in teaching content through a foreign language. *Bulletin suisse de linguistique appliquée*, 67, 13-18.
- Parâmetros Curriculares Nacionais do Ensino Médio (2000). Retrieved from: [http://portal.mec.gov.br/seb/arquivos/pdf/14\\_24.pdf](http://portal.mec.gov.br/seb/arquivos/pdf/14_24.pdf).
- Peal, E., & Lambert, W. E. (1962). The relation of bilingualism to intelligence. *Psychological Monographs: general and applied*, 76(27), 1-23.
- Pérez Cañado, M. L. (2016). Are teachers ready for CLIL? Evidence from a European study. *European Journal of Teacher Education*, 39(2), 202-221.
- Phillipson, R. (2001). English for Globalisation or for the World's People? *International Review of Education / Internationale Zeitschrift Für Erziehungswissenschaft t/ Revue Internationale De L'Education*, 47(3/4), 185-200.
- Piekkari, R., Vaara, E., Tienari, J., & Sääntti, R. (2005). Integration or disintegration? Human resource implications of a common corporate language decision in a cross-border merger. *The International Journal of Human Resource*

*Management*, 16(3), 330-344.

Piesche, N., Jonkmann, K., Fiege, C., & Keßler, J. U. (2016). CLIL for all? A randomised controlled field experiment with sixth-grade students on the effects of content and language integrated science learning. *Learning and Instruction*, 44, 108-116.

Rajagopalan, K. (2005). *A geopolítica do inglês*. São Paulo: Parábola Editorial.

Ruiz De Zarobe, Y. (2007). CLIL in a bilingual community: Similarities and differences with the learning of English as a foreign language, *Vienna English Working Papers*, 16(3), 47-52.

Ruiz de Zarobe, Y. (2008). CLIL and foreign language learning: A longitudinal study in the Basque Country. *International CLIL Research Journal*, 1(1), 60-73.

Schneider, E. W. (2007). *Postcolonial English: varieties around the world*. Cambridge University Press.

Schwietzer, J. W., & Tokowicz, N. (2015). Bilingual processing: a dynamic and rapidly changing field. *The Cambridge Handbook of Bilingual Processing*. Cambridge, UK: Cambridge University Press.

Serafini, E. J., Lake, J. B., & Long, M. H. (2015). Needs analysis for specialized learner populations: Essential methodological improvements. *English for Specific Purposes*, 40, 11-26.

Short, D., Echevarría, J., & Richards-Tutor, C. (2011). Research on academic literacy development in sheltered instruction classrooms. *Language Teaching Research*, 15(3), 363-380.

Silva-Corvalán, C., & Treffers-Daller, J. (2015). *Language dominance in bilinguals: Issues of measurement and operationalization*. Cambridge, UK: Cambridge University Press.

Stein, M., Federspiel, A., Koenig, T., Wirth, M., Strik, W., Wiest, R., & Dierks, T. (2012).

- Structural plasticity in the language system related to increased second language proficiency. *Cortex*, 48(4), 458-465.
- Sylvén, L. K. (2013). CLIL in Sweden—Why does it not work? A metaperspective on CLIL across contexts in Europe. *International Journal of Bilingual Education and Bilingualism*, 16(3), 301-320.
- Swain, M. (2000). The output hypothesis and beyond: Mediating acquisition through collaborative dialogue. *Sociocultural theory and second language learning*. Oxford, UK: Oxford University Press.
- The British Council (2015). English in Brazil: An examination of policy, perceptions and influencing factors. Retrieved from: <https://ei.britishcouncil.org/sites/default/files/latin-america-research/English%20in%20Brazil.pdf>
- Unsworth, S., Persson, L., Prins, T., & De Bot, K. (2014). An investigation of factors affecting early foreign language learning in the Netherlands. *Applied Linguistics*, 2014, 1-23.
- Upton, T. A. (2012). LSP at 50: Looking back, looking forward. *Ibérica: Revista de la Asociación Europea de Lenguas para Fines Específicos (AELFE)*, 23, 9-28.
- Ur, P. (1996). *A course in language teaching: practice and theory*. Cambridge University Press.
- Vaid, J. (1984). Visual, phonetic, and semantic processing in early and late bilinguals. *Early bilingualism and child development*, 175-191. Lisse, the Netherlands: Swets & Zeitlinger.
- Van de Craen, P., Mondt, K., Allain, L., & Gao, Y. (2007). Why and how CLIL works. An outline for a CLIL theory. *Vienna English Working Papers*, 16(3), 70-78.
- Weinreich, U. (1953). *Languages in contact*. The Hague, the Netherlands: Mouton.
- West, R. (1994). Needs analysis in language teaching. *Language teaching*, 27(1), 1-19.

West, R. (1997). Needs Analysis: State of the Art1. In R. Howard & G. Brown (Eds.),

*Teacher Education for Languages for Specific Purposes*. Clevedon, U.K.:

Multilingual Matters.

### Appendix A- School timetable

The timetable is related to the workshop called "Formation", which has as the project challenge: "What's Africa really like? Why should we study about it?" (African and Afro-Brazilian history is part of the Brazilian education curriculum)

Elective 1: Microsoft Sway

Elective 2: Anthropology

ROOM 07 – FORMATION

TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
08.00	ELECTIVE 1 Teacher Luis Larocca	APPLIED SCIENCE Teacher Daniel	BIOLOGIA Teacher Daniel	GUIDED STUDIES Teacher Pedro	HISTORY Teacher Monah
08.45	ELECTIVE 1 Teacher Luis Larocca	APPLIED SCIENCE Teacher Daniel	BIOLOGIA Teacher Daniel	LEARNING PROJECTS Teacher Natália	PRODUÇÃO TEXTUAL Teacher Danielle
09.50	SOCIOLOGIA Teacher Pedro	HISTÓRIA Teacher Monah	LÍNGUA PORTUGUESA Teacher Danielle	QUÍMICA Teacher Júnior	GEOGRAFIA Teacher Jean
10.35	GEOGRAPHY Teacher Jean	HISTÓRIA Teacher Monah	LÍNGUA PORTUGUESA Teacher Danielle	QUÍMICA Teacher Júnior	GEOGRAFIA Teacher Jean
12.20	MATEMÁTICA Teacher Márcia	ENGLISH Teacher Amanda	ELECTIVE 2 Teacher Pedro	GUIDED STUDIES Teacher Guilherme	ESPAÑOL Teacher Luciana
01.05	MATEMÁTICA Teacher Márcia	ENGLISH Teacher Amanda	ELECTIVE 2 Teacher Pedro	MATEMÁTICA Teacher Márcia	ESPAÑOL Teacher Luciana
01.50	EDUCAÇÃO FÍSICA Teacher Fernanda	ART Teacher Luis Larocca	TECHNOLOGICAL STUDIES Teacher Márcia	FÍSICA Teacher Luis Caporal	FILOSOFIA Teacher Guilherme
2.35	EDUCAÇÃO FÍSICA Teacher Fernanda	ARTE Teacher Luis Larocca	TECHNOLOGICAL STUDIES Teacher Márcia	FÍSICA Teachers Luis Caporal	ENGLISH Teacher Amanda
3.35	A.S.W./Language Lab	A.S.W./Language Lab	A.S.W./Language Lab	A.S.W./Language Lab	A.S.W./Language Lab
4.20	A.S.W./Language Lab	A.S.W./Language Lab	A.S.W./Language Lab	A.S.W./Language Lab	A.S.W./Language Lab

## **Appendix B- Learning Workshop**

*1. Original version: Portuguese*

**Learning workshop:** Formation

Quarter: 2nd 2016

Teacher in charge: XXXXXXXX

### **Justification**

Há pelo menos três milhões de anos, a África vem contribuindo com culturas, conhecimento, técnicas e tecnologias para o mundo. Tudo isso repassado ao longo do tempo não por tribos, como frequentemente se pensa a respeito dos povos africanos, mas por sociedades constituídas e organizadas. No entanto, historicamente, o continente africano foi visto como fornecedor de matérias-primas e mão de obra escrava para as grandes potências colonialistas. Durante muito tempo, a África foi sinônimo de um lugar selvagem, hostil e inculto; onde predominavam a miséria e a discórdia entre os povos.

Todavia, um olhar mais cuidadoso e os estudos recentes mostram que este continente possui grande diversidade cultural e paisagística, além de ser exemplo de resistência e persistência diante de tanta adversidade e exploração.

Muitos povos têm nas suas raízes influências africanas, seja por meio da linguagem, da música, do folclore, da culinária, da religião.

Dessa forma, estudar a cultura africana é propor uma maneira de perceber os valores que atualmente podem ser aprendidos com as nações que a formam, além de propor a mudança de olhar a respeito do continente, por tanto tempo discriminado e subjugado.

### **Challenge**

What's Africa really like? Why should we study about it?

**Objectives**

Desconstruir estereótipos e preconceitos e caminhar em direção a uma visão mais realista do continente africano.

Investigar as contribuições do continente africano na construção do mundo atual, abordando estudos em diferentes áreas: biologia, geografia, história, antropologia e tecnologia.

*2. Translated version: English*

**Learning workshop:** Formation

Quarter: 2nd 2016

Teacher in charge: XXXXXXXX

**Justification**

For around three millions years Africa has been contributing to the world by sharing their cultures, knowledge, techniques and technologies. Not all of this has been passed along by tribes, which people frequently think of when imagining African people but by shaped and organized societies. However, historically, the African continent has most of the time been seen as a supplier of feedstock and slave workforce for the colonialist powers. For a long time, Africa was considered to be a wild, hostile and uneducated place, wherein the misery and the confusion between people prevailed. Nonetheless, a closer look and recent studies show that this continent possesses a lot of cultural and geographical diversity and is an example of resistance and persistence in the face of so much adversity and exploitation.

Peoples in different parts of the world carry the influence of African roots, expressing itself through their language, their music, their folklore, their food, and their religion.

By studying the African culture, we are able to learn about the values that African countries have. In addition, it can change the way we look at the African continent which has been discriminated and dominated by others for a long time.

**Challenge**

What's Africa really like? Why should we study it?

**Objectives**

Deconstructing stereotypes and prejudice and leading students to a more realistic view of the African continent.

Investigating the contributions that the African continent has made to the world by shedding light at the continent from different areas, such as biology, geography, history, anthropology and technology.

