

## AN OVERVIEW TO THE IMPLEMENTATION OF TRANSVERSALITY AT SOME

## SCHOOLS IN POPAYÁN

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## AN OVERVIEW TO THE IMPLEMENTATION OF TRANSVERSALITY AT SOME SCHOOLS IN POPAYÁN

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#### ABSTRACT

In this research project, we discussed our perceptions about the traditional education we witnessed when were at school. These discussions were based upon the reflection on our previous experiences as school students. At the same time, we worked on a literature review about different theories related to transversality in order to analyze the characteristics of transversal education and determine which ones have been considered in the educational practices in five schools of Popayán (Champagnat School, Amalaka School, Gabriela Mistral School, Francisco Antonio de Ulloa School and Normal Superior High School). We gathered information in these schools through the use of interviews, classroom observations, and surveys. We have also constructed operational definitions about transversality and construction of knowledge.

Key words: education, transversality and construction of knowledge

#### RESUMEN

En este trabajo de investigación, se expresan las diferentes percepciones sobre la educación tradicional de la cual fuimos testigos en el colegio. Estas discusiones se basaron en la reflexión de nuestras experiencias previas como estudiantes. Del mismo modo, se hizo una revisión literaria sobre diferentes teorías relacionadas con la transversalidad para analizar las características de la educación transversal y determinar cuáles han sido consideradas en las practicas educativas en cinco colegios de Popayán (Colegio Champagnat, Granja escuela Amalaka, institución educativa Gabriela Mistral, institución educativa Francisco Antonio de Ulloa, y Escuela Normal Superior de Popayán). Nosotros recolectamos información a través del uso de entrevistas, observaciones de clase y encuestas. Así, se construyeron definiciones operacionales sobre transversalidad y construcción de conocimiento.

Palabras clave: educación, transversalidad y construcción de conocimiento.

#### **INTRODUCTION**

Taking into account the current moment that we live, all the phenomena that have appeared with globalization, and above all, the boom of foreign languages teaching and learning, we found it very important, as future teachers of languages, to reflect upon education and its expected role of bridging the gap between social belonging and academic relevance.

This study on transversal education was aimed to analyze the characteristics of transversal education and determine which ones have been considered in the educational practices in five schools of Popayán (Champagnat School, Amalaka School, Gabriela Mistral School, Francisco Antonio de Ulloa School and Normal Superior High School). In this way, we have taken into consideration a different perspective of educational environments in which students and teachers can interchange ideas and reflect upon their experiences for the construction of knowledge to transform society, as tranversality pursues. This pedagogical alternative fosters the relationship between school and students' lives in order to avoid the fragmentation of knowledge and the transmission of information, by involving students' background knowledge, enhancing an interdisciplinary vision of education, constructing knowledge, and developing critical thinking and autonomy. Furthermore, transversality is grounded on an education in values such as solidarity, respect, responsibility, equality, justice in order to improve life quality. It proposes some themes like environmental education, civics, education for sexuality, health, and peace which are essential for motivating students to recognize problems taking place in different contexts and to face them in their community.

The implementation of this kind of education would not only break the paradigm of traditional education, consisting just of the transmission of information, but also, would permit people to develop critical thinking, propose alternatives to meet real needs and find possible solutions. Regarding language teaching and learning, this alternative education would make this process more enjoyable and enriching for both students and teachers.

In this study, we explored different theories grounded on tranversality. During this process, we looked for some contemporary pedagogical theories about transversality, constructivism, material design, complex thinking, critical thinking, communicative language teaching, whole language teaching, content – based instruction, and some of the contemporary transversal education projects in order to construct operational definitions for the concepts of transversality and construction of knowledge.

In order to analyze the characteristics of transversal education and determine which ones have been considered in the educational practices in five schools of Popayán (Champagnat School, Amalaka School, Gabriela Mistral School, Francisco Antonio de Ulloa School and Normal Superior High School), four different kinds of research techniques were implemented. These were autoethnographies, interviews to English and other subjects teachers, classroom observations to English and other subjects teachers and surveys to students

In the justification, we present a discussion about traditional and transversal education. We see traditional education as transmission of information, while traversal

education proposes an education based upon the integral development of human beings, the construction of knowledge, the development of critical thinking, bearing in mind students' previous experiences, interests, likes and needs which allow them to play an active role in education.

In the problem statement, we reflect on the current education based on our experiences at high school and the *Orientación del Proceso Educativo OPE*, and the importance of transversality in education as a way to motivate and enrich the process of learning a foreign language. Then, we present the general objective focused on the analysis of the characteristics of transversal education, mainly in English learning and teaching considered in the educational practices in some schools in Popayán.

In our methodological orientations, we resort to qualitative approach since this research is based upon the experiences of the members of school communities, autoethnographies, interviews to teachers and non-participant classroom observations carried out in English classes and some other subjects in five schools of Popayán (Champagnat School, Amalaka School, Gabriela Mistral School, Francisco Antonio de Ulloa School and Normal Superior High School). Regarding the surveys to students of different ages, we used a quantitative approach to analyze the data in a more practical way.

In the referential framework, we consider different sources of information to set the foundations of the research and propose an alternative to tackle the diverse difficulties of education. First, we checked the contextual aspects in the schools we planned to carry out the research. Second, we reviewed the legal framework of Colombia which guides English education in schools and establishes the goals of the educational process. And finally, we conduct a literature review to examine different approaches of language education and determined which elements could be useful for our proposal.

The data analysis for this research was based on autoethnographies, and the information emerging from interviews, surveys, and class observations implemented at the schools, which allowed us to analyze the role of transversality in these schools. For the interviews' data analysis we recognized the answers provided by teachers of English and other different subjects, the surveys were aimed to identify the characteristics of transversality in the schools and the current English teaching strategies implemented in these schools, finally the class observations were analyzed in order to establish which aspects need to be reinforced in these schools. In the triangulation of data, we include the analysis and comparison of the findings obtained from the data collected. From the information gathered from these schools, we analyzed the concept of transversality and its characteristics, different projects and proposals linked to transversal education. Then, we compared our experiences about transversality in our schools.

In this study, some pedagogical implications are stated for the integral education of professionals in foreign languages. As future teachers of foreign languages, we find important the characteristics of transversality to transform Colombian Education into one that bridges the gap between school and students' lives, constructs knowledge, and develops critical thinking. Some of these pedagogical implications were thought bearing in mind the importance of transversal education in the aims of *Proyecto Educativo del Programa de Lenguas Modernas* 

Inglés-Francés 2010 de la Universidad del Cauca. Besides, some other implications were proposed based upon the evidences of transversal characteristics found in the educational processes carried out in the schools and their contributions to the school community.

The conclusions were drawn based upon the analysis of the role of transversality in education, its themes, its characteristics, and the way Champagnat School, Amalaka School, Gabriela Mistral School, Francisco Antonio de Ulloa School and Normal Superior High School are performing it. There are also some recommendations addressed to the academic community, aiming to contribute to the betterment of educational processes in these schools. In addition to this, we proposed some guidelines for English classes based on transversal themes such as education for sexuality, environmental education, civics education, education for plurality, and education for peace and health. They are centered on the essential points of transversality that are the relationship between school and students' lives, the betterment of students' quality of life by nurturing principles and values, interdisciplinarity, and the building of knowledge. These guidelines are based on materials and activities that revolve around the students' needs and concerns, which promote the construction of knowledge and encourage students' critical thinking.

#### **2. JUSTIFICATION**

One of the discussions that educators have done is often centered on their assumptions of what contents would be taught and how these would be taught; in other words, this discussion is focused on the contents proposed to be taught and the methods to be taken into account to teach those contents.

On the discussion related to methods used for teaching (English Instruction), it is found that Language Instruction has become a contest where people take part by choosing a side and closing their mind to any idea of the counterpart; there is no discussion; everything is reduced to non-reflected assumptions toward the theories and practices of the other side. Traditional education claims that its aim is to educate their pupils under the assumption that knowledge is extrinsic to students, while modern education asserts that the school has to be sensitive to students' learning rhythm-pace, letting them develop their skills.

Education is supposed to be involved with knowledge and the progress of society because with it, human beings construct their world, which is going to be analyzed and transformed. However, its importance has been partially recognized by our nation, the National Constitution of 1991 states:

Artículo 67. La educación es un derecho de la persona y un servicio público que tiene una función social; con ella se busca el acceso al conocimiento, a la ciencia, a la técnica, y a los demás bienes y valores de la cultura. La educación formará al colombiano en el respeto a los derechos humanos, a la paz y a la

democracia y en la práctica del trabajo y la recreación, para el mejoramiento cultural, científico, tecnológico y para la protección del ambiente (p. 11).

Nevertheless, it has not been implemented as expected. Even today, some people consider that education is just a transmission of data in a lineal relationship between students and teachers whose information is the only valid one; then reflection, critical thinking, and creativity have been overlooked. We have experienced an education concerned with reproducing knowledge rather than creating and discovering it.

Taking into account this discussion and our experiences, knowledge has been imposed as a goal that we have to get by means of routines that limit our mental processes; this research looked for new alternatives in teaching to encourage students during their process of learning to express their thinking, their needs, and their experiences.

We identified some aspects about education like the passive role that students play and the fact that teachers are thought to be the only ones who know and are able to construct knowledge that often is not related to students' lives and environment. Furthermore, education has split knowledge and labeled some of the subjects as the most or least important, theory is not put into practice, there is no reflection on the processes inside the schools, students and teachers are evaluated according to standards which do not take into account all the different aspects and variables of the learning and teaching processes. For these reasons, education has become static. In this research, we considered fundamental the reflection on the aspects previously mentioned. The study of different theories on education permitted us to have knowledge about methods that are currently implemented, their success, their strengths, and their weaknesses. In addition, this can help to bridge the gap among the different theories and establish dialectical processes that permit teachers and students to reflect on their processes and enrich them day by day. The recognition of different alternatives in education gives us the opportunity to think education as a dynamics available for everybody, where people can find enough resources to comprehend the world and become active agents in the transformation of society.

It is of paramount importance to say that experiencing new things makes our learning processes richer because we can find new alternatives to make education a more significant process. That is what we wanted to do, to see education as the possibility to connect all the society's members in search of an improvement of our lives' quality and the alternative we chose is the transversal education. Transversality is a proposal that aims to connect school with students' environment. Students begin to construct their knowledge based upon their lives, own experiences, and contexts giving them tools to comprehend the meaning of living in society. Thus, knowledge is not conceived as a mechanism of control and authority, but as a means of constructing society founded on the lives and realities of its members. In this way, students may become important agents in education and society construction.

#### **3. PROBLEM STATEMENT**

This research was aimed to analyze some characteristics of transversal education and determine ones have been considered in the educational practices at some schools of Popayán. We believe in educational processes in which a different teaching alternative can be applied in order to contribute to the achievement of meaningful knowledge. We trust that it is possible to learn a foreign language in a significant way, through the active and continuous construction of knowledge based upon the different aspects that compose students' daily life; this could be possible through the study of transversality which comprises the different experiences that people live day by day. Transversality constitutes opportunities for teachers to construct relationships with their students in order to comprehend specific situations of students' realities and therefore, reflect upon the concepts proposed in national educational policies to make foreign language learning more delightful.

Taking into account our past experiences in high school and the ones that we gained from our O.P.E, we can say that there is certain similarity in the processes schools have been carried out. Those similarities were reflected in how classes were teacher-centered, the methodologies used in the classes, the constant fragmentation between school subjects and society. For instance, English was a subject which seldom motivated the learning of another language because of the way it was taught. It was generally based on Grammar-Translation Method, in which activities consisted of drillings, learning grammar rules by rote and doing exercises mechanically on a notebook, rather than speaking and listening exercises which involved students actively. Since we noticed a fragmentation between the subjects and the real context, in our research we proposed to explore some alternatives to overcome this disconnection that creates a barrier between foreign language learning and students' reality.

#### **4. OBJECTIVES**

#### 4.1 General Objective

 To analyze the characteristics of transversal education and determine which ones have been considered in the educational practices at Champagnat School, Amalaka School, Gabriela Mistral School, Francisco Antonio de Ulloa School and Normal Superior High School.

#### 4.2 Specific objectives

- To comprehend fundamental aspects of transversality and its implications for the transformation of education and society.
- To analyze some teachers' beliefs about transversal education
- To construct operational definitions for the concepts of transversality and construction of knowledge.
- To check which characteristics of transversality are tackled at Champagnat School, Amalaka School, Gabriela Mistral School, Francisco Antonio de Ulloa School and Normal Superior High School.

## **5. RESEARCH QