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CLIL or EMI: What is more effective for elementary education English learners?

A case study in a bilingual school in Panama

Abstract

Bilingual schools with a principles-based program are most likely to succeed in helping students become bilingual and biliterate. This case study presents the investigation conducted at Morgan Bilingual School (MBS)* to understand the content and language learning failure of many students who have been attending the program for a number of years. The investigation contextualizes the problem by presenting an overview of the school and carries out the implementation proposal of a unit of study designed using Content and Language Integrated Learning (CLIL) and Task-Based Language Teaching (TBLT) in order to see the effectiveness of these student-centered approaches for instruction compared to the school's current teacher-centered approaches for instruction. The methodology employed qualitative and quantitative methods of data collection. The first set of findings revealed that the school's language and content learning failure results from the lack of an assessment and accountability system, an integrated curriculum, a well-trained staff, a structured program, and appropriate and sufficient resources. The second set of findings revealed that the implementation of student-centered instructional approaches such as CLIL and TBLT are more effective for teaching and learning content and language compared to the teacher-centered instructional approaches used at Morgan Bilingual School. The implementation of a principles-based program that incorporates CLIL and TBLT may offer a solution to the school's current content and language learning failure.

Keywords: monolingual, bilingual, biliterate, language competence, mother tongue, additional language, language of instruction, additive bilingualism, subtractive bilingualism, bilingual school (see Appendix A)

^{*} The school name has been changed to protect its identity.

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Chapter 1 - Introduction

For many people—due to emigration, job mobility or simply because it is popular—English has become the primary choice when deciding to learn an additional language (L2). This phenomenon has caused an increase in the number of schools in Spanish-speaking countries in Latin America offering bilingual programs that use English and Spanish as languages of instruction.

In order to accomplish their main goal, some of these schools replicate—at least to some extend—highly regarded models of bilingual education programs from developed, English-speaking countries with expectancies of success, most often without adapting them to their own sociocultural and sociolinguistic context. This negligent practice may have negative consequences for students in the long term.

1.1 Justification of the Proposal and Problem

Bilingual schools are expected to help students to gain language competence in all languages of instruction by understanding and producing them at acceptable levels, as well as to learn content through these languages.

This proposal dissertation entitled "CLIL or EMI: what is more effective for elementary education English learners? A case study in a bilingual school in Panama" presents a two-part investigation into understanding why a considerable number of students at Morgan Bilingual School show low language competence in the additional language (L2) in one or more language skills as well as low academic achievement in content subjects taught through this additional language (L2) despite having attended the school bilingual program for several years.

First, the investigation contextualizes the problem by studying the school features, language situation, instructional approaches, learning environment, teachers' teaching background and practice, and students' perception on bilingual education. Secondly, the investigation proposes the implementation of CLIL (Content and Language Integrated Learning) and Task-Based Language Teaching (TBLT)—two approaches considered more suitable for teaching and learning an additional language (L2) and content through an additional language (L2).

1.2 Brief Analysis of the State-of-the-Art

Thorough and comprehensive research on bilingual education in North America has focused on developing, implementing and maintaining bilingual education programs that use English, French and Spanish. Some of these programs target English or French monolinguals seeking to learn the other majority language, while other programs target Spanish monolinguals or language minority students seeking to learn English or French as a Second Language (Genesee & Gándara, 1999; Lindholm-Leary & Genesee, 2010).

In the case of Latin America, specialized literature on intercultural bilingual education that focuses on researching the languages of discriminated, minority indigenous groups mainly in Spanish-speaking countries in the region and that at the same time promote maintenance bilingual education programs among them in order to preserve their culture, has been the subject of many extensive studies (Cummings & Tamayo, 1994; see also López, 2009; Mejía, 2005).

As opposed to the studies on minority indigenous languages, research on bilingual education in Spanish-speaking countries in Latin America using English and Spanish has progressed slowly (Mejía, 2004). Some allege that this is due to the perception that many Latin-Americans have of English as a language that they consider detrimental to the national identity—a signal of rejection to the American and British Imperialism in Latin America (Porto, 2014). A recent study suggests that it may be the result of the lack of government-funded programs for English language learning and the lack of well-trained language teachers (British Council, 2015).

In the last decades there has been a slow but steady growth in the number of bilingual schools in Spanish-speaking countries in Latin America that implement accredited international curriculums or foreign national curriculums from English-speaking, developed countries. Local elite families along with families that, primarily, due to job mobilization have to make their home in different countries and across continents find in these schools a suitable alternative to local national curriculums often considered insufficient to train students to succeed in our globalized and mobilized world. These schools best known as international schools or English-medium schools—most of them American or British in origin—have characteristics that set them apart from bilingual schools where English is also a language of instruction (Gaskell, 2015; see also Hayden & Thompson, 2008).

With the purpose of closing the gap between the elite and the less privilege as well as to adapt to a globalized and mobilized world, a small number of countries in Latin America have taken the initiative to promote the learning of an additional language (L2)—most often English. This has been done through the establishment of national language policies, the evaluation of the language learning programs and the implementation of better language teaching approaches. Current research findings suggest, however, that there is still a long way to go before these new initiatives can prove their effectiveness (British Council, 2015).

Task-Based Language Teaching (TBLT) as a learner-centered approach to language teaching and learning has been gaining more importance in recent years. This approach—which originated from the Communicative Approach—has proven to be current and an essential element in any language learning program as well as in content and language integrated programs. Its main objective is to help students to improve language skills by using the additional language (L2) while completing an authentic task (Rodríguez-Bonces & Rodríguez-Bonces, 2010).

Another approach to language learning that has proven to be highly reliable is Content and Language Integrated Learning, also known as CLIL. Through this approach, students learn content through an additional language (L2) as well as language through content learning (Coyle et al., 2010). CLIL has been implemented in many countries across different continents—mainly Europe. In the context of Latin America more research on CLIL still needs to be done in order to better implement it (McDougald, 2015).

1.3 Aims

The two-part investigation conducted at Morgan Bilingual School had two aims—one for each part. First, it aimed to find out possible reasons for the school content and language learning failure. Secondly, it aimed to determine the reliability of CLIL (Content and Language Integrated Learning) and Task-Based Language Teaching (TBLT) for learning an additional language (L2), and for learning content through an additional language (L2). The following research questions were designed to support the aims of the investigation.

1. What factor(s) may be affecting the level of academic success—in content and language—attained by students at Morgan Bilingual School?

2. How is CLIL (Content and Language Integrated Learning) and Task-Based Language Teaching (TBLT) more effective approaches for learning content through an additional language (L2) as well as learning an additional language (L2) compared to Morgan Bilingual School's current instructional approaches?

1.4 Methodologies

To meet the aims of this two-part investigation in the most efficient and effective way it was necessary to implement two working methodologies, one for each proposed aim. Each working methodology employed a different research approach and as a result each of them used different data collection instruments.

1.4.1 Methodology of the Contextualization of the Problem

The methodology of the contextualization of the problem—part one of the investigation—employed both, a quantitative approach and a qualitative approach. The instruments used to collect information were discrete school observations, discrete classroom observations, teaching staff interviews, and student interviews.

Discrete school observations were used in order to record, analyze, and interpret the school's features—general information—as well as the school's current language situation—specific information. Nine questions provided guidance for the discrete school observations (see Appendix B).

Discrete classroom observations were used in order to record, analyze, and interpret the classroom's environment—physical and psychological, management, and organization. Eight questions provided guidance for the discrete classroom observations (see Appendix C).

Teaching staff interviews were used in order to record, analyze, and interpret the teaching staff's teaching background—formal training and experience—and current teaching practice. Nine questions provided guidance for the teaching staff interviews (see Appendix D).

Student interviews were used in order to record, analyze, and interpret the students' perceptions on their language learning experience in a bilingual program. Seven questions provided guidance for student interviews (see Appendix E).

During the course of part one of the investigation all data collected was recorded on forms (see Appendixes B-E). The numerical data collected was analyzed and transferred to graphics to provide an easy interpretation of the findings. The figures and tables created for this purpose have been included as part of the report of the investigation (see Chapter 4).

1.4.2 Methodology of the CLIL Unit Implementation

The methodology of the CLIL unit implementation—part two of the investigation—employed a quantitative approach and a qualitative approach. A CLIL instructional plan consisting of one unit plan and three lesson plans was used to guide the implementation (see Chapter 3). The instruments used to collect information were classroom observations and student interviews.

Classroom observations were used in order to record, analyze, and interpret the instructional model and delivery, students' engagement and interaction, differentiation, rigor, and formative assessment of the CLIL lessons. Classroom observations were recorded by a teacher observer and by the teacher researcher. The observations were then analyzed by both, the teacher observer and the teacher researcher in a private meeting at the end of the CLIL unit implementation. Six questions provided guidance for classroom observations (see Appendix F).

Student interviews were used in order to record, analyze, and interpret the students' perceptions on their content and language learning experience through CLIL and TBLT. Five questions provided guidance for student interviews (see Appendix G).

During the course of part two of the investigation all data collected was recorded on forms (see Appendixes F-G). The numerical data collected was analyzed and transferred to graphics to provide an easy interpretation of the findings. The figures and tables created for this purpose have been included as part of the report of the investigation (see Chapter 4).

Chapter 2 - Literature Review

The literature on bilingual education is quite extensive and it unfolds across different fields of study—second/foreign language development and second/foreign language teaching methodology, to name a few. Many renowned researchers mainly psychologists and linguistics have devoted great part of their investigation to the study of bilingual education in different sociocultural and sociolinguistic contexts.

2.1 Bilingual Education in English-speaking Countries in North America

It is widely known that a variety of bilingual education programs have been developed in English-speaking countries in North America as the result of the constant waves of immigrants arriving from countries where English is not spoken. It is also known that some of these programs have had a tremendous influence on bilingual education programs in other regions across the globe.

In the last decades, several publications have appeared documenting these various programs that target linguistically diverse students of English also referred to as English Language Learners or ELLs (Genesee et al., 1999; see also Howard et al., 2007). According to Lambert (1975) each one of these programs fall into either of two categories: additive—those that help students to gain language competence in an additional language (L2) while learning and maintaining their mother tongue (L1)—and subtractive—those that help students to gain language competence in an additional language (L2), often a majority language, at the expense of losing competence in their mother tongue (L1) (as cited in Baker, 2001).

In the United States and Canada, Dual Language Programs—regarded as additive bilingualism—have gained special attention from administrators and policy makers that have consulted the research on these programs and have recognized its many advantages (Christian, 1994; see also Haulman & López, 2011). Howard et al. (2007:1) argue that "the term dual language refers to any program that provides literacy and content instruction to all students through two languages and that promotes bilingualism and biliteracy, grade-level academic achievement, and multicultural competence for all students".

Christian (1994), in her study entitled "Two-Way Bilingual Education: Students Learning Through Two Languages" funded by The Center for Research on Education, Diversity & Excellence (CREDE/CAL) found that Two-Way Bilingual Programs and other types of Dual Language Programs have a trifold focus: to help students to gain language competence in both languages of instruction, to help students to achieve academic excellence in content subjects and to help students to become aware of cultures other than their own.

Programs that support additive bilingualism have proven to be highly effective and continue to be implemented nationwide (Solís, n.d), however, still to a much lesser degree compared to Immersion Programs and Transitional Bilingual Programs—regarded as subtractive bilingualism. This is, in many cases, due to some state legislations in the United States that ban bilingual education, the lack of funding and the lack of properly trained bilingual teachers (Gándara, n.d.).

2.2 The Role of the Mother Tongue (L1) in Bilingual Education

Researchers on bilingual education have suggested that individuals who have reached an acceptable level of language competence in their mother tongue (L1) actively transfer language skills and cognitive-related skills from their mother tongue (L1) to the additional language (L2) (August, Calderón & Carlo, 2002).

The most interesting approach to this issue has been proposed by Cummins (1979:3) in his Developmental Interdependence Hypothesis also known as the Iceberg Hypothesis, which states that "the development of competence in a second language (L2) is partially a function of the type of competence already developed in L1 at the time when intensive exposure to L2 begins".

Despite the fact that Cummins' Iceberg Hypothesis was very influential at the time and is still relevant today—at least to some—many policy makers in non-English-speaking countries around the world set up language policies that encourage, and in some cases mandate, the use of English as the only language of instruction for teaching content—English as a Medium of Instruction (EMI)—without paying much attention to language instruction (Dearden, 2014). While some consider this approach highly beneficial for any country's social and economic development, others, on the other hand, consider it a threat to the development and maintenance of their mother tongue (L1) (Jenkins et al., 2014).

As defined by Genesee (2004:2), "Bilingual education is defined as education that aims to promote bilingual (or multilingual) competence by using both (or all) languages as media of instruction for significant portions of the academic curriculum". This definition clearly states that in order for a school to be called bilingual it has to ensure instruction in more than one language.

Nonetheless, there is a growing tendency to refer to many schools in non-English-speaking countries as bilingual despite the fact that in these schools the additional language (L2) is the primary language of instruction which monopolizes the curriculum and disregards the majority of the students' mother tongue (L1).

2.3 Bilingual Education Policies and Programs in Spanishspeaking Countries in Latin America

English has become an important language for communication around the globe. Despite the current status of English as a lingua franca (Seidlhofer, 2005) only a small number of countries in Latin America have passed national educational laws or created programs that promote learning an additional language (L2) at different levels—preschool, elementary school and high school.

Sánchez & Diez (2014), in their comparative study entitled "The Teaching of English as Public Policy in Latin America" found that 11 out of a total of 20 countries in Latin America—Mexico, Colombia, Chile, Brazil, Argentina, Ecuador, Uruguay, Honduras, Peru, Costa Rica, Paraguay—have a national language policy or program that promotes the learning of English as an additional language (L2).

In the year 2015, the British Council published a report entitled "English in Latin America: An examination of policy and priorities in seven countries". The study on seven Latin-American countries—Mexico, Colombia, Chile, Brazil, Argentina, Ecuador, Uruguay, Honduras, Peru, Costa Rica and Paraguay—reveals that the main goal behind the creation and implementation of bilingual programs is to make their countries more globally competitive.

The case of Latin America—contrary to the case of the European Union (EU) where all of its state members share a common language policy that promotes and supports multilingualism (Council of Europe, 2006)—shows no joint efforts to address the challenge of becoming a bilingual region (British Council, 2015).

2.4 Effective Bilingual Programs

As mentioned before, effective bilingual programs should help to preserve the students' mother tongue (L1) while they learn an additional language (L2). Torres-Guzmán (2002), suggests that any effective bilingual program must have and follow a clear set of policies/standards, each with distinctive characteristics grouped into three domains—linguistic, sociocultural and pedagogical.

In the linguistic domain, the author argues that teachers should keep both languages of instruction separate, avoiding the use of translation or interpretation mechanisms. By doing this students can gain the expected language competence in the mother tongue (L1) as well as in the additional language (L2). In these bilingual programs each language of instruction is given the same importance and is incorporated in the instructional program. Language is learned through content studied in content classes. Teachers use various instructional strategies such as whole-class, group work and independent work. The ultimate goal is that students become bilingual and biliterate in both languages of instruction.

In the sociocultural domain, the author affirms that effective bilingual programs should encourage the development of cultural sensitivity among students. This can be done through the study of cultural-oriented topics in both, language classes and content classes. Also, the constant interaction of students and teachers from different cultural backgrounds helps to develop self-esteem in all participants. Cooperative learning activities, tasks and projects are used across disciplines to promote the development of social skills and self-management skills. Another characteristic of such programs is active parental involvement. Parents of students enrolled in bilingual programs are seen as key support in their children's education. In addition, it is important to mention that effective bilingual programs should have a visible and structured school community where all the stakeholders play a role.

In the pedagogical domain, the author says that effective bilingual programs should promote high academic achievement. This means that differentiated instruction should be provided for all students across subjects. Content classes such as mathematics, science and social studies should be taught in both languages as this benefits attainment of content. The units of study in such programs should be taught around a central theme/topic ensuring integration of content. Teachers should be monolingual models and be well-trained in language learning theories and practices.

On the other hand, Howard et al., (2007), suggest a set of guiding principles organized into seven strands that may be used for planning and implementing effective dual language programs. The principles may also be used for subsequent reflection and improvement of these programs.

The first strand is Assessment and Accountability. This strand includes six principles which highlight the importance of having a standards-based and goal-based assessment system. This assessment system should encourage student progress measurement and program data collection for accountability and evaluation. The findings of these assessments need to be reported to the program stakeholders—teachers, administrators, parents, and community members.

The second strand is Curriculum. This strand includes three principles which underline the importance of having a standards-based curriculum that supports the development of bilingual, biliterate and multicultural students. These standards should reach all of the students equally. This curriculum program should be developed and revised to guarantee the quality of the program.

The third strand is Instruction. This strand includes four principles which stress the importance of implementing instructional approaches, methods and strategies sustained by research on dual language education, bilingualism and biliteracy. Instruction should be student-centered provided in a learning environment where teachers strive for multilingualism and multiculturality.

The fourth strand is Staff Quality and Professional Development. This strand includes four principles which place emphasis on the importance of recruiting and retaining high quality dual language staff. The program should provide the staff with opportunities for professional development as well as collaboration and interaction with other groups to guarantee quality of the program.

The fifth strand is Program Structure. This strand includes five principles which draw attention to the importance of all the components of the program and how they interlace to achieve the program goals. The program should provide to all members—staff and students—equal access to resources as well as linguistic and cultural equity. The school leadership team should be stable, efficient, experienced and educated. The program should follow a process of continuous refining of its design—planning, implementation and evaluation.

The sixth strand is Family and Community. This strand includes three principles which accentuate the importance of having a framework for encouraging continuous strategic partnership with students' families and the community. The program should grant parent education on the program goals.

The seventh strand is Support and Resources. This strand includes five principles which point to the importance of having a program that is supported by all staff, students, families and the community. The program should be well-funded. All resources should be assigned equally within the program.

2.5 Task-Based Language Teaching (TBLT)

Nunan (2004:4) has defined task as "a piece of classroom work that involves learners in comprehending, manipulating, producing or interacting in the target language while their attention is focused on mobilizing their grammatical knowledge in order to express meaning, and in which the intention is to convey meaning rather than to manipulate form. The task should also have a sense of completeness, being able to stand alone as a communicative act in its own right with a beginning, a middle and an end".

According to Nunan (2004), Task-Based Language Teaching (TBLT) supports various pedagogical principles and practices. It aids teachers when planning their lessons as they focus on the language that is most important for student communication in any given context. Through this approach students are exposed to authentic material—written and multimedia—rich in contextualized language. This approach provides students with opportunities to learn language—as they use it—while developing metacognitive skills as they reflect on their own learning. The focus of this language teaching approach lies on the functionality of the task as a mechanism through which the learner will gain language competence.

Ellis (2009) has proposed a framework for designing lessons using Task-Based Language Teaching (TBLT) which involves three different stages—pre-task, during task and post-task. During the pre-task stage the teacher prepares the learner for the task by performing/modeling a task like the task the students will perform in the second stage. In the second stage—during task—the students engage in performing the task. Here, the teacher makes decisions alone or in conjunction with the students to decide about the development of the task. In the post-task stage, the

teacher may decide to ask the students to repeat the task, reflect on the process and performance task and/or go over problematic language.

2.6 Content and Language Integrated Learning (CLIL)

Research on Content and Language Integrated Learning (CLIL) reveals that this approach to teaching and learning has two main aims. On the one hand, there is the learning of an additional language (L2), and on the other hand there is the learning of content through the use of this additional language (L2).

Ball (n.d.) suggests two main versions of CLIL. The first version which the authors refer to as hard CLIL focuses on students learning content through the additional language (L2) in one or more content classes usually for several years full-time which means that they are more content-oriented. Students improve their language competence in the additional language (L2), but only as an indirect consequence. The second version which the authors refer to as soft CLIL focuses on students learning content through the additional language (L2), but only for a short period part-time. This type of CLIL programs place more attention to language than to content which means that they are more language-oriented.

Do Coyle (2005) proposed a framework known as the 4 Cs—content, cognition, communication, and culture—to better understand and implement this approach. Teachers may use this framework as a reference when planning their CLIL units/lessons.

The C for content is the knowledge, concepts, and skills that students need to attain. It is the theme to be covered as part of the curriculum of the content class. This CLIL component is fundamental to the CLIL unit/lesson as it holds all other three components together—it is crucial for its successful implementation.

The C for cognition is the mental path through which students construct their own learning. It involves implementing higher-order thinking skills in order to gain enduring understanding. CLIL units/lessons should include the completion of linguistic and cognitive demanding tasks as proposed by the CLIL Matrix adapted from Cummins' (1984). After each task students should reflect on the new understandings by questioning and finding new lines of inquiry in order to extend their learning experience while developing ownership of learning.

The C for communication is the language component. In CLIL, language is conceptualized as language of learning, which is the language of the content being studied, language for learning, which is the language necessary to learn the content, and language through learning, which is the language—spontaneous and unplanned—that the learner produces during the learning process and through active thinking. This three languages are known as the CLIL language triptych.

The C for culture is the CLIL program component that helps to connect students with their self and with others. Learning content through an additional language (L2) creates a valuable opportunity for students to understand their world and build relationships outside their communities.

Coyle et al. (2010) have identified a group of characteristics of Content and Language Integrated Learning (CLIL) that exemplify good teaching practice. These characteristics have been alined under five strands: choosing content that is suitable, developing intercultural understanding, using language to learn and learning to use language, making meanings that matter, and progression.

In CLIL, the content chosen to be taught needs to be level and age appropriate as well as meaningful for the learner. The approach should promote the understanding of other cultures helping the learner to become a citizen of the world. Language is used for learning content and at the same time language is learned. Students' content and language learning progression is assessed, documented and evaluated in order to support decision making.

In the last decades, due to the lack of a CLIL curriculum, the approach has been implemented in different ways. The major drawback of this approach is that there is no consensus as to what to assess—content, language, or both. As a result, some Content and Language Integrated Learning (CLIL) programs may focus on language rather than on content or vice versa.

Nonetheless, the approach has been implemented in different sociocultural and sociolinguistic contexts primarily in Europe. Eurydice (2012) in its key Data report on Education in Europe says that in nearly all European countries there is existence of CLIL provision. CLIL has also been implemented in Asia as is the case of Taiwan (Yang, 2013). In countries such as Colombia and Argentina in South America CLIL has also gained importance (Banegas, 2011; McDougald, 2015).

Chapter 3 - CLIL Instructional Plan

The methodology of the CLIL unit implementation required the design of an instructional plan to guide the instruction delivery and ultimately attain the intended goals and objectives. The plan was divided into two sections—section one includes a CLIL unit plan, and section two includes three CLIL lesson plans.

3.1 CLIL Unit Plan

The following CLIL unit plan contains key elements from the 4Cs Framework for CLIL, the Language Triptych, the CLIL Matrix based on Cummins' work (Coyle, 2010: Chapter 4), and Bloom's Taxonomy (Munzenmaier & Rubin, 2013).

Figure 3.1a CLIL Unit Plan

Unit Title	Dig Into Ecosystems		
Areas of Study	Science, Eng	lish, Technology, and Art	
Unit Goals	Use thinking skills to perform tasks. Improve English language productive skills. Become aware of the natural world.		
Unit Pacing	7 days		
Content	Knowledge	types, properties and structures of ecosystems, similarities and differences of ecosystems	
	Concepts	ecosystems, interactions in ecosystems	
Cognition	Thinking Skills	<u>LOTS</u> : recall facts about environments, define and explain key vocabulary, summarize the main ideas of lessons, complete statements about ecosystems	
		HOTS: investigate, determine, and present the similarities and differences of two ecosystems	
	Language	Key Vocabulary: environment, ecosystem, terrestrial ecosystem, aquatic ecosystem, habitat, population, community	
Communication	of	Grammar: simple present tense, comparative adjectives, compare and contrast words/phrases	
Communication	Language for	defining and explaining terms, interpreting visuals, comparing and contrasting elements, summarizing ideas, writing a report poster	
	Language through	class discussion, teacher feedback, peer feedback, investigation skills, presentation skills	

Culture	School	Connect the new knowledge with content from other classes. Post the report posters in the school hallways for others to read.		
	Community	Investigate other ecosystems in the province/ country. Share the new knowledge with others at home and/or in the neighborhood.		
	World	Find out how children interact with their ecosystems. Reflect on how their lives differ from the lives of other children in other places.		
Prior Knowledge Needed		y, knowledge, concepts, and skills from Grade 2 Environments for Living Things".		
	Diagnostic	Complete "Placemats" to tell how much you know about environments.		
Assessment	Formative	"Cloze Passages" and "Learning Journals"		
Activities and Tasks	Summative	Create a report poster with a "Double Bubble Map", and write a "Comparison and Contrast Paragraph" of two ecosystems of the same type using the map and present it to the class.		
	Content	Use below-level reader "Where Living Things Are Found" with struggling readers, use on-level reader "Living Things Are All Around Us" with students reading at grade level.		
Differentiation	Process	Use "Main Idea and Details Organizers" and "Sentence Frames" to summarize the information of lessons.		
of Instruction	Product	To enrich their presentation, art-oriented students may create models of the two ecosystems, and technology-oriented students may create a presentation or a video podcast of the two ecosystems.		
	Learning Environment	Visit the library to investigate. Use the big, round tables in the library to work.		
	Printed	HMH Science Fusion Grade 3 Student Edition and Leveled Readers, non-fiction reference books, "Cloze Passages" worksheets		
	Audio	recordings of student book and leveled readers		
Instructional Materials Needed	Visual	visuals of key vocabulary, thinking maps, and graphic organizers		
	Audiovisual	online encyclopedia and dictionaries, concept- related videos		
	Other	computers, internet, holistic rubric (teacher), performance checklist (students)		

3.2 CLIL Lesson Plans

The following CLIL lesson plans are based on the CLIL unit plan presented in section 3.1 of this chapter. The CLIL lesson plans incorporate the nine events of instruction in Gagné's Instructional Model (Northern Illinois University, n.d.).

Figure 3.2a CLIL Lesson Plan One

Lesson Title	Properties, Structures, and Types of Ecosystems			
Lesson Pacing	1 day			
Lesson Objectives	To define and explain the key vocabulary: environment, ecosystem, habitat, population, and community. To identify the properties and structures of ecosystems.			
Time Allotment	Event of Instruction	Event of Instruction Details		
5 minutes	Gain Attention	Show students visuals of ecosystems. Ask students to write what they see, think, and wonder about the visuals in the notebook.		
5 minutes	Inform Learners of Objectives List the lesson objectives on chart paper. Discuss the lesson objectives as a whole class.			
5 minutes	Stimulate Recall of Prior Learning Have quads complete "Placemats" with information they remember about environments (Grade 2).			
10 minutes	Present the Content Discuss "Animals and Plants at Home" and "Communities of Populations", refer to student book pages 152-155.			
5 minutes	Provide Learning Guidance Have partners complete and discuss "Bubble Maps" using the key vocabula and the lesson content.			
5 minutes	Elicit Performance	Ask students questions so they can show their knowledge.		
5 minutes	Provide Feedback	Provide effective feedback to students on language usage and content after the learning activities and tasks.		
5 minutes	Assess Performance Assess Performance Have partners complete short "Cloze Passages" using the key vocabulary and the lesson content. Have students assess each other's work.			
5 minutes	Enhance Retention and Transfer Have students summarize main ideas and details of lesson one using their "Learning Journals". Ask students to write a reflection on their learning experience.			

Figure 3.2b CLIL Lesson Plan Two

Lesson Title	Terrestrial Ecosystems and Aquatic Ecosystems			
Lesson Pacing	1 day			
Lesson Objectives	To define and explain the key vocabulary: terrestrial ecosystems and aquatic ecosystems. To describe terrestrial and aquatic ecosystems. To explain how living things interact in their environments.			
Time Allotment	Event of Instruction	Event of Instruction Details		
5 minutes	Gain Attention	Show students visuals of terrestrial and aquatic ecosystems. Ask students to think about the best way to sort them into two groups.		
5 minutes	Inform Learners of Objectives	List the lesson objectives on chart paper. Discuss the lesson objectives as a whole class.		
5 minutes	Stimulate Recall of Prior Learning	Have quads complete "Placemats" with information they remember about ecosystems (Lesson One).		
10 minutes	Present the Content	Discuss "Living on the Land" and "Under Water", refer to information on pages 156-159 in the write-in student book.		
5 minutes	Provide Learning Guidance	Have partners complete and discuss "Bubble Maps" using the key vocabulary and the lesson content.		
5 minutes	Elicit Performance	Ask students questions so they can show their knowledge.		
5 minutes	Provide Feedback	Provide effective feedback to students on language usage and content after the learning activities and tasks.		
5 minutes	Assess Performance Assess Performance Have partners complete short "Cloze Passages" using the key vocabulary and the lesson content. Have students asses each other's work.			
5 minutes	Enhance Retention and Transfer Have students summarize main ideas of lesson two using their "Learning Journals". Ask students to write a reflection on their learning experience.			

The activities included in the CLIL lesson plans one and two aim to promote the development of thinking skills, communication skills, collaborative learning, content and language knowledge and concept development, and reflective thinking.

Figure 3.2c CLIL Lesson Plan Three

Lesson Title	Comparing and Contrasting Ecosystems			
Lesson Pacing	5 days			
Lesson Objectives	To investigate in what way two ecosystems of the same type are alike and different. To use the key vocabulary, the content in lesson one and two, and the investigation findings to write a "Comparison and Contrast Paragraph" about two ecosystems of the same type. To create and present a report poster to the class.			
Time Allotment	Event of Instruction	Event of Instruction Details		
5 minutes	Gain Attention	Show students a video of ecosystems. Have students think about two ecosystems of the same type that would like to investigate.		
5 minutes	Inform Learners of Objectives	List the lesson objectives on chart paper. Discuss the lesson objectives as a whole class.		
5 minutes	Stimulate Recall of Prior Learning	Ask students to state ten facts about ecosystems (Lesson One and Two).		
10 minutes	Present the Content	Ask students to use this time to investigate their two ecosystems. Have students visit the library to use the resources available—reference books, digital encyclopedias, and online dictionaries.		
5 minutes	Provide Learning Guidance Have students pre-write their paragrausing "Double Bubble Maps" which include the key vocabulary, the contellesson one and two, and the investigating findings.			
5 minutes	Elicit Performance	Have students start drafting their "Comparison and Contrast Paragraphs" using the information in the "Double Bubble Maps".		
5 minutes	Provide Feedback Provide Feedback to students language usage and content after the learning activities and tasks.			
5 minutes	Assess Performance	Have students create a report poster of two ecosystems of the same type using information from the "Double Bubble Map" and illustrations, and present it to the class orally. Students' performance will be assessed using a holistic rubric.		
5 minutes	Enhance Retention and Transfer	Ask students to assess their own learning experience using a self-assessment checklist.		

The activities included in the CLIL lesson plan three aim to promote the development of investigation skills, communication skills, student-centered learning, self-management skills, creativity skills content and language knowledge and concept development, and reflective thinking.

The three CLIL lesson plans complement each other. The overall learning outcomes of the lessons include the attainment of knowledge and concepts related to the content subject of study, the improvement of English language productive skills—speaking and writing, the practice and improvement of thinking skills—low-order and high-order, and the gaining of cultural awareness.

Chapter 4 - Findings and Analysis

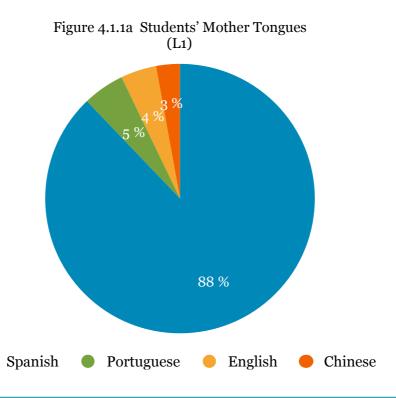
The following information summarizes the findings of the two working methodologies of the investigation—Contextualization of the Problem and Implementation of the CLIL Unit (see Chapter 1). The data collected was analyzed, and interpreted in the course of a four-month period.

4.1 Morgan Bilingual School: Overview

Morgan Bilingual School is a 5-year old, urban bilingual school located in Panama—a Spanish-monolingual country in Latin America. The school has a total enrollment of 140 students—kindergarten to fifth grade—representing 14 nationalities from three different continents.

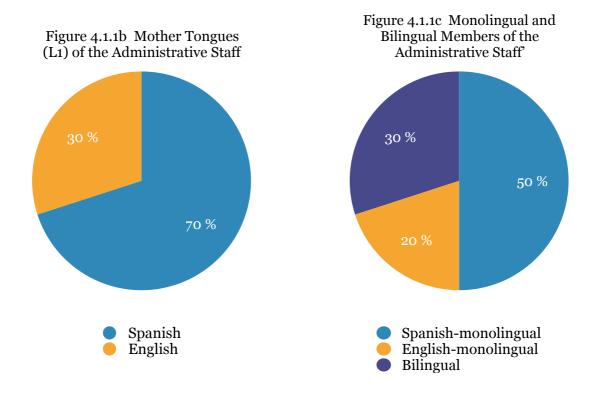
4.1.1 Language (s) of Students and of the School Staff

Of the total enrollment, 123 students speak Spanish as their mother tongue (L1), 7 students speak Portuguese as their mother tongue (L1), 6 students speak English as their mother tongue (L1), and 4 students speak Chinese as their mother tongue (L1)—see Figure 4.1.1a.



Morgan Bilingual School has a ten-member administrative staff which includes, one principal, one Spanish-English department coordinator, one manager, one receptionist, one assistant accountant, one nurse, one librarian, one bus coordinator, and two custodians.

It was found that 7 staff members speak Spanish as their mother tongue (L1), and 3 staff members speak English as their mother tongue (L1)—see Figure 4.1.1b. It was also found that 3 staff members are English-Spanish bilingual, 2 staff members are English-monolingual, and 5 staff members are Spanish-monolingual—see Figure 4.1.1c.



Morgan Bilingual School has an eighteen-member teaching staff which includes, one special education teacher, eight homeroom teachers, six special teachers, and three teaching assistants.

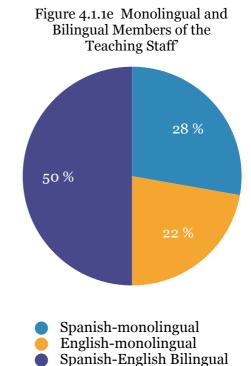
It was found that 12 staff members speak Spanish as their mother tongue (L1), and 6 staff members speak English as their mother tongue (L1)—see Figure 4.1.1d. It was also found that 9 staff members are Spanish-English bilingual, 4 staff members are English-monolingual, and 5 staff members are Spanish-monolingual—see Figure 4.1.1e.

Figure 4.1.1d Mother Tongues
(L1) of the Teaching Staff

33 %

67 %

Spanish
English

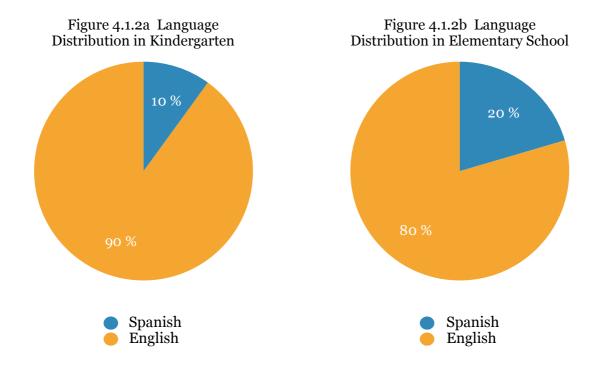


Internal communication is usually delivered in English to administrative and teaching staff members. Teaching and administrative staff meetings, workshops, conferences and collaborative work sessions are delivered in either English or Spanish depending on the speaker's mother tongue (L1). Formal interpretation during school professional development activities is not always provided. Often, the person siting next to the monolingual has to interpret.

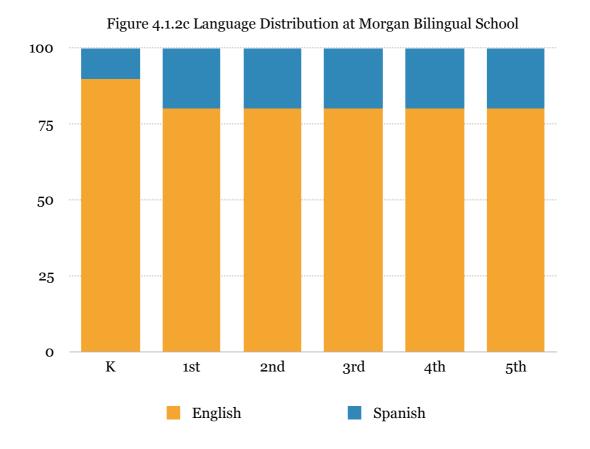
4.1.2 Language(s) of Instruction and of Learning Materials

At Morgan Bilingual School, English is taught as a language subject. English is also the medium of instruction of five content classes—mathematics, science, technology, music, and art. English is the school main language of instruction. Spanish is taught as a language subject in elementary school. It is also the medium of instruction of two content classes—physical education and social studies.

