A DIAGNOSIS OF PROFESSORS' CBI COMPETENCES AT THE UNDERGRADUATE ENGLISH TEACHING PROGRAM AT FUNDACIÓN UNIVERSITARIA COLOMBO INTERNACIONAL

Tutor: Mg. Abraham Sir Barrios

JOSÉ LUIS LÓPEZ CARABALLO

LUZ MIREYA PELÁEZ LÓPEZ

CÉSAR AUGUSTO ROMERO LÓPEZ

UNIVERSIDAD DEL NORTE

MAESTRÍA EN LA ENSEÑANZA DEL INGLÉS

BARRANQUILLA

2015

A DIAGNOSIS OF PROFESSORS' CBI COMPETENCES AT THE
UNDERGRADUATE ENGLISH TEACHING PROGRAM AT FUNDACIÓN
UNIVERSITARIA COLOMBO INTERNACIONAL

Tutor: Mg. Abraham Sir Barrios

THESIS SUBMITTED IN PARTIAL FULFILLMENT FOR THE REQUIREMENTS
FOR THE DEGREE OF MASTER IN LANGUAGE TEACHING

UNIVERSIDAD DEL NORTE

MAESTRÍA EN LA ENSEÑANZA DEL INGLÉS

BARRANQUILLA

2015

IDENTIFICACIÓN DEL PROYECTO

AUTORES

LÓPEZ CARABALLO JOSÉ LUIS 73'167.645
1er apellido 2do apellido Nombre Cédula

PELÁEZ LÓPEZ LUZ MIREYA   45'766.629
1er apellido 2do apellido Nombre Cédula

ROMERO LÓPEZ CÉSAR AUGUSTO 3'798.216
1er apellido 2do apellido Nombre Cédula

_____

DIVISIÓN: Humanidades

PROGRAMA: Master in Language Teaching

TÍTULO DEL PROYECTO:

A DIAGNOSIS OF PROFESSORS' CBI COMPETENCES AT THE UNDERGRADUATE ENGLISH TEACHING PROGRAM AT FUNDACIÓN UNIVERSITARIA COLOMBO INTERNACIONAL

NOTA DE ACEPTACIÓN: _____

DIRECTORA DEL PROGRAMA: Mgt. Heidy Robles

DIRECTOR DEL TRABAJO: Mgt. Abraham Sir Barrios

FECHA DE RECIBIDO POR LA BIBLIOTECA _____

Dedication

In memory of my beloved parents, to my children and my wife, Luz Adriana for all of their encouragement love and support

From: José Luis

In dedication to my dad, my angel, who taught me to work hard for the things that I aspire to achieve. Also to my mom, my children and my husband Roberto for their love and support.

From: Luz Mireya

To my parents César and Maryluz, my wife Lina and my children Isa and Juandi for being there all the time and believing in me.

From: César

Acknowledgments

We would like to express sincere and heartfelt appreciation to our tutors: Osiris María Chajín Mendoza and Abraham Sir Barrios; they are to be commended for providing the field with their valuable insights, and without them our work would not have such rich dimensions and grounded insights. We would also like to thank Lizeth Vergara, José Barrios and Alexander Osorio, whose help was of the utmost importance. Finally our special thanks to the professors who participated in the study described in this dissertation.

From José Luis

I would like to express my deepest gratitude to my adorable wife, Luz Adriana for her patience, comprehension and support throughout all this process; also, I give all my gratitude to Ludis Arteaga because without your support I would not have been able to finish my Master's degree. I would also like to thank Luzmi and César and their families; Luz , thanks for being always there and César, thanks for being my friend, co-worker, co-researcher and "doble compadre". My special gratitude for Osiris, the person who has showed me the importance of research for my professional growth. Finally, I thank God because he is "guilty" of crossing all these wonderful people in my life.

From Luz Mireya

I would like to express my deepest appreciation to my beloved husband, Roberto, for his tireless support and patience during the writing of this thesis. A special thanks to my unconditional friend, Jose Luis, for trusting me and being with me during difficult and good times. I would also like to thank Osiris and Cesar for sharing with me all their experience and knowledge in this process. Most of all, thanks to God who gives me the strength to forge ahead.

From César

Firstly, I would like to thank God for giving me the spiritual support I needed in hard moments. I would also want to give my gratitude to my family, my wife Lina because I was absent many times to fulfill this dream, my two kids Isabella and Juan Diego for being my inspiration to do great things, my parents because they have always believed in me and I know how proud they are with this. I thank my two partners Luz Mireya and José Luis for spending their time with me and being ready to continue no matter how exhausted we felt sometimes and for the good moments traveling to Barranquilla and back to Cartagena, Professors Osiris Chajín, Alex Osorio and Jose Santos for spending their time to help us during this process.

Abstract

This study aimed to identify the CBI competences of professors that teach subjects in English at an undergraduate English teaching program. It used an analytical-descriptive case study developed through focal groups, observations, surveys and tests. The study units were ten professors, 242 students and 23 subjects. The results suggest that most of the professors need opportunities to improve their CBI competences to be able to fulfill all the requirements that this approach have in terms of teacher development. The present study corroborates what literature shows in regards to the artificial separation of content and language objectives in traditional classes since it demonstrates how some professors that teach subjects in English in a teacher education program lack the necessary competences to consciously integrate content and language objectives. Therefore, a training development program should be carried out in order to improve pedagogical actions in the content classes taught in English.

Key words: CBI/CLIL, competences, teacher development, undergraduate English teaching programs.

Table of Contents

Index of Tables

Index of Graphics

List of Appendixes

Introduction

The need for internationalization of the curricula of higher education programs requires that current and future professionals have a high level of English proficiency, not only in a social but in an academic and professional context. Due to this fact, there is a clear need for a "framework for constructing content based curricula that simultaneously promoted the learning of a foreign language" (Arizmendi, Diaz & Salazar, 2008, p.114). Parallel to this, "the first decade of this century witnessed both a significant change in the vision of teaching foreign languages as it conceived the foreign language fundamentally as a means of learning content, and no longer as an end in itself,..."(Gutierrez, Durán & Beltrán, 2012, p. 48). However, the success of these changes have to be supported by professors that are competent in using a Content based instruction approach (CBI) in their classrooms.

It is important to clarify that there are different approaches that simultaneously promote the learning of content and a foreign language such as the traditional English for Specific Purposes (ESP), Content Based Instruction (CBI), Content and Language Integrated Learning (CLIL) and Immersion (Tarnopolsky, 2013). It is essential to take into account that CBI is referred to as CLIL (Content Language Integrated Learning) in the European academic context (Brewster, 2004; Larsen-Freeman, 2000). These two terms will be used indistinctly in this dissertation. All of the aforementioned approaches are being researched and

implemented in higher education programs in foreign language contexts as it is the case in some universities in Colombia (Habte, 2004; Arizmendy, Diaz & Salazar, 2008; Monsalve et al, 2007; Corrales & Maloof, 2009; Granados, 2011; Chávez, 2013) including CBI models such as theme-based, adjunct and even the Sheltered Instruction Observation Protocol (SIOP model). However, one of the major concerns that researchers report in EFL contexts is the challenge of teacher preparation since either they lack the subject-matter knowledge or they are not second language specialists, and just in a few cases they are both, content and second language specialists; they do not have the competences to carry out a CBI lesson (Monsalve et al, 2007; Pessoa, et al, 2007; Arismendi, Diaz & Salazar, 2008; Cabezuelo & Fernández, 2014).

This research project focuses on faculty members at the pre-service English teaching program (Licenciatura en Educación con Énfasis en Inglés) at Fundación Universitaria Colombo Internacional (henceforth, Unicolombo). This lets us examine the needs the professors have in order to teach through a CBI model, more specifically, the SIOP model. Thus, the purpose of this case study is to identify the CBI competences of professors that teach subjects in English at the undergraduate English teaching program at Unicolombo in order to suggest key points for a future teacher development program that suits their needs.

To this end, at first a rationale that includes the statement of the problem, background, research questions and objectives of the study is presented. Then the

theory that underlies this study is put forward. Afterwards, the methodology used in

this project is explained and the data collection procedure is described. Having

shown the theoretical issues and collected data, the results are analyzed and

interpreted in order to draw conclusions of the research. Finally, some

considerations and the scope for future research are exposed.

1. Rationale

1.1 Statement of the problem

Fundación Universitaria Colombo Internacional-Unicolombo located on the Caribbean coast of Colombia, is one of the universities that is implementing subject matter classes in English in all of its academic programs as part of a bilingual project that is embedded in its institutional mission: Unicolombo is a higher education institution that is oriented to the bilingual development of professionals in the service of society, in the context of demanding ethical, conscious Caribbean cultural identity, open to universal knowledge and understanding of other cultures, research and innovative humanistic sense. In this sense, this type of professionals need to be prepared for the demands of a globalized world. Consequently, English communicative competence is at the core of all Unicolombo academic programs.

This study focuses on the Undergraduate English Teacher Education program. This four-year program aims at contributing to the development of English teachers with high communicative competence as this is described in Hymes, 1972; Widdowson, 1978; Canale and Swain, 1980; Canale, 1983; Bachman & Savignon, 1990; Bachman & Palmer, 1996, and Celce-Murcia, 2007. They are also characterized with attitude, knowledge and specialized skills to keep learning autonomously and consciously and who are also aware of the importance of research to improve their educational practice.

The program initiated in 2007, called Undergraduate English Teacher Basic

Education program (Licenciatura en Educación Básica con Énfasis en Inglés), which was developed throughout 10 semesters. Since 2014, it has had some curricular changes as a consequence of a self-evaluation process that led to an improvement plan. Some of the changes were in regard to the study plan that was redistributed to eight semesters, and also more subjects are taught in English in this plan. Another important change was the inclusion of academic English language subjects that support the content classes.

Regarding the English level, the students that enter their first year of the program are quite often true beginners, A1 according to the Common European Framework of Reference for Languages, CEF. Accordingly, the English learning process at the teacher education program offers a course in BICS *"basic interpersonal communication skills"* (Cummins, 1981) which is focused on an English for a General Purpose (EGP) course and a communicative approach methodology. Hence, the students learn to communicate in different social domains. The goal of this course is that the students are able to understand the main points of clear standard input on familiar matters regularly encountered in work, school, leisure, etc. and deal with most situations likely to arise whilst travelling in an area where the language is spoken. Also produce simple connected text on topics which are familiar or of personal interest, and describe experiences and events, dreams, hopes and ambitions and briefly give reasons and explanations for opinions and plans" (Council of Europe, 2001, p.24; Curricular documents, Centro Colombo Americano) which means to take the students from

an A1 to a B1 and possibly a B2 level according to the Common European

Framework, CEF level in two academic years of study (640 hours), and the

communicative skills emphasized are listening and speaking. This phase of the

learning process is taught to the pre-service teachers in agreement with Centro

Cultural Colombo Americano, a binational language institute with more than fifty

years of experience teaching English. Despite all the aforementioned, some of the

students do not reach the desired CEF level by the end of the two-year period as

evidenced in a study carried out by a Ministry of Education expert in 2014.

On the other hand and in addition to the EGP courses, the program focuses

on two approaches for subjects taught in English, traditional English for Academic

Purposes (EAP), which highlights the cognitive academic skills, reading and

writing, and a second one that is based on the teaching of pedagogical content in

English. The former is taught in 64 hours each semester in weekly classes of four

hours, and the latter in different subjects that are further explained in table 1.

These two approaches are taught simultaneously after the first academic year of

the EGP. The implementation of this model has been refined through the design of

methodology that combines a CBI Adjunct model (Brinton & Jensen, 2002) for the

team teaching of the EAP subjects and the Subject-matter classes. The former

emphasizes the teaching of language with the use of texts of the latter that focuses

on content rather than in language. Besides the desired implementation of an

adjunct model to link the EAP and mainstream classes, a SIOP model (Short

&Echavarria, 1999) is considered in the methodology to prepare, deliver and

17

assess lessons as a good teaching practice model.

The program is still at a process of transition in regards to the curricular changes. This means that the implementation of these changes is being carried out in the first four semesters. The last semesters still correspond to the previous study plan. For the purpose of this project, we make emphasis on the first semesters where some CBI classes are being piloted. Nonetheless, some information is taken from the previous study plan.

In order to have a clearer vision of the subjects taught in English at the Teacher Education program the following table is shown.

Table1.
Subjects taught in English at the undergraduate English teaching program

Semester	Subjects	Hours per semester	Emphasis
II	Communication I	64	Language
III	Communication II	64	Language
IV	Communication III	64	Language
IV	History of LanguageTeaching	48	Content
IV	ResearchMethodology I	48	Content
V	Communication IV	64	Language
V	Current Approaches to Language Teaching	48	Content
V	Second Language Acquisition I	48	Content
V	Phonetics and Phonology	48	Content
V	Research Methodology II	48	Content
VI	Communication V	64	Language
VI	Teaching English to Children	48	Content
VI	Second Language Assessment Workshop	48	Content
VI	Second Language Acquisition II	48	Content
VI	Sociolinguistics	48	Content
VI	Internship I	48	Content
VII	Teaching English to Young adults and Adults	48	Content
VII	Material design	48	Content
VII	Academic Writing Workshop	64	Language
VII	Pragmatic and Discourse Analysis	48	Content

VII	Internship II	48	Content
VIII	Technologies Mediating Learning	48	Content
VIII	Internship III	48	Content

These curricular changes were originated due to a self-evaluation process that drew conclusions such as the difficulty of students to keep up with the work in the subject-matter classes. One of the issues is that the previous plan had no EAP subjects that served as a bridge that linked the EGP course and the Subjects taught in English. Additionally, in a government study whose purpose was to help English teaching undergraduate programs around Colombia to reach high levels of quality, and in which Unicolombo education program was part of, the expert could witness through classroom observations that the professors of the subject-matter classes at Unicolombo focused on the content rather than the language, according to the report presented by the expert from MEN. However, as mentioned before, these students are still struggling to reach a desired level of language, minimum B2 when they finish the undergraduate program. Then, these students should learn the content and the language simultaneously. But is the Unicolombo program faculty prepared to integrate the teaching of language and content through a CBI approach? Are these professors competent to teach classes using a CBI approach? and if they are not, what is needed to help them acquire these competences?

The studies presented by the expert of the MEN evidenced that most of the professors had not reached a desired pedagogical knowledge according to the

TKT test (Teaching Knowledge Test). Most of the faculty reached the band three in the TKT modules even though professors in an education program should all reach the band 4 as a desired level. The professors were tested in the knowledge of the terms and concepts of English language teaching. It focuses on the factors underpinning the learning of English, the knowledge and skills to plan a lesson, assessment, knowledge of what happens in the classroom and classroom management. Although these results picture the knowledge and skills of the faculty, they were presented two years before the present study and they do not depict the knowledge and skills of the professors in CLIL/CBI.

The professors were also examined by the expert in their language proficiency through the OOPT (Online Oxford Placement Test). Some of the professors did not reach a C level according to the CEF (Common European Framework). The desired level for a second language professor is C1/C2 level thus this also evidenced that professors needed to improve their language proficiency. However, these results were yielded two years before the previous study. Therefore, new studies should be carried out in order to know the current situation of the faculty in order to find out whether they are prepared in terms of language proficiency to teach through a CBI approach in the undergraduate teachers education program.

The purpose of this case study is to diagnose CBI competences professors have at the undergraduate English teaching education program at Unicolombo so

they are able to contribute to the development of the pedagogy and improvement of the foreign language of pre-service teachers through a sound content based language teaching methodology.Thus the relevance of this study lies in the fact that it helps in-service professors and program administrators to identify the competences they lack and need to carry out a CBI program that could be nationwide example of good practices. The study also seeks to be the first step of a macro-project that intends to serve as a pilot research that might be replicated at the other Unicolombo programs that also have subject-matter classes in English. For this reason, we decided to perform this study which focuses on the undergraduate English teaching faculty as a starting point to develop a consistent and ongoing teacher development program that ensure the quality of professors to carry out a CBI approach.

1.2. Research questions

In order to diagnose the professors CBI competences to help students to simultaneously improve content and language at Unicolombo, the research question guiding this project is:

1.2.1 Main Question

What CBI competences do professors need for teaching language and content and the integration of both in class at the undergraduate English teaching education program at Unicolombo?

In order to provide a structured response to the main question of this project, the following specific questions are asked:

1.2.2 Sub-questions

- What is the English proficiency level of the professors that teach subjects in English at the undergraduate English teaching education program at Unicolombo?
- What CBI methodological competences do the faculty lack and need in order to be able to teach through a CBI approach at the undergraduate English teaching education program at Unicolombo?

1.3 Objectives

1.3.1 General objective

To diagnose the professors' CBI competences in teaching language and content and the integration of both in class at the undergraduate English teaching education program at Unicolombo.

1.3.2 Specific objectives

- To describe the English proficiency level of the professors that teach subjects in English at the undergraduate English teaching education program at Unicolombo.
- To characterize the CBI methodological competences that the professors

need to teach subjects in English at the undergraduate English teaching

education program at Unicolombo.

2. Theoretical Framework

In this chapter the relevant literature to this dissertation is presented. We first introduce content-based instruction in order to have a broad idea of what this approach is. For this purpose, content-based instruction is defined, characterized and some features are presented. Secondly, the different models of CBI are briefly described. These models may help us understand how CBI might be implemented at the pre-service teacher education program at Unicolombo. Special attention is paid to the sheltered instruction observation protocol (SIOP) as an exemplary model of good practices in content-based courses. Finally, there is a revision of the literature concerning the competences that EFL teachers and more specifically CBI/CLIL teachers should have in order to successfully teach content based language classes.

2.1 Introduction to content-based instruction

Content based instruction methodology has proven to be successful for the target language and content learning in different settings (Marani, 1998; Crandall, 1993; Snow, Met & Genesee, 1989; Stoller, 2004), and in the last decades, content-based language education has become more and more popular in higher education. (Snow, Met & Genesee, 1989; Crandall & Kauffman, 2002) since "the learning place is no longer just in a local institution; it is in the global village" (Griffin, 1999, p.3) and there is a need for the internalization of the curricula.

To deeply describe the Content based language teaching features it is important to previously clarify that there are various definitions of CBI and CLIL and for the purpose of this study, both approaches, as previously mentioned , refer to the same methodology since both of them integrate the teaching/learning of a target language and a subject-matter simultaneously. Therefore, different definitions of CBI and CLIL are considered below.

2.1.1 Definition

According to Brinton and Wesche (1989, cited in Marani, 1998, p. 5) CBI is "the integration of a specific content with language teaching objectives". Stoller (2002, cited in Pessoa et al., 2007) indicates that CBI is "language as a medium for learning content and content as a resource for learning and improving language"(p. 103). This means that both language and content learning have to be fostered in the CBI classroom. In the same direction, Dalton-puffer (2011) states that "CLIL can be described as an educational approach where curricular content is taught through the medium of a foreign language, typically to students participating in some form of mainstream education at the primary, secondary, or tertiary level." To sum up, these definitions of CBI show that language and content should be integrated in order to support "its dual commitment to language- and content-learning objectives" (Stoller, 2004, p. 261).

2.1.2 Features of Content Based Instruction

CBI differs from other approaches to language teaching because unlike traditional methods, its focus is on the learning of content through a target language (Marani, 1998). This content is tied to the language learning whereas in traditional courses there may not be a logical link between tasks (Marani, 1998). This distinction is one of the features that characterize content based approaches to language learning. Accordingly, Brinton, Snow and Wesche (1993, cited in Stryker & Leaver, 1997) propose that CBI intends to avoid the separation of content and language which is not natural in real contexts and it is present in most of traditional classes.

Also, Dueñas (2004) claims that "CBI cannot be conceptualized as a fixed immovable method; quite contrarily, it is commonly perceived as a flexible operational framework for language instruction, with heterogeneity of prototype models and application options available for different contexts and pedagogical needs" (p.75). This flexibility is a challenge for teachers that have to adapt their classes to the particularities of the context. "In light of this situation, teacher trainers might well wonder what is the most effective and expeditious way to proceed in preparing college faculty for content based teaching" (Sagliano, Stewart & Sagliano, 1998, p.37).

Another characteristic is that the organization of content-based courses is derived from the subject-matter and not from topics or grammar structures. (Stryker

& Leaver, 1997). In this sense, the focus of instruction is on meaning rather than on form. (Krashen, 1985; Savignon, 1983).Therefore, professors have to view language as a means and not as an end in itself.

Authentic material is used in CBI. However, this is not exclusive but it should be as usual as possible (Dueñas, 2004). This material fosters cultural awareness in learners and it is also motivating since it is meaningful and derived from relevant content for students. Also, "the information that is embedded in context allows English learners to understand and complete more cognitively demanding tasks" (Echavarria, Vogt & Short, 2013, p.39). Selecting this authentic material is a challenge for instructors since it is not an easy task and it might also be time consuming.

Teachers in CBI classes have to help students understand content. As a consequence, they have to shelter (make the material understandable) the texts the students are exposed to. However, this adaptation must keep the content concepts intact (Echavarria, Vogt & Short, 2013). In this sense, Dupuy (2000) claims that the content-based class is a language class where every effort is made to ensure that subject-matter is comprehensible to students.

In addition to making content comprehensible for students, teachers in content based language teaching support students through scaffolding that is the process by which experts (teachers) help novices(students) to accomplish an objective and look for solutions that students could not find on their own. (Wood,

Bruner & Ross, 1976). As a consequence, the students gradually take responsibility of their own learning. Thus, according to Brown (2008, cited in Echavarria, Vogt & Short, 2013, p.121) teachers consciously scaffold information and lead to students' independence when:

- Emphasize the role of personal choice, effort, and persistence in enacting learning strategies;
- Motivate students' strategy use by showing how applying strategies improves comprehension and learning;
- Highlight the vital role of prior knowledge activation and connection in learning;
- Explain the benefits of strategy use in general and the value of using specific strategies;
- Mentally model(e.g., think-aloud) to make thinking transparent to students;
- Provide guided and independent practice so that students learn to use strategies when cued by a diverse array of goals, needs, task demands, and texts;
- Promote independent strategy use by gradually shifting responsibility for strategy application to students.

Many experiences have highlighted the benefits of learning through the use of a content based methodology; students have increased their motivation and language proficiency (Kasper, 1995; Leaver, 1997; Stryker & Leaver, 1997).

Grabeand Stoller (1997) claim that "motivation, positive attributions and interest are critical factors which support student success with challenging informational activities and which help them learn complex skills"(p. 12). One of the reasons of these benefits is that the language is acquired through a natural process because it is presented in a meaningful way and in contexts that are relevant for students. Thus, teachers are challenged to present topics to students through texts and situations that trigger their motivation.

CBI promotes higher order thinking to challenge students intellectually. Therefore, teachers should provide activities that promote critical thinking. (Echavarria, Vogt & Short, 2013). This implies that teachers that enhance critical thinking will assist their students when acquiring academic language. Based on this, learning strategies play an important role in CBI classes because students organize and summarize information and ask questions for clarification. (Chamot& O'Malley, 1986; Oxford, 1990).

2.2 Models of content-based instruction

Content based instruction has been applied in different contexts and educational settings (Dueñas, 2004) .This section aims at presenting the most common CBI models in higher education since this level is the focus of the present study. These models are Theme-based, Adjunct and SIOP model.

2.2.1 Theme- based model

Brinton, Snow and Wesche (1989) suggest this model as a kind of content based instruction that is basically language oriented. This model is considered one of the weakest forms of CBI since "language aims are usually more important than the content learning objectives" (Dueñas, 2004, p.4). According to Brinton, Snow and Wesche (1989) theme-based courses integrate the four communicative skills and are organized around topics or themes for professional purposes.

Theme-based is useful at all proficiency levels and ages. However, it is with adults that could have a better impact in their motivation because they might share the same areas of interests. This model aims at helping students to cope with the demand of texts that are cognitively challenging (Banegas, 2011).

The instructor is a language teacher that is responsible for the teaching of language and content. This teacher works independently from the rest of the faculty. This characteristic makes this instructional model easy for its implementation.

The content is organized around a variety of topics or a major topic that are unrelated (e.g. communication, transportation, etc). These topics have to be meaningful and relevant to students. Furthermore, In Theme based courses teachers use a variety of text types and genres as well as all the communicative skills, and everything is organized to suit the learners' needs. This model is used in

pilot courses in the classes of Communication I and Communication II in the context of this study.

2.2.2 Adjunct courses

This model is a sophisticated way to integrate two classes that share content but the emphasis of each of them differs in that one focuses on the content and the other in the language (Flowerdew, 1993; Dueñas, 2004). Adjunct or linked courses are still language oriented in the sense that the adjunct course serves as a "mediating tool" (Vygotsky, 1978) to help students to overcome difficulties understanding the content in mainstream classes (Dueñas, 2004; Tarnopolsky, 2013).

One of the major drawbacks of Adjunct courses is that there must be coordination of the instructors and the curricula to be able to integrate the content, texts and even strategies in both classes. In the education program at Unicolombo, a first attempt to integrate content classes (e.g. History of Language Teaching, Research I) with academic language classes (e.g. Communication I-II) has been done in the new study plan in the program. Thus, some professors are already trying out to mutually collaborate to plan their classes in conjunction.

2.2.3 Sheltered Instruction Observation Protocol (SIOP model)

The SIOP model is a research-based model of sheltered instruction that originated from the SIOP instrument that was developed by Echevarria and Short

(1999) at the Center for Research on Education,Diversity, and Excellence as a way

to observe the best practices of teaching content in school districts in the U.S.A.

This instructional model is based on eight components and a 30-item framework

for teaching language and content effectively (Echevarria, Vogt, & Short,

2008;Short &Echevarria, 1999). The eight components and 30 features are:

Table 2.
Components and features of SIOP model

Lesson Preparation	Building Background	Comprehensible Input	Strategies
Clearly define content objectives Clearly define language objectives Content concepts Supplementary materials Adaptation of content Meaningful activities	Concepts explicitly linked to students' background experiences Links explicitly made between past learning and new concepts Key vocabulary emphasized	Speech appropriate for students' proficiency level Clear explanation of academic tasks A variety of techniques used to make content concepts clear	Use of learning strategies Use of scaffolding techniques A variety of questions that promote higher-order thinking
Interaction	Practice & Application	Lesson Delivery	Review & Assessment
Frequent opportunities for interaction Grouping interaction support language and content objectives Sufficient wait time for student responses Ample opportunities for students to clarify key concepts in L1	Hands-on materials and /or manipulatives Activities to apply content and language knowledge Activities integrate all language skills	Content objectives clearly supported Language objectives clearly supported Students engaged 90%-100% Appropriate pacing of the lesson	Review of key vocabulary Review of key content concepts Regular feedback provided Assessment of student comprehension and learning

This sheltered model "provides teaching ideas for each of the model's eight

components, suggests ways to differentiate instruction in multi-level classrooms,

and demonstrates through lesson scenarios how the model can be implemented

across grades and subject areas"(Echevarria, Vogt, & Short, 2008, p.13).

SIOP has also been used in higher education EFL settings (see, Chavez, 2013). This CBI model has been used in the pilot courses at Unicolombo to help teachers structure effective lessons to teach subject-matter classes in English.

Consequently, the preparation of teachers is a key factor to implement the different CBI models. With this in mind, the next section gives a description of the ideal competences and teacher development programs for EFL teachers and CBI/CLIL instructors, especially in higher education.

2.3 Professional Development for language teachers

Language teaching professionals require to continually improve their competences in a variety of fields: Knowledge, skills and attitudes are three important dimensions. For Richards (2010), the most important dimensions that foreign and second language teachers should have are as follow: the language proficiency factor; the role of content knowledge; teaching skills; contextual knowledge; the language teacher's identity; learner-focused teaching, pedagogical reasoning skills,theorizing from practice, membership of a community of practice and professionalism. It is evident that the dimensions mentioned by Richards could be divided in language/ content knowledge and pedagogical skills and reflection. The other dimensions such as professionalism and community of practice could be identified like personal ones that are mainly obtained through autonomy and involvement in teaching academic groups. Richards (2012, p.10) explains the following core components for language teacher knowledge:

Table 3.
Components for teacher knowledge

Practical	Content	Contextual	Pedagogical	Personal	Reflective
The teacher's repertoire of classroom techniques and strategies.	The teacher's understanding of the subject of TESOL, e.g. pedagogical grammar, phonology, teaching theories, second language acquisition, as well as the specialized discourse and terminology of language teaching.	Familiarity with school or institutional context, school norms, and knowledge of the learners, including cultural and other relevant information.	Ability to restructure content knowledge for teaching purposes, and to plan, adapt and improvise.	The teacher's personal beliefs and principles and his or her individual approach to teaching.	The teacher's capacity to reflect on and assess his or her own practice.

In the same direction, Fandiño (2013) affirms that EFL teachers face different challenges in terms of language proficiency, teaching in diverse contexts, belonging to academic communities a doing classroom based research.

In regards to the language proficiency factor that is fundamental for EFL teachers and it is even more important when these teachers use the foreign language to teach subject-matter classes. Pavesi, Bertocchi, Hofmannova and Kazianka (2001, p.87) state that "CLIL teachers should have a good command of the foreign language that is to be the means of instruction. Good knowledge of the first language of the learners is however advantageous as teachers must fully appreciate the learners' language difficulties". In this sense, Richards (2010, p.3)

34

outlines that some of the abilities regarding the language proficiency that teachers need include:

- To comprehend texts accurately

- To provide good language models

- To maintain use of the target language in the classroom

- To maintain fluent use of the target language

- To give explanations and instructions in the target language

- To provide examples of words and grammatical structures and give accurate explanations (e.g., of vocabulary and language points)

- To use appropriate classroom language

- To select target-language resources (e.g., newspapers, magazines, the Internet)

- To monitor his or her own speech and writing for accuracy

- To give correct feedback on learner language

- To provide input at an appropriate level of difficulty

- To provide language-enrichment experiences for learners

Consequently, EFL teachers need these abilities to teach a lesson effectively. Richards (2010) also claims that teachers that are native speakers need to pay special attention to the following dimensions of teaching:

- To be able to monitor one's language use in order to provide suitable learning input

- To avoid unnecessary colloqualisms and idiomatic usage

- To provide a model of spoken English appropriate for students learning English as an international language

- To provide language input at an appropriate level for learner

In Europe, the study of competences for CLIL teachers are summarized in three documents that Brunning and Purmann (2014) outline in the following matrix:

Table 4.
Teachers' competences for CLIL

	CLIL Teacher's Competences Grid	CLIL Teacher Profile	European Framework for CLIL Teacher Education
Aim	"aims to map competences that can support the development of a rich CLIL learning environment in a wide variety of contexts" (1)	"aims to define the profile of a CLIL teacher across a variety of national and local contexts" (1)	"aims to provide a set of principles and ideas for designing CLIL professional development curricula [and] [...] seeks to serve as a tool for reflection" (3)
Theory	• Dividing theory (underpinning CLIL) and practice (setting CLIL in motion) (1) • Theory: defining CLIL, CLIL policy (context, curriculum, school program) (1-2)	• Knowledge about benefits of CLIL (8)	• Module 1: Approaching CLIL (31-32) • Understanding core features of CLIL (18) • Contextualize with respect to school, curriculum (18) • Critical thinking towards CLIL theory & research (24)
Intercultural learning	• Critical thinking (5) • Promoting cultural awareness & interculturality (6)	• Knowledge & understanding role CLIL in cultural understanding	• Different cultural perspectives of content (19) • Critical thinking (19)

	→ cultures, stereotypes, partnerships (6)	and promote it (multiple perspectives, differences) (8)	
Language	• Target language competences (BICS, CALP, classroom management & teaching) (2-3) • Knowing & Applying SLA (5-6)	• High level of fluency and accuracy in target language (communication, speaking, classroom language, lifelong learning) (2-3) • language learning strategies (5)	• support language learning (SLA) (19) • first language can support additional language learning (19) • key concepts: critical discourse, domains & registers, BICS, CALPS (19)
Content/ subject	• Analyzing content from multiple perspectives (8)	• Knowledge & understanding of subject content & curriculum → skills to teach subject (4) • Knowledge & understanding of subject pedagogy (4) • No "watering down" of content (4)	• Identifies appropriate content (19) • Key concepts of content subject → accessible for students (21)
Integration of language and content	• Designing a course: include language, content and learning skills (3) • Integrate language and subject curricula (support each other) (3) → merging into integrated approach (5) • Guide students: maintain multiple focus (5) • interrelationship language, content,	• Knowledge importance of integrated approach (subject & language) • Skill identify & introduce key language/terminology for content (5) • Use communicative approach for subject content teaching (5)	• Interdependence of language (L1,L2,L3) and content learning (18) • Content learning in language classes (19) • Link language awareness to content (19) • Scaffold language learning during content classes (19) • Triple focus (content,

	learning skills (one concept in two cultures, metalinguistic awareness) (8)		language, learning skills) (22)
Class/Lesson	• Course designing (integration, CLIL core features) (3) • Use appropriate & authentic materials (3,6) • Lesson planning, plans into action, fostering outcome attainment (5) • Interactive methodology (7)	• Knowledge objective primary curriculum (5) • Knowledge & understanding methodology & interactive activities → planning & implementation for CLIL (6) • Knowledge appropriate materials & adapt materials to students (7)	• Design & use material (25) • Module 2: Implementing CLIL (curriculum design, CLIL course construction, CLIL course scheduling) (33-35)
Cooperation	• Partnerships with colleagues etc. (4) • Constructive relationship with students (4)	• Willingness to work collaboratively within multidisciplinary team (4,5)	• Necessity to cooperate (17) • Nurture cooperation (21) • Work with learners (21)
Self-Reflection	• Regular Self-assessment (9) • Updating knowledge (9)	• Reviewing teaching plans (10) • Systematic reflection & evaluation (10)	• Explore attitudes towards CLIL (17) • Define level of language competence (17) • Action research (24)

Most of the competencies highlighted in these three CLIL documents coincide with the competences that are found in CBI papers and in the SIOP model. Darling-Hammond (1998 cited in Short and Echavarria, 1999) summarize some features that all CBI teacher should have:

- Teachers need to understand the subject matter deeply and flexibly.

- Teachers need to know about learning (teaching strategies, decision-making strategies about the content to cover and the best way to do so, assessment strategies, language acquisition theory).

- Teachers need to know about curriculum resources and technologies.

- Teachers need to know about collaboration, their collaboration with other teachers, students collaborating together, and collaboration with parents.

- Teachers need to be able to analyze and reflect on their practice, to assess the effects of their teaching, and to refine and improve their instruction.

To sum up the Ideal CBI professor should develop competences in the following:

Table 5.
Components of the ideal CBI/CLIL professor competences (Present study author's summary of key documents)

Language Factor	CBI/CLIL theory	Cognitive development	Integration of language and content	Lesson plan and Delivery
Level C1/C2 CEF Comprehend academic texts Maintain use of target language in class Appropriate use of BICS and CALP	Knowledge of background origin Knowledge of definition of CLIL Knowledge of features of CBI/CLIL Knowledge of Theory that underlies CLIL/CBI	Critical thinking Promotion of intercultural competences Reflect on their actions and practices	Plan language and content objectives Understand content from different perspectives Introduce key vocabulary for content and language	Use of interactive methodology Use inductive teaching of grammar Use of different classroom techniques .

				Use of research of CBI/CLIL
Interaction	**Strategies**	**Use of Materials**	**Review & Assessment**	**Teacher Collaboration**
Foster interactive classes Offer ample opportunities for students to participate Use different grouping configuration	Use and promotion of learning strategies Use of scaffolding techniques Ask questions to promote high order thinking	Use of appropriate & authentic materials Adapt materials Design materials Use of ICTs	Give feedback on content and language Use of formative assessment Provide regular feedback	Partnerships of colleagues Belong to communities of practice Willingness to work collaboratively

Using a variety of documents that highlight the competences of EFL and CBI teachers in Europe and America, we developed a grounded theory interrelating variables (or categories) of ideal CBI competences that are used to serve as fundamental base to know what competences professors that teach content in English at Unicolombo need. In addition, the theory was a light to choose the most suitable instruments to collect data for the diagnosis of the present study. Moreover, we compared the results with findings from other studies on competences and development programs. The research of the literature suggests that there are diverse perspectives on the teachers' competences. However, there are some coincident key competences that can be contrasted with our results.

In this respect the next section discusses the methodology used to carry out the present research.

3. Methodology

The goal of this chapter is to present a description of the research approach, participants, data collection techniques and instruments, specific procedures taken during this research study and limitations of the study.

3.1 Paradigms

Research is an organized and systematic way of finding answers to questions. Traditionally, there have been two paradigms used in research- qualitative and quantitative research. Qualitative research is primarily exploratory research and aims to study social problems from individuals or groups in their natural settings being the qualitative researcher subjective and relative. On the other hand, quantitative research is used to quantify the problem; an outside and objective researcher attempts to determine the relation between variables in a singular and definable reality using a predefined hypothesis, formal and controlled data-collection techniques with the goal of finding facts and presenting results in terms of numerical descriptions (Seliger & Shohamy, 2001; Nunan, 1992).

There are several characteristics of qualitative research to be mentioned. As this type of research studies behaviors of the participants in natural settings, it does not try to pretend artificial situations or control variables. It focuses on a small number of participants, groups or settings rather than making broad generalizations about a large population based on particular characteristics (Richards, 2003).

Creswell (2012) claims for the need to incorporate complex reasoning between inductive and deductive when collecting data of participants in this type of studies. He notes that the analysis is based on a wide range of features, instead of a single feature as it can be found in experimental research. Seliger and Shohamy (2001) suggest that in qualitative methods the behavior of the subjects must not be affected or manipulated; human behavior is inquired and described yet. Lastly, qualitative research uses quantification when appropriate in a way to code qualitative data to be statistically analyzed (Strauss & Corbin, 1998).

Qualitative research has become increasingly important for social sciences such as education, most commonly used in the field of L2 education. Accordingly, research in L2 education is still very new and continues to evolve. It was in the 1950s-60s when second language research became an effective tool for studying the teaching-learning process as a way to demonstrate the suitability of one language approach over another (Seliger & Shohamy, 2001).

Having described the main characteristics of qualitative inquiry and how it differs from quantitative research, it is necessary to make a decision upon which of these two approaches best help us achieve the objectives in our study. Following we explain the main criteria used to select the approach that best suits the focus of this investigation. We feel a need to carry out this research from a perspective that enables us to obtain rich, descriptive information to analyze what happens in content classes and what the practices of professors are when teaching those

classes. Thus, qualitative inquiry enables us to obtain comprehensive and expository data about what actually happens in the teaching-learning process of the subject-matters in the undergraduate English teaching program at Unicolombo and allows the identification of competences that professors have and need to have to teach through a CBI approach. Therefore, we have decided upon qualitative rather than quantitative research for the purpose of our study design.

By conducting a qualitative study, we are able to collect the kind of data that is not easily represented by numbers. Namely, professors' experiences, students' perceptions of the teaching-learning process, observational data, to name a few. This kind of data is best analyzed and presented in textual form, rather than reducing it to statistical analyses.

3.2 Type of study

Qualitative inquiry uses a variety of methods to have different perspectives of a complex social phenomenon. Richards (2003) presents seven types of design options relevant to language research: ethnography, grounded theory, phenomenology, case study, life history, action research, and conversation analysis.

This study uses an analytical-descriptive case study as a research strategy. Case study is one of the several forms of social science research. A case study can be considered a methodology, strategy of inquiry, or research method. "As one

of important research methods, case study research has been used for many years across a variety of disciplines" (Qi, 2009, p.21).

Case study can be defined in a variety of ways. Nisbet and Watt (1984) define it as "a specific instance that is frequently designed to illustrate a more general principle" (p.72). Adelman et al. (1980) exemplify instance as a student, a class, a school, a community that is studied in action. In other words, "a researcher may select an instance from the class of objects and phenomena one is investigating and investigates the way this instance functions in context" (Cohen et al., 2007, p.81).

Case study is differentiated from other research methods because its focus is in a case; "research lies in delimiting the object of study: the case" (Merriam, 1998, p. 27). Yin (1994) views it as "an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used" (p.23). More recently, Cresswell (2007) defined it as "a qualitative approach in which the investigator explores a bounded system (case) or multiple bounded systems (cases) over time through detailed, in -depth data collection involving multiple sources of information" (p.73).

To sum up, a case study, involves the study of an issue through specific cases. In case studies, emphasis is placed on the exploration and description; they offer the researcher "an insight into the real dynamics of situations and people"

(Cohen, Manion & Morrison, 2007, p. 258). An important point to highlight is the extent to which the perceptions obtained in this type of study can be applied to other cases (Nunan, 1992).

Having established what a case study is, we can outline some important features of case study. This research method allows an in-depth understanding of the case/cases in their context. "Case studies observe effects in real contexts, recognizing that context is a powerful determinant of both cause and effects" (Cohen et al., 2000, p.181). Moreover, it highlights specific events relevant to the case and provides a rich description of them. It focuses on an individual participant or group of participants. Here, the researcher is actively involved in the case.

Our choice on the type of study depends in large part on our research questions. Case study research will be relevant to help explain some present circumstances of the subjects that are taught in English at the undergraduate English teaching program and of the CBI competences needed by the professors who teach them. We also believe that a case study design is the most suitable for gathering data on our research objectives and contributes to the description of the particular phenomenon. It helps increase our understanding of the issues involved in our context.

Since our study uses an analytical-descriptive case study as a research strategy, it is essential to collect information from different sources. The data collection in case study is commonly extensive. Yin (2003), suggests six types of

information to collect: documents, archival records, interviews, direct observations, participant-observations, and physical artifacts. Some of these are used in our study and contribute to provide a detailed description of the case and then to focus on key issues of analysis, as well to an interpretation of the results.

3.3 Description of units of analysis

3.3.1 Professors

This case study involves seven professors that teach content subjects in the undergraduate English teaching program at Unicolombo (See Table 5.). All of them are Colombian except for one who is a native speaker.

Table 6.
UNICOLOMBO professors' data

Professors	Bachelor's degree	Postgraduate study
Professor 1	Language Arts in English Teaching	Diploma Course in English Teaching Candidate to Master in English Teaching
Professor 2	Psychology	Diploma Course in English Teaching
Professor 3	Language Arts in English Teaching	Master in English Teaching as a Foreign Language
Professor 4	Language Arts in English and French Teaching	Diploma Course in English Teaching
Professor 5	Sociology	Candidate to Master in Sociocultural Studies
Professor 6	Language Arts in English Teaching	Diploma Course in English Teaching
Professor 7	Language Arts in English Teaching	Diploma Course in English Teaching

3.3.2 Students

This research focuses on the undergraduate English teaching program students from second to tenth semester, 605 in total. This population was chosen since these students attend subject-matter classes in English. The participants in the survey conducted were 242 students.

3.3.3 Content subjects

There are 23 subjects taught in English, from which eight classes were observed. The classes observed were: Communication I, Communication II, Communication III, History of Language teaching, The Nature of Language II, The Nature of Language III, The Nature of Language V and Didactics I. Some of these classes are language oriented (Communication I,II and III) however, the oral and written texts that are used in the classes are taken from the classes that are content oriented that were also observed. Some of these classes are also from the previous curricular plan.

3.4 Description of data collection procedures

This section of the chapter discusses the specific data collection techniques and instruments that we used in this study. In qualitative types of research where a unit is studied in its natural context, information is often gathered by different techniques of data collection. The use of more than one source of data guarantees

the process of triangulation and the viewpoints from different perspectives and sources.

The procedures and instruments for data collection should suit the research design. "The use of a case study database, in the form of notes, documents, tabular materials, and narratives, enables the researcher to organize and maintain raw data, and it increases the reliability of the case study" (Brown, 2008, p.4). As stated by (Merriam, 1988, p. 16), "case studies are particularistic, descriptive, and heuristic and rely heavily on inductive reasoning in handling multiple data sources".

Having chosen the qualitative paradigm and the case study method, the most appropriate techniques according to the objectives of our research study are the following: focus group interviews, class observations, tests and surveys. Next, we describe each selected data source along with the rationale behind the choice and application of each.

3.4.1 Focus group interviewing

The technique consists on interviewing a group of participants that are generally seven to ten people that share certain characteristics that are relevant to the problem of the study (Marshall & Rossman, 1995). The composition of the groups should ensure the participation of all the members. The person who asks the questions is the interviewer or moderator and should have training in conducting this type of interview to obtain accurate information.

Morgan (1997) suggests that the topic chosen for discussion has to be one that all participants know, thus they are able to say something about it. He adds that homogeneity has to be in participants' backgrounds and not in attitudes, in order to have different perspectives to be examined between the groups. "The trick is to promote the participants' self-disclosure through the creation of a permissive environment" (Marshall & Rossman, 1995, p. 84)

One of the main advantages of this technique is that it is socially oriented, allowing the study of participants in natural settings and the analysis from the different perspectives that could be examined between the groups. The researcher observes a large amount of discussion on a topic in a limited period of time. Additionally, focus groups make it easier to conduct less structured interviews. However, if all the participants have the same perspectives on a topic, this can lead to worthless debates.

A disadvantage of this technique is that the interviewer has less control of the discussion than if it were and individual one (Marshall & Rossman, 1995). Also, the differences that could exist among the participants can affect their participation. Sex differences, social background and lifestyle are factors affecting the participations. "Participants must feel able to talk to each other, and wide gaps in social background or lifestyle can defeat this requirement" (Morgan, 1997, p. 7).

We chose to use focus group interviewing because it allows us to know in a direct way about the professors' views and perceptions of CBI as an approach to

teach subject-matters and about the approaches and methodology they currently use in their classes. That is why a focus group was conducted at the beginning of the study with a group of seven teachers of the program that teach content subjects. Seven questions were asked in a form of interview (See Appendix A). The interviewer, which was one of the researchers, asked the questions while the other two researchers participated in the discussion of the interviewing session.

Furthermore, in order to get to know students' perceptions about their learning process with subjects in English, a focus group was conducted the same day with a group of 10 students of the program from different semesters. Five questions were asked during the discussion (See Appendix A). Both focus group were conducted in Spanish and recorded for further analysis. It was fundamental for us to gather data of both, students' and professors' perceptions in this process for further analysis in our study.

3.4.2 Observations

They are a research technique commonly used by the researchers to collect data that support the research purpose (Kothari, 2004). When using observation, the observer can assume different positions. The observer may take five stances: a complete participant, participant as observer, observer as participant, complete observer and a collaborative partner, where the researcher and participant are complete partners in the inquiry process (Merriam, 1988). Observations can be

carried out by the teachers themselves, colleagues, students or by outside observers.

Observations allow the researcher approach the subject to better understand behaviours and interactions among the participants. DeWalt and DeWalt (1998) believe that "the goal for design of research using participant observation as a method is to develop a holistic understanding of the phenomena under study that is as objective and accurate as possible given the limitations of the method" (p.92). Moreover, Marshall and Rossman (1995) note that "observation entails the systematic noting and recording of events, behaviors, and artifacts (objects) in the social setting chosen for study" (p. 79).

Data from observations is usually collected through checklists; but sometimes it is used without a questionnaire or other instruments. In descriptive observation, the researcher defined the focus in advance and defined the instruments that will be used to record data from the observation process. Observational schedule, a checklist or evaluation sheets are some observational tools to be used (Wallace, 1998; Seliger & Shohamy, 2001).

While using this technique, the researcher has to be clear on what to observe, how she/he is going to record data from the observation and to what extent is the observation accurate. Depending on the characteristics of the observation, it can be a structured observation, or an unstructured observation. In structured observations a careful definition of the units to be observed is

established previously; also the style of recording data collected implies the use of standardized conditions. Though, unstructured observation happens without considering these characteristics in advance (Kothari, 2004). Besides, Kothari (2004) exposes the participant and non-participant types of observation in the area of social research. He notes that the difference depends upon the researcher sharing or not his life with the participants or the group he/she is observing. If the observer is a member of the observed group, it will be a participant observation. But, if the observer observes " as a detached emissary without any attempt on his part to experience through participation what others feel, the observation of this type is often termed as *non-participant observation"* (Kothari, 2004, p. 96)*.* Lastly, Kothari presents the distinguished type of observation as that the observer does without being noticed by the observed group.

There are several advantages of using observation over other methods of data collection. These include that it affords access to culture; it allows for richly detailed description of behaviors, intentions, situations, and events as understood by one or more informants; and it provides opportunities for viewing or participating in unscheduled events (de Munck & Sobo, 1998).

The quality of observation depends upon the ability of the researcher to observe, document and interpret what has been observed. Schensul, Schensul, and LeCompte (1999) note as a disadvantage that observation is filtered through

one's interpretive frames and that "the most accurate observations are shaped by formative theoretical frameworks and scrupulous attention to detail" (p.95).

We chose to use structured observations since they allow gathering data directly as the teaching/learning activity takes place. SIOP observational checklist was used to do the observations. This checklist was chosen in advance since it puts together the main practices that a CBI teacher should follow while working under a CBI approach. Also, classes observed were recorded for further revision.

This technique enables us to see in detail how professors deal with CBI methodology during the instruction and the practices they carried out during it. Additionally, we looked at learners' performance as they interacted with content and language in the subject-matters. The researchers observed 12 classes that are all taught in English in a programed period of two weeks. An observational schedule was organized in order to have a balance between classes observed from the previous program and from the new program. (See Appendix B). Observers were the same three researchers in this study and a graduate student of the program who is member of a student's research group of the University that supports different research processes in the program. There were four observers in total for the class observations.

Due to different circumstances with the classes during the two weeks schedule, some teachers were not observed and a new week for observations was programed afterwards. As teachers were not informed about the observation

schedule, some of them have planned different activities with their students, such as sessions for students' work revisions. Teacher 7 could not be observed in the end.

SIOP observation checklist was chosen to record the practices of the professors during the class. Results of the observation are reported using the five-point scale from 0 to 4 provided by the instrument, being zero the lowest score and four the maximum Also, there is a space for comments to write and clarify specific actions that occur during the class. Check for a sample of the instrument applied to professors in Appendix C. This instrument permits us to verify what competences that Unicolombo professors of the undergraduate teacher program already have and point out other competences that need development.

3.4.3 Standardized tests

This is a technique used to get information regarding specific ability of people through different types of questions. Standardized testing means that a test is "administered and scored in a predetermined, standard manner" (Popham, 1999, p. 43). In this type of tests, all the questions, instructions and scoring are the same for all the test takers; they take the test in the same conditions and at the same time. Therefore, results can be attributed to student performance and not to differences in the administration or form of the test (Wilde, 2004).