**Appendix C- Teachers' questionnaire and test**

This questionnaire is used as part of a study on how to improve bilingual education in Brazil. It is conducted for educational purposes only and does not serve any immediate commercial goals. Please take your time to answer all questions and take the short test at the end of this questionnaire. We will not keep any records of your personal identity or any other form that can lead to your identification. Your responses will be kept confidential and all data will be destroyed after the completion of the study.

1. What is your gender?

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2. What is your highest level of education?

- a) Secondary education or lower
- b) Bachelor's degree
- c) Master's degree /post-graduation/ specialization
- d) Doctor's degree or higher

3. How old are you? \_\_\_\_\_ years old.

4. What did you study? \_\_\_\_\_

5. How long have you been teaching in this school for?

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6. Which subject(s) do you teach? \_\_\_\_\_

7. Do you speak any other languages other than English or Portuguese?

- a) Yes, I speak \_\_\_\_\_. If yes, how well do you speak this/these language(s)? \_\_\_\_\_  
E.g. fluent speaker (1), good command (2), sufficient command (3), basic understanding (4)

b) No, I don't.

8. Do you possess any proficiency certificate in English?
- No, I don't.
  - Yes, I have. I have a certificate from \_\_\_\_\_ which indicates a proficiency level of \_\_\_\_\_ (CEF: A1/A2/B1/B2/C1/C2)
9. Have you ever lived abroad?
- Yes, I have. I lived in \_\_\_\_\_ for \_\_\_\_\_ years.
  - No, I haven't.
10. How long have you been teaching your subject for? \_\_\_\_\_
11. How long have you been teaching your subject in English for? \_\_\_\_\_
12. Are you familiar with the concept of Content Language Integrated Learning (CLIL)?
- Yes
  - No
- If yes, what does it mean to you?
- \_\_\_\_\_
- \_\_\_\_\_
13. How many classes do you give per week and how many hours do you spend on average per week working including preparation time, correcting tests, and other work-related activities?
- I teach \_\_\_\_\_ classes which amounts to a total of \_\_\_\_\_ working hours.
14. Are your students more motivated in classes that you teach in Portuguese or in English?
- Much more motivated in English
  - More motivated in English
  - Equally motivated
  - More motivated in Portuguese
  - Much more motivated in Portuguese

15. How many students do you have on average in one classroom?

- a) less than 15
- b) 15-20
- c) 20-25
- d) 25-30
- e) 30-35
- f) more than 35

16. Have you ever received any specialized training on how to teach in a bilingual school?

- a) Yes, I have received a training course in \_\_\_\_\_  
How often do you receive such training? \_\_\_\_\_
- b) No

17. Do you have meetings to discuss your activities with other teachers? If so, how often?

- a) Yes, I have meetings \_\_\_\_\_ (e.g. once a month). b) No

18. Please indicate on a scale from 1-5 the degree to which you agree or disagree with the following statements.	disagree	1.completely disagree	2.somewhat disagree	3.neither agree, nor disagree	4.somewhat agree	5.completely agree
a. All my students are able to accompany classes taught in English						
b. My students would be able to accompany the classes better if they were taught in Portuguese						
c. Discussions in classroom often unintendedly switch to Portuguese.						
d. The English language proficiency of my students is very similar						
e. I think English language proficiency gets too much attention in school						
f. Students put more effort into their assignments in English than in Portuguese						

g. I feel more comfortable teaching in Portuguese than in English					
h. Discussions in classroom are more productive in English than in Portuguese					
i. Discussions in classroom are more productive in Portuguese than in English					
j. Some students don't participate well because they are afraid of making mistakes					
k. I find it difficult to motivate students to speak English					
l. I keep up to date on the latest teaching methods in bilingual education					
m. I feel the need to improve my English					
n. The school provides me with sufficient opportunities to become a better teacher					
o. I prefer to give classes in English					
p. I prefer to give classes in Portuguese					

19. Please indicate on a scale from 1 to 5 your and your students' English language skills.	1.very poor	2.poor	3.okay	4.good	5.very good
a. My writing skills in English are					
b. My speaking skills in English are					
c. My listening skills in English are					
d. My reading skills in English are					
	1.very poor	2.poor	3.okay	4.good	5.very good
a. My students' writing skills in English are					
b. My students' speaking skills in English are					
c. My students' listening skills in English are					
d. My students' reading skills in English are					

20. What strategies do you use when students have difficulties to understand the content in English?

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21. What would you change about the schools' teaching concept if you were school principal?

1. 

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2. 

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3. 

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## Instructions for the test

This test consists of about 60 items, in each of which you will see a string of letters. Your task is to decide whether this is an existing English word or not. If you think it is an existing English word, you check the box on “yes”, and if you think it is not an existing English word, you check the box on “no”. If you are sure that the word exists, even though you don’t know its exact meaning, you may still respond “yes”. But if you are not sure if it is an existing word, you should respond “no”.

**Attention:** In this experiment, we use American English rather than British English spelling. For example: “realize” instead of “realise”; “color” instead of “colour”, and so on. Please don’t let this confuse you. This experiment is not about detecting such subtle spelling differences anyway. You have as much time as you like for each decision. This part of the experiment will take about 5 minutes. If everything is clear, you can now start the experiment

The first three ones called “test” are examples.

Test	platory	Yes	No <b>X</b>	30	skave	Yes	No
Test	penial	<b>Yes X</b>	No	31	plaintively	Yes	No
Test	generic	<b>Yes X</b>	No	32	kilp	Yes	No
1	mensible	Yes	No	33	interfate	Yes	No
2	scornful	Yes	No	34	hasty	Yes	No
3	stoutly	Yes	No	35	lengthy	Yes	No
4	ablaze	Yes	No	36	fray	Yes	No
5	kermshaw	Yes	No	37	crumper	Yes	No
6	moonlit	Yes	No	38	upkeep	Yes	No
7	lofty	Yes	No	39	majestic	Yes	No
8	hurricane	Yes	No	40	magrity	Yes	No
9	flaw	Yes	No	41	nourishment	Yes	No
10	alberation	Yes	No	42	abergy	Yes	No
11	unkempt	Yes	No	43	proom	Yes	No
12	breeding	Yes	No	44	turmoil	Yes	No
13	festivity	Yes	No	45	carbohydrate	Yes	No
14	screech	Yes	No	46	scholar	Yes	No
15	savory	Yes	No	47	turtle	Yes	No

16	plaudate	Yes	No	48	fellick	Yes	No
17	shin	Yes	No	49	destription	Yes	No
18	fluid	Yes	No	50	cylinder	Yes	No
19	spaunch	Yes	No	51	ensorship	Yes	No
20	allied	Yes	No	52	celestial	Yes	No
21	slain	Yes	No	53	rascal	Yes	No
22	recipient	Yes	No	54	purrage	Yes	No
23	exprate	Yes	No	55	pulsh	Yes	No
24	eloquence	Yes	No	56	muddy	Yes	No
25	cleanliness	Yes	No	57	quirty	Yes	No
26	dispatch	Yes	No	58	puдор	Yes	No
27	rebondicate	Yes	No	59	listless	Yes	No
28	ingenious	Yes	No	60	wrought	Yes	No
29	bewitch	Yes	No	----	-----	-----	-----

Thank you for your participation!

**Appendix D- Students' questionnaire and test**

This questionnaire is used as part of a study on how to improve bilingual education in Brazil. It is conducted for educational purposes only and does not serve any immediate commercial goals. Please take the time to answer all questions and take the short test at the end of this questionnaire. We will not keep any records of your personal identity or any other form that can lead to your identification. Your responses will be kept confidential and all data will be destroyed after the completion of the study.

1. What is your gender? \_\_\_\_\_
  
2. What is your parents' level of education?
  - a) Secondary education or lower
  - b) Bachelor's degree
  - c) Master's degree /post-graduation/ specialization
  - d) Doctor's degree or higher
  
3. How old are you? \_\_\_\_\_
  
4. Which grade are you currently in?  
\_\_\_\_\_
  
5. How long have you been studying in the bilingual school?  
\_\_\_\_\_
  
6. Do you speak any languages other than Portuguese or English?
  - a) Yes, I also speak \_\_\_\_\_. How well do you speak this/these language(s)? \_\_\_\_\_  
E.g. fluent speaker(1), good command(2), sufficient command(3), basic understanding(4)
  - b) No, I don't.

7. Have you studied abroad?

- a) Yes, I have. I studied in \_\_\_\_\_  
for\_\_\_\_ years ( ) months ( ) weeks ( ).
- b) No, I haven't.

8. Are both your parents Brazilian?

- a. Yes      b. No, my mum is \_\_\_\_\_ and my dad is \_\_\_\_\_.

9. How long have you been studying English for?

\_\_\_\_\_

10. Whose decision was it for you to start studying at this bilingual school?

- a. I made the decision to study here.
- b. My parents want me to be here.
- c. My parents and I think this is the best school for me.

11. Please indicate on a scale from 1-5 the degree to which you agree or disagree with each of the following statements:	1. completely agree	2. somewhat disagree	3. neither agree, nor disagree	4. somewhat agree	5. completely agree
a. Studying here will provide me with better working opportunities in life					
b. Studying here will help me to understand and interact better with people from different cultures					
c. The teaching program in this school is very interesting.					
d. The content I learn here in school will help me later when I have finished studying					
e. I like the classes in English					
f. I like the classes in Portuguese					
g. I find discussions in class important					
h. I like the workshops that we work on each term					
i. My fellow students don't have any difficulties to do their assignments in English					

j. I would prefer to have all classes in Portuguese					
k. I would prefer to have all classes in English					
l. Classes in English are more interesting than classes in Portuguese					
m. The discussions and materials are realistic and reflect real world issues					
n. All my fellow students have a similar level of English language proficiency					
o. I like to work in a group					
p. I regularly help my classmates when they have English language difficulties					
q. My classmates help me when I have difficulties to understand English					
r. I always do my assignments					
s. If I get good grades, my parents give me rewards					
t. Getting good grades is very important to me					
u. I am confident to speak out in English in the classroom, regardless of mistakes					
v. I am confident to speak out in my native language in the classroom					
x. I speak English better than my classmates do					
z. My teacher often changes to Portuguese when there is a misunderstanding in English					

12. On average teachers at the school speak English

- d. excellently
- e. well
- f. sufficiently
- g. insufficiently

13. On average students at the school speak English

- a. excellently
- b. well
- c. sufficiently
- d. insufficiently

14. Please indicate on a scale from 1 to 5 your English language skills.	1.very poor	2.poor	3.okay	4.good	5.very good
a. My writing skills in English are					
b. My speaking skills in English are					
c. My listening skills in English are					
d. My reading skills in English are					

15. Name three things that you would change about your classes if you were school principal.

1 \_\_\_\_\_

2 \_\_\_\_\_

3 \_\_\_\_\_

### Instructions for the test

This test consists of about 60 items, in each of which you will see a string of letters. Your task is to decide whether this is an existing English word or not. If you think it is an existing English word, you check the box on “yes”, and if you think it is not an existing English word, you check the box on “no”. If you are sure that the word exists, even though you don’t know its exact meaning, you may still respond “yes”. But if you are not sure if it is an existing word, you should respond “no”.

**Attention:** In this experiment, we use American English rather than British English spelling. For example: “realize” instead of “realise”; “colour” instead of “color”, and so on. Please don’t let this confuse you. This experiment is not about detecting such subtle spelling differences anyway. You have as much time as you like for each decision. This part of the experiment will take about 5 minutes. If everything is clear, you can now start the experiment.

The first three ones called “test” are examples.

Test	platory	Yes	No <b>X</b>	30	skave	Yes	No
Test	denial	<b>Yes X</b>	No	31	plaintively	Yes	No
Test	generic	<b>Yes X</b>	No	32	kilp	Yes	No
1	mensible	Yes	No	33	interfate	Yes	No
2	scornful	Yes	No	34	hasty	Yes	No
3	stoutly	Yes	No	35	lengthy	Yes	No
4	ablaze	Yes	No	36	fray	Yes	No
5	kermshaw	Yes	No	37	crumper	Yes	No
6	moonlit	Yes	No	38	upkeep	Yes	No
7	lofty	Yes	No	39	majestic	Yes	No
8	hurricane	Yes	No	40	magrity	Yes	No
9	flaw	Yes	No	41	nourishment	Yes	No
10	alberation	Yes	No	42	abergy	Yes	No
11	unkempt	Yes	No	43	proom	Yes	No
12	breeding	Yes	No	44	turmoil	Yes	No
13	festivity	Yes	No	45	carbohydrate	Yes	No
14	screech	Yes	No	46	scholar	Yes	No
15	savory	Yes	No	47	turtle	Yes	No

16	plaudate	Yes	No	48	fellick	Yes	No
17	shin	Yes	No	49	destription	Yes	No
18	fluid	Yes	No	50	cylinder	Yes	No
19	spaunch	Yes	No	51	ensorship	Yes	No
20	allied	Yes	No	52	celestial	Yes	No
21	slain	Yes	No	53	rascal	Yes	No
22	recipient	Yes	No	54	purrage	Yes	No
23	exprate	Yes	No	55	pulsh	Yes	No
24	eloquence	Yes	No	56	muddy	Yes	No
25	cleanliness	Yes	No	57	quirty	Yes	No
26	dispatch	Yes	No	58	pudour	Yes	No
27	rebondicate	Yes	No	59	listless	Yes	No
28	ingenious	Yes	No	60	wrought	Yes	No
29	bewitch	Yes	No	-----	-----	-----	-----

Thank you for your participation!

**Appendix E – CLIL lesson plans and activities****Lesson Plan- CLIL Geography 1****Teacher's notes: Landscapes.**

<b>Aims</b>	To learn what the different types of landscapes are and how human activities can disturb the ecosystems. This will lead students to be prepared for discussing a video and starting to prepare their presentations for the end of the term.
<b>Activities</b>	<ol style="list-style-type: none"> <li>1. Answering multiple-choice questions about landscapes; skimming and scanning of web sources.</li> <li>2. Matching vocabulary with pictures and consulting dictionaries online.</li> <li>3. Deducting vocabulary from context.</li> <li>4. Reading information about landscapes and labeling a diagram with information.</li> <li>5. Reading to understand the main ideas of a text, producing a paragraph and discussing it.</li> <li>6. Researching and preparing a poster about different human activities that have changed natural landscapes.</li> </ol>
<b>Language</b>	Present simple, simple past, present perfect; comparative and superlative adjectives; vocabulary related to landscape
<b>Challenge</b>	Formation - What is Africa really like? Why should we study it?
<b>Procedure</b>	<ul style="list-style-type: none"> <li>- The class will be divided into groups. Teachers group students based on their language levels. Students with lower levels should work together on Text 1, students with medium levels should work together on Text 2, and students with high levels should work together on Text 3.</li> <li>- The class begins with a warm up vocabulary domino game which is the same for all groups.</li> <li>- Ask students to do the quiz about natural landscapes in Exercise 1 individually and then compare in pairs their answers.</li> <li>- Ask students to match the words with the pictures in Exercise 2, then let them check their answers online and write down the correct responses.</li> </ul>

- Ask students to search for natural landscapes on the internet and match the words with the definitions in Exercise 3.
- Ask students to look at the diagram of a natural landscape in Exercise 4 and label it using words from Exercise 3.
- Students read the text individually in Exercise 5. After reading, each group discusses, what they understood from the text within their own group.
- Then students draw their own conclusion by writing down one paragraph in their own words about what they understood from the text they read.
- After finishing to write the paragraph, all students share what they read with different groups. Everyone should have a chance to talk and discuss the main points of the text by speaking in English with each other. In addition, students could use their written production to help them discuss their points with class members.
- Ask students to hand in their paragraphs on which feedback will be given next class to everyone. Additionally to feedback on their written production, the teacher will also give feedback on their oral production during conversation which is based on notes taken during classroom interaction.
- Make groups of three students who all read a different text. Exercise 6 which is considered the project stage can be given as homework to each group. Ask students to do an online research about natural landscapes and human activities and design a poster. Tell them that next class they need to display their posters on the wall and present it to the class and then ask the class to vote for their favorite poster.

**Answer key pretest 1**

- |                                     |   |
|-------------------------------------|---|
| 1. T                                | 7. T  |
| 2. F                                | 8. T  |
| 3. T                                | 9. T  |
| 4. F They are mountains, not hills. | 10. T                                       |
| 5. T                                | 11. F It is a landform, not a<br>landscape. |
| 6. F                                | 12. F It is a desert, not a forest.         |

**1. Pre-reading**

Read the sentences about natural landscape and decide whether these are correct by checking a True or False box. Then check your answers by searching on the internet for the correct answers. You can visit this website to help you.

- <http://nationalgeographic.org/encyclopedia/africa-physical-geography/>

	True	False
1. A mountain is a landform that rises high above the surrounding terrain in a limited area.	( <b>x</b> )	( )
2. Generally, mountains are higher than 100 meters. Those less than 100 meters are called hills	( )	( )
3. High mountains rise above the plain.	( )	( )
4. Many plateaus are located in or near hills ranges, where the tectonic uplift raised broad areas of flat land as a single unit.	( )	( )
5. Lakes can be formed because of tectonic, volcanic, or even glacial activities.	( )	( )
6. Streams are generally larger than lakes.	( )	( )
7. Lakes are larger and deeper compared to the bodies of water we refer to as ponds.	( )	( )
8. Many lakes are fed and drained by streams and rivers.	( )	( )
9. Soil is the surface of the Earth that is not water, air, or rock.	( )	( )
10. A landscape is the visible feature of an area.	( )	( )
11. A landscape is the shape (morphology) and character of land surface that is the result of physical processes.	( )	( )
12. Dunes are hills of sand near an ocean or in a forest that are formed by the wind.	( )	( )

**2. Vocabulary**

Label the pictures with the words from the box. Then go to an online dictionary and check your answers.

**mountains- hills- plain- plateau- weathering - stream- soil- landscape- hilly- dunes**

1.



*Mountains*

---

5.



2.



6.



3.



7.



4.



8.



9.



10.



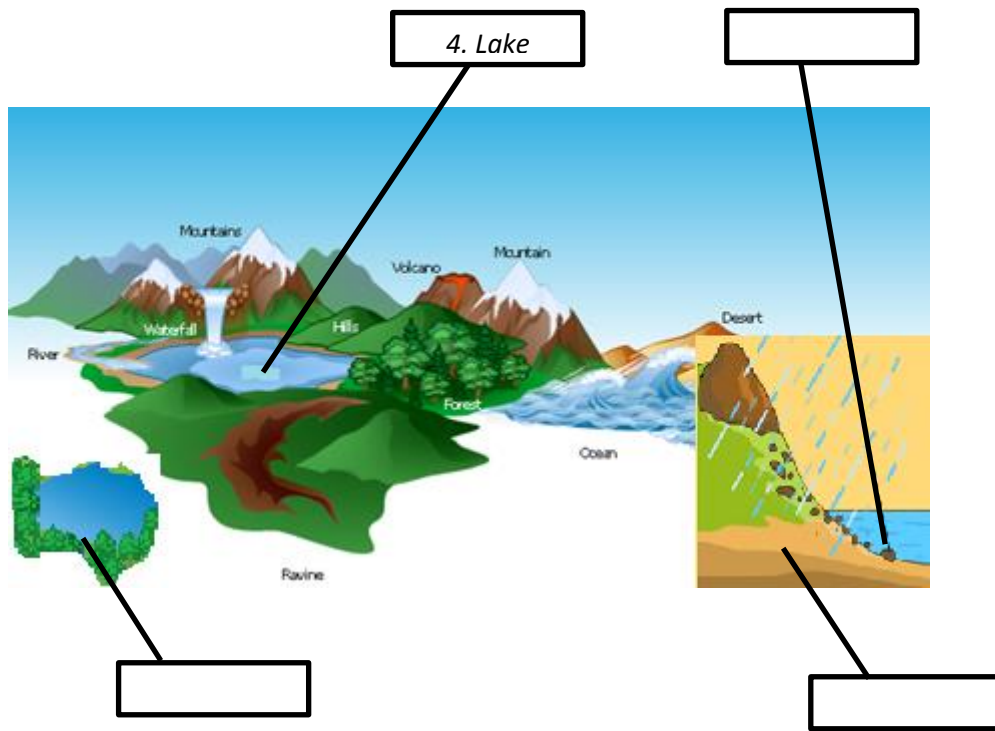
### 3. Vocabulary

Do an internet search for natural landscape and match the words with their definitions.

- |            |  |
|------------|--|
| 1. erosion | a. is body of water surrounded by land.  |
| 2. soil    | b. is a large puddle formed naturally or by artificial means.                            |
| 3. pond    | c. is the process by which rock or soil is gradually destroyed by wind, rain, or the sea |
| 4. lake    | d. is the top layer of the Earth in which plants grow                                    |

#### 4. Vocabulary

Label this diagram of a natural landscape with the words from exercise 3



## 5. Reading

### Text 1: Landscape

A landscape is part of the Earth's surface that can be viewed at one time from one place. It consists of the geographic features that mark, or are characteristics of, a particular area.

The term comes from the Dutch word *landschap*, the name given to paintings of the countryside. Geographers have borrowed the word from artists. Although landscape paintings have existed since ancient Roman times, they were reborn during the Renaissance in Northern Europe. Painters ignored people or scenes in landscape art, and made the land itself the subject of paintings. Famous Dutch landscape painters include Jacob van Ruisdael and Vincent van Gogh.

An artist paints a landscape; a geographer studies it. Some geographers, such as Otto Schluter, actually define geography as landscape science. Schluter was the first scientist to write specifically of natural landscapes and cultural landscapes.

A natural landscape is made up of a collection of landforms such as mountains, hills, plains, and plateaus. Lakes, streams, soils (such as sand or clay), and natural vegetation are other features of natural landscapes. A desert landscape, for instance, usually indicates sandy soil and few trees. Even desert landscapes can vary: The hilly sand dunes of the Sahara desert landscape are very different from the cactus-dotted landscape of the Mojave desert in the American Southwest.

*Adapted from: <http://nationalgeographic.org/encyclopedia/landscape/>*

**Text 2: People and the Natural Landscape**

The growth of technology has increased our ability to change a natural landscape. An example of human impact on landscape can be seen along the coastline of the Netherlands. Water from the North Sea was pumped out of certain areas, uncovering the fertile soil below. Dikes and dams were built to keep water from these areas, now used for farming and other purposes.

Dams can change a natural landscape by flooding it. The Three Gorges Dam on the Yangtze River, in Yichang, China, is the world's largest electric power plant. The Three Gorges Dam project has displaced more than 1.2 million people and permanently altered the flow of the Yangtze River, changing both the physical and cultural landscape of the region.

Many human activities increase the rate at which natural processes, such as weathering and erosion, shape the landscape. The cutting of forests exposes more soil to wind and water erosion. Pollution such as acid rain often speeds up the weathering, or breakdown, of the Earth's rocky surface.

By studying natural and cultural landscapes, geographers learn how people's activities affect the land. Their studies may suggest ways that will help us protect the delicate balance of the Earth's ecosystems.

*Adapted from: <http://nationalgeographic.org/encyclopedia/landscape/>*

**Text 3: Cultural Landscape**

A landscape that people have modified is called a cultural landscape. People and the plants they grow, the animals they care for, and the structures they build make up cultural landscapes. Such landscapes can vary greatly. They can be as different as a vast cattle ranch in Argentina or the urban landscape of Tokyo, Japan.

Since 1992, the United Nations has recognized significant interactions between people and the natural landscape as official cultural landscapes. The international organization protects these sites from destruction, and identifies them as tourist destinations. The World Heritage Committee of UNESCO (the United Nations Economic, Social, and Cultural Organization) defines a cultural landscape in three ways. The first is a clearly defined landscape designed and created intentionally by man. The archaeological landscape of the first coffee plantations in the South-East of Cuba, near Santiago, Cuba, is an example of this type of cultural landscape.

The second type of cultural landscape is an organically evolved landscape. An organically evolved landscape is one where the spiritual, economic, and cultural significance of an area developed along with its physical characteristics. The cultural landscape of the Orkhon Valley, along the banks of the Orkhon River in central Mongolia, is an example of an organically evolved landscape. The Orkhon Valley has been used by Mongolian nomads since the 8<sup>th</sup> century as grassland for their horses and other animals. Mongolian herders still use the rich river valley for grassland today.

The last type of cultural landscape is an associative cultural landscape. An associative landscape is much like an organically evolved landscape, except physical evidence of historical human use of the site may be missing. Its significance is an association with spiritual, economic, or cultural features of a people. Tongariro National Park in New Zealand is an associative cultural landscape for the Maori people. The mountains in the park

symbolize the link between the Maori and the physical environment.

*Adapted from: <http://nationalgeographic.org/encyclopedia/landscape/>*

## 6. Project

Make a poster of the human activities that have destroyed the natural landscape on Earth most.

- Before human activity
- During human activity
- After human activity

*Adapted from:*

*<http://www.macmillaninspiration.com/new/resources/web-projects;>*

*<http://resources.woodlands-junior.kent.sch.uk/homework/mountains.htm;>*

*<http://dictionary.cambridge.org/dictionary/english/plain;>*






*<http://study.com/academy/lesson/what-is-a-plateau-definition-lesson-quiz.html;>*






*<http://www.worldatlas.com/articles/10-largest-lakes-in-the-world.html;>*




*<http://cals.arizona.edu/oals/soils/defined.html;>*

*[http://www.geospace.edu.au/verve/resources/2.3.4.2\\_1\\_Landscapes\\_landforms\\_pdf.pdf;](http://www.geospace.edu.au/verve/resources/2.3.4.2_1_Landscapes_landforms_pdf.pdf;)*

**Handout 1 – Domino**

	<b>mountain</b>
	<b>hill</b>
	<b>plain</b>
	<b>plateau</b>
	<b>lake</b>

	<p><b>stream</b></p>
	<p><b>soil</b></p>
	<p><b>landscape</b></p>
	<p><b>hilly</b></p>
	<p><b>dunes</b></p>

	<p><b>cactus-dotted</b></p>
	<p><b>weathering</b></p>
	<p><b>erosion</b></p>

**Lesson Plan- CLIL Geography 2****Teacher's notes: Landscapes**

<b>Aims</b>	To understand what effects humans have on different ecosystems and more specifically to the wildlife in Africa. This will lead students to think critically and compare their attitudes towards Africa to their attitudes towards Brazil.
<b>Activities</b>	<ol style="list-style-type: none"> <li>1. Presenting their poster in front of the class.</li> <li>2. Identify mistakes and correct them.</li> <li>3. Watching a video, training their listening skills.</li> <li>4. Watching the same video, training their listening skills while taking notes at the same time.</li> <li>5. Deciding on the most useful discussion expressions.</li> <li>6. Answering questions by discussing these in a group of students with similar abilities and the teacher at times.</li> </ol>
<b>Language</b>	Giving opinion, agreement and disagreement
<b>Challenge</b>	Formation - What is Africa really like? Why should we study it?
<b>Procedure</b>	<ul style="list-style-type: none"> <li>- Set up the video Africa Megaflyover, computers and songs. <a href="http://video.nationalgeographic.com/video/ng-adventure/adv-africa-megaflyover-fay">http://video.nationalgeographic.com/video/ng-adventure/adv-africa-megaflyover-fay</a></li> <li>- Ask students to put up their posters on the wall. Then ask each group to individually present their poster in 3-5 minutes. After that, they vote which poster they liked best.</li> <li>- After that, open a word document with correct and incorrect sentences selected from students' writing and speaking activities from last class.</li> </ul>

- Ask students to find the mistakes in each sentence. After that, ask the group how they would correct them. If students do not know how to correct the sentences, assist them by leading them to the right direction.
- After correcting all mistakes, hand out a copy with the correct sentences and words (printed or by e-mail). If the feedback is given by writing on the board, give students after the correction 5 minutes to take notes of the sentences.
- Ask students to pay attention to the video that will be displayed. Then play the video again and ask them to take notes.
- Make groups of weak students and groups of strong students to do Activity 1 and 2 together.
- Hand out Activity 1 to all of them and ask them to highlight what expressions they most use to show agreement and disagreement. After that, hand out Activity 2.
- Ask students to do Activity 2 within their respective groups. The teacher should go around from group to group and from time to time also engage in their conversation.
- Ask one member of the group to give a short summary of their group discussion.
- Ask students if they have any questions.

**Student's handout – Activity 1****Expressions on how to express your opinion:**

In my opinion...	I have no doubt that...
In my eyes...	I am certain that...
To my mind	I hold the opinion that...
As far as I am concerned...	I dare to say that...
Speaking personally...	I guess that...
From my point of view...	Speaking for myself...
My conviction is that...	Personally I think...
I hold the view that...	I'd say that...
I would say that...	I'd suggest that...
It seems to me that...	I'd like to point out that...
I am under the impression that...	What I mean is...

**Useful words and phrases to express agreement:**

I agree with you.	I don't think so either.
I share your view.	So do I.
I think so.	I'd go along with that.
The author/ narrator is right.	That's true.
He is quite right.	Neither do I.
I have no objection.	I agree with you entirely.
I have come to the same conclusion.	That's just what I was thinking.
I hold the same opinion.	I couldn't agree more.
We are on the same page.	

**Useful words and phrases of disagreement:**

I don't agree with...

That's not entirely true.

I disagree with...

I am sorry to disagree with you, but...

I don't think so.

Yes, but don't you think...

I don't think this is quite right.

That's not the same thing at all...

I take a different view.

I'm afraid I have to disagree...

I don't share the same view.

I'm not sure about that...

This argument does not hold water.

*Adapted from:*

*<http://yvanbaptiste.pagesperso-orange.fr/methodo/opinion.htm> and*

*<http://www.vocabulary.cl/Lists/Opinions.htm>.*

**Activity 2: group work*****Students' questions. (A)***

“Mike Fay has a perspective on Africa few people in the world can claim- he’s likely seen more of the continent first-hand than anyone in history” (NPR.org, 2005).

1. Discuss with your group why attention to human interference in a country could change something?
2. What intentions do you think Mike Fay had when doing this geographical work?
3. Different wild animals in Africa are in great peril, as we have watched. What do you think are the causes of it?

“The human footprint looks much lighter in most cases than it does in the United States or in Europe - or in China or anyplace outside of that continent,” Fay tells Alex Chadwick. “And it looks to me like (Africans) are really thinking about their relationship with the land, whereas in the Western world – and indeed, the Eastern world- they’re not, (NPR.org, 2005).

4. Do you agree with the statement above? Why or why not?
5. Fay stated that humans have the power to destroy and to protect our planet Do you agree with him? Why or why not?

*Quotes retrieved from <http://www.npr.org/templates/story/story.php?storyId=4803547>.*

***Students' questions. (B)***

1. What types of landscapes do you remember seeing in the Africa Megaflyover video?
2. Discuss your opinion about the situation of the wild animal life in Africa. Can you name the animals they discussed in the video?
3. Which countries are being discussed in the video? Can we compare the state of their wildlife to the state of wildlife in Brazil?