In the half-day kindergarten program, students begin early English literacy. They spend most of their time in school learning English and through English—see Figure 4.1.2a. Students begin late Spanish literacy in first grade. In elementary school, students receive more instruction through Spanish. However, they spend most of their time in school working through English—see Figure 4.1.2b.



The 80/20 language distribution remains unchanged throughout the entire elementary school. Students take the same language and content classes in the same frequency from first grade until the fifth grade—see Figure 4.1.2c.



Nearly all of the earning materials used in school—posters, manipulatives, flashcards, textbooks, write-in books, didactic games, and music CDs—are in English. Most of the books and other learning materials in the library are in English. All of the signs on the doors and on hall walls are also in English.

4.1.3 Classroom Environment, Instruction, and Assessment

Classrooms are painted in white and have standard fluorescent lighting. All classrooms have desks except for the kindergarten classroom that has tables. Classrooms are small and crowded—transit, wall, and storage space is limited. Not all classrooms have windows. The few existing windows do not have shades.

Students seem to enjoy school. Most of them willingly participate in activities, tasks and projects. Learning and behavioral expectations seem to be clear for most them. Teachers show enthusiasm and hard work toward teaching. Most of them are very creative, especially those teaching kindergarten and lower elementary.

Teachers use different teaching approaches and methods depending on the class to teach. All teachers treat classes as independent. They do not integrate language and content classes. Students perceive classes as independent, as well. Class schedules show an emphasis on separation rather than on integration.

When teaching mathematics, most teachers use direct instruction and lots of book work and worksheets—seat work. Most teachers in kindergarten and lower elementary use math manipulatives regularly. When teaching language, teachers use a combination of direct instruction, book work, videos and online games. Few teachers purposely plan for speaking and writing activities. When teaching science, most teachers have students engage in various teacher-directed and/or student-directed investigations or labs about different science-related topics. However, students are still asked to complete book work.

Most teachers use questioning for formative assessment. Often, the questions they ask are closed questions which do not engage students in high-order thinking. Most of them rely heavily on traditional summative assessments—tests. Whenever they have students perform a task few of them use appropriate rubrics for assessing students' performance. Most of them give general feedback to students, usually as a whole class. Few of them give students individual written feedback.

4.1.4 Teacher's Teaching Background and Practice

All 18 members of the teaching staff agreed to participate as case studies for the investigation. All participants work full-time at the school. Each staff member answered ten questions. Each interview lasted between eight to twelve minutes.

The first set of questions dealt with the teaching backgrounds of homeroom teachers, special teachers, and teaching assistants. The data collected has been analyzed and interpreted—see Table 4.1.4a.

Table 4.1.4a Teachers' Teaching background

Teacher	Years Teaching	Years Teaching at MBS	Language Training	Content Training
Homeroom Teacher A	13	5	No	No
Homeroom Teacher B	9	2	Yes-English	Yes
Homeroom Teacher C	22	5	Yes-Spanish	Yes
Homerom Teacher D	12	1	Yes-English	No
Homeroom Teacher E	12	5	Yes-English	Yes
Homeroom Teacher F	2	2	Yes-English	Yes
Homeroom Teacher G	13	2	No	No
Homeroom Teacher H	26	1	Yes-English	Yes
Special Teacher A	18	5	Yes-Spanish	Not Required
Special Teacher B	14	1	Yes-Spanish	Yes
Special Teacher C	12	2	Not Required	Yes
Special Teacher D	18	5	Not Required	Yes
Special Teacher E	8	5	Not Required	Yes

Special Teacher F	1	1	Not Required	No
Special Teacher G	5	3	Not Required	No
Teaching Assistant A	3	3	No	No
Teaching Assistant B	25	4	Yes-English	No
Teaching Assistant C	1	1	No	No

Homeroom teachers are required to teach English language and content classes through English—mathematics and science—however, some of them have not been trained in language teaching and/or content teaching.

Special teachers are required to teach Spanish language and/or content classes—technology, social studies, music, art, and physical education. A majority has been trained in content teaching.

Teaching assistants are required to assist students in language and content classes in English and/or Spanish, however, a majority has not been trained in language teaching and/or content teaching.

The second set of questions dealt with the teaching practice of homeroom teachers, special teachers, and teaching assistants. The data collected has been analyzed and interpreted—see Table 4.1.4b.

Table 4.1.4b Teachers' Teaching Practice

Teacher	Language Required for Teaching	Teaching Hours Per Week	Participates in PD Activities at MBS	Stays up-to- date with Practice
Homeroom Teacher A	English	15	Yes	No
Homeroom Teacher B	English	32	Yes	Yes
Homeroom Teacher C	English	32	Yes	No
Homerom Teacher D	English	32	Yes	No

Homeroom Teacher E	English	32	Yes	Yes
Homeroom Teacher F	English	32	Yes	Yes
Homeroom Teacher G	Engslish	32	Yes	Yes
Homeroom Teacher H	English	32	Yes	Yes
Special Teacher A	Spanish	25	Yes	No
Special Teacher B	Spanish	24	Yes	No
Special Teacher C	English	16	Yes	No
Special Teacher D	Spanish	16	Yes	Yes
Special Teacher E	Spanish	16	Yes	Yes
Special Teacher F	English	8	Yes	No
Special Teacher G	English Spanish	32	Yes	Yes
Teaching Assistant A	English Spanish	20	Yes	Yes
Teaching Assistant B	English Spanish	20	Yes	No
Teaching Assistant C	English Spanish	20	Yes	No

Homeroom teachers have a heavy teaching workload. They have few lesson preparation/collaboration periods during the week. All of them participate in professional development activities organized by the school. Some of them said to stay up-to-date with the teaching practice by reading books, blogs, and articles, as well as watching webinars.

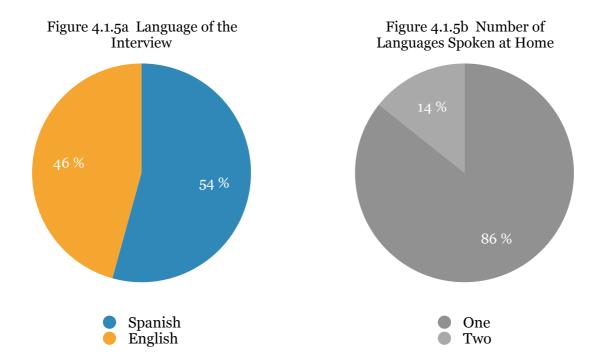
Special teachers have less teaching periods than homeroom teachers. They have more lesson preparation/collaboration periods during the week. All of them participate in professional development activities organized by the school. A few of them said to stay up-to-date with the teaching practice by reading articles.

Teaching assistants do not have a heavy workload. All of them participate in professional development activities organized by the school. A few of them said to stay up-to-date with the teaching practice by reading books and articles.

4.1.5 Students' Perception on Bilingual Education

A total of 35 students participated in the interviews with the consent of their parents. The participants have been in the bilingual program at Morgan Bilingual School for 4+ years. They are students in third, fourth and fifth grade.

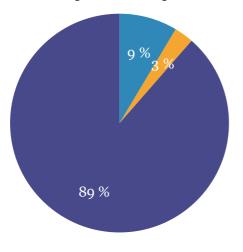
Students chose the language of the interview. They could choose between English and Spanish—see Figure 4.1.5a. They also gave information on the number of languages they spoke at home with their parents and relatives—see Figure 4.1.5b.



Just over half of the students felt more comfortable answering the questions of the interview in Spanish rather than in English. More than three-fourths of the students interviewed reported to speak only one language al home.

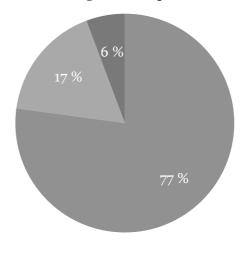
Students shared their perception on the status of both school languages of instruction—see Figure 4.1.5c. They also gave information on the benefits of being bilingual and what this meant for them—see Figure 4.1.5d.

Figure 4.1.5c Status of English and Spanish (Perception)



Spanish is More ImportantEnglish is More ImportantBoth are Equally Important

Figure 4.1.5d Benefits of Being Bilingual (Perception)

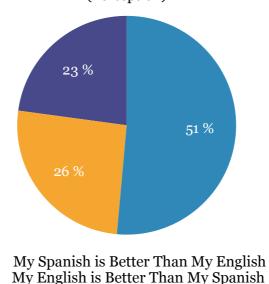


- For Communication
- Learning New Things
- Getting a Job

Most of the students interviewed said that both, English and Spanish, were equally important. However, when asked to elaborate, most of them said English, not Spanish, was necessary for communicating with other people in other places.

Students were asked to rate their overall language competence in Spanish and English in a scale of 1 (poor) to 6 (very good)—see Figure 4.1.5e.

Figure 4.1.5e English and Spanish Language Competence (Perception)



I perform well in Both Languages

Just over half of the students interviewed said Spanish was their strong language. About a quarter of them said English was their strong language. Just less than a quarter said they performed well in both, English and Spanish. When asked to elaborate, the ones that answered that either their Spanish or their English was better said both languages could improve if only they spent more time practicing. The ones that thought they performed well in both languages said they spent time practicing both English and Spanish outside school.

4.2 CLIL Unit Implementation

The CLIL unit implementation consisted of two parts. Part one involved teacher observations made in the course of a week period. Part two involved interviewing student participants in order to find out their perceptions of CLIL.

4.2.1 Classroom Observations

At the beginning of each lesson the teacher observer sat at the back of the classroom to observe while the teacher researcher taught her lessons. She then walked around the room to write observations of the teacher and the students' work. The teacher observer was told to use the proposed questions (see Appendix F) as guidelines for her classroom observations. The data collected has been analyzed and interpreted—see Table 4.2.1a.

Table 4.2.1a Teacher Observer Classroom Observations (Summary)

Visit	Observations
One	The class worked in small groups, then in pairs, and finally individually. Students willingly completed each one of the proposed activities and tasks. Students were given enough time to work, present their work, and reflect on their learning. The results of the formative assessment activities showed that all students had attained the expected objectives.
Two	Students worked in small groups, pairs, and finally individually. During the development of the lesson, students always showed a high level of commitment and cooperation when working. This helped them complete all of the proposed activities and tasks. Students' work, comments and questions showed that they had attained the expected objectives.
Three	The class worked on their investigation individually. They were given enough time to work on their research and on their writing task. Students seemed confident looking for information and writing their report posters. They received one-on-one teacher feedback. Students also had the chance to receive peer feedback. They reflected on their leaning.

Four

With great excitement students presented their very creative report posters and their comparison and contrast paragraphs for their final assessment. They also gave a brief oral report on their work. All students seemed confident sharing their new knowledge, concepts, and skills. They were using the key vocabulary which made them sound fluent.

By the end of the CLIL unit implementation students were using the key vocabulary and the unit content to write well-structured, informative "Comparison and Contrast Paragraphs". It may seem that the thinking maps and the paragraph frame used for the writing task eased the work. Knowing the key vocabulary and the unit content made possible for students to be accurate and fluent when presenting their report. Students were eager to share their new knowledge with the class and they were confident about what they knew. The report posters posted on a wall outside the classroom drew attention from students in other classes who started to ask questions about what the students had done.

4.2.2 Students' Perception of the CLIL Unit Implementation

A total of 16 students participated in the interviews with the consent of their parents. All students attended all three CLIL lessons. Each student answered five questions. Each interview lasted between one to two minutes.

Students shared their perception on the attainment of language objectives as a result of the CLIL unit implementation—see Figure 4.2.2a.

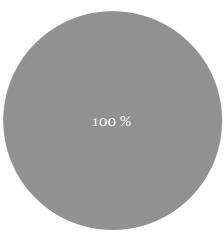


Figure 4.2.2a Attainment of Language Objectives (Perception)

- Yes. I feel that I have attained the language objectives
- No. I feel that I have not attained the language objectives

All students said that they felt they had attained the CLIL unit language objectives. They said that now they knew how to spell and read words they did not know before. Most of them added that they liked working on this unit because they were given enough time to work on their writing without rushing. These students also said that they liked typing their "Comparison and Contrast Paragraphs" on the computer as this gave them the chance to check their spelling and look up definitions of unknown words using the online dictionary. Some students said that this unit of study was different because they were doing different subjects in one.

Students shared their perception on the attainment of content objectives as a result of the CLIL unit implementation—see Figure 4.2.2b.

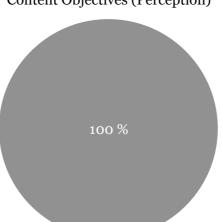


Figure 4.2.2b Attainment of Content Objectives (Perception)

Yes. I feel that I have attained the content objectivesNo. I feel that I have not attained the content objectives

All students said that they felt they had attained the CLIL unit content objectives. They added that they were given enough time to do their research. They all said that they liked that the teacher gave them freedom to choose the ecosystems they wanted to study rather than been told what to research. They added that now they felt they knew more about how their world works.

Students shared their perception on the practice of skills during the CLIL unit implementation—see Table 4.2.2a. They also gave information on their perception on the practice of attitudes during the CLIL unit implementation—see Table 4.2.2b.

Table 4.2.2a Skills Practiced During the CLIL Unit Implementation (Perception)

Student	Thinking Skills	Communication Skills	Research Skills	Self- Management Skills
A	~	~	V	×
В	~	~	V	V
С	~	>	V	V
D	~	~	V	×
E	~	V	>	V
F	~	~	V	V
G	~	~	V	×
Н	~	~	V	V
I	~	V	V	V
J	~	~	V	V
K	~	~	V	×
L	V	V	V	×
M	~	~	V	V
N	V	V	V	V

All of the students agreed that the three skills that they practiced the most during the CLIL unit implementation were thinking skills—most of them said these were the most challenging, communication skills—writing and speaking, and research skills—collecting, recording, organizing, interpreting and presenting data. All of the students but five, said self-management skills—time management and organization—were also among those they practiced the most.

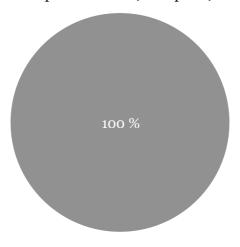
Table 4.2.2b Attitudes Practiced During the CLIL Unit Implementation (Perception)

Student	Commitment	Confidence	Cooperation	Creativity
A	V	×	×	~
В	V	V	~	~
С	V	V	V	V
D	V	V	V	×
E	V	V	~	~
F	V	V	V	×
G	V	×	×	V
Н	V	×	×	~
I	V	V	~	~
J	V	V	~	~
K	V	×	×	~
L	V	V	V	~
М	V	V	~	V
N	V	V	V	V

All of the students agreed that commitment was the attitude that they practiced the most during the CLIL unit implementation. Creativity was the second most practiced attitude among students. Four students said they struggled with practicing cooperation during pair work. Four of them said they did not feel very confident when sharing their new knowledge, because they were shy, not because they did not know the language or the unit content.

Students shared their perception on the teacher facilitating learning during the CLIL unit implementation—see Figure 4.2.2c.

Figure 4.2.2c Teacher Facilitating Learning During the CLIL Unit Implementation (Perception)



- Yes. The teacher facilitated learning.
- No. The teacher did not facilitate learning.

All students said that the teacher facilitated learning during the CLIL unit implementation by answering their questions whenever needed. They also added that the teacher took time to explain and model things for them.

When asked to tell what they liked the most about the CLIL unit implementation they all said that using the computer in classes other than computer class was something they really enjoyed. They also said that they liked this unit of study because they were able to decide what they wanted to research and also that they were allowed enough time to do so.

Chapter 5 - Discussion

Considering the fact that the present investigation was conducted using two working methodologies—one for each part of the investigation—and because the methodologies resulted in two sets of findings, it was precise to divide the discussion into two parts, one for each set of findings. The findings were then compared and contrasted with the literature review (see Chapter 2) and presented in this report.

5.1 Learning English in Some Schools in Latin American Countries

As the findings reveal, Morgan Bilingual School has largely been influenced by English-monolingual programs from the United States. The school language distribution shows a tendency to submerge students in an additional language (L2)—English—for most of the school day while using resources designed for native English speakers just as if they were attending a school in an English-monolingual country. Morgan Bilingual School uses English as a Medium of Instruction (EMI) thus disregarding the majority of students' mother tongue (L1)—Spanish. Most of the school's late bilinguals have succeed in the program because they have gained literacy in Spanish in their old schools. These skills have helped them to learn English. This finding clearly supports Cummings' Developmental Interdependence Hypothesis which states that the learning skills gained in the mother tongue (L1) transfer to the additional language (L2) as this is learned.

Morgan Bilingual School lacks a school language policy as well as bilingual program principles and standards—a common scenario in many bilingual schools in Panama and likely in other countries in Latin America. This situation is in great part the result of the lack of formality and accountability exemplified by the Ministry of Education in Panama as well as the lack of national laws and regulations concerning the implementation of effective bilingual education programs. As indicated in the report published by the British Council in 2015 as well as the report published by Sánchez & Diez in 2014, few countries in Latin America have worked toward designing, implementing and evaluating language policies that support the learning of an additional language (L2). Morgan Bilingual School is located in a country where there is not a national bilingual education policy and where schools—public and private—are rarely evaluated for improvement.

5.2 Effective Bilingual Instruction

Following the guidelines offered by various experts in the field of CLIL and TBLT implementation made it easier to plan, design, implement and evaluate the outcomes of the CLIL unit of study. Coyle's 4Cs framework served as the cornerstone of the unit planning. The language triptych helped to make language visible throughout the unit. The CLIL Matrix defined the rigor of the CLIL unit. Bloom's Taxonomy guided the students' cognition path. Ellis' methodology for Task-Based Language Teaching helped to plan, implement, and assess the unit writing task. Gagné's nine events of instruction helped to organize key unit instructional events.

Contrasting what Torres-Guzmán suggested about avoiding the use of the mother tongue (L1) in bilingual education, during the implementation of the CLIL unit of study, Spanish was used responsibly when talking about Spanish cognates for science words. The mother tongue (L1) was used as a last resort when other strategies had failed. Whenever students purposely used Spanish to say something, they were guided to say what they intended to say this time in English.

Culture may be understood as personal beliefs, attitudes, habits, and skills. It also incorporates elements from other cultures and peoples. Culture connects us with ourselves and with others. Toward the end of the CLIL unit implementation it was evident, by the way students talked to each other, that they had developed a sense of respect for their environment and the living things in it, starting with the classroom environment and their classmates.

After each lesson of the CLIL unit implementation, students were able to sharpen their reflective skills by self-assessing their performance using a checklist. Quietly, students took the time to think about their learning experiences. After finishing volunteers shared their thoughts. All of them were pleased with the job done, however some were able to identify their weak areas and promised to improve.

Students' content and language learning progression was assessed using two rubrics—one for content and one for language. Classroom observations were documented in writing and evaluated with the help of the teacher observer in order to support decision making for future implementations. Documenting students' progression is time-consuming, however, it was done in order to improve instruction and better help students' attainment of the proposed unit/lesson objectives.

Chapter 6 - Conclusions

As I stated in chapter 1, the case study conducted at Morgan Bilingual School had two aims, each with a working methodology. First, it aimed to identify adverse factors involved in the students' lack of attainment of content and language objectives. Secondly, it aimed to determine how the implementation of alternative approaches such as CLIL and TBLT may yield better results for ELLs.

The data obtained through the first working methodology—contextualization of the problem—which I presented in chapter 4, suggests that the school's current content and language teaching and learning situation is far from being ideal. Even though the majority of the students' mother tongues (L1) is Spanish, the school's bilingual program clearly favors English over Spanish, as evidenced by the language distribution across grade levels, the language of learning materials, and the school environmental print. The teaching staff is not completely bilingual which poses a communication problem whenever they have to meet. The physical environment of the classrooms do not always support learning. Teachers' instructional approaches and methods as well as the assessment tools they employ tend to be traditional edna repetitive. The school curriculum is disintegrated which makes it hard for students to make valuable connections. Not all teachers-language, content or both-have been properly trained in either language or content which means that some of them may not be accurate and/or fluent when delivering instruction. Although all of them participate in professional development activities organized by the school, few of them find new ways to stay up-to-date with the teaching practice.

The results obtained through the second working methodology—implementation of a CLIL unit—which I also presented in chapter 4, show that when CLIL and TBLT are used in conjunction to create authentic, engaging, and meaningful units of study, students' attainment of content and language objectives is greater. Based on the classroom observations made by the teacher observer and the teacher researcher, it can be concluded that the implementation of the CLIL unit was successful in terms of attainment of objectives in all CLIL areas of interest—content, cognition, language and culture. TBLT served as the perfect companion to guide the performance language task that students needed to complete. Students' perceptions on the attainment of objectives related to content, language, learning skills, and attitudes matched the teachers' observations.

Regardless of the perception that some may have about the reliability and functionality of English-medium programs in Spanish-speaking countries in Latin America, the present case study seems to indicate that CLIL—infused with TBLT—is an effective approach to content and language teaching and learning which by no means disregards the importance of the students' mother tongues (L1). It is fundamental that the school's stakeholders see the need for change in the area of content and language instruction and assessment. They also need to see that instruction is a piece of a puzzle in the program, and that when the program is based on principles and standards it can yield great results for the entire school community, especially students as they become bilingual, biliterate, culture aware and sensible, and knowledgeable.

Chapter 7 - Future Research Lines and Limitations

On the basis of the promising findings presented in the case study conducted at Morgan Bilingual School, continuing research on the effectiveness of CLIL (Content and Language Integrated Learning) and TBLT (Task-Based Language Teaching) appears fully justified. Work on the remaining issues is continuing and will be presented in future investigations.

The next stage of my research will involve further experimental work in the area of CLIL and TBLT instructional planning and implementation at the preschool and lower elementary levels. This will help stakeholders see the benefits of CLIL and TBLT being implemented with young learners as well as to raise awareness of the need to adjust the language distribution in kindergarten and lower elementary so as to include more Spanish than English thus helping students to acquire literacy and learning skills in Spanish from an early age so they can then transfer these skills into the learning of English. This will confirm my rationale—that both approaches, CLIL and TBLT, facilitate the teaching and learning of an additional language (L2) as well as content through an additional language L2), as opposed to EMI (English as a Medium of Instruction) programs which often disregard language instruction especially in the majority of the students' mother tongues (L1).

Further study of the issue of CLIL and TBLT teacher training would be of special interest considering that—as the findings of the case study have reveled—several members of the teaching staff—homeroom teachers, specials teachers, and teaching assistants—have insufficient language, content and/or pedagogic training. CLIL and TBLT teacher training, I believe, will help teachers—language and content ones—better integrate content and language for the students' benefit. This way language will not venture into playing an invisible role, but a visible and active one, as it will be embedded in content teaching and learning across the curriculum.

The main limitation of the case study was engaging school stakeholders, primarily the principal and the Spanish-English department coordinator, in the implementation of the CLIL unit of study. Although they both agreed to let me teach the chosen unit of study using CLIL and TBLT, neither the principal nor the Spanish-English department coordinator showed any interest in getting to know the development and final results on the investigation.

Chapter 8 - References

August, D., Calderón, M., & Carlo., M. (2002). Transfer of Skills from Spanish to English: A Study of Young Learners. Washington, DC. United states. Center for Applied Linguistics. Retrieved from http://www.cal.org/acquiringliteracy/pdfs/skills-transfer.pdf

Baker, C. (2001). Foundations of Bilingual Education and Bilingualism. United Kingdom: Multilingual Matters Ltd.

Ball, P. (n.d.). How do you know if you're practising CLIL? United Kingdom. One Stop English. Retrieved from http://www.onestopenglish.com/clil/methodology/articles/article-how-do-you-know-if-youre-practising-clil/500614.article

Banegas, D. L. (2011). Content and Language Integrated Learning in Argentina 2008–2011. Latin American Journal of Content & Language Integrated Learning, 4(2), 33-50. doi:10.5294/laclil.2011.4.2.4

British Council. (2015). English in Latin America: an examination of policy and priorities in seven countries. Retrieved from https://ei.britishcouncil.org/sites/default/files/latin-america-research/English%20in%20Latin%20America%20An%20examination%20of%20policy%20and%20priorities%20in%20seven%20countries%20Flipbook.pdf

British Council (Producer). (2014). English Medium Instruction: Cure or Curse? [Online]. Available from https://iatefl.britishcouncil.org/2014/session/britishcouncil-signature-event-english-medium-instruction-cure-or-curse

Christian, D. (1994). Two-Way Bilingual Education: Students Learning Through Two Languages. University of California, Berkeley. United States. NCRCDSLL Educational Practice Reports, Center for Research on Education, Diversity and Excellence. Retrieved from http://escholarship.org/uc/item/567256ft

Council of Europe. (2006). Plurilingual Education in Europe: 50 Years of International Cooperation. Strasbourg Cedex. Language Policy Division. Retrieved from https://www.coe.int/t/dg4/linguistic/Source/PlurinlingalEducation_EN.pdf

Coyle, D., Hood, Philip., Marsh, D. (2010). CLIL: Content and Language Integrated Learning. United Kingdom: Cambridge University Press.

Coyle, D. (2005). CLIL: Planning Tools for Teachers. University of Nottingham, United Kingdom. Retrieved from http://www.unifg.it/sites/default/files/allegatiparagrafo/20-01-2014/coyle_clil_planningtool_kit.pdf

Cummins, J. (1979). Linguistic Interdependence and the Educational Development of Bilingual Children. Bilingual Education Paper Series, Vol. 3 No. 2. California State University, Los Angeles. United States. Evaluation, Dissemination, and Assessment Center. Retrieved from https://eric.ed.gov/?id=ED257312

Cummings, S.M. & Tamayo, S. (1994). Language and education in Latin America: an overview. Human resources development and operations policy working papers; no. HRO 30. Washington, DC. United States. World Bank. Retrieved from http://documents.worldbank.org/curated/en/875391468779998742/Language-and-education-in-Latin-America-an-overview

Degraden, J. (2015). English as a medium of instruction: a growing global phenomenon. British Council & Oxford University Department of Education (OUDE) Retrieved from https://www.britishcouncil.engli

Ellis, R. (2009). The Methodology of Task-Based Teaching [Special Issue]. Asian EFL Journal, 11(5), 6-23. Retrieved from http://www.asian-efl-journal.com/PDF/ The Asian EFL JournalCEBU conf.pdf

Eurydice. (2012). Key Data on Teaching Languages at School in Europe. Brussels. Education, Audiovisual and Culture Executive Agency. doi:10.2797/83967

Gándara. P. (n.d.). The Impact of English-Only Instructional Policies on English Learners. Colorín Colorado. Retrieved from http://www.colorincolorado.org/ article/impact-english-only-instructional-policies-english-learners

Gaskell, R. (2015). Latin America's International Schools Market. ISC Research. Retrieved from https://www.linkedin.com/pulse/latin-americas-international-schools-market-richard-gaskell

Genesee, F. et al., (1999). Program Alternatives for Linguistically Diverse Students. University of California, Santa Cruz. United States. Center for Research on Education, Diversity and Excellence. Retrieved from http://www.cal.org/twi/pdfs/program-alternatives-for-linguistically-diverse-students.pdf

Genesse, F. (2004). What Do We Know about Bilingual Eduction for Majority Language Students? Handbook of Bilingualism. McGill University, Canada. Retrieved from http://www.psych.mcgill.ca/perpg/fac/genesee/HDBK %20BILINGUAL%20EDUCATION.pdf

Genesee, F. & Gándara, P. (1999). Bilingual Education Programs: A Cross-National Perspective. Journal of Social Issues, 55(4), 665-685. doi:10.1111/0022-4537.00141

Genesee, F. & Lindholm-Leary, K. (2010). Dual Language Education in Canada and the U.S.A. Encyclopedia of Language and Education pp. 1696-1706. McGill University & San José State University. Canada & United States. doi: 10.1007/978-0-387-30424-3_129

Haulman, A. & López, R. (1999). Designing and Implementing Two-way, Dual Language Programs: Issues to Consider. Administrative Issues Journal, 1(3). Retrieved from http://dc.swosu.edu/aij/vol1/iss3/10

Hayden, M. & Thompson, J. (2008). Internationals Schools: growth and influence. International Institute for Educational Planning. UNESCO. Paris. Retrieved from http://unesdoc.unesco.org/images/0018/001803/180396e.pdf

Howard, E. et al., (2007). Guiding Principles for Dual Language Education. Washington, DC. United states. Center for Applied Linguistics. Retrieved from http://www.cal.org/twi/guidingprinciples.htm

López, L.E. (2009). Reaching the unreached: indigenous intercultural bilingual education in Latin America. UNESCO. Retrieved from http://unesdoc.unesco.org/images/0018/001866/186620e.pdf

McDougald, J. (2015). Teachers' attitudes, perceptions and experiences in CLIL: A look at content and language. Colomb. Appl. Linguist. J., 17(1), pp. 25-41. doi: http://dx.doi.org/10.14483/udistrital.jour.calj.2015.1.a02

Mejía, A.M. (2004). Bilingual Education in Colombia: Towards an Integrated Perspective. Bilingual Education and Bilingualism. Universidad del Valle. Cali, Colombia, 7(5), pp. 381-397. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.466.7407&rep=rep1&type=pdf

Mejía, A.M. (2005). Bilingual Education in South America. Studios sober Educación. Clevedon: Multilingual Matters, 31, pp. 198-200. Retrieved from https://www.unav.edu/publicaciones/revistas/index.php/estudios-sobre-educacion/article/view/7767/6788

Munzenmaier, C. & Rubin, n. (2013). Bloom's Taxonomy: What's Old Is New Again. Santa Rosa, California. United States. The eLearning Guild. Retrieved from http://educationalelearningresources.yolasite.com/resources/guildresearch_blooms2013%20(1).pdf

Northern Illinois University. (n.d.). Gagné's Nine Events of Instruction. Illinois. United States. Faculty Development and Instructional Design Center. Retrieved from http://www.niu.edu/facdev/pdf/guide/learning/gagnes nine events instruction.pdf

Nunan, D. (2004). Task-Based Language Teaching. United Kingdom: Cambridge University Press. Retrieved from http://sites.educ.ualberta.ca/staff/olenka.bilash/ Best%20of%20Bilash/Task-based%20Language%20Teaching.pdf

Port, M. (2014). The Role and Status of English in Spanish-speaking Argentina and Its Education System: Nationalism or Imperialism? Sage Open, pp. 1-14. doi: 10.1177/2158244013514059

Rodríguez-Bonces, M. & Rodríguez-Bonces, J. (2010). Task-Based Language Learning: Old Approach, New Style. A New Lesson to Learn. Profile Issues in Teachers' Professional Development. Universidad Nacional de Colombia. 12(2), pp. 1-3. Retrieved from http://www.revistas.unal.edu.co/index.php/profile/article/view/17691/36825

Sánchez, M.E. & Diez, I. (2014). La Enseñanza del Inglés Como Política Pública en América Latina: Estudio Comparado. México. Instituto de Fomento e Investigación Educativa, A.C. Retrieved from http://ifie.edu.mx/wp-content/uploads/2016/10/ Ingles-como-politica-publica-cuadro-comparativo.pdf

Seidlhofer, B. (2005). English as a lingua franca. ELT Journal Oxford University Press, 59(4), pp. 339-341. doi:10.1093/elt/ccio64

Solís, A. (Producer). (n.d.). Reflections on Bilingual Education Today and Beyond. [Audio podcast]. Available from http://www.idra.org/resource-center/reflections-on-bilingual-education-today-and-beyond/

Torres-Guzmán, M.E. (2002). Dual Language Programs: Key Features And Results. Directions in Language and Education, 14, pp. 1-16. Retrieved from http://dlti.us/doc/DL_FEATURES-TORRES-GUZMAN.pdf

Yang, W. (2013). National Appraisal and Stakeholder Perceptions of a Tertiary CLIL Programme in Taiwan. International CLIL Research Journal, ICRJ, 2(1), pp. 1-18. Retrieved from http://www.icrj.eu/21/article6.html

Appendix A

Keywords Glossary

- 1. Monolingual: any individual who can speak only one language.
- 2. Bilingual: any individual who can speak more than one language.
- 3. Biliterate: any individual who can read and write in more than one language.
- Language Competence: ability to understand and produce a language fluently and accurately in order to communicate.
- 5. Mother Tongue: language that the individual acquires and learns from birth. In the case of bilinguals, it is the language that the individual understands and produces more accurately and fluently.
- 6. Additional language: language that an individual acquires and/or learns besides his/her mother tongue.
- 7. Language of instruction: language that a school uses for teaching and learning.
- 8. Additive Bilingualism: occurs when an individual acquires and/or learns an additional language (L2) while remaining competent in his/her mother tongue (L1).
- 9. Subtractive Bilingualism: occurs when an individual acquires and/or learns an additional language (L2) while losing competence in his/her mother tongue (L1)
- 10. Bilingual School: school that provides individuals with quality language instruction in order to help them gain language competence in more than one language—one of these usually being the individual's mother tongue (L1).

Appendix B

Discrete School Observations Form

This form will be used by the teacher researcher to collect information about the school subject of study. All information collected will be used in the study and treated confidentially.

Read the questions. Discretely observe the administrative staff, the teaching staff and the students, and record the information below. 1. What is the school's location and the country's official language? 2. What is the total school enrollment? 3. What are the language(s) of students and the number of nationalities? 4. What is the total number of members of the administrative staff? 5. What are the mother tongues (L1) of the administrative staff?

6. What is the total number of members of the teaching staff?

- 7. What are the mother tongues (L1) of the teaching staff?
- 8. What language(s) is/are used for internal communication?
- 9. What is/are the language(s) of collaborative relationships?

Appendix C

Discrete Classroom Observations Form

This form will be used by the teacher researcher to collect information about the school subject of study. All information collected will be used in the study and treated confidentially.

Read the questions. Discretely observe the classroom, and record the information below.
1. What is/are the language(s) of learning materials?
2. What is/are the language(s) of instruction in language classes?
3. What is/are the language(s) of instruction in content classes?
4. What is the environment of the classrooms like?
5. What are the teachers' profile, attitudes, and skills?
6. What are the students' profile, attitudes, and skills?

7. What teaching approaches, methods, and strategies do teachers use/implement?
8. What assessment tools do teachers use in the teaching practice?

Appendix D

Teaching Staff Interview Form

This form will be used by the teacher researcher to collect information about the school subject of study. Participation in this interview is voluntary. All information collected will be used in the study and treated confidentially.

This questionnaire asks for information about you, your education and teaching practice. Please respond to the following questions.

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1. How long have you been working as a teacher?
2. How long have you been working as a teacher at Morgan Bilingual School?
3. Are you a language teacher, a subject teacher, or both?
4. What language(s) do you use in the teaching practice?
5. What is the number of teaching blocks per week that you have?
6. Have you ever received formal English or Spanish language training?

7. Have you ever received formal content training?
8. Do you participate in professional development activities organized by Morgan Bilingual School?
9. Do you find ways to stay up-to-date with the teaching practice?

Appendix E

Student Interview Form

This form will be used by the teacher researcher to collect information about the school subject of study. Student participation in this interview has been authorized by parents. All information collected will be used in the study and treated confidentially.

This questionnaire asks for information about you, your education, and your experience as a learner of an additional language (L2) at this school. Please respond to the following questions.

- 1. Do you want me to conduct this interview in English or in Spanish?
- 2. What language(s) do you speak at home? In case you speak more than one language, which language do you speak more accurately and fluently?
- 3. Do you think maintaining your mother tongue (L1) is important?
- 4. Do you think learning an additional language (L2) is important?
- 5. In what way (s) does knowing English and Spanish benefit you?

- 6. On a scale of 1 to 6, how would you rate your level of language competence in Spanish?
- 7. On a scale of 1 to 6, how would you rate your level of language competence in English?

Appendix F

Classroom Observations Form (CLIL Lessons)

This form will be used by the teacher observer and by the teacher researcher to collect information about the school subject of study. All information collected will be used in the study and treated confidentially.

Read the questions. Discretely observe the classroom during the CLIL unit implementation, and record the information below.

- 1. What teaching approaches, methods, and strategies does the teacher use/implement during the delivery of the lessons?
- 2. How would you rate the level of students' engagement?
- 3. How does the teacher facilitate instructions during the delivery of the lessons?
- 4. What strategies and tools for differentiated instruction does the teacher use/implement during the delivery of the lessons?
- 5. How does the teacher add rigor to the lessons?



Appendix G

Student Interview Form (CLIL Lessons)

This form will be used by the teacher researcher to collect information about the school subject of study. Student participation in this interview has been authorized by parents. All information collected will be used in the study and treated confidentially.

This questionnaire asks for information about your experience as a participant in the CLIL unit implementation at the school. Please respond to the following questions.

Do you feel that you have attained the unit language objectives?
 Do you feel that you have attained the unit content objectives?
 What skills/attitudes have practiced during the CLIL unit implementation?
 Do you feel that your teacher has facilitated learning during the CLIL unit implementation? If so, how?
 What did you like the most about the CLIL unit implementation?