All standardized tests must meet standards for reliability, validity, and lack of bias. Reliability means that the test is so internally consistent that a student could

take it repeatedly and get approximately the same score; validity means that the test measures accurately what it is intended to measure. Tests must be unbiased, that is, students must not be at a disadvantage no matter what ethnic or social group they belong to (Zucker, 2003; Bracey, 2002; Joint Committee on Testing Practices, 2004).

There are multiple advantages of these types of tests. They are practical and easy to administer. They allow educators compare scores and performance of the individuals or group of individuals that take it. Since standardizing testing results are quantifiable, educators can identify proficiency levels of students more easily. A disadvantage could be that most items in the tests assess general knowledge and understanding rather than higher-level thinking skills.

In this case study, two tests were chosen because of their international validity in determining the language proficiency of the professors, in the case of MET; and language teaching pedagogy and content pedagogy in the TKT CLIL.

The TKT CLIL was administered to seven professors who teach subjects in English. TKT CLIL test is an optional extension model of the teaching knowledge test. A sample of the test is presented in Appendix D.

TKT CLIL tests knowledge of Content and Language Integrated Learning and concepts related to a CLIL approach. It tests knowledge about subject teaching in a target language and the learning, thinking and language skills which are developed across different curriculum subjects. It tests knowledge

of how to plan lessons as well as knowledge of activities and resources used to support a CLIL approach. It also tests knowledge of teaching strategies and how assessment is carried out in CLIL contexts. (Teaching Knowledge Test (TKT) Content and Language Integrated Learning (CLIL) handbook for teachers).

This test examines four main areas about CLIL:

- General knowledge of the approach.
- Knowledge about the teaching, learning, thinking and language skills.
- How to plan lessons and the kind of activities and resources used to support the approach.
- Knowledge of strategies and assessment.

A deeper description of each area of the examination is presented in Appendix E.

TKT CLIL test contains 80 questions and was to be answered in 80 minutes (one hour and twenty minutes). This test aims to examine professors' knowledge of concepts related to a CLIL approach and knowledge of the practice of planning, teaching and assessing curriculum subjects taught in a second or foreign language. The TKT CLIL test ranks the candidates in four bands: band 1, band 2, band 3 and band 4. The following chart contains information regarding the indicators of percentage scores to bands in TKT CLIL.

Table 7.
Indicators of percentage scores to bands in TKT

Band	Indicators	%
1	Limited knowledge of TKT of content areas	0 – 25%
2	Basic but systematic knowledge of TKT content areas	26 – 56%
3	Breadth and depth knowledge of TKT content areas	57 – 80%
4	Extensive knowledge of TKT content areas	81 – 100 %

Additionally, the MET test was administered to six professors in the program. This is an international examination designed and scored by the University of Michigan English Language Institute. It assesses general English language proficiency in social, educational, and workplace contexts. The MET consists of three parts: MET Listening, Reading and Grammar, MET Speaking and MET Writing.

The first part is the Listening, Grammar and Reading test which consists of 135 multiple-choice questions in two sections:

Section I: Listening (approximately 45 minutes). 60 questions assessing the ability to understand conversations and talks in social, educational, and workplace contexts. Section II: Grammar and Reading (90 minutes). 25 questions testing a variety of grammar structures.50 reading questions assessing the ability to understand a variety of texts in social, educational, and workplace contexts. The vocabulary is assessed in the listening and reading sections.

The second part is MET speaking. This part measures the test taker's ability to communicate comprehensible discourse in response to five tasks in which the

examinee must describe a picture, talk about a personal experience, give an opinion and express the advantages and disadvantages of a particular situation. This part takes approximately 10 minutes.The description of the tasks are the following:

- Task 1: The test taker describes a picture.

- Task 2: The test taker talks about a personal experience on a topic related to what is seen in the picture.

- Task 3: The test taker gives a personal opinion about a topic related to the picture.

- Task 4: The test taker is presented with a situation and will have to explain some advantages and disadvantages related to that situation.

- Task 5: The test taker is asked to give an opinion on a new topic and to try to convince the examiner to agree with the idea.

The fourth part is MET writing. This part intends to assess the test taker's ability to write texts in English in at the sentence level, the paragraph level and a short essay. The MET writing requires the test taker to develop two tasks: In the first task, the test taker must answer three questions to connect ideas together. In the second task, the test taker is asked to write an essay based on a prompt given in advanced.

The MET writing takes 45 minutes to complete. It is evaluated based on the range of vocabulary, connection of ideas, grammatical accuracy and use of mechanics.

Table 8.
MET: Scores and the levels in each section

Sections	Scores	Level (CEFR)
Listening, grammar-reading and interview	39 or below	A2
Listening, grammar-reading and interview	40-52	B1
Listening, grammar-reading and interview	53-63	B2
Listening, grammar-reading and interview	64 and above	C1

(Source: Cambridge Michigan Language Assessment CaMLA)

For a deeper description of each level in the three components check Appendix F.

Six professors (out of seven) took the MET test. The first section of the test (Listening, Grammar and Reading) of the test was given by The Centro Colombo Americano de Cartagena in 2014 and the second section (Speaking) was done in 2015. The Writing section was not done. Professor 1 does not have any results.

3.4.4 Surveys or questionnaires

They are the most commonly used techniques in educational research. Their purpose is "to obtain a snapshot of conditions, attitudes, and/or events at a single point in time" (Nunan, 1992). Researchers administer them to a sample of a population in order to learn about their attitudes, behaviors, thoughts or beliefs. "The survey is the preferred method if the researcher wishes to obtain a small

amount of information from a large number of subjects" (Marshall &Rossman, 1994).

Checklists and rating scales are used in surveys. These devices help simplify and quantify people's behaviors and attitudes. A checklist is a list of behaviors, characteristics, or other data that the researcher is looking for. Also a rating scale is useful when a behavior needs to be evaluated on a continuum. They are also known as Likert scales (Leedy & Ormrod, 2001).

There are several advantages of administering surveys, especially when gathering data from a large population. They are easy instruments to be used even when there is a large number of people to reach. Another advantage is that some people feel more comfortable to express their opinions when responding a survey than in an interview. Surveys reduce sampling error and sampling bias because the same questions are asked to all respondents (Finn & Jacobson, 2008). A disadvantage is that some respondents may not answer the survey completely resulting in low responses rates and due to the lack of contact of the researcher with respondents; the researcher never knows who really completed the survey.

We considered using surveys since they are a fast way to obtain information from a large population. Students always offer valuable information to researchers in the field of education. A sample of students from the program was taken from the total population. First, a pilot testing of the survey was applied to a group of students that take several classes in English and represent our intended sample.

The purpose of piloting was to make sure that everyone in our sample understands the questions and in the same way. Also, this piloting enables us to know if the questions were appropriate to gather data about professors' practices and how long it takes the learners to complete the survey in real time.

We paid attention to instances when respondents ask for clarification. Two questions were improved because some concepts were not clearly stated and some students asked for clarification during the piloting.

Following the piloting testing of our survey, 242 students of the program were asked to complete it. This number was calculated through the Estimation and sample size determination for finite population formula.

The survey aimed to determine the students' perceptions of the methodology that professors use to develop their classes taught in English in the program. The students who completed the survey belong to all the semesters except the first one because they have not taken any classes in English. It was conducted in Spanish to assure a better understanding of each item and more trustfulness of the results.

The survey consists of 29 items adapted from the SIOP observational checklist which are expressed in terms of actions that a CBI professor must develop in the class. In those 29 items, the students had to mark one of the five choices in each item: 1. None (no professors), 2.A few (professors), 3.Some

(professors), 4. Many (professors) and 5. All (the professors). See Appendix G. for a sample of the survey administered to the students.

Additionally, the questions in the survey are grouped in seven components all addressing teachers' practices. Lesson preparation is the first component. It focuses on the presentation, development and revision of the objectives of the class, content and language objectives. Development of activities and use of the materials is the second component of the survey; it seeks to know if the professors use supplementary materials in their classes and if the activities are significant and integrate reading, listening, writing and speaking skills. The third component is Building background; it attempts to evaluate if teachers connect background knowledge to new knowledge and the way new vocabulary is introduced. While the fourth is about Comprehensible input and identifies if professors use techniques to make concepts and explanations more clear. Component five is Strategies; it aims to know how much these are used in the class. Then, component six, Interaction and motivation, it determines the kind of interactions promoted by the professors in class (students-students and/or teacher- student). Lastly, component seven, Review and assessment, it checks the amount of feedback that the professors give to their students and if they review concepts and vocabulary in different moments of the class.

3.5 Triangulation

Triangulation is a technique where two or more data collection instruments are used to compare information obtained from different sources, especially in the studies of some aspects of human behavior. By triangulating data, the researcher attempts to provide "a confluence of evidence that breeds credibility" (Eisner, 1991, p. 110). Through this, the researcher can corroborate if data matches or not, giving more validity to results. Triangulation helps the researcher "guard against the accusation that a study's findings are simply an artifact of a single method, a single source, or a single investigator's bias" (Ho, 2008, p. 64).

We used several instruments from where data is triangulated, they are: focus group, observations, tests and surveys. This helps us explain the results of this research project more deeply. The following table summarizes the techniques we used in the study and the purpose and objective of using each one.

Table 9.
Summary of data collection

Technique	Purpose	Objective
Focus group to teachers	To know in a direct way about the professors' views and perceptions of CBI and methodology they use in their classes.	To characterise the CBI methodological competences that the professors need to teach subjects in English.
Focus group to students	To know students perceptions about their learning process with subjects in English.	To characterise the CBI methodological competences that the professors need to teach subjects in English. To describe the English proficiency level of the professors.
Class observation	To see how professors deal with CBI methodology during the instruction.	To characterise the CBI methodological competences that the professors need to teach subjects in English. To describe the English proficiency level of the professors.

Standardized tests	TKT CLIL. To get information regarding professors' knowledge of concepts related to a CLIL approach and knowledge of the practice of planning, teaching and assessing curriculum subjects taught in a second or foreign language.	To describe the English proficiency level of the professors. To characterise the CBI methodological competences that the professors need to teach subjects in English.
	MET. To know professors' English language proficiency in social, educational and workplace contexts.	To describe the English proficiency level of the professors.
Survey	To gather information about students' perceptions of the methodology that professors use to develop their classes taught in English.	To characterise the CBI methodological competences that the professors need to teach subjects in English.

3.6 Data collection analysis

After collecting data, the analysis of this data is essential to ensure that we have enough relevant information to make comparisons and examination. Data has to be processed and analyzed "in accordance with the outline laid down for the purpose at the time of developing the research plan"; it implies "editing, coding, classification and tabulation of collected data so that they are amenable to analysis" (Kothari, 2004, p. 122)

Different operations were done with the information obtained to be able to analyzed it. First, we had to codify the information for the analysis. We assigned each professor a number so we do not use their names in the analysis. The professors selected for the study are called professor 1, professor 2, professor 3, professor 4, professor 5, professor 6 and professor 7 in the analysis and the

results. We also codify questions of the survey and the observation instrument when tabulating data.

The analysis of the focus groups was done based on the information provided by the students and professors that participated in the interviews. We transcribed their answers to the questions of the interview session, then analyzed them reaching conclusions that relate to the research objectives.

For each of the observations done, we checked that all the answers were complete reporting a score for each question. We also read the information that was written by the observers in the spaces provided for qualitative data and listen to the recordings to make comparisons with the scores reported. Then, we calculated an average score of the results obtained in each question for all the professors. This information was tabulated and represented in a general line graph. Six individual line graphs were done later, one for each of the six professors with the results of each professor's observations. A descriptive analysis reaching conclusions was done for each of the graphs.

The analysis of the tests was based on the results reported by the same test. In the MET test, as it was explained in the data collection techniques' description, professors were assigned an English language proficiency level according to the scale offered by the CEFRL, from A2 to C1. Results of all the professors' tests were organized and represented in a table by skills (Listening, Reading/Grammar and Speaking). Then, we made an analysis of what each level

means in terms of the professors' ability in three domains of the language following the CEFRL description chart for the classification in levels and skills. We do not have results of the writing skill since the writing test was not administered.

The results obtained from the TKT CLIL were also tabulated and represented in bar graphs. Two bar graphs were done. The first, is a general one that represents the total score obtained by each professor in bands from one to four, being band four the ideal for a professor who teach subject-matter classes in English. But, in that first graph, we could see the bands for each of the professors and not the lacks they have regarding the four areas of knowledge that the test tested. For this reason we did a second graph that represents the results of the professors in the four specific areas of CLIL teaching knowledge. This last graph allowed us to made an analysis of points for teacher development in CBI/CLIL competences.

Data collected from students' surveys was revised to check for completion. Then, we tabulated data and made a general graph with the results of the 29 questions or items. A description with the results of each of the items in the survey was done.

Since the survey contains seven components of best professors' practices, results of the 29 items were explained by components to have a clear view of what competences professors already have or not. Therefore, one graph for each component was done with the total score percentage of the items corresponding to each component. Results in each components' graphs were interpreted and

analysed from the illustration of high and low results and the matching or mismatching points of the professors' practices. A descriptive analysis was written reaching conclusions of the best professors' practices and practices that need development for professors to be able to teach content classes in English.

Lastly, a contrast in the perceptions of students from second to fourth semester and the perceptions of students from fifth to tenth semester was observed. Results from the former pointed out higher percentages, while results from the latter evidenced lower percentages. Accordingly, two more graphs were done with the results from students' surveys. One graph corresponds to the results of students from second to fourth semester and another graph with the results of the students from fifth to tenth semester. The difference on students' perceptions of their teachers' practices led us to analyze the results in terms of students from the new program and students from the previous program.

3.7 Limitations of the study

- Observations: 12 observations were carried out on an average of two observations per teacher. In some cases, just one observation could be done and in one case, the teacher could not be observed. More observations could have been done in order to give more consistency to the study.

- Time: The volume of data required in case studies makes analysis and interpretation time consuming. Therefore, results can be more difficult and time consuming to characterize in a visual way.

- The writing section of the MET: This section was not included in the proficiency test that was administered to teachers. It is evident that CBI teachers should be competent in writing thus the results of the Writing MET would have led more lights to the present study.

4. Results

This chapter shows the resulting data gathered through the development of this research project. As it was mentioned in the methodology chapter, the instruments and techniques used to get these results are focus groups to teachers and students, surveys to students, the TKT CLIL test, the MET test and class observations.

4.1 Focus groups

Two focus groups were carried out, one for professors and one for students. The focus group for professors aimed at gathering data about the knowledge professors had about the CBI approach and to know how they taught the subject-matter classes in English. The main objective for the focus groups to students was to know their perceptions regarding their experiences in classes taught in English.

4.1.1 Focus group with professors

During the session, professors were motivated to participate in the discussion. They demonstrate commitment with their classes as they all expressed that they use a variety of techniques to make their classes meaningful to students aiming to encourage them to learn the content and improve their language skills. Eventhough, it is evident that they do not agree in the models they must use to develop their classes in English, due to the varied responses in this topic. The

professors expressed that they use different models to teach subjects in English but not a specific one. Some of them claim to be constructivist while others say they use the Communicative approach to teach the subjects in English. Some professors pointed out that they do not based their teaching on any methodological approach.

> Professor 4: "Para mis clases, yo basicamente uso el enfoque comunicativo, tratando de integrar las cuatro habilidades en el desarrollo de cada actividad que los muchachos deben hacer…"
>
> Professor 2: "Bueno, ehh. Estoy de acuerdo con Professor 4, mis clases se fundamentan en el enfoque comunicativo y para las actividades o tareas usamos task-based instruction, ehh... que hace que los estudiantes vean esos tasks de manera significativa…"
>
> Professor 6: "el constructivismo es la base de mis clases, la idea es hacer que los muchachos construyan sus propios saberes a partir de sus propias experiencias y las actividades que se desarrollan en el aula..."
>
> Professor 7: "El enfoque comunicativo es definitivamente lo que apoya mis clases…"
>
> Professor 3: "Al hablar de enseñanza por contenidos, podría decir que no tengo claro el enfoque usado para este tipo de metodología…"

In terms of benefits and drawbacks the students face in content classes taught in English, the professors highlighted that the main benefits in this kind of classes is that students learn new vocabulary related to their field of interest and that students practice their language in class. On the other hand, the professors also pointed out some difficulties in the development of the classes. They claimed that students are usually reluctant to read, as a consequence, they believe that students lack reading strategies and skills and this factor hinders their reading

comprehension and affects the whole process of learning. Another drawback is the students' low English proficiency level; According to the professors, this problem is evidenced in the poor quality of the participation of the students in class.

> Professor 2: "...Pienso que el beneficio más importante para los estudiantes es el hecho de que ellos practican y mejoran el inglés que traen del Centro Colombo americano… y con relación a las dificultades… creo que es que los estudiantes no les gusta leer y esto atrasa el proceso…"

> Professor 5: "Sí, los estudiantes tienen la oportunidad de practicar su inglés y adquieren lenguaje académico y aprenden vocabulario nuevo relacionado con su carrera…"

> Professor 1: "Una de las mayores dificultades que enfrentan algunos estudiantes es su bajo nivel de inglés, esto les dificulta entender y participar en clase"

Regarding the methodology that professors use in content classes taught in English, the professors claimed that they do not establish any difference between the classes they teach in Spanish and the ones they develop in English, the only difference is the language of instruction. This means that they do not plan their classes determining language objectives, they only set content objectives because they take for granted that the students learn the language automatically.

> Professor 2: "La única diferencia en clases en español e inglés es el idioma, las enseño de la misma manera…"

> Professor 6: "La verdad… ehhh, no hago énfasis en la lengua, solo se usa el Inglés para comunicarse con los estudiantes y dar la clase…"

> Professor 1: "No escribo objetivos de lengua, solo de los temas de la clase"

Another topic discussed in the focus group was the knowledge that the professors have about CBI/CLIL approach and how much of it they use in their

classes. All of the professors mentioned that they did not know much about this methodology and as expected, they do not teach their classes in response to this, but they manifested that they are interested in knowing more about this approach and how to apply it in their classes.

> Professor 4: "para ser honesto, no tengo muy claro el enfoque CBI o CLIL y por ende pienso que no la uso en mis clases… ehhh, bueno tal vez si, sin darme cuenta. Algo debe haber de CBI o CLIL, las clases se hacen en Inglés y los estudiantes aprenden"

> Professor 7: "Sé que es CBI o CLIL, sin embargo no tengo claridad de su correcta aplicación en clase… me gustaría conocer más sobre este enfoque. Considero que lo necesitamos para mejorar nuestra metodología."

4.1.2 Focus group with students

Students expressed that the subject-matter classes are usually taught in English and that the English level of proficiency of their professors is excellent, but they also said that professors make more emphasis in the teaching of content rather than in the language. They neither feel that there is an emphasis in the language during the instruction, nor a balance between content and language objectives. Students stated that teachers rarely pay attention to the language and that they incidentally correct their language mistakes. Also, that they only evaluate the content in the exams.

> Student 4: "La verdad es que las clases se dictan casi siempre en inglés, se usa español para despejar dudas y esas cosas. En cuanto a los exámenes, los profesores no corrigen mucho el Inglés, evalúan más los temas de la clase…"

> Student 7: Los profesores dan sus clases en inglés, este… ehhh unos pocos corrigen si uno se equivoca, no todos. En los exámenes lo importante es que uno diga los temas que enseñó…"

Students pointed out that the methodology professors use in the content classes taught in English is not different from the classes in Spanish. They consider that classes are all usually teacher-centered. Thus, there is not a specific methodology to teach the classes in English. Moreover, students expressed that teachers do not state the objectives of the class, neither the content nor the language objectives. This means, teachers are not using good practices to prepare and deliver their lessons as it is highlighted in the SIOP model.

> Student 1: "Las clases que hemos tenido en inglés prácticamente se dan igual a las clases en Español, lo único que es diferente es el idioma. Los profesores algunas veces nos dicen el objetivo de los temas, pero de Inglés no…"
>
> Student 5: "Rara vez los profesores nos corrigen si cometemos errores en Inglés, solo cuando es muy grave, yo creo que lo más importante es que sepamos de lo que estamos hablando, osea, del tema"
>
> Student 9: "...Unos si le ponen atención al inglés, otro no, pero se le pone más atención a los temas…"

The main difficulty that students face when attending their content classes is related to the focus of this study. Students said that not all of them have the same English level, there are mixed ability levels in the classes, most of them have a low English level and are struggling with the reading and comprehension of texts assigned by the teachers in English. Few of them participate in class because of the lack of ability they have to produce comprehensive speech in response to a topic. However, students see their content classes as a way to practice their English and learn new vocabulary.

Student 7: "...yo creo que el problema más grande es que algunos de nosotros no se sienten seguros de hablar en clase porque les da miedo equivocarse y es porque algunos tienen…. o tenemos un nivel de inglés un poco bajo…"

Student 3: "...escribir y leer en inglés es lo más difícil. Uno a veces lee pero no entiende todo y toca traducir y no es lo mismo…"

Student 10: "...nos equivocamos bastante y nos da pena hablar, entonces no participamos mucho, los profesores son los que hablan más en clase…"

Finally, students highlighted the language proficiency level of the professors, they mentioned that all the classes are taught in English and the professors make their biggest effort to help them understand the concepts and the instructions of the lesson.

Student 4: "el nivel de inglés de los profesores en general el bueno, se les entiende muy bien y explican bien…"

Student 2: "los profesores tienen muy buen inglés y es fácil entenderles. La mayoría de ellos también trabajan en el Colombo y enseñan inglés

Student 8: "...los profesores explican bien y si no entendemos nos explican más…"

4.2 Survey to students

In this chapter, the data resulting from the survey is presented. Firstly, we analyze a general graph containing the information of the 29 items of this instrument. Secondly, we also interpret the same data divided in the seven components of the survey. Finally, we study and interpret the results in two big groups: one contains the information that the students from second to fourth semesters provided, and another that has the data from the students from sixth to tenth semesters aiming to identify the different views that this two groups of

students may have regarding the methodology that their professors use in content

classes taught in English, taking into account that from second to fourth semester,

some CBI pilots groups are being implemented.

4.2.1 Analysis of the survey

To start with, we present graph 1 which contains general information of the

survey, we also show the average percentages of the 29 items in the survey.

These items will allow us analyze each one in depth to identify strengths and/or

areas of improvement in professors' CBI competences.
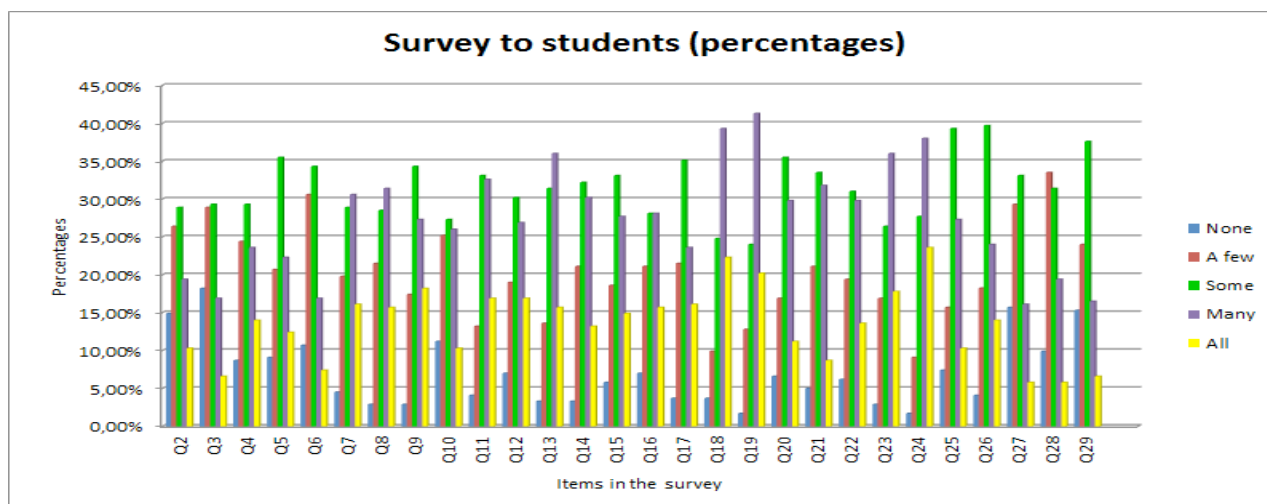
Graph 1. Survey to students results

In graph 1, a general overview of the perceptions the students have in terms

of methodology at the undergraduate English program is presented. We can

observe that the professors' speech is appropriate to the level of language

proficiency of the students. 41% of the students stated that their professors offer clear explanations of the academic tasks and provide them with opportunities of interaction and discussion in class.

It is clear that a great number of students think that only some of the professors are developing their content classes taught in English in response to the methodological requirements of the CBI approach, we can also see that another group of learners pointed out that in some areas a few professors are fulfilling the principles of a CBI lesson. More importantly, it is observable that in all the items some students expressed that none of the professors develop their lessons following the guidelines of the aforementioned approach. (See the complete survey in appendix G)

4.2.2. Analysis of the surveyfrom 2nd to 4th semester and from 6th to 10th semester students

Graph 2 contains the data that students from 2nd to 4th semester provided in the survey.
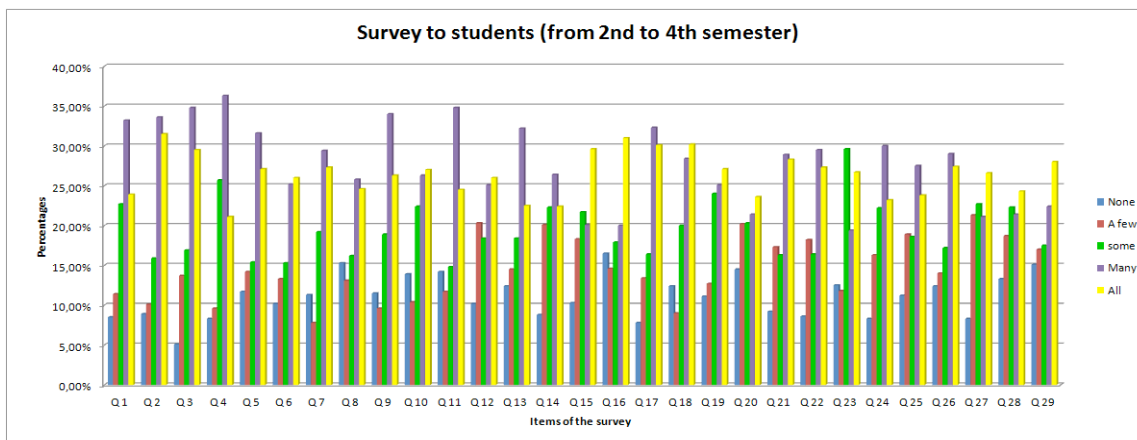
Graph 2. Perceptions of students from 2nd to 4th semester

It is observable that this group of pre-service teachers has a more positive perception of the methodology used by their professors, compared to the students from 6th to 10th semester, in content classes at the program. In item 1, for instance, 33.2% of the students think that their professors show the language objectives at the beginning of each lesson. In terms of activities and materials, a great number of students point out that the professors develop such activities to integrate the language abilities. These students also have good references about strategies and assessment in general terms. On the other hand, a few students think that the methodology does not suit the principles of the CBI approach regarding class preparation, activities and materials, strategies and evaluation among others.

One important consideration to keep in mind is that the students in second, third and fourth semesters may have a different experience to the rest of the students due to the implementation of an updated program that includes a new

subject called "Communication workshop" which has been structured in response to the demands of the CBI approach and the professors in charged of this subject have received training from a piloting teacher development course about the best practices in teaching content and language classes.
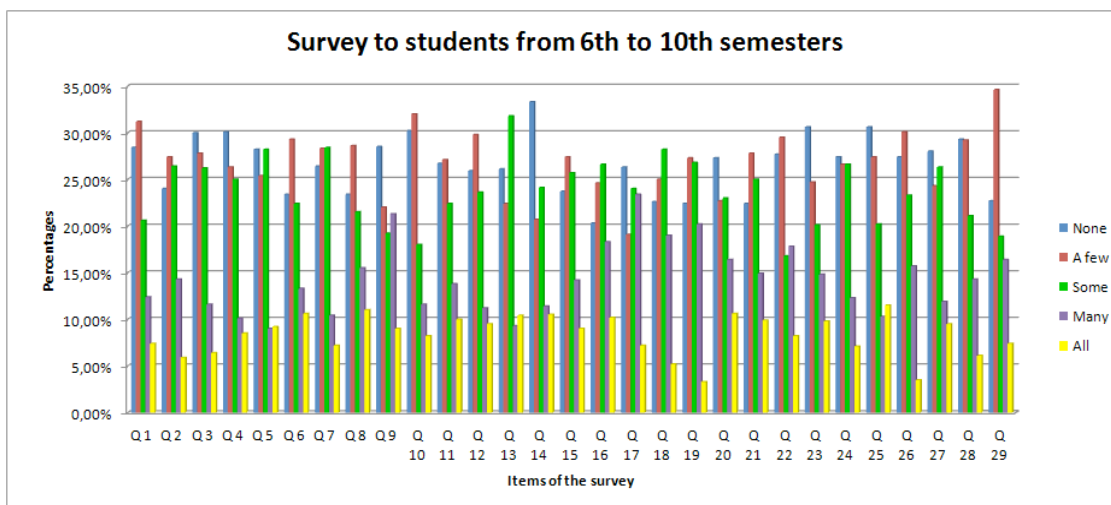
Graph 3. Perceptions of students from 6th to 10th semester

The students from 6th to 10th semester seem to have a more negative view of the methodological process in the program. In general, Most of the students believe that not many professors fulfill the actions needed in the CBI approach for this to be successful. In the graph, we can observe that the survey contestants mark mainly none or a few professors in each of the components of the survey. For instance, more than 25% of the students claimed that a few professors present, discuss and review the language and content objectives; another example is that about the 30% of the students think that a few professors carry out an appropriate assessment process. On average, only about 6% of the students determined that

all professors develop actions in class in response to the CBI approach, which supports the negative perception that these students have in terms of the methodology their professors use in the program.

It is worth mentioning that these students have seen their subjects in the previous study plan and started taking classes in English not in the second semester like the first group of students, but in the fifth semester and they have also had more professors and consequently more experience in the program.

4.2.3 Analysis of the components of the survey

In order to offer a better explanation, we analyze the seven components of the survey in more detail.
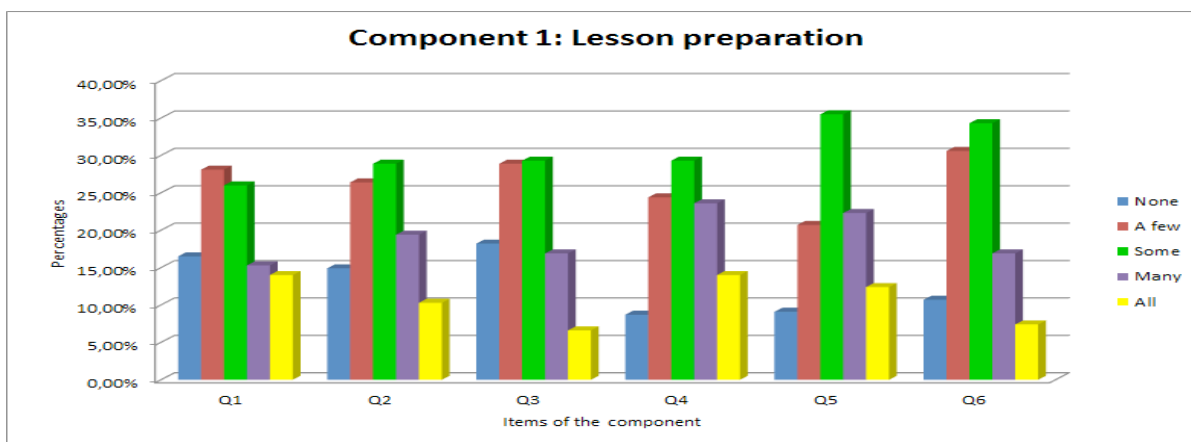
Graph 4. Students' perceptions of Lesson preparation

This component consists of six questions that aim to know what the pre service teachers think in terms of class preparation.

In the first item "Los docentes muestran los objetivos de la lengua al inicio de la clase" 16.5% of the students expressed that none of the professors show the language objectives at the beginning of the class. Also 28.1% thinks that only a few professors present the objectives in the first part of the lesson. At the same time, 15.3% of the students pointed out that many professors show the objectives and a 14% think that all of the professors do so.

In item 2, "Los docentes explican los objetivos de la lengua a los estudiantes", we can see that a 14.9% of the students stated that none of the professors explain the language objectives to students while a 26.4% suggested that a few professors do so. Equally, 28.9% marked the choice "many professors" and only 10.3% agreed that all of the professors give explanations regarding the language objectives at the beginning of each lesson.

In item 3, "Los docentes repasan los objetivos de la lengua con los estudiantes" a 18.2% expressed that none of the professor does this, a 28.9% said that only a few professors fulfill this action, a 29.3% of the students expressed that some professors review the language objectives, a 16.9% thinks that many professors do this and only a 6.6% of the pre service teachers pointed out that all of the professors review the language objectives with them.

In item 4, "Los docentes muestran los objetivos de contenido a los estudiantes", only a 8.7% of the students had the perception that none of their professors present the content objectives at the beginning of each lesson while

more students (29.3%) stated that some professors present the content objectives to start a lesson. A 23.6% of the pre service teachers think that many professors complete this action and 14% of them suggested that all of the professors present the content objectives as a first step of the lesson.

In item 5, "Los docentes explican los objetivos de contenido al inicio de la clase", 9% of the students marked that none of the professors explain the content objectives in the first part of the lesson. 21% expressed that a few professors do it and a 36% of the survey respondent agreed that some professors actually give explanations of the content objectives. 22.3% stated that many professor do this and a 12.4% think that all of the professor do it.

In item 6, "Los docentes repasan los objetivos de contenido con los estudiantes", 11% of the students responded that none of the professors review the content objectives with them, 31% suggested that a few of their professors do this, a 34% of the students pointed out that some of the professor accomplish this item, a 16.9% think that many of their professor review the this kind of objectives and only a 7.4% agreed that all of the professors review the content objectives with them.

The resulting data from component one (class preparation) suggests that:

- the professors at the undergraduate English program are making more emphasis on the content objectives rather than on the language objectives.

- language objectives are not evolving from the lessons topics, it is evident that they are more a matter of incidental correction during the classes.

- according to students, content objectives seem to guide teaching and learning in their classes.

- in general terms, it is clear that not many professors are applying the principles of class preparation in Content based instruction since they are not balancing language and content objectives when planning their lessons,

- however, in some items we can notice that there is a balance in the students' opinions. This may be the result of the different experiences of second, third and fourth semester students of having the communication workshop subject that makes them to have a better attitude towards the methodology in class.

- we also need to consider that the survey respondents have not had the same professors, for instance, eighth or ninth semester students have had more professors that the students from second to fourth semester.
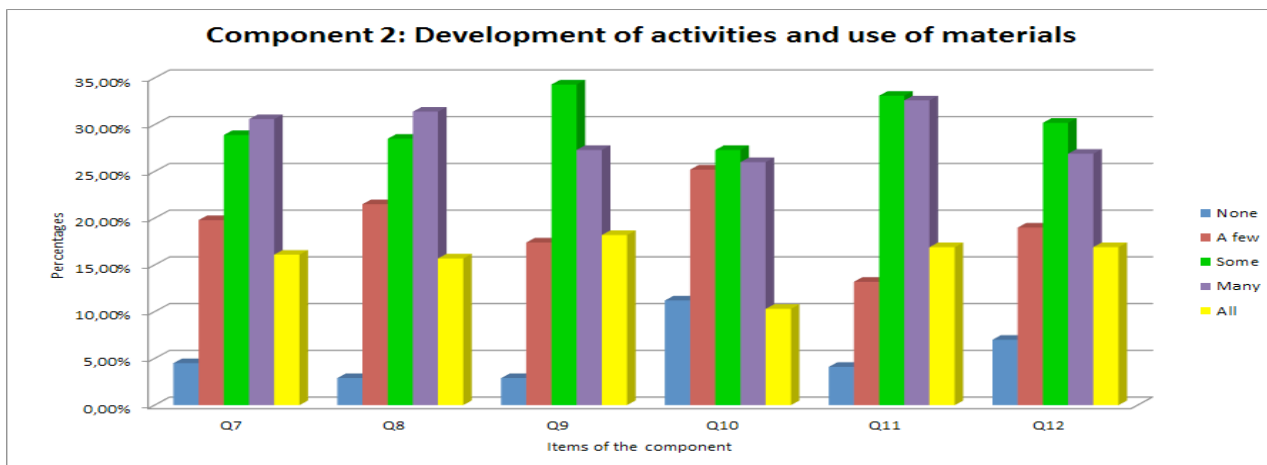
Graph 5. Students' perceptions of the development of activities and use of the materials

This area in the survey aims to determine the students' perceptions in terms of the way professor develop activities and make use of materials in the lessons, which has six items (from item 7 to item 12) and in each one pre service teachers had to mark one of the five options presented.

In item 7, "Los docentes usan material complementario para hacer la clase clara y significativa", only a 4.5% of the students think that none of their professors use supplementary material to make a clear and meaningful class, a 19.8% of them agreed that a few professors fulfill this task, a 28.9% pointed out that some of the professors use this kind of materials in class, a significant 30.6% suggested that many professor do it and a 16.1% think that all of the professors do this.

In item 8 "Los docentes realizan actividades significativas que integran conceptos de la lección con oportunidades para practicar la escritura del idioma",

only 2.9% think that none of the professors do meaningful activities that integrate concepts with opportunities to practice the writing skill, 21.5% of the students expressed that a few professors offer opportunities to practice writing through the activities carried out in class, 28.5% said that some professors do this, a 31.4% agreed that many of the professors link activities in class with the opportunities to practice writing and a 15.7% expressed that all of them do so.

In item 9, "Los docentes realizan actividades significativas que integran conceptos de la lección con oportunidades para practicar la lectura del idioma", only 2.9% of the students marked that none of the professors do activities connected to the reading skill, a 17.4% thinks that a few of their professors do this kind of activities, 34.3% of the pre service teachers pointed out that some professors do this, 27.3% agreed that many professors apply this item in their classes and finally a 18.2% of the students suggested that all of the professors develop activities in order to practice reading in class.

In Item 10, "Los docentes realizan actividades significativas que integran conceptos de la lección con oportunidades para practicar la escucha del idioma", a 11.2% of the students estimated that none of their professors do meaningful activities that integrate concepts of the lesson with opportunities to practice listening in classes, 25.2% think that a few professors comply with this kind of technique, 27.3% believe that some of their teachers do activities that provide

listening practice, 26% of the students pointed out that many professors do that kind of activity and 10.3% suggested that all of their professors do so.

In item 11, "Los docentes realizan actividades significativas que integran conceptos de la lección con oportunidades para practicar el habla en el idioma", 4.1% of the students think that none of their professors do this kind of the activities to integrate concepts of the lesson with opportunities to practice speaking, 13.2% believes that a few of their professors integrate concepts with speaking practice, 33.1% of the students pointed out that some of their professors do this, a 32.6% of them think that many of their professors fulfill this task and 16.9% of the students estimated that all of their professors do or have done this kind of activities.

In item 12, "Los docents realizan actividades que integran todas las habilidades lingüísticas (ej: lectura, escritura, escucha y habla)", 7% of the students think that none of their professors do activities to integrate the main skills, 19% of them pointed out that a few professors fulfill this kind of activities, 30.2% stated that some professors integrate abilities through the activities they carry out in class, a 26.9% think that many professors do so and a 16.9% of the students expressed that all of the professors integrate the abilities in class.

In component 2 (Development of activities and use of materials), we can observe that the students have a better perception compared to component 1 (Lesson preparation) because the results show that:

- almost half of the students think that some or many professors involve the use of supplementary materials that support the lessons
- at a high degree, professors develop activities that integrate concepts with opportunities to practice skills or integrate them.
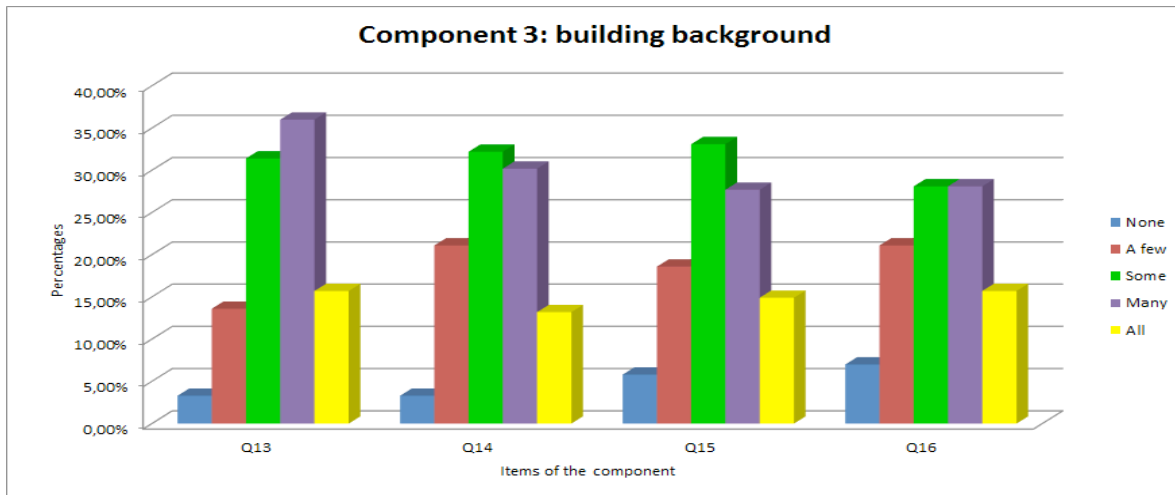
Graph 6. Students' perceptions of building background

This component has four items and aims to determine if the professors activate previous knowledge in order to acquire the new knowledge.

In item 13 "Los docents conectan los conocimientos previos con nuevos conceptos", we can see that 3.3% of the students think that none of the professors connect previous concepts with new ones, 13.6% of them pointed out that a few of their teachers keep in mind previous knowledge with the aim of learning the new ones, 31.4% agreed that some of their professor fulfill this requirement, 36% believe that many of the professors do this and 15.7% expressed that all of them do so.

In item 14 "Los docentes conectan experiencias previas de los estudiantes con los nuevos conceptos", 3.3% of the students believe that none of the professor in the program connect life experiences with new concepts, 21.1% think that a few professors do this, 32.2% marked that some professors make this transition, 30.2% pointed out that many professors do it and 13.2% of the students believe that all of the professors achieve this practice.

"Los docentes presentan vocabulario clave" is item 15 and shows that 5.8% of the students think that none of their professors show key vocabulary in class, 18.6 % of them believe that a few professor fulfill this, 33.1% suggested that some professors do it, 27.7% of the students pointed out that a few of their professor present key vocabulary and 14.9% of them considered that all of the professor do so.

In item 16, "Los docents resaltan el vocabulario clave", the survey shows that 3.7% of the students think that none of the professors highlight key vocabulary, 21.5% of them considered that a few professors comply with this, 35.1% estimated that some of the professors highlight key vocabulary, 23.6% of the students assumed that their many of their professors do it and 16.1% believe that all the professors do it.

To sum up component 3, it is clear that:

- most of the students consider that some professors connect previous knowledge with new concepts and highlight key vocabulary. Another group of students think that many professors do it.
- the "none" column has decreased while the "all" column has increased, this might mean that students estimate that more teachers are fulfilling the principles of CBI lessons, however, this could be done because the professors use their general knowledge of language teaching methodology.
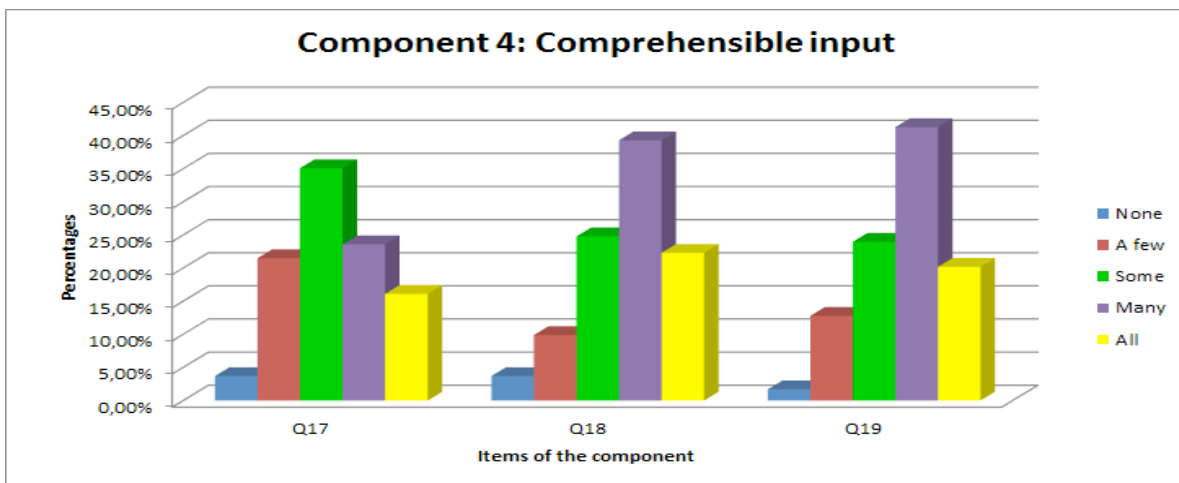
Graph 7. Students' perceptions of comprehensible input

This component uses three items to verify if the professors use techniques to make the learning of the language and content easier and more accessible to students.

In item 17, "Los docentes usan una variedad de técnicas para hacer que los conceptos de contenido sean más claros", 3.7% of the students believe that none of their professors use techniques in order to make the learning of the concepts easier, 9,9% of them think that a few of their professors do this, a 24.8% estimated that some professors complete this action, 39.3% of the students considered that many of their professors use this kind of techniques and 22.3% think that all of the professors do so.

In item 18, "Los docentes usan el lenguaje apropiado para el nivel de proficiencia del estudiante", 1.7% of the students estimated that none of their professors use appropriate language according to their level of English, a 12.8% feels that a few of their professors take into account their language level to deliver the new concepts, a 24% believe that some of the professors do this, a 41.3% considered that a few of the professors are aware of this process and a 20.2% of them indicated that all of the professors do so.

"Los docentes ofrecen explicaciones claras de las tareas académicas" is item 19 and shows the following information: 6.6% of the students suggested that none of the professors offers clear explanations of the academic tasks, a 16.9% believes that a few of their professors do it, 35.5% of the students think that some professors explain tasks clearly, a 29.8% pointed out that a few professors do it and a 11.2% marked that all of the professors do so.

In component 4, a great number of opinions focus on "some (professors)" and "many (professors)" in regards to taking into account the language level of students to develop content classes taught in English. This may mean that:

- the professors are aware of the language competences of the students to be able to acquire the content and improve their level.
- they adapt their lessons to suit the students' language competences but again there is a must to agree on this process due to the different opinions students give.
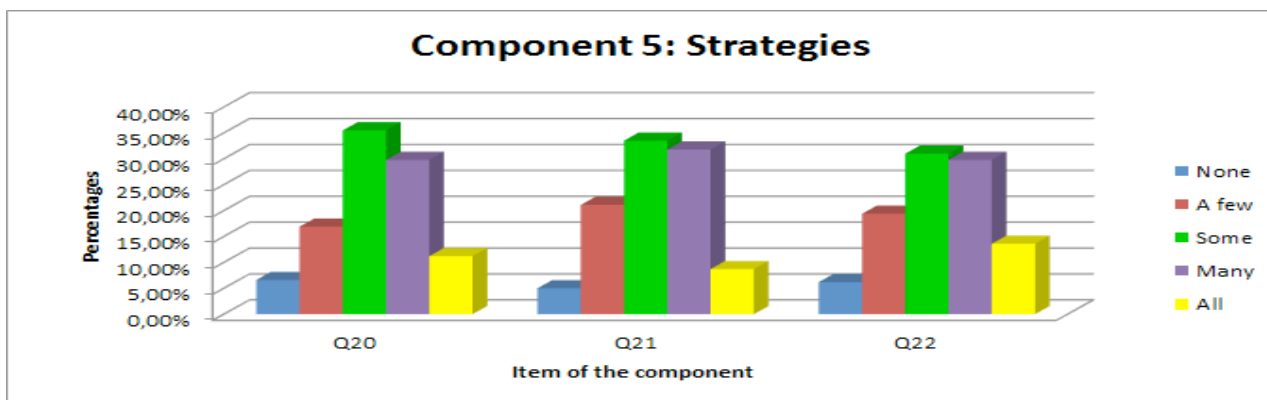
*Graph 8.*Students' perceptions of the use of strategies

This component contains three items which aim to identify whether the professors provide learners with strategies to make the learning of the content and language easier for them.

In item 20 "Los docentes proven estrategias de aprendizaje a los estudiantes", we can see that 5% of the students think that none of their professors provide them with learning strategies, 21.1% of the survey respondents indicated

that a few professor carry out this action, 33.5% believes that some professors do it, 31.8% of them expressed that many professors do this and 8.7% indicated that all the professors provide students with that kind of strategies.

Item 21 indicates that "Los docentes utilizan técnicas para ayudar y apoyar al estudiante a comprender los nuevos conceptos". We can see that 6.2% of the students expressed that none of their professors use techniques to support them to acquire new concepts, 19.4% believe that a few professors do this, likewise, 31% of them think that some of their professors do use this kind of techniques, 29.8% pointed out that many of the professor do it and 13.6% suggested that all of the professors fulfill this task.

In item 22 "Los docentes utilizan diferentes tipos de preguntas que promueven habilidades de pensamiento. (Literales, analíticas e interpretativas)", 2.9% of the students stated that none of their professors use questions to promote thinking skills, 16.9% of them considered that a few of their professors do this, 26.4% declared that some of the professors use this kind of questions to make students develop thinking skills, whereas, 36% of them believe that many of their professors do use questions to make them think, and 17.8% think that all of the professors do so.

In component 5: Strategies, it is clear that:

- the perceptions of the students towards the techniques used in class to develop thinking is positive; an important number of students think that many of their professors do use this kind of questions in class.

- students still find a proportion that consider that none or a few professors give ample opportunities to use language learning in class,which is a vital element in a CBI lesson.

- students in a high degree believe that professors include scaffolding techniques that gradually release their responsibility in students' learning.

- students think that some professors promote critical thinking through the use of questions.
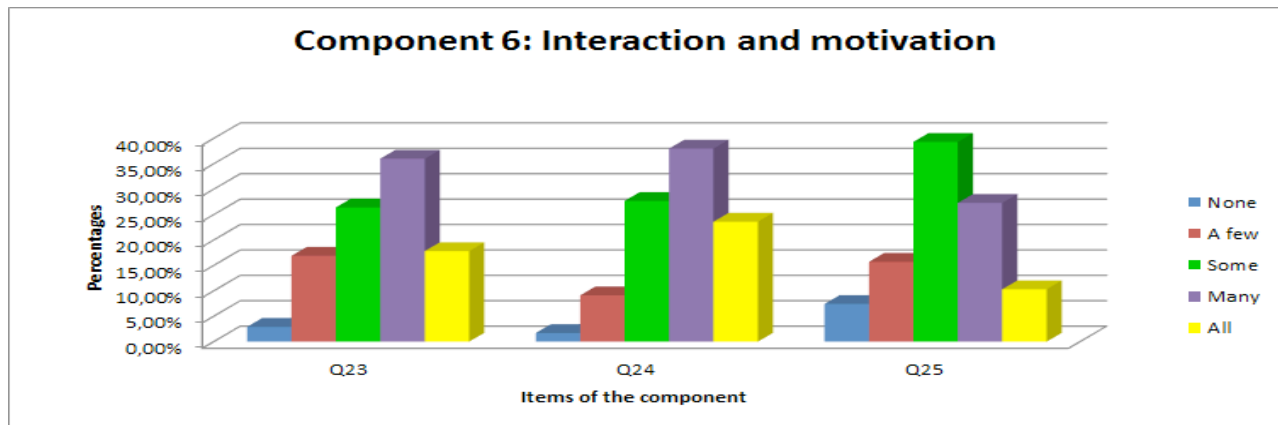
Graph 9. Students' perceptions of interaction and motivation

This component is divided in three item and intends to determine if the professors promote interaction among students and motivate them to achieve the objectives of the class.

In item 23, "Los docentes ofrecen oportunidades de interacción y discusión entre docente/estudiante y estudiante/docente que promueven alcanzar los objetivos de la clase", 1.7% of the students pointed out that none of their professors offer opportunities of interaction to achieve the goals of the class, 9.1% of them think that a few professors do this, 27.7% indicated that some of the professors complete this activity, 38% believes that many professor provide opportunities of interaction and 23.6% of the students marked that all of the professors do so.

In item 24, "Los docentes utilizan actividades grupales que promueven alcanzar los objetivos de la clase" 7.4% of the students believe that none of the professors do group work to achieve the goals of the class, 15.7% of them think that a few professor apply this group work technique, 39.3% of them determined that some of the professors do this, 27.3% of them expressed that many professor fulfill this action and 10.3% of the students stated that all of the professors do it.

In item 25, "Los docentes presentan actividades que le permiten al estudiante esta rmotivado durante el periodo de clase" 4.1% of the students think that none of their professors do activities to motivate them, 18.2% of them believe that a few professors do this, 39,7% of the students pointed out that some professors motivate them through the class activities, 24% of them think that many of their professors do this and 14% estimated that their professors do so.

To sum up component 6, it is relevant to highlight that: the perception of the students regarding interaction and motivation is more positive than in other areas. In the survey, the contestants think that:

- some and/or many of the professors do create spaces for interaction and motivation in class, however, some other students still think that not all the professor do so.

- there is an average of 14% of them that think that a small number of professors do activities to give them opportunities of interaction and motivation. Also an average of 5% of the students think that none of the professors understands that interaction and motivation are vital components of this kind of content and language instruction.

- In a high degree, students believe that professors vary grouping configurations and allow them to work together.

- most professors make their students to be engaged in class most of the time.
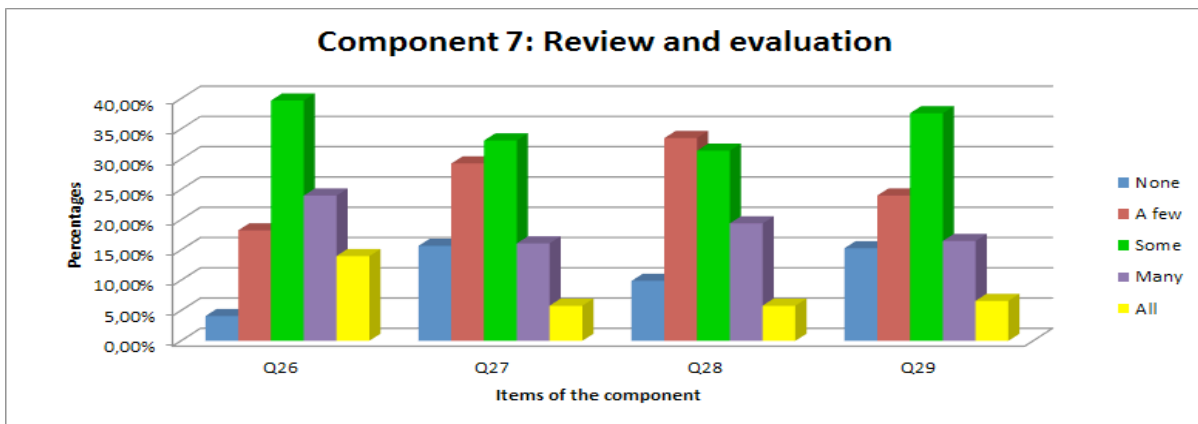
Graph 10. Students' perceptions on review and assessment

The four items in this components aim to know if the professors review and assess their students in order to achieve the proposed goals of the lessons.

In item 26, "Los docentes hacen continua retroalimentación durante la clase", 4.1% of the students think that none of their professors give them feedback in class, 18.2% pointed out that a few of them do it, 39.7% of the students suggested that some of the professors do any kind of activities for feedback, 24% of the survey contestant believe that many professors achieve this CBI requirement and 14% of the learners considered that all of the professors do this.

In item 27, "Los docentes repasan el vocabulario clave de la lección al finalizar la clase", 15.7% of the students determined that none of the professors review key vocabulary at the end of a class, 29.3% of them think that a few of the professors do this, 33.1% of the learners consider that some of the professors fulfill this principle of a CBI lesson, 16.1% of them said that many of the professors do this and 5.8% of the students believe that all of them do so.

In item 28, "Los docentes repasan los conceptos de la lección al finalizar clase", we find that 9.9% of the contestants think that none of the professors review key concepts at the end of the lesson, 33.5% considered that a small number do this, 31.4% of the students believe that some of the professors review concepts at the end of the lesson, 19.4% of them marked that many of the professor do this and 5.6% of them pointed out that all of the professors do so.

In item 29, "Los docentes revisan la comprensión y aprendizaje del estudiante antes de terminar la clase. (Revisión de objetivos propuestos)", 15.3% of the survey contestant believe that none of the professors evaluates comprehension and learning at the end of a lesson, simultaneously, 24% of the them suggested that a few of the professors do this, at the same time, 37.6% considered that some of the professor check understanding and learning, 16.5% of them said that many of the professors do it and 6.6% expressed that all of the professors achieve this task.

In component 7, review and assessment, there is a lot of work to do because an important number of students think that:

- very few professors spend time and effort to review and/or evaluate their comprehension and learning at the end of each session.
- additionally, it is important to highlight that the majority of students think that only some of the professors carry out this evaluation and review process.
- most professors do not usually review language, content and key vocabulary to clarify confusing points of the lesson.
- most professors do not regularly assess students' comprehension during the classes, according to students.

4.3 TKT CLIL test

The following graph shows the results of the seven professors of this study in the TKT CLIL test.
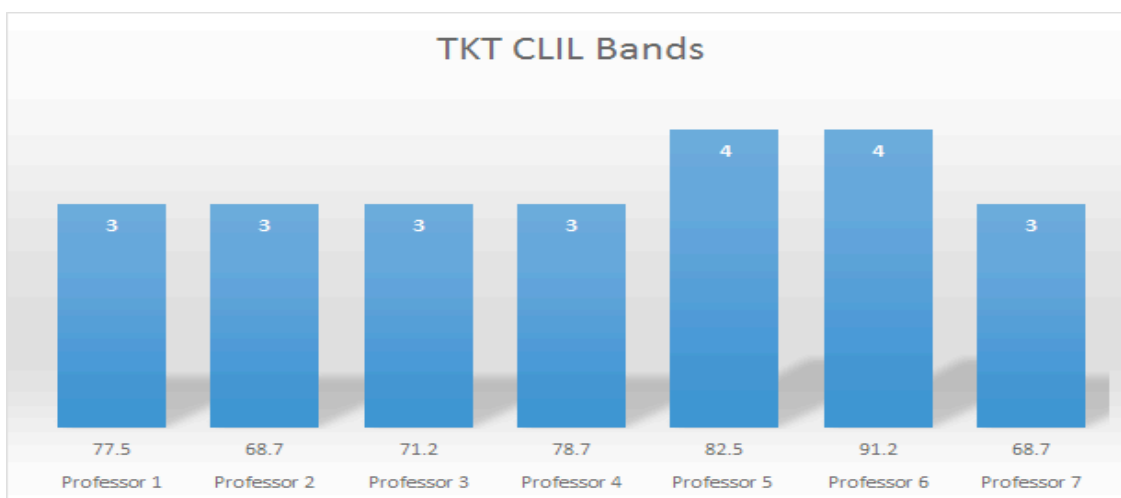
Graph 11.Unicolombo professors' TKT CLIL bands

4.3.1 Interpretation of bands and scores.

Regarding the bands, five professors were classified in band 3 and two professors in band 4. The scores go from 68.7% to 91.2%.

According to the TKT CLIL test, the desirable level for in-service teachers and/or professors is band 4. The results of this test show that the professors who teach subject-matter in English at the Undergraduate English teaching program of Unicolombo mainly achieved band 3 which suggests that according to the test they have accurate and comprehensive knowledge of CBI/CLIL methodology, however, a professor in band 4 demonstrates extensive knowledge which is the desirable band for a professor in an undergraduate English education program .

From the results of the TKT CLIL test, the areas that need improvement are basically lesson planning, the development of activities and the use of resources to support the approach and knowledge of strategies and assessment.

4.3.2 Interpretation of the TKT CLIL components
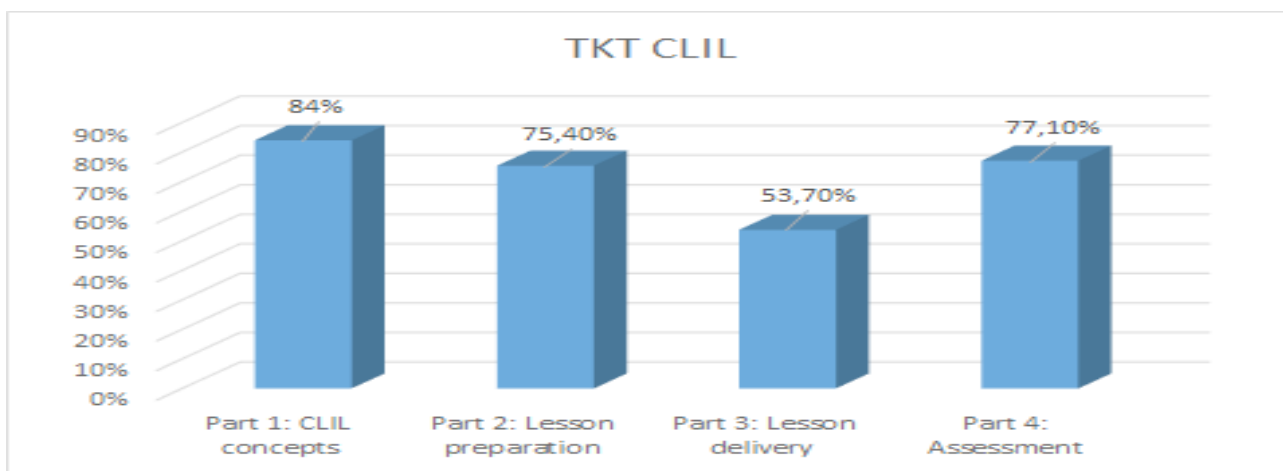
*Graph 12.*Unicolombo professors' knowledge of TKT CLIL areas

As it was mentioned in the methodology chapter, The TKT CLIL tests four parts: part 1: CLIL concepts, part 2: Lesson preparation, part 3: Lesson delivery and part 4: review and assessment. The following is the analysis of those four parts.

- CLIL concepts: in general (84%) of the professors demonstrate extensive knowledge about CLIL concepts.
- Lesson preparation (setting presenting goals, selecting materials, selecting texts, planning activities, etc): a (75.4%) of the professors have some knowledge about this tasks. Eventhough, this is not a desirable result for a professor who must balance the teaching of content and language.

- Lesson delivery: professors demonstrate a 53.7 % of management of the lesson delivery which means that they do not might not be developing their content classes in English according to the principles of the CBI approach. This the one component that needs more attention and intervention due to the low result the professors achieved in this part.

- Review and assessment: the professors somehow know how to carry out this process but the there is a 22.9% that still needs to be achieved to guarantee the success of the implementation of CBI in the program.

4.4 MET test

Table 10 presents the results of the MET test taken by the professors that teach content classes in the foreign language.

Table 10.
Unicolombo professors' English language level of proficiency

	Listening	Reading/Grammar	Speaking
Professor 1			
Professor 2	71(C1)	74(C1)	76(C1)
Professor 3	71(C1)	62(B2)	72(C1)
Professor 4	63(B2)	71(C1)	76(C1)
Professor 5	76(C1)	74(C1)	80(C1)
Professor 6	80(C1)	77(C1)	72(C1)
Professor 7	63(B2)	59(B2)	80(C1)

In general terms, the results of the MET test shows that most of the professors of the program demonstrate high competences in the language due to the great number of them that achieved a high level of competence in each skill

(C1). Therefore, the majority of the professors may be considered as "language experts" and according to The council of Europe (2001) in The Common European Framework of References, these C1 professors " Can understand a wide range of demanding, longer texts, and recognize implicit meaning. Can express him/herself fluently and spontaneously without much obvious searching for expressions. Can use language flexibly and effectively for social, academic and professional purposes...." (p. 24)

However, the results of the MET test make evident that a few professors do not obtain the desirable proficiency level in some of the skills, for instance, professors 3 and 7 evidence sufficient knowledge about grammar and reading competence (B2). Professors 4 and 7 also show acceptable competences in the listening skill (B2). Nevertheless, all the professors make clear that they are proficient users of the language in the oral component of the test. All of them obtained C1.

These results suggest that professors need opportunities to improve their competences in some areas to be able to fulfill the requirements that the CBI approach has in terms of language proficiency, and that this factor needs to be included in the development training course that this research project intends to propose. However, it is important to highlight that writing was not part of this test.

4.5 Class observations

Most of the professors were observed once or twice, and one graphic per professor represents each of the professors' average score. The average score goes from one to four, being four the ideals score that a professor who teaches a subject-matter class should achieve. There are six graphs, since professor 7 could not be observed.
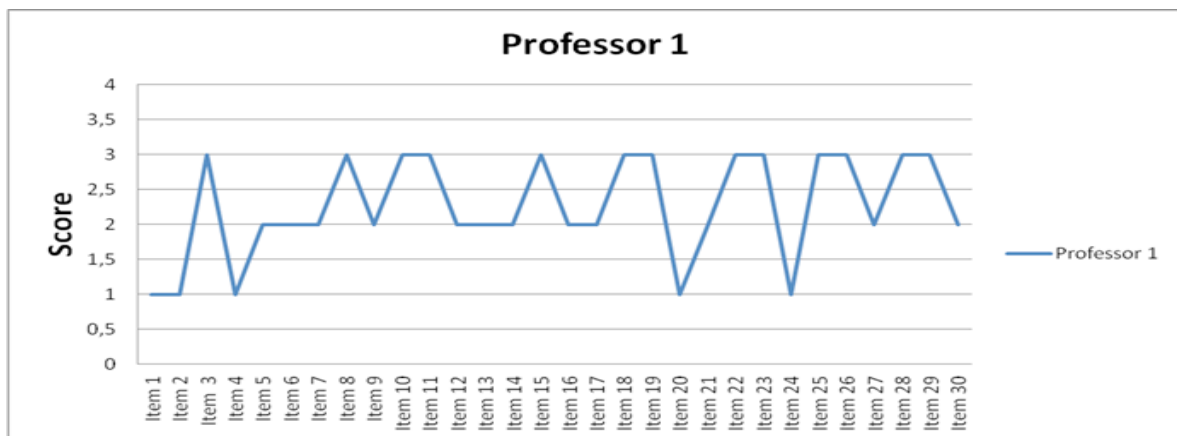
Graph 13. Professor's 1 class observation score

In the observations of professor 1, we could observe that he/she obtained low scores in some of the items. In items one, two, four, 20 and 24, he/she obtained almost the lowest score in the observation checklist. This means that:

- the professor delivered content concepts that are appropriate for the age and educational background level of students.

- this professor did not always define, display or review the objectives of the classes with her/his students.

- he/she rarely used supplementary materials to support the development of the classes.

- he/she needs more attention in the lesson preparation component.

- professor 1 provided few hands-on materials and/or manipulative for students to practice using new content knowledge.

- he/she provided to the students, content and language activities, as well as activities that integrate all language skills (reading, writing, listening, and speaking) but not in all the classes.

- that language objectives are not stated neither supported by professor 1.

- the professor made more emphasis in the content rather than in the language in the classes observed.

- none of the scores reach the highest result.

- in general, according to the observations, most of the practices of professor 1 are not satisfactory to teach content classes in English.
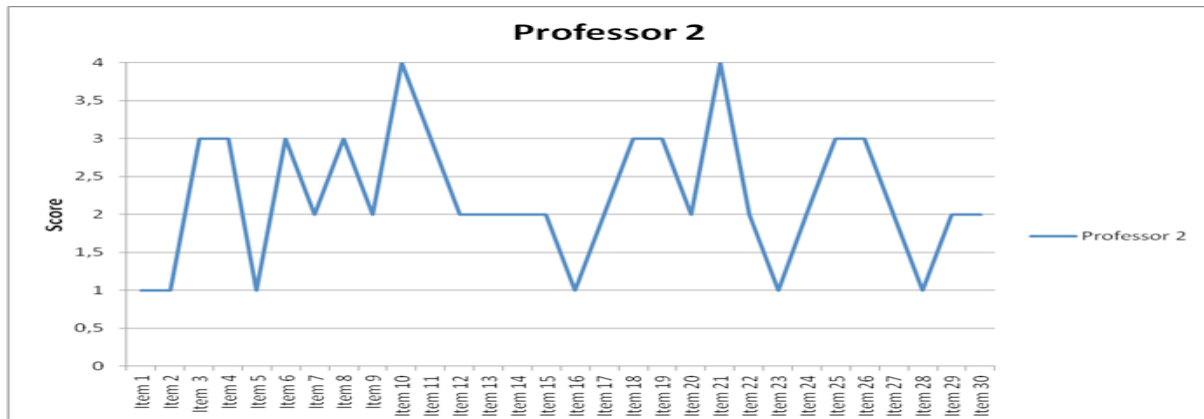
Graph 14. Professor's 2 class observation score

In the observations conducted to professor 2, we witnessed a range of percentages different from the ones observed with professor 1. In this case, he/she demonstrated some good practices as he/she obtained the maximum score for some items. That is:

- professor 2 maintained an appropriate speech for students' proficiency level; he/she uses a rate, enunciation, and simple sentences that are appropriate for students level.
- he/she provided activities for students to apply content and language knowledge in the classroom.

On the other hand, the graph shows several items with a low score; they correspond to items two, five, 16, 23 and 28.Then this means that:

- professor 2 did not clearly define the language objectives for his/her students.

- he/she did not use texts that are adapted to the different levels of his/her students.

- he/she did not offer frequent opportunities for interaction and discussion between teacher/students and among students.

- content objectives are not clearly supported by lesson delivery.

- there was no a comprehensive review of concepts to wrap up the lessons. Therefore, according to the class observations, professor 2 needs improvement in most of his/her practices to be able to teach content classes in English.

Graph 15. Professor's 3 class observation score

After observing professor 3, we can conclude that:

- he/she demonstrated some good practices of lesson preparation as he/she most of the times defined content and language objectives for the class but does not always reviewed them with the students.

- he/she sometimes helped students build their background when making links between past learning.

- he/she never linked concepts to students' background experiences and new concepts.

- most of the time he/she used an appropriate speech for students' proficiency level.

- he/she does not provide students with opportunities to use learning strategies or strategies that promote higher-order thinking skills.

- professor 3 did not organize group activities that support the language nor the content objectives.

- he/she did not provide to his/her students any hands-on materials and/or manipulative that allow them use new content knowledge.

- key vocabulary is not always introduced neither emphasized by the professor.

- he/she lack strategies to support students learning and to assess students' comprehension and learning of lesson objectives.
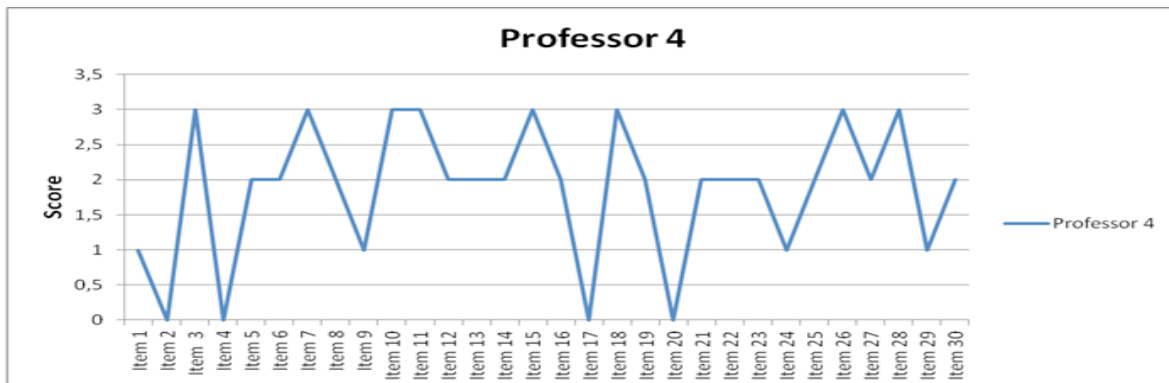
Graph 16. Professor's 4 class observation score

The observation done to professor 4 shows that his/her methodology in content and language classes is not well balanced because:

- he/she did not define the language objectives for the lesson, therefore, this language objectives were not evidenced in the development of the lessons.
- neither did he/she supply the students with supplementary or hand on materials.
- in a content based lesson, it is important to do activities in groups but professor 4 did not plan any tasks to be done this way.
- he/she did not make much emphasis on key vocabulary.
- he/she did not give feedback to students when needed.

Good findings in the observations of professor 4 were that:

- in a high degree the content concepts were appropriate and linked to the age and the educational background of the students.
- he /she adjusted his/her speech and the pacing of the lesson to their proficiency level to clearly explain the high order thinking skill tasks they had to accomplish.
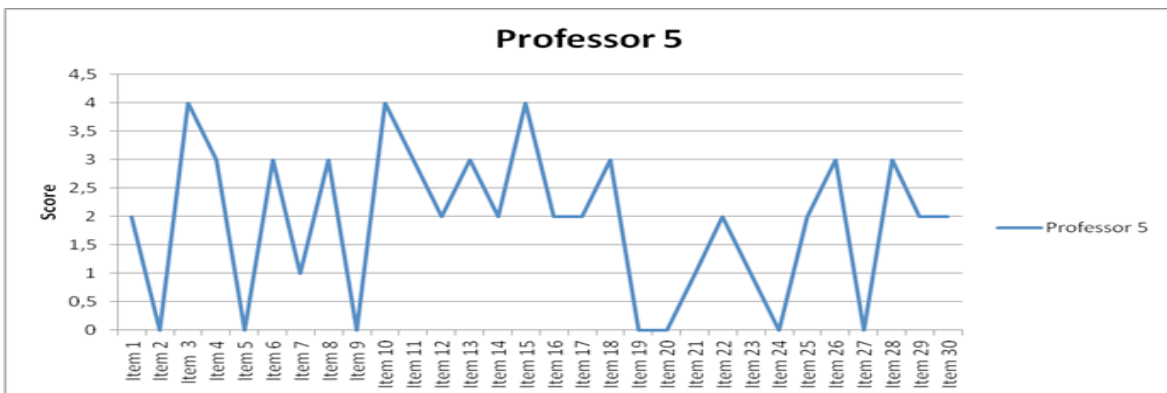
Graph 17. Professor's 5 class observation score

With professor 5, we can see a similar situation to the one of professor 4; some actions he/she carried out in the lessons observed were not coherent to a well-structured content and language class methodology, others show a connection with this kind of approach though. In the two classes we observed, professor 5 focused on the content because:

- he/she mentioned the content objectives, however, he/she did not display or review them.
- she/he did not define nor present the language objectives to the students and consequently, language was neither assessed nor corrected.

On the other hand,

- Professor 5 did not emphasize the vocabulary needed in the lesson. He/she did not offer students opportunities to clarify it in the L1.
- the content was not adapted to the students' levels of proficiency.

Among the positive actions of professor 5 we can mention that:

- he/she made the content concepts appropriate and linked to the age and the educational background of the students and at the same time,

- he /she adjusted his/her speech and the pacing of the lesson to their proficiency level.
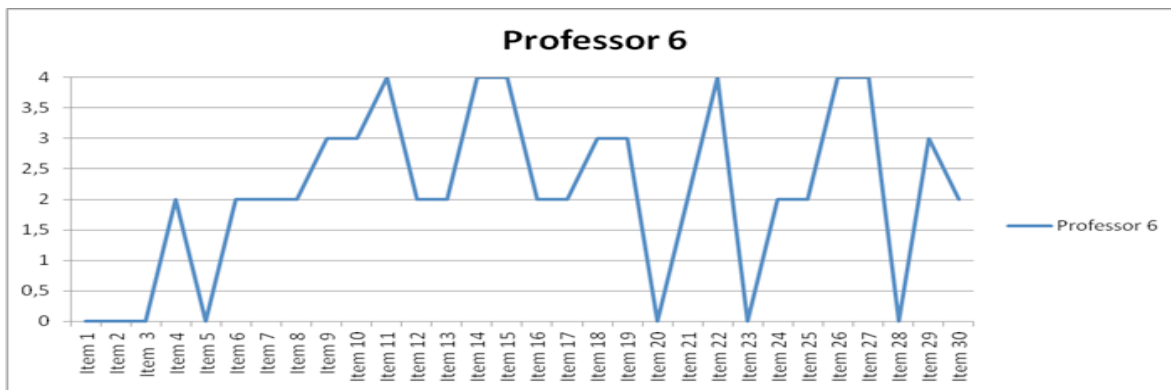
Graph 18. Professor's 6 class observation score

Professor 6, as the rest of the professors, shows a variety of indicators, some of them correspond to a CBI lesson and others do not respond to it.

In the lessons observed we could notice that:

- most of the activities proposed by the professor integrated all the skills making them more meaningful to students.

- the key vocabulary was presented and reviewed at the end of the lesson and students could clarify key concepts using their mother tongue.

- the professor also used scaffolding techniques to assist and support students understanding and a number of questions and tasks to promote higher-order thinking skills.

Nevertheless, some actions reflect a lack of knowledge of the application of well balanced content and language class, for example:

- there was a total absence of demonstration of objectives.

- professor 6 did not show or share neither the content nor the language objectives to the class.

- he/she did not adapt the content to the students' proficiency level.

- the professor did not make use of any additional material that supports the theme.

- he did not review or assess the content studied in the lesson.
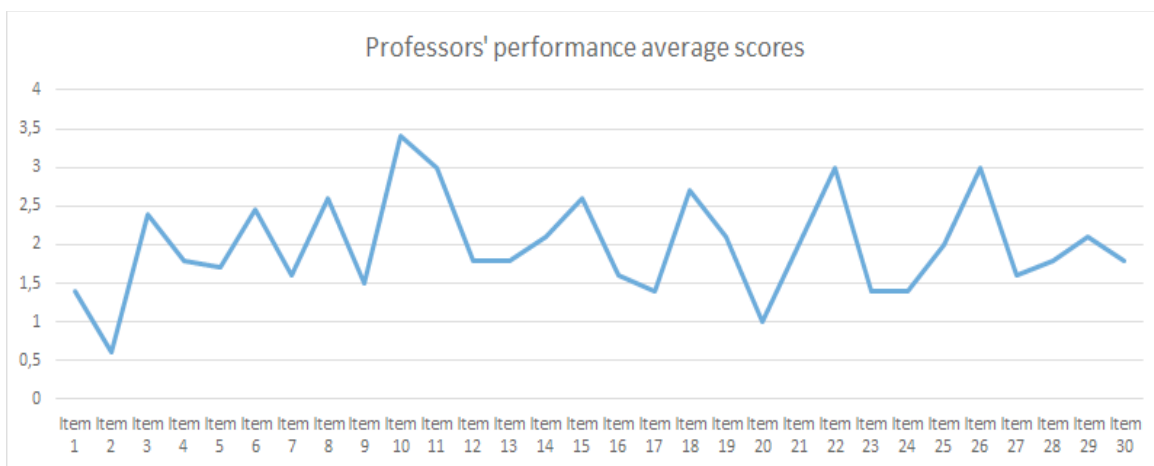
Graph 19.Unicolombo professors' performance average score

To conclude the results from class observations, we interpret a general graph, which shows average scores that represent the performance of professors in the lessons of content subjects taught in English.

In general and according to the class observations the professors at the undergraduate English teaching program do not develop their classes according to the principles and components of the CBI approach due to their lack of knowledge of this kind of methodology.

In regards to lesson preparation, we can observe that on average:

- the professors do not plan their classes with the aim of balancing the teaching of content and language because the class observations revealed that they do not display nor explain the language and content objectives, therefore, these have to be inferred by the students in the development of the lesson.
- the content concepts that the professors teach are not completely appropriate for the students' age, educational background and levels of proficiency.
- the professors also fail in the use of supplementary materials and the development of meaningful activities due to the fact that they provide little opportunities for language practice.

The next component observed is building background. We can see that:

- the professors do not usually bear in mind the students' background experiences when planning and teaching the classes and link the past learning with new concepts.

- the professors do not emphasize key vocabulary for the students to see, remember and learn.

- the professors do adapt their speech to the students' proficiency level and this makes the explanation of academic tasks easy to follow by the students.

- the professors do not use techniques to make content concept clear for example modeling, visuals, demonstrations, body language, etc.

With respect to the strategies used in class, it was observed that:

- the professors do not provide students with ample opportunities to use learning strategies, to interact and discuss and to clarify concepts in the L1 in order to encourage the elaboration of responses about the lesson concepts.

- the class configuration used by the professors does not support the language and content objectives of the lesson.

- the professors do not plan or propose activities aiming to integrate neither the skills (listening, speaking, writing and reading) nor language and content, instead, they develop them separately.

- the lack of hands-on materials and/or manipulatives is another issue

  that needs to be improved in the methodology professors use in their

  lessons.

Due to the fact that the language and content objectives are not displayed, discussed nor reviewed, it is not clear whether the lesson delivery supports these objectives. On the contrary, the pacing used to deliver the lessons is coherent with the students' ability levels and this factor makes students somehow engaged in class but passively.

In terms of review and assessment, in general we can see that:

- the professors do not use appropriate strategies to check students'

  comprehension and learning of language and content.

- the key vocabulary and content concepts are not reviewed.

- regular feedback is not provided to students on their output. The

  following table summarizes the final percentages per professors from

  each observation.

Table 11
Professors' observation scores

Professors	Observation 1	Observation 2
Professor 1	42.5%	74.1%
Professor 2	59.0%	66.6%
Professor 3	34.5%	46.5%
Professor 3	54.0%	
Professor 4	48.3%	
Professor 5	50.9%	52.0%
Professor 6	57.3%	34.5%

4.6 Triangulation

The results are analyzed taking into consideration data collected from the students' and professors' focus group, the survey to students, standardized tests and class observations. Data is compared to provide evidence that gives credibility to the study. Through triangulation we corroborate matching and mismatching points that give more validity to the results.

As regards to the language proficiency of the professors, the students expressed on the focus group that they feel their professors have a good command of the language. Thus, they perceive their teachers are good language models for them.

On the surveys to students, it is also evident that they feel their professors have an appropriate level of language proficiency since they believe that many of the professors take into account the students' language level to make their classes comprehensible.

As well as the students' focus groups and surveys, the class observations evidenced that teachers provide good language models, maintain use of target language in the classroom, give explanations and instructions in English and use appropriate classroom language most of the time. However, there is not much more correction on the language of the students. In the case of the native speaker professor, he/she showed that he/she is able to monitor his own language and avoid unnecessary colloquialism and unnecessary idiomatic use.

The MET test shows that professors have a C1 level according to the CEF in most of the skills evaluated in the test, only three professors rank B2 in listening and/or in grammar.

To sum up, the professors have and appropriate level of the language to be able to teach CBI lessons. However, there is a need to evaluate the writing component which was not evident in any of the data collection instrument.

Regarding the lesson preparation, on the focus group, students stated that there was more emphasis on content than in language. However, neither content objectives nor language objectives were usually presented to them. On the focus group, professors accepted they do not plan language objectives in the content classes.

On the surveys, students also claimed that a few professors define, explain and review language and content objectives, and in the same manner as expressed in the focus group they believe that more emphasis is given to content objectives.

The TKT CLIL shows that in terms of lesson preparation, professors have a comprehensible and accurate level of knowledge of the approach. However, the class observations demonstrated that most of the teachers had not previously planned language and content objectives, thus, they did not presented, explained and reviewed them with students.

As regard to the knowledge of the theory that underlies CBI and its background knowledge, professors affirmed that they have little or no knowledge of CBI approach, nevertheless on the TKT CLIL the test showed extensive knowledge of the theory that underlies CBI and its background.

In terms of building background students expressed, in the surveys, that just some of the professors connect past learning and new concepts. Accordingly, the class observations demonstrated that most of the professors do not bear in mind students' background when preparing and teaching their lessons and there is not much emphasis on key vocabulary.

In surveys to students as in the class observations there is evidence that some professors use learning strategies, scaffolding techniques and a variety of questions that promote higher order thinking.

With reference to interaction in the classroom, the surveys and the class observations reported that there were few professors that provided opportunities for interaction and the class configuration did not enhance the support for language and content objectives.

In relation to activities and materials, the students stated that in the focus group, that the class was a way to practice their English, but more use of authentic material is needed to provide more opportunities to mirror real contexts. However, there is a mismatch between what students expressed in the focus group and what was stated in the survey, because most of the students believe that professors use

materials that provide opportunities for the integration of the four communicative skills. On the other hand, the observers did not evidence much use of supplementary materials and there were few opportunities to practice language skills. Then the four language skills were not used in all of the classes, specially listening and writing.

Concerning the lesson delivery, students said that there is not balance between content and language and that the same methodology that is used in Spanish classes is used in the English classes. So they believe that there is not a special methodology for the teaching of subject-matters in English. Professors also believe that they do not follow a CBI approach since students stated there was not a difference between the classes taught in English and the classes in Spanish.

The TKT CLIL confirmed what students and teachers expressed in the focus group. The lesson delivery was the lowest score in this test. The observations also showed coherence with the focus groups and the TKT CLIL because professors have difficulties supporting language and content objectives. As a consequence, students were not engaged in class.

Finally, the students expressed in the focus group that the correction of the language is incidental and there is no presence of review of key vocabulary and key content concepts. However, some teachers provided regular feedback to students' production in class.

In the surveys, it is also evident that few professors spent time reviewing key concepts of the class, although, in the TKT CLIL they demonstrate a comprehensible and accurate knowledge of concepts in CLIL but the class observation showed that professors, in general, do not use appropriate strategies to assess and review the key concepts and vocabulary studied in the lessons.

4.7 Discussion

The present study corroborates what literature shows in regards to the artificial separation of content and language objectives in traditional classes (Brinton, Snow and Wesche, 1993, cited in Stryker & Leaver, 1997) since it demonstrates how some professors that teach subjects in English in a teacher education program lack the necessary competences to consciously integrate content and language objectives. It also evidences that professors need to make content comprehensible to students and in order to do this, they need to shelter the material (Echavarria, Vogt & Short, 2013).

In this study, the English language proficiency of the professors was measured following the descriptors of the Common European Framework through an international validated test (MET). However, one of the main limitations was the absence of the MET writing test that could evidence how proficient these professors were in regards to this communicative skill that it is essential to teach content-based classes.

The present study builds on the suggested components of the SIOP model (Echavarria, Vogt & Short, 2013) and it validates what research says about professional development and CBI competences (Echavarria, Vogt & Short, 2008; Richards, 2010; Fandiño, 2013; Brunning and Purmann,2014).

The use of different data collection instruments is a key factor to triangulate information that contributes to confirm the importance of teacher preparation in order to gain a deep understanding of content based instruction to implement it consistently and to a high degree.

This dissertation shed lights to replicate the same study on professors that teach subjects in English of other programs at Unicolombo. It could also be used as an example to be reproduced in similar EFL contexts.

Based on the literature review, this dissertation represents the most extensive reporting of CBI professors' competences at an undergraduate English teaching program in Colombia to date. Although some studies have been carried out on CBI within English language teaching faculties in Colombia (Salcedo, 2010; Serna, 2011; Morales, 2011; Chavez, 2013), very little work has been done on identifying the linguistic and pedagogical competences that professors need to teach content based classes effectively.

Conclusion

This chapter draws conclusions reached by this research along with the future research scope that can be derived from this study. Through this dissertation, it was possible to respond to the main question of the study: What CBI competences do professors need for teaching language and content and the integration of both in class at the undergraduate English teaching education program at Unicolombo?

Two secondary research questions were also asked to give a structural answer to the main question:

- What is the English proficiency level of the professors that teach subjects in English at the undergraduate English teaching education program at Unicolombo?
- What CBI methodological competences do the faculty lack in order to be able to teach through a CBI approach at the undergraduate English teaching education program at Unicolombo?

Considering the analyzed data the following conclusions have been drawn:

Professors at Unicolombo need support to carry out an effective CBI approach that promotes the learning of language and content simultaneously. We might disaggregate these competences in two broad dimensions:

The first one is concerned with the language proficiencies that professors need to effectively teach subject-matter classes. Whereas the second one has to do with the pedagogical competences that are required to help students learn new content through the use of a target language.

As regards to the language proficiency, professors prove to have a high command of the language since all of them are in a C1 level according to the results of the MET test, in consequence, the professors are able to teach content classes. However, there should be still more work on the language, especially in the use of adequate classroom language. It is also evident that they need more development in the appropriate selection of target language resources to provide more authentic texts to their students. Additionally, the professors need to be tested in their writing skills, since they must also have an appropriate command of this skill in order to report their findings in academic papers and to be a good example for students, since one of the professors concerns is that students are reluctant to read and write.

The pedagogical competences dimension has been analyzed based on the eight components that the SIOP observation protocol proposes to apply the CBI approach consistently. These components are: lesson preparation, building background, comprehensible input, interaction, practice and application, lesson delivery and review & assessment.

In terms of lesson preparation, the professors at the undergraduate English teaching program must be able to:

- understand the use of language in the subjects and provide the students with opportunities to practice with it.
- use supplementary materials that help students understand the classes.
- write lesson level language and content objectives in terms of students learning.
- support content and language objectives during the class.

In regards to building background, the professors must be able to:
- link students' experiences and existing knowledge with the content being learned and taught.
- link past learning and new concepts.
- teach and emphasize academic vocabulary.

In relation to comprehensible input, they must:
- make the content comprehensible through techniques such as the use of visual aids, modeling, demonstrations, graphic organizers, vocabulary previews, adapted texts, cooperative learning to promote students engagement in the classes.
- use appropriate speech according to students' proficiency level.

- make clear explanations of academic tasks for students to follow them appropriately.

In terms of strategies to be used in a CBI lesson, the professors must:

- help students to construct meaning and understand complex content from texts.

- include techniques that preview the concepts of the class.

- use different techniques to make content concepts clear.

- scaffold students' learning to help them reach the following level of development.

With respect to interaction, it is necessary that professors:

- use different grouping configurations to maximize the opportunity of interaction and integrate all language skills.

- provide students with opportunities for interaction and discussion among all the participants in the lesson.

- allow students clarify key concepts in L1 as needed.

Concerning practice and application, it is required to:

- use hands-on materials.

- vary the kind of activities done in class for students to apply content and language knowledge.

- do activities that integrate all language skills (reading, writing, listening and speaking).

In relation to lesson delivery, the professors have to:

- promote students' engagement.

- support content and language objectives in the lesson.

- adapt the pacing of the lesson to the students' language level.

About review and assessment, it is a must that the professors:

- review and assess content and language objectives in every lesson.

- use formative assessment.

- provide regular feedback to students and,

- use different alternatives of assessment.

As a final consideration, a teacher development program must be designed to suit the Unicolombo professors' needs. This program would be supported by teacher collaboration, peer observation, study groups, the use of teaching portfolios, regular feedback, belonging to communities of practice, attendance of methodological workshops, classroom and action based research. After and during implementing this teacher development program, more research should be done in order to see possible program and professors' improvement in regards to

content-based language teaching at the undergraduate English teaching program

at Unicolombo.

References

Adelman, C., Jenkins, D. & Kemmis, S. (1980). Rethinking case study: notes from the second Cambridge conference. In H.Simons (ed.) towards a Science of the Singular.Center for Applied Research in Education, University of East Anglia.

Arismendi, F. A., Díaz, C. P. & Salazar, L. N. (2008). Designing and Implementing Content-Based Courses in English with a Non-Language Faculty at a Public Colombian University. Profile Issues in Teachers´ Professional Development, (10) 113-134. Retrieved from http://www.redalyc.org/articulo.oa?id=169214143006

Bachman, L. & Palmer, A. (1996). *Language testing in practice*: Designing and developing useful language tests. Oxford: Oxford University Press.

Bachman, L. &Savignon, S. (1990). *Fundamental considerations in language testing* (Vol. 107). Oxford: Oxford University Press.

Banegas, D. (2011). Content and language integrated learning in Argentina2008-2011. Latin American Journal of Content and Language IntegratedLearning, 4(2), 32-48.

Bracey, G. W. (2002). *Put to the test: An educator's and consumer's guide to standardizedtesting*. (2nd ed.) Bloomington IN: Phi Delta Kappa International.

Brewster, J. (2004). Content-based language teaching: a way to keep students motivated and challenged? The IATEFL Young Learners SIG. 1-5.

Brinton, D. & Jensen, L. (2002). Appropriating the adjunct model: English for AcademicPurposes at the university level. En J. Crandall y D. Kaufman (Comps), *Content based instruction in higher education settings* (pp. 125-137). Alexandria, VA: TESOL.

Brown, P. A. (2008). A Review of the literature on case study research.*CanadianJournalfor New Scholars in Education*, 1 (1).

Brüning, C. I., &Purrmann, M. S. (2014). CLIL Pedagogy in Europe: CLIL Teacher Education in Germany.*Utrecht Studies in Language and Communication*, (27), 315.

Cabezuelo, P., &Fernández, R. (2014). A case study on teacher training needs in the Madrid bilingual project. Latin American Journal of Content and

Language Integrated Learning, 7(2), 50-70. doi:10.5294/laclil.2014.7.2.3 eISSN 2322-9721

CaMLA. (n.d.). Retreived May 16, 2015, from http://www.cambridgemichigan.org/wp-content/uploads/2014/10/MET_CEFR.pdf

Canale, M. (1983). From communicative competence to communicative language pedagogy.*Language and communication*, *1*.

Canale, M., & Swain, M. (1980). Theoretical bases of communicative approaches to second language teaching and testing. *Applied linguistics*, *1*(1), 1-47

Celce-Murcia, M. (2007). Rethinking the role of communicative competence in language teaching. In *Intercultural language use and language learning* (pp. 41-57). Springer Netherlands.

Chamot, A. & O'Malley, M. (1986) *.A Cognitive academic language approach: an ESL content based curriculum*. Silver Spring, MD: National Clearinghouse for Bilingual Education.

Chávez, L. C. (2013). SIOP components: Application and assessment through PBL in a content-language college classroom. Latin American Journal of Content & Language Integrated Learning, 6(1), 37-54.

Clearinghouse on Languages and Linguistics, Washington DC. Retrieved from http://www.ericdigests.org/2000-3/protocol.htm

Cohen, L., Manion, L. & Morrison, K. (2007).*Research methods in education*.(6th ed.). London and New York: Routledge.

Corbin, J. & Strauss, A. (2008). *Basics of qualitative research: Techniques andprocedures for developing grounded theory* (3rd ed.). Thousand Oaks, CA: Sage Publications.

Corrales, K. &Maloof, C. (2009). Evaluating the Effects of CBI on an English for MedicalStudents Program. Latin American Journal of Content &LanguageIntegrated Learning.2(1). 15-23. Retrieved from: http://laclil.unisabana.edu.co/index.php/LACLIL/article/viewFile/2609/2745

Council of Europe (2001).Common European Framework of References for LanguagesLearning Teaching, Assessment.Cambridge University Press.

Crandall, J. & Kaufman, D. (Eds.) (2002). *Content based instruction in higher education settings.* Alexandria, VA: Teachers of English to Speakers of Other Languages.

Crandall, J. (1993) Content center learning in the United States. *Annual Review of Applied Linguistics, 13*, 111-126.

Creswell, J. W. (2007). Quality inquiry and research design. Choosing away fiveapproaches (2nd ed.). Lincoln: Sage Publications.

Creswell, J. W. (2012). *Qualitative inquiry and research design*. Choosing away fiveapproaches (3rd ed.). Lincoln: Sage Publications.

Cummins, J. (1981). The role of primary language development in promoting educational success for language minority students. En California State Department of Education (Comp.), Schooling and language minority students: A theoretical framework (pp. 3-49). Los Angeles, CA: National Dissemination and Assessment Center.

Dalton-Puffer, C. (2011). Content-and-language integrated learning: from practice to principles?.*Annual Review of applied linguistics*, *31*, 182-204.

deMunck, V. C. &Sobo, E. J. (Eds) (1998). *Using methods in the field: a practical introduction and casebook*. Walnut Creek, CA: AltaMira Press.

DeWalt, K. M. & DeWalt, B. R. (1998). Participant observation. In H. Russell. Bernard. (Ed.) (1998). *Handbook of methods in cultural anthropology.* (pp.259-300). Walnut Creek: AltaMira Press.

Dueñas,M.(2004). A Description of Prototype Models for Content-Based Language Instruction in Higher Education. *BELLS: Barcelona english language and literature studies, (12)* Retrieved from http://www.raco.cat/index.php/Bells/article/.../108658

Dupuy, B. (2000). Content Based Instruction: Can it help ease the transition from beginning to advanced foreign language classes? Foreign language annals, 33 (2), 205-223.

Echavarria, J., Vogt, M., & Short, D. (2008). Implementing the SIOP model through effective professional development and coaching. Boston: Pearson.

Echavarria, J., Vogt, M., & Short, D. (2013). Making content comprehensible for English learners: The SIOP model (Fourth ed.). New Jersey: Pearson.

Eisner, E. (1991). The Enlightened Eye: Qualitative Inquiry and the Enhancement of Educational Practice. New York: Macmillan Publishing Company.

Fandiño, Y. (2013). Knowledge base and EFL teacher education programs: a Colombian perspective. Íkala, Revista de Lenguaje y Cultura, 18(1), 83-95.

Fin, J. & Jacobson, M. (2008).Introduction. Just Practice: A social Justice Approach to Social Work (2nd e.). Peosta, Iowa: Eddie Bowers publishing co. inc.

Flowerdew, J. (1993). Content-based language instruction in a tertiary setting. English for Specific Purposes, 12, 121-138

Goulding (eds) *Conducting Small-Scale Investigations in Educational Management*. London: Harper & Row.

Grabe, W. & F.L. Stoller. (1997). Content based instruction: research foundations. The content based classroom: perspectives on integrating language and content. White Plains: Longman, 5-21

Granados, C. (2011). Facing CLIL challenges at university level. How: A Colombian Journal For Teachers of English, 18, 24-42

Griffin, P. A. (1999). The incorporation of internationalization into adult and higher education curricula. Paper presented at the annual meeting of the Comparative International Education Society, Toronto, Ontario, Canada

Gutiérrez, G., Durán, R., & Beltrán, F. (2012). CLIL in teacher training: A Nottingham Trent University and University of Salamanca experience.

Habte-Gabr, E. E. (2004). Language considerations in teaching English Content Based courses in the Colombian context.Educación y Educadores, (7) 205-212. Recuperado de http://www.redalyc.org/articulo.oa?id=83400713

Handbook for teachers. (n.d.). Retrieved May 16, 2015, from http://www.cambridgeenglish.org/images/tkt-clil-handbook.pdf

Heo, Y. (2006). Content-based instruction (Vol. 4, No. 2, pp. 25-32).TESL Working Paper Series.

Hitchcock, G. & Hughes, D. (1995) *Research and the teacher* (2nd ed.). London: Routledge.

Ho, W. (2008). Dissertations & Theses - Gradworks. Retrieved May 18, 2015, from http://gradworks.umi.com/33/25/3325922.html

Hymes, D. (1972). On communicative competence.In J.B. Pride and J. Holmes, eds. *Sociolinguistics.*Harmondsworth: Penguin Books.

Joint Committee on Testing Practices. (2004). *Code of fair testing practices in education* (Revised). Washington D.C.: American Psychological Association.

Jupp, V. (2006).*The Sage dictionary of social research methods*. Sage.

Kasper, L. F. (1995). Theory and practice in content-based ESL reading instruction. English for Specific Purposes, 14(3), 223-230.

Kothari, C. (2004). *Research methodology methods & techniques* (2nd rev. ed.). New Delhi: New Age International (P).

Krashen, S. (1985). The input hypothesis: issues and implications. New York: Longman.

Larsen-Freeman, D.(2000). Techniques and principles in language teaching. Oxford: Oxford University Press.

Leaver, B. L. (1997).Content-based instruction in a basic Russian program. In S. Stryker & B. L. Leaver (Eds.), Content-based instruction in foreign language education: Models and methods (pp. 30-54). Washington, DC: Georgetown University Press.

Leedy, P. &Ormrod, J. (2001). Practical research: Planning and design (7th ed.). Upper Saddle River, NJ: Merrill Prentice Hall. Thousand Oaks: SAGE Publications.

Marani, J. (1998). An Overview of Content-Based Language Instruction.ERIC Document Reproduction Service No. ED424 762.

Marshall, C., &Rossman, G. (1995). *Designing qualitative research* (2nd ed.). Thousand Oaks, Calif.: Sage Publications.

Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San   Francisco: Jossey-Bass.

Merriam, S.B. (1988). *Case study research in education.*San Francisco: Jossey Bass.

Monsalve, M., Montoya, P & Others. (2007) Articulating English to specific content areasatPontificiaBolivariana University. Colombian Applied Linguistics Journal, n.7. Retreived from: http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S0123-46412005000100009&lng=pt&nrm=iso

Morales, E. V. (2011). Lesson Delivery: A Key Component to Ensure Maximum Benefit to the. Latin American Journal of Content & Language Integrated Learning, 4(1).

Morgan, D. (1997). *Focus groups as qualitative research* (Vol. 16). Thousand Oaks, California: Sage.

Nisbet, J. & Watt, J. (1984). Case study. In J. Bell, T. Bush, A. Fox, J. Goodey and S.

Nunan, D. (1992). *Research methods in language teaching*. New York: Cambridge University Press.

Oxford, R. (1990). *Language Learning Strategies: What Every Teacher should Know.*New York: Newbury House Publishers.

Pavesi, M.,Bertocchi, D. , Hofmanová, M. &Kasianka, M. (2001). Teaching through aforeign language: a guide for teachers and schools to using Foreign Language in Content Teaching, [32p.] In D. Langé (Ed.), Insegnare in una lingua straniera.UnterrichtendurcheineFremdsprache. Teaching through a foreign language. Enseñar en unalenguaextranjera.Enseignerdansune langue vivante. Milan: M.I.U.R., DirezioneGeneraledellaLombardia on behalf of TIE-CLIL. Retrieved from http://www.ub.es/filoan/CLIL/teachers.pdf

Pessoa, S., Hendry, H., Donato, R., Tucker, G. R., & Lee, H. (2007). Content-basedinstruction in the foreign language classroom: A discourse perspective. *Foreign Language Annals, 40*, 102–119.

Popham, W.J. (1999). Why standardized tests don't measure educational quality. Educational Leadership, 56(6), 8–15.

Qi, S. (2009). Case study in contemporary educational research: Conceptualization andcritique. *Cross-Cultural Communication*, 5 (4), 21-31.

Rapley, T. (2007). *Doing conversation, discourse and document analysis.* London: SagePublications.

Richards, J. C. (2010). Competence and performance in language teaching.*RELC Journal*, *41*(2), 101-122.

Richards, J. C. (2012). Program factors in effective foreign and second language teaching. *Journal of Southeast Asian Education*, 2(2).

Richards, J., Platt, J. & Weber, H. (1985). Longman Dictionary of Applied Linguistics. London: Longman.

Richards, K. (2003). *Qualitative inquiry in TESOL*. Great Britain: Palgrave Macmillian. Retrieved April 03, 2015, from http://www.qualres.org/HomeObse-3594.html

Sagliano, M., Stewart, T., &Sagliano, J. (1998) Professional training to develop content-based instruction in higher education.*TESL Canada Journal, 16* (1), *36-51.*

Salcedo, D. M. (2010). The SIOP Model: Transforming the Experiences of College Professors Part I. Lesson Planning, Building Background, and Comprehensible Input. GIST Education and Learning Research Journal, (4), 78-93.

Savignon (1983).*Communicative Competence: Theory and Classroom Practice. Reading*: Addison-Wesley.

Schensul, S. L., Schensul, J. J. &LeCompte, M. D. (1999). *Essential ethnographic methods: observations, interviews, and questionnaires* (Book 2 in Ethnographer's Toolkit). Walnut Creek, CA: AltaMira Press.

Seliger, H.W. &Shohamy, E. (2001). *Second language research methods*. Oxford: Oxford University Press.

Serna, H. M. (2011). Explicit Vocabulary Instruction in an English Content-Area Course with University Student Teachers: When Comprehensible Input Needs to be Comprehended. GIST Education and Learning Research Journal, (5), 84-103.

Short, D. &Echevarria, J. (1999).*The sheltered instruction observation protocol: A tool for teacher-researcher collaboration and professional development.* ERIC

Silver, H. (2004).*Evaluation research in education*. Retrieved April 01, 2015, fromUniversity of Plymouth, Faculty of Education Website: http://www.edu.plymouth.ac.uk/resined/evaluation/

Snow, M. A., Met, M., and Genesee, F.(1989). A conceptual framework for the integration of language and content in second/foreign language instruction.*TESOL, Quarterly,23,* 201-217.

Stoller, F. (2004). Content-based instruction: Perspectives on curriculum planning. Annual Review of Applied Linguistics, 24, 261-283.

Strauss, A. & Corbin, J. (1998). Basics of qualitative research: Techniques and procedures for developing grounded theory (2nd ed.). Thousand Oaks: Sage Publications.

Stryker, S. B., & Leaver, B. L. (1997). Content-based instruction: From theory to practice. Content-based instruction in foreign language education: Models and methods, 3-28.

Stufflebeam, D.L. &Shinkfield, A. J.(2007). Evaluation Theory, Models, and Applications. San Francisco: Jossey-Bass.

Tarnopolsky, O. (2013). Content-Based Instruction, CLIL, and immersion in Teaching ESP at Tertiary Schools in Non-English-speaking countries. Journal of ELT and Applied Linguistics (JELTAL), 1(1), 10-21.

Teaching Knowledge Test (TKT) Content and Language Integrated Learning (CLIL).

Van de Putte (in press). Proyecto de Fortalecimiento a Licenciaturas en Lenguas: Inglés. Bogotá: Ministerio de Educación Nacional-British Council.

Vygotsky, L. (1978). Mind in society: The development of higher mental processes. Cambridge, MA: Harvard University Press.

Wallace, R.J. (1998). *Action research for language learners*. Cambridge: Cambridge University Press.

Widdowson, H. G. (1978). Teaching language as communication.Oxford: OxfordUniversity Press

Wilde, J. (2004). *Definitions for the No Child Left Behind act of 2001: Assessment.* Washington, DC: National Clearinghouse for English Language Acquisition.

Wood, D.,Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem solving.*Journal of Child Psychology and Psychiatry*, *25*, 45-62

Yin, R. K. (1994).*Case study research: Design and methods* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Yin, R. K. (2003).*Case study research: Design and method* (3rd ed.). Thousand Oaks,CA: Sage Publications.

Zucker, S. (2003).*Fundamentals of standardized testing*. San Antonio TX: HarcourtAssessment, Inc.

Appendixes

Appendix A

Focus groups' questions

QUESTIONS FOR TEACHERS

1. Describe the methodology you use to teach your Classes in English?
2. What foreign language teaching approach do you use?
3. What benefits/difficulties for your students do you find when teaching your classes?
4. Regarding the methodology you use, is there any difference between the classes you teach in Spanish and English?
5. Do you plan your lessons with content objectives, language objectives or both?
6. How much do you know about CLIL/CBI?
7. How much do you apply the principles of CLIL/CBI in your classes?

QUESTIONS FOR STUDENTS

1. Describe the Classes you attend in English?
2. What difficulties do you find when attending your classes?
3. Regarding the methodology your teachers use, is there any difference between the classes you attend in Spanish and English?
4. Do teachers express content objectives, language objectives or both in your classes?
5. Do you think you are reinforcing your language skills through the classes you attend in English?

Appendix B

Class observation Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday
TWO WEEKS CLASS OBSERVATION SCHEDULE					
Date/Time	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
2:00P.M.	History of Language Teaching Professor 1 Sede Los Mangos 102 Observer: L.Peláez				
4:30P.M.			Communication I Professor 1 Sede Los Mangos E104 Observer: C. Romero		Communication I Professor 1 Sede Los Mangos E104 OBserver: C.Romero
6:45P.M.	Naturaleza del Lenguaje II Professor 2 4 vientos C206 Observer: L. Vergara	Didactics I Professor 6 4 vientos C206 Observer: J.López Naturaleza del Lenguaje III Professor 2 4 vientos C207 Observer: C. Romero	Communication II Professor 4 Foco Rojo Observer: L. Vergara Communication III Professor 3 Foco Rojo Observer: J. López	Naturaleza del Lenguaje V Professor 2 4 vientos Observer: J.López	Communication III Professor 7 Foco Rojo Observer: J.López

Appendix C

Observation sample

The Sheltered Instruction Observation Protocol (SIOP®)

Observer(s): Luz Mireya P.
Date: April 6/15   2:00 p.m.
Grade: IV semester
ESL Level: _____

Teacher: Teacher.1.
School: Unicolombo
Class/Topic: History of Language Teaching
Lesson: (Multi-day) (Single-day) *(circle one)*

Total Points Possible: 120 (Subtract 4 points for each NA given: 120)
Total Points Earned: 51

Percentage Score: 42.5%

Directions: Circle the number that best reflects what you observe in a sheltered lesson. You may give a score from 0–4 (or NA on selected items). Cite under "Comments" specific examples of the behaviors observed.

Lesson Preparation

4	3	2	1	0
1. **Content objectives** clearly defined, displayed and reviewed with students		**Content objectives** for students implied		(0) No clearly defined **content objectives** for students

Comments: No objectives defined nor displayed.

4	3	2	1	0
2. **Language objectives** clearly defined, displayed and reviewed with students		**Language objectives** for students implied		(0) No clearly defined **language objectives** for students

Comments: The same as above.

4	3	2	1	0
3. **Content concepts** appropriate for age and educational background level of students		(2) **Content concepts** somewhat appropriate for age and educational background level of students		**Content concepts** inappropriate for age and educational background level of students

Comments: Ss keep quiet when T. asks questions about the methods. The same two or three answer to the questions.

4	3	2	1	0
4. **Supplementary materials** used to a high degree, making the lesson clear and meaningful (e.g., computer programs, graphs, models, visuals)		(2) Some use of **supplementary materials**		No use of **supplementary materials**

Comments: Presentation from ss.
Ss. have some previous questions from last classes to be answered.
were not sure if they have to
answer the same questions.

(Echevarria, Vogt, & Short, 2000, 2004, 2008, 2013)

288

137

4	③	2	1	0	NA
5. **Adaptation of content** (e.g., text, assignment) to all levels of student proficiency		Some **adaptation of content** to all levels of student proficiency		No significant **adaptation of content** to all levels of student proficiency	

Comments: Ss have different readings about the same topic (2) in their portfolio. Some, given by the T., others from their presentations.   Ss have doubts about vocabulary in the readings.

4	③	2	1	0
6. **Meaningful activities** that integrate lesson concepts (e.g., interviews, letter writing, simulations, models) with language practice opportunities for reading, writing, listening, and/or speaking		**Meaningful activities** that integrate lesson concepts but provide few language practice opportunities for reading, writing, listening, and/or speaking		No **meaningful activities** that integrate lesson concepts with language practice

Comments: A Group of Ss made a presentation about Silent Way Method. Then, answered to questions, about the method, in a piece of paper. T. discuss the questions with the class. It was the same activity for the last 3 or 4 classes.

Building Background

4	3	2	①	0	NA
7. **Concepts explicitly linked** to students' background experiences		**Concepts loosely linked** to students' background experiences		**Concepts not explicitly linked** to students' background experiences	

Comments:

4	3	②	1	0
8. **Links explicitly made** between past learning and new concepts		**Few links made** between past learning and new concepts		No **links made** between past learning and new concepts

Comments: T. sometimes made links with past presentations.

4	3	②	1	0
9. **Key vocabulary** emphasized (e.g., introduced, written, repeated, and highlighted for students to see)		**Key vocabulary** introduced, but not emphasized		**Key vocabulary** not introduced or emphasized

Comments:

138

Comprehensible Input

4	3	2	1	0
10. **Speech** appropriate for students' proficiency levels (e.g., slower rate, enunciation, and simple sentence structure for beginners)		**Speech** sometimes inappropriate for students' proficiency levels		**Speech** inappropriate for students' proficiency levels

Comments:

4	3	2	1	0
11. **Clear explanation** of academic tasks		**Unclear** explanation of academic tasks		No explanation of academic tasks

Comments: The same tasks as from previous classes. T said: Remember to answer the questions.

4	3	2	1	0
12. **A variety of techniques** used to make content concepts clear (e.g., modeling, visuals, hands-on activities, demonstrations, gestures, body language)		Some techniques used to make content concepts clear		No **techniques** used to make concepts clear

Comments: T. explained content orally, once she used the board. She also read excerpts from a reading.

Strategies

4	3	2	1	0
13. Ample opportunities provided for students to use **learning strategies**		Inadequate opportunities provided for students to use **learning strategies**		No opportunity provided for students to use **learning strategies**

Comments:

4	3	2	1	0
14. **Scaffolding techniques** consistently used, assisting and supporting student understanding (e.g., think-alouds)		**Scaffolding techniques** occasionally used		**Scaffolding techniques** not used

Comments: T. used question for this purpose.

4	③	2	1	0
15. A variety of **questions or tasks that promote higher-order thinking skills** (e.g., literal, analytical, and interpretive questions)		Infrequent **questions or tasks that promote higher-order thinking skills**		No **questions or tasks that promote higher-order thinking skills**

Comments: T. uses questions (analytical questions). How will you as a teacher correct ss. error using this method?

Interaction

4	3	2	①	0
16. Frequent opportunities for **interaction** and discussion between teacher/student and among students, which encourage elaborated responses about lesson concepts		**Interaction** mostly teacher-dominated with some opportunities for students to talk about or question lesson concepts		**Interaction** teacher-dominated with no opportunities for students to discuss lesson concepts

Comments: Few opportunities for ss interaction.

4	3	2	1	⓪
17. **Grouping configurations** support language and content objectives of the lesson		**Grouping configurations** unevenly support the language and content objectives		**Grouping configurations** do not support the language and content objectives

Comments: No group work.

④	3	2	1	0
18. Sufficient **wait time for student responses** consistently provided		Sufficient **wait time for student responses** occasionally provided		Sufficient **wait time for student responses** not provided

Comments:

④	3	2	1	0	NA
19. Ample opportunities for students to **clarify key concepts in L1** as needed with aide, peer, or L1 text		Some opportunities for students to **clarify key concepts in L1**		No opportunities for students to **clarify key concepts in L1**	

Comments:

140

Practice & Application

4	3	2	(1)	0	NA
20. **Hands-on materials and/or manipulatives** provided for students to practice using new content knowledge		Few **hands-on materials and/ or manipulatives** provided for students to practice using new content knowledge		No **hands-on materials and/or manipulatives** provided for students to practice using new content knowledge	

Comments: _So have some previous questions to be answered, from the last 3 classes._

4	3	2	(1)	0	NA
21. Activities provided for students to **apply content and language knowledge** in the classroom		Activities provided for students to **apply** either **content or language knowledge** in the classroom		No activities provided for students to **apply content and language knowledge** in the classroom	

Comments: The same questions.

4	(3)	2	1	0
22. Activities integrate all **language skills** (i.e., reading, writing, listening, and speaking)		Activities integrate some **language skills**		Activities do not integrate **language skills**

Comments: When answering the questions they do it individually, not allowing them to speak. When T. asks questions the same ss. participate. Two or three ss.

Lesson Delivery

4	3	(2)	1	0
23. **Content objectives** clearly supported by lesson delivery		**Content objectives** somewhat supported by lesson delivery		**Content objectives** not supported by lesson delivery

Comments: Eventhough, there were no content objectives defined, during the class the teacher makes emphasis on the understanding of how is teaching, using the silent way method.

4	3	2	1	(0)
24. **Language objectives** clearly supported by lesson delivery		**Language objectives** somewhat supported by lesson delivery		**Language objectives** not supported by lesson delivery

Comments: There were not language objectives specified, neither supported during the lesson.

4	3	2	1	0

25. **Students engaged** approximately 90% to 100% of the period   (3)   **Students engaged** approximately 70% of the period   **Students engaged** less than 50% of the period

Comments:

4	3	2	1	0

26. **Pacing** of the lesson appropriate to students' ability levels   (2) **Pacing** generally appropriate, but at times too fast or too slow   **Pacing** inappropriate to students' ability levels

Comments: Ss couldn't finish answering → all of the questions.

Review & Assessment

4	3	2	1	0

27. Comprehensive **review** of key vocabulary   Uneven **review of** key vocabulary   No **review of key vocabulary** (0)

Comments:

4	3	2	1	0

28. Comprehensive **review** of key content concepts   Uneven **review of** key content concepts   No **review of key content** concepts (0)

Comments:

4	3	2	1	0

29. Regular **feedback** provided to students on their output (e.g., language, content, work)   (3)   Inconsistent **feedback** provided to students on their output   (2)   No **feedback** provided to students on their output

Comments: Regular feedback on ss. participation ∧ not feedback (when T. speaks.) on their ∧individual ∧work, nor their presentation.

4	3	2	1	0

30. **Assessment of student comprehension and learning** of all lesson objectives (e.g., spot checking, group response) throughout the lesson   **Assessment of student comprehension and learning** of some lesson objectives (2)   No **assessment of student comprehension and learning** of lesson objectives

Comments:

(Reproduction of this material is restricted to use with Echevarria, Vogt, and Short (2008), *Making Content Comprehensible for English Learners: The SIOP® Model.*)

APPENDIX A   **293**

142

The Sheltered Instruction Observation Protocol (SIOP®)
(Echevarria, Vogt, & Short, 2000, 2004, 2008, 2013)

Observer(s): Luz Peláez
Date: April 6, 2015
Grade: IV semester
ESL Level: _____

School: _____
Teacher: _____
Class/Topic: History of Language
Lesson: Multi-day (Single-day) (circle one)

Total Points Possible: 120 (Subtract 4 points for each NA given) 120
Total Points Earned: 51   Percentage Score: 42.5 %

Directions: Circle the number that best reflects what you observe in a sheltered lesson. You may give a score from 0–4 (or NA on selected items). Cite under "Comments" specific examples of the behaviors observed.

	Highly Evident		Somewhat Evident		Not Evident	
Preparation	4	3	2	1	0	
1. **Content objectives** clearly defined, displayed, and reviewed with students	☐	☐	☐	☐	(☐)	
2. **Language objectives** clearly defined, displayed, and reviewed with students	☐	☐	☐	☐	(☐)	
3. **Content concepts** appropriate for age and educational background level of students	☐	☐	(☐)	☐	☐	
4. **Supplementary materials** used to a high degree, making the lesson clear and meaningful (e.g., computer programs, graphs, models, visuals)	☐	☐	(☐)	☐	☐	
						NA
5. **Adaptation of content** (e.g., text, assignment) to all levels of student proficiency	☐	(☐)	☐	☐	☐	☐
6. **Meaningful activities** that integrate lesson concepts (e.g., surveys, letter writing, simulations, constructing models) with language practice opportunities for reading, writing, listening, and/or speaking	☐	(☐)	☐	☐	☐	

Comments:

Building Background	4	3	2	(1)	0	NA
7. **Concepts explicitly linked** to students' background experiences	☐	☐	☐	(☐)	☐	☐
8. **Links explicitly made** between past learning and new concepts	☐	☐	(☐)	☐	☐	
9. **Key vocabulary** emphasized (e.g., introduced, written, repeated, and highlighted for students to see)	☐	☐	(☐)	☐	☐	

Comments:

Comprehensible Input	4	3	2	1	0
10. **Speech** appropriate for students' proficiency level (e.g., slower rate, enunciation, and simple sentence structure for beginners)	(☐)	☐	☐	☐	☐
11. **Clear explanation** of academic tasks	☐	☐	☐	(☐)	☐

APPENDIX A

12. **A variety of techniques** used to make content concepts clear
(e.g., modeling, visuals, hands-on activities, demonstrations,
gestures, body language) — circled: **1**
    Comments:

Strategies

	4	3	2	1	0
13. Ample opportunities provided for students to use **learning strategies**	❑	❑	❑	❑	(0)
14. **Scaffolding techniques** consistently used assisting and supporting student understanding (e.g., think-alouds)	❑	❑	(2)	❑	❑
15. A variety of **questions or tasks that promote higher-order thinking skills** (e.g., literal, analytical, and interpretive questions)	❑	(3)	❑	❑	❑

Comments:

Interaction

	4	3	2	1	0	
16. Frequent opportunities for **interaction** and discussion between teacher/student and among students, which encourage elaborated responses about lesson concepts	❑	❑	❑	(1)	❑	
17. **Grouping configurations** support language and content objectives. of the lesson	❑	❑	❑	❑	(0)	
18. Sufficient **wait time for student responses** consistently provided	(4)	❑	❑	❑	❑	NA
19. Ample opportunities for students to **clarify key concepts in L1** as needed with aide, peer, or L1 text	(4)	❑	❑	❑	❑	❑ NA

Comments:

Practice & Application

	4	3	2	1	0	NA
20. **Hands-on materials and/or manipulatives** provided for students to practice using new content knowledge	❑	❑	❑	(1)	❑	❑
21. Activities provided for students to **apply content and language knowledge** in the classroom	❑	❑	❑	(1)	❑	❑ NA
22. Activities integrate all **language skills** (i.e., reading, writing, listening, and speaking)	❑	(3)	❑	❑	❑	

Comments:

Lesson Delivery

	4	3	2	1	0
23. **Content objectives** clearly supported by lesson delivery	❑	❑	(2)	❑	❑
24. **Language objectives** clearly supported by lesson delivery	❑	❑	❑	❑	(0)
25. **Students engaged** approximately 90% to 100% of the period	❑	(3)	❑	❑	❑
26. **Pacing** of the lesson appropriate to students' ability level	❑	❑	(2)	❑	❑

Comments:

APPENDIX A

Review & Assessment	4	3	2	1	0
27. Comprehensive **review of key vocabulary**	❑	❑	❑	❑	⊙
28. Comprehensive **review of key content concepts**	❑	❑	❑	❑	⊙
29. Regular **feedback** provided to students on their output (e.g., language, content, work)	❑	❑	⊙	❑	❑
30. **Assessment of student comprehension and learning** of all lesson objectives (e.g., spot checking, group response) throughout the lesson	❑	❑	⊙	❑	❑

Comments:

(Reproduction of this material is restricted to use with Echevarria, Vogt, and Short (2013), *Making Content Comprehensible for English Learners: The SIOP® Model.*)

APPENDIX A

145

Appendix D

TKT CLIL practice test

TKT: CLIL | Practice test

A sample answer sheet is on page 114.

Part 1 Aims of and rationale for CLIL

For questions **1–7**, match the activities with the CLIL aims listed **A–D**.

Mark the correct letter (**A–D**) on your answer sheet.

You will need to use some of the options more than once.

CLIL aims

A	reviewing content knowledge
B	practising communication skills
C	developing cognitive skills
D	increasing awareness of culture

Activities

1. Learners look at pictures of musical instruments and then group them according to how they think they might be played.

2. Learners read a text about plants and how different people use them. They underline the uses of plants which are similar to how plants are used in the area where they come from.

3. Learners use a search engine to look for information about electric cars. They read the text and find three facts they learned about in a previous lesson.

4. Without any sound, learners watch a DVD showing some ways to keep fit. Once they've watched it, they describe one way to keep fit to a partner.

5. Learners are given six shapes and asked to calculate their areas. They use the methods they've done in class to find the answers.

6. How green is your school? In groups, learners agree on what they could do to reduce the energy the school uses.

7. Learners find features in the architecture of five buildings which are also found in buildings in different parts of their country.

For questions **8–13**, match the teachers' comments with the language needed for the tasks listed **A–G**.

Mark the correct letter (**A–G**) on your mark sheet.

There is one extra option which you do not need to use.

Language needed for tasks

A	prepositions of place
B	passive forms
C	past tenses
D	reporting verbs
E	conditionals
F	adjectives
G	comparative forms

Teachers' comments

8. I'd like my learners to be more accurate when they are hypothesising before we do experiments with liquids and solids.

9. My learners need practice with impersonal language to describe a production line.

10. My learners know basic colours and shapes but they don't have enough vocabulary to describe the different paintings in detail.

11. My class has a wide range of subject vocabulary to be able to identify symbols on a map but they are not good at describing where to find the symbols.

12. It's important my learners can write about similarities and differences between environments around the world.

13. My learners are quite good at telling me what they're doing during match practice but after the match has finished, they're not very accurate about describing the moves they made.

100

101

For questions **14–19**, look at the learner's language and the three possible functions listed **A**, **B** and **C**.

Choose the function which matches the learner's language.

Mark the correct letter (**A**, **B** or **C**) on your answer sheet.

---

14 What I mean is that the lyrics seem to match the music.

   A   justifying a prediction
   B   contrasting two ideas
   C   clarifying a point

15 I'm sure we should add the numbers first and then divide them to find the average.

   A   expressing a preference
   B   expressing an opinion
   C   expressing uncertainty

16 How about copying and pasting some images next to these bits of text to make the page layout look better?

   A   agreeing with a partner
   B   presenting a solution
   C   describing a process

17 We think this historical source has been used really well as the group gave many examples of evidence from it.

   A   explaining the purpose of a piece of work
   B   suggesting how to improve a piece of work
   C   evaluating a piece of work

18 If we used a Venn diagram, we could show the similarities between the two governments really clearly.

   A   making a suggestion
   B   hypothesising about the past
   C   generalising

19 Using a time-line will help us remember how we did the yeast experiment because we'll see the order of how we did it really clearly.

   A   expressing obligation
   B   defining a problem
   C   justifying an opinion

For questions **20–25**, match the teachers' questions with the cognitive skills they demand listed **A–C**.

Mark the correct letter (**A**, **B** or **C**) on your answer sheet.

You will need to use some of the options more than once.

Cognitive skills

A	lower-order thinking
B	higher-order thinking
C	lower-order and higher-order thinking

Teachers' questions

20 Which bar chart shows the data more clearly? When you've decided, tell your partner why.

21 Read the words about lines and patterns on the board. Which words do you know? How many are new?

22 On the screen you'll see four examples of musical scales. Click on those that are major keys. How do you know?

23 Think about the basketball match you played yesterday. What happened before the coach stopped the game? Why did he stop the game?

24 Look at these visual organisers. How do they help you take notes? How could you use them after reading your chapter about classical civilisations?

25 This page has some diagrams about farming. Which ones are bar charts and which ones are line graphs? Where else in your book can you find data presented like this?

Part 2 Lesson preparation

For questions 26–31, match the examples from an IT lesson plan with the lesson plan headings listed A–G.

Mark the correct letter (A–G) on your answer sheet.

There is one extra option which you do not need to use.

### Lesson plan headings

A	learning outcomes
B	evaluation
C	communication
D	activating prior knowledge
E	resources
F	content language
G	differentiation

Examples from an IT lesson plan

26 Key vocabulary: cell, column, cut, data, drag, formula, graph, label, paste

27 Learners work individually to brainstorm different ways of recording information.

28 Learners think about why their spreadsheet is useful and how they could improve the design next time.

29 Describing values in cells; predicting problems; suggesting how to use a spreadsheet in real life

30 Some learners sort the table, some set up two cells and include them in the formula.

31 To be able to format and label data correctly, to enter rules and formulae accurately
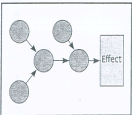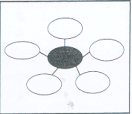
For questions 32–37, match the teachers' comments with the visual organisers which would support the learners, listed A–G.

Mark the correct letter (A–G) on your answer sheet.

There is one extra option which you do not need to use.

Teachers' comments

32 Before they design a shoe, I'd like my learners to write down the names of types of shoes.

33 To help them learn some technical vocabulary, I want my learners to identify the leaves by answering some questions.

34 Learners need support to visualise all the different facts that might lead up to a world water shortage.

35 I'll ask my learners to categorise all the types of factories that started during the Industrial Revolution.

Visual organisers

A

B

C

D

36 I'll ask my learners to show which numbers are square numbers under 100, which numbers under 100 can be divided by 5 and which numbers belong to both sets.
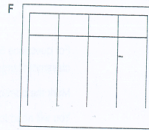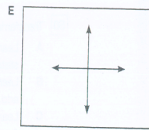
37 Some learners had difficulty understanding the text about the carbon cycle so I'll give them a diagram to show what happens.

E

F

G

Is it a _____?

Yes   No

Does it   Does it
have ____?   have ____?
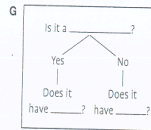
For questions **38–44**, match the parts of the web page with the reasons for selecting the page listed **A–D**.

Mark the correct letter (**A–D**) on your answer sheet.

You will need to use some of the options more than once.

Reasons for selecting a web page

A	to support understanding of new concepts
B	to personalise learning
C	to give word level support
D	to develop receptive skills

Parts of web page

Did you know?

🔊 **Listen**

38 Breakfast is your most important meal of the day.

39 **Breakfast**
Listen to an interview with a food expert.

40   **41** **Examples of food with carbohydrates**
potatoes   rice   cereal
pasta   noodles

'How do carbohydrates help the body?'

42 Carbohydrates help the body by providing energy. When we do activities such as riding a bike, running or playing sport, the body uses up large amounts of energy. We have to make sure we balance the energy that goes out, with food and water that comes into the body. We can replace lost energy by eating foods rich in carbohydrates.

43 **You can increase your carbohydrates by:**
- always having a breakfast
- having thick sliced toast like wholegrain bread
- eating brown rice or pasta
- having boiled potatoes rather than chips, which are cooked in fats.

44 **FUEL BALANCE**

Fuel taken into the body as food and drink

Fuel used up by body functions, growth and physical activities

IN   OUT
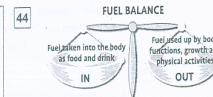
(adapted from www.bbc.co.uk/
northernireland/schools/4_11/uptoyou/
healthy/nutrientfacts1.shtml)

For questions **45–50**, look at the activity types and the three possible examples of activities listed **A**, **B** and **C**.

Choose the example which matches the activity type.

Mark the correct letter (**A**, **B** or **C**) on your answer sheet.

45 Ranking

A   Learners listen to music from different countries and then mark the countries on a map.

B   Learners list different musical instruments and then write them in the order they hear them played.

C   Learners listen to music used for different celebrations and then list the music according to how fast it was played.

46 Interpreting data

A   Learners read about how to plan a design project and then work out how much time to spend at each stage of the project.

B   Learners look at a range of products and then agree which product their group will design.

C   Learners list all the materials and tools they might need to use while making their products.

47 Observing and recording

A   Learners look at an interactive poster on recycling and then tell a partner why it is an effective poster.

B   Learners explore the poster by clicking on the recycling images and then look back at the questions they wrote to check if their questions were answered.

C   Learners click on a video clip, watch it and then write down three questions the environmentalist asked.

48 Developing communicative fluency

A   Learners activate prior knowledge by writing five words they associate with Mexico.

B   Learners look at the website 'from bean to drink' and then take turns to explain how chocolate became a drink.

C   Learners use the Internet to find out the way the Aztecs used the land around them to support their diet.

49 Classifying

A   Learners make a table and complete it with information about the locations, weather, population and economy of their country.

B   Learners make a pie chart to show the percentage of people who work in the main industries in their country.

C   Learners make a diagram to show the different jobs in their country and put them under three headings: manufacturing, agriculture and services.

50 Transferring data

A   Learners study a map of the Mediterranean and then say if they agree with a statement about Hannibal's route.

B   Learners look at a map showing Alexander's empire. They read a text and then add direction arrows to show which way he went.

C   Learners look at a map of the Islamic Empire and then underline the dates the Arabs reached each area.

For questions **51–57**, match the examples of teacher talk with the purpose of the classroom language listed **A–D**.

Mark the correct letter (**A–D**) on your answer sheet.

You will need to use some of the options more than once.

Purpose of classroom language

A   to encourage further collaboration

B   to find out if learners are having difficulties

C   to develop thinking skills

D   to give positive feedback

Teacher talk

51 You read about the fire festivals and then worked very well together to answer the questions.

52 Why don't you find out who the competitors are, then decide who is going to search these websites for examples of their products?

53 Who found it hard to match the descriptions of the trees with their leaves?

54 How about choosing a different rhythm as a group and recording the music again?

55 Look at these political terms and tell me which ones you think are complicated.

56 On your own, I'd like you to compare the cave painting of the animal with the animals Picasso drew.

57 Try to make connections with how the river was used in the Middle Ages and how it is used today.

For questions **58–64**, match the learners' comments with the learning strategies listed **A–H**.

Mark the correct letter (A–H) on your answer sheet.

There is one extra option which you do not need to use.

Learning strategies

A	setting learning goals
B	analysing how to do the task
C	working out timing
D	identifying key content vocabulary
E	asking for clarification
F	personalising learning
G	using visual prompts
H	editing work

Learners' comments

58 I'm going to highlight one or two science words which look or sound similar to the words in my first language.

59 I'll use a diagram which could help me to organise my notes about the history text.

60 We're going to check our work together to see if we've made any mistakes with the stages of the design process before we hand them in to the teacher.

61 I think we could look at the purpose of the question, decide what information we need from the Internet and then agree who is going to search for the different parts.

62 Before I start my IT project on local communities, I'll think about which IT skills I will be able to improve by the end of the project that I can't do so well now.

63 We have several reports to read about fair trade. It's a good idea to read them again quickly and use a coloured pen to highlight the phrases we'll need for the debate.

64 When I don't understand a maths problem and I don't have my bilingual dictionary, I sometimes check what I have to do with a partner.

For questions **65–70**, look at the ways to differentiate learning and the three tasks listed **A, B** and **C**.

Two of the tasks are ways to differentiate learning. One task is **NOT**.

Mark the letter (**A, B** or **C**) which is **NOT** a way to differentiate learning on your answer sheet.

65 Differentiating input for less able learners while they read a text about economics

A Give them more examples of economic words they might need to use.

B Give out bilingual glossaries to help with the economic vocabulary in the text.

C Give them an oral summary of the text before they start reading.

66 Differentiating input for more able learners in a practical PE class

A Advise them to start exercising on the more challenging fitness machines.

B Ask them to tell you the names of the fitness machines.

C Put them in pairs to monitor their own fitness programmes.

67 Differentiating output for less able learners doing a writing task in history

A Draw a writing frame on the board for a group to use.

B Suggest they can use dictionaries to look up all the words they don't know.

C Tell them they can use their word banks and coursebook to help them.

68 Differentiating output for more able learners in geography

A Encourage them to link what they've learned about types of rocks to rocks found in their local environment.

B Tell them not to look at glossaries of rock vocabulary while they are writing, even though the rest of the class are using them.

C Work with a partner and tick all the words in the text which they already know about rocks.

69 Differentiating outcome for less able learners in maths

A Give them only one type of symmetry to investigate.

B Give them the definitions of the words about symmetry to learn.

C Give them practical examples using mirrors and tracing paper before they examine geometrical shapes.

70 Differentiating outcome for more able learners in science

A Ask them to copy the sentences about food chains from the board.

B Ask them to apply their knowledge of food chains and describe one in the sea.

C Ask them to design a food chain that could exist on another planet.

For questions **71–75**, match the examples of assessment with the main focus of the assessment listed **A–F**.

Mark the correct letter (**A–F**) on your answer sheet.

There is one extra option which you do not need to use.

Main focus of assessment

A	knowledge of subject content
B	awareness of language structures
C	written fluency
D	oral fluency
E	oral fluency and accuracy
F	practical skills

Examples of assessment

71 Imagine a piece of abstract art with the title 'Movement'. Tell us how it might look.

72 Using a pair of compasses and a ruler, draw three circles with different circumferences.

73 Using the vocabulary you have learned and your edited notes, you have three minutes to speak about how to reduce waste.

74 Look at the list of facts about electromagnetism and tick the three applications which are most useful for industry.

75 Read the text about the government's economic plans and underline those plans which were made in the past and then, in a different colour, underline those plans made for the future.

For questions **76–80**, look at the types of assessment and the three possible assessment tasks listed **A**, **B** and **C**.

Choose the assessment task which matches the type of assessment.

Mark the correct letter (**A**, **B** or **C**) on your answer sheet.

76 summative assessment of subject content

A   Learners do a speaking task about what they are investigating on the Internet.

B   Learners do a test on the computer after an interactive revision unit.

C   Learners write a summary of what they'd like to revise next.

77 formative assessment of subject content

A   After the learners play some chords, the teacher asks them to explain what harmony is and then gives feedback on how they played them.

B   After a unit of work, the teacher asks learners to circle chords which are from minor keys. The teacher then tells them the answers.

C   At the end of term, the teacher asks a learner to play a series of chords from a piece of music they have studied.

78 peer assessment

A   Learners read about the Indian economy. They make a table with five headings and exchange it with a partner, who comments on their choice of headings.

B   Learners listen to a report on the Indian economy and then in pairs they write down ten words and phrases they heard which described the economy.

C   Learners work with a partner. One has a gap-fill text about the Indian economy and the other has a list of economic words. They ask and answer questions to complete the text.

79 self-assessment of physical skills

A   Learners agree about how the teacher can improve their athletics training.

B   Learners tick a list of criteria to evaluate their progress in athletics training.

C   Learners do a progress test about training programmes for athletics.

80 performance assessment

A   Learners use a list to see how many different national meals they can identify.

B   Learners use a set of 'can do' statements to find out what they know about meals from different countries.

C   Learners use a set of criteria to check how well they cooked some meals from different countries.

Appendix E

TKT CLIL general description

GENERAL DESCRIPTION

Examination format	TKT: CLIL consists of two parts
Timing	1 hour 20 minutes
Number of items	80
Task types	3-option multiple choice; 1-1 matching; 3/4/5-option matching; odd one out; ordering; sequencing
Answer format	For all parts, candidates indicate their answers by shading the correct lozenges on their answer sheets. Candidates should use a pencil and mark their answers firmly. Candidates should use an eraser to rub out any answer they wish to change.
Marks	Each item carries one mark.

SYLLABUS

TKT: CLIL is an examination for both subject teachers and English language teachers involved in CLIL programmes. It tests knowledge of the aims and rationale of a CLIL approach and knowledge of CLIL from a teaching perspective: the planning, teaching and assessment of CLIL. It also focuses on teachers' awareness of learning demands (content, language, communication, cognition) and support strategies for learners in CLIL programmes.

PART 1

Title	Knowledge of CLIL and Principles of CLIL.
Number of items	25
Areas of knowledge	• aims of and rationale for CLIL • language across the curriculum • communication skills across the curriculum • cognitive skills across the curriculum • learning skills across the curriculum
Task types	4 tasks of 5-8 items each: 1-1 matching; 3-option multiple-choice; 3/4/5-option matching; odd one out

PART 2

Title	Lesson Preparation
Number of items	25
Areas of knowledge	• planning a lesson or a series of lessons • language demands of subject content and accompanying tasks • resources including multi-media and visual organisers • materials selection and adaptation • activity types
Task types	4 tasks of 5-8 items each: 1-1 matching; 3-option multiple-choice; 3/4/5-option matching; odd one out; ordering; sequencing

PART 2

Title	Lesson Delivery
Number of items	20
Areas of knowledge	• classroom language • scaffolding content and language learning • methods to help learners develop learning strategies • consolidating learning and differentiation
Task types	3 tasks of 5-8 items each 1-1 matching; 3-option multiple-choice; 3/4/5-option matching; odd one out

PART 2

Title	Assessment
Number of items	10
Areas of knowledge	• focus of assessment • types of assessment • support strategies
Task types	2 tasks of 5 items each: 1-1 matching; 3-option multiple-choice; odd one out

Appendix F

MET general description of levels by skills

		A1	A2	B1
UNDERSTANDING	**Listening**	I can recognise familiar words and very basic phrases concerning myself, my family and immediate concrete surroundings when people speak slowly and clearly.	I can understand phrases and the highest frequency vocabulary related to areas of most immediate personal relevance (e.g. very basic personal and family information, shopping, local area, employment). I can catch the main point in short, clear, simple messages and announcements.	I can understand the main points of clear standard speech on familiar matters regularly encountered in work, school, leisure, etc. I can understand the main point of many radio or TV programmes on current affairs or topics of personal or professional interest when the delivery is relatively slow and clear.
	Reading	I can understand familiar names, words and very simple sentences, for example on notices and posters or in catalogues.	I can read very short, simple texts. I can find specific, predictable information in simple everyday material such as advertisements, prospectuses, menus and timetables and I can understand short simple personal letters.	I can understand texts that consist mainly of high frequency everyday or job-related language. I can understand the description of events, feelings and wishes in personal letters.
SPEAKING	**Spoken Interaction**	I can interact in a simple way provided the other person is prepared to repeat or rephrase things at a slower rate of speech and help me formulate what I'm trying to say. I can ask and answer simple questions in areas of immediate need or on very familiar topics.	I can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar topics and activities. I can handle very short social exchanges, even though I can't usually understand enough to keep the conversation going myself.	I can deal with most situations likely to arise whilst travelling in an area where the language is spoken. I can enter unprepared into conversation on topics that are familiar, of personal interest or pertinent to everyday life (e.g. family, hobbies, work, travel and current events).
	Spoken Production	I can use simple phrases and sentences to describe where I live and people I know.	I can use a series of phrases and sentences to describe in simple terms my family and other people, living conditions, my educational background and my present or most recent job.	I can connect phrases in a simple way in order to describe experiences and events, my dreams, hopes and ambitions. I can briefly give reasons and explanations for opinions and plans. I can narrate a story or relate the plot of a book or film and describe my reactions.
WRITING	**Writing**	I can write a short, simple postcard, for example sending holiday greetings. I can fill in forms with personal details, for example entering my name, nationality and address on a hotel registration form.	I can write short, simple notes and messages relating to matters in areas of immediate need. I can write a very simple personal letter, for example thanking someone for something.	I can write simple connected text on topics which are familiar or of personal interest. I can write personal letters describing experiences and impressions.

B2	C1	C2
I can understand extended speech and lectures and follow even complex lines of argument provided the topic is reasonably familiar. I can understand most TV news and current affairs programmes. I can understand the majority of films in standard dialect.	I can understand extended speech even when it is not clearly structured and when relationships are only implied and not signalled explicitly. I can understand television programmes and films without too much effort.	I have no difficulty in understanding any kind of spoken language, whether live or broadcast, even when delivered at fast native speed, provided I have some time to get familiar with the accent.
I can read articles and reports concerned with contemporary problems in which the writers adopt particular attitudes or viewpoints. I can understand contemporary literary prose.	I can understand long and complex factual and literary texts, appreciating distinctions of style. I can understand specialised articles and longer technical instructions, even when they do not relate to my field.	I can read with ease virtually all forms of the written language, including abstract, structurally or linguistically complex texts such as manuals, specialised articles and literary works.
I can interact with a degree of fluency and spontaneity that makes regular interaction with native speakers quite possible. I can take an active part in discussion in familiar contexts, accounting for and sustaining my views.	I can express myself fluently and spontaneously without much obvious searching for expressions. I can use language flexibly and effectively for social and professional purposes. I can formulate ideas and opinions with precision and relate my contribution skilfully to those of other speakers.	I can take part effortlessly in any conversation or discussion and have a good familiarity with idiomatic expressions and colloquialisms. I can express myself fluently and convey finer shades of meaning precisely. If I do have a problem I can backtrack and restructure around the difficulty so smoothly that other people are hardly aware of it.
I can present clear, detailed descriptions on a wide range of subjects related to my field of interest. I can explain a viewpoint on a topical issue giving the advantages and disadvantages of various options.	I can present clear, detailed descriptions of complex subjects integrating sub-themes, developing particular points and rounding off with an appropriate conclusion.	I can present a clear, smoothly flowing description or argument in a style appropriate to the context and with an effective logical structure which helps the recipient to notice and remember significant points.
I can write clear, detailed text on a wide range of subjects related to my interests. I can write an essay or report, passing on information or giving reasons in support of or against a particular point of view. I can write letters highlighting the personal significance of events and experiences.	I can express myself in clear, well-structured text, expressing points of view at some length. I can write about complex subjects in a letter, an essay or a report, underlining what I consider to be the salient issues. I can select style appropriate to the reader in mind.	I can write clear, smoothly flowing text in an appropriate style. I can write complex letters, reports or articles which present a case with an effective logical structure which helps the recipient to notice and remember significant points. I can write summaries and reviews of professional or literary works.

Appendix G

Survey to students sample

ENCUESTA A ESTUDIANTES

Fecha: _April 25th 2015_   Semestre: _____

Como parte de la investigación que se viene desarrollando en la Fundación Universitaria Colombo Internacional en el programa de Licenciatura en Educación con Énfasis en Inglés sobre la identificación de competencias en Content Based Instruction (CBI) de los docentes que dictan asignaturas de contenidos en Inglés, se realiza esta encuesta con el objetivo de obtener información sobre la metodología que utilizan estos profesores.

A continuación se presenta un listado de prácticas que los docentes de asignaturas de contenidos en Inglés realizan en el desarrollo de sus clases. Lea cuidadosamente cada enunciado y elija el número que represente la respuesta con la que más esté de acuerdo.

Utilice la siguiente escala:

1	2	3	4	5
Ninguno	Pocos	Algunos	Casi todos	Todos

PRESENTACIÓN DE OBJETIVOS

1.	Los docentes muestran los objetivos de la lengua al inicio de la clase.	1	⊠2	3	4	5
2.	Los docentes explican los objetivos de la lengua a los estudiantes.	1	⊠2	3	4	5
3.	Los docentes repasan los objetivos de la lengua con los estudiantes.	1	⊠2	3	4	5
4.	Los docentes muestran los objetivos de contenido al inicio de la clase.	1	⊠2	3	4	5
5.	Los docentes explican los objetivos de contenido a los estudiantes.	1	⊠2	3	4	5
6.	Los docentes repasan los objetivos de contenido con los estudiantes.	1	⊠2	3	4	5

DESARROLLO DE ACTIVIDADES Y USO DE MATERIALES

7.	Los docentes usan material complementario para hacer la clase clara y significativa.	1	2	3	⊠4	5
8.	Los docentes realizan actividades significativas que integran conceptos de la lección con oportunidades para practicar la escritura del idioma.	1	⊠2	3	4	5
9.	Los docentes realizan actividades significativas que integran conceptos de la lección con oportunidades para practicar la lectura del idioma.	1	2	⊠3	4	5
10.	Los docentes realizan actividades significativas que integran conceptos de la lección con oportunidades para practicar la escucha del idioma.	1	2	⊠3	4	5
11.	Los docentes realizan actividades significativas que integran conceptos de la lección con oportunidades para practicar el habla en el idioma.	1	2	3	⊠4	5
12.	Los docentes realizan actividades que integran todas las habilidades lingüísticas (ej. lectura, escritura, escucha y habla).	1	2	⊠3	4	5

CONSTRUCCIÓN DE CONOCIMIENTOS PREVIOS

13.	Los docentes conectan los conocimientos previos con nuevos conceptos.	1	2	3	4	5
15.	Los docentes conectan experiencias previas de los estudiantes con los nuevos conceptos.	1	2	3	4	5
16.	Los docentes presentan el vocabulario clave.	1	2	3	4	5
17.	Los docentes resaltan el vocabulario clave.	1	2	3	4	5

USO COMPRENSIBLE DEL LENGUAJE

18.	Los docentes usan una variedad de técnicas para hacer que los conceptos de contenido sean más claros.	1	2	3	4	5
19.	Los docentes usan el lenguaje apropiado para el nivel de proficiencia del estudiante.	1	2	3	4	5
20.	Los docentes ofrecen explicaciones claras de las tareas académicas.	1	2	3	4	5

ESTRATEGIAS

21.	Los docentes proveen estrategias de aprendizaje a los estudiantes.	1	2	3	4	5
22.	Los docentes utilizan técnicas para ayudar y apoyar al estudiante a comprender los nuevos conceptos.	1	2	3	4	5
23.	Los docentes utilizan diferentes tipos de preguntas que promueven habilidades de pensamiento. (Literales, analíticas e interpretativas)	1	2	3	4	5

INTERACCIÓN Y MOTIVACIÓN

24.	El docente ofrece oportunidades de interacción y discusión entre docente/estudiante y estudiante/estudiante que promueven alcanzar los objetivos de clase.	1	2	3	4	5
25.	El docente utiliza actividades grupales que promueven alcanzar los objetivos de clase.	1	2	3	4	5
26.	El docente presenta actividades que le permiten al estudiante estar motivado durante el periodo de clase.	1	2	3	4	5

REPASO Y EVALUACIÓN

27.	El docente hace continua retroalimentación durante la clase.	1	2	3	4	5
28.	El docente repasa el vocabulario clave de la lección al finalizar la clase.	1	2	3	4	5
29.	El docente repasa los conceptos de la lección al finalizar clase.	1	2	3	4	5
30	El docente revisa la comprensión y aprendizaje del estudiante antes de terminar la clase. (Revisión de objetivos propuestos)	1	2	3	4	5

Appendix H

TKT sample result

Appendix I

MET Speaking test sample result

Para aprender inglés de verdad !

The Corporación Cultural Centro Colombo Americano in Cartagena, Tax ID No. 890480040-2, a Binational Institution with Government Legal Permit No. 37 dated January 1961; Cartagena Chamber of Commerce Registration No. 09-236032-21; Academic Program renewal through Resolution No. 8260 of November 28th, 2014, issued by Cartagena de Indias District Department of Education.

CERTIFIES

That, **ASTRID DIAZ DONADO**, with identification card No. 1.128.050.987 issued in Cartagena, Colombia, took an English Speaking Test on April 29th, 2015. Her score is as follows:

Speaking Test Score: 72, 7 points

Common European Framework Level: C1

The scaled scores for the different CEFR Levels are:
C1 (64-80), B2 (53-63), B1 (40-52), A2 (0-39)

Issued in Cartagena de Indias on May 8, 2015.

ARMANDO VILLA PEREZ
Academic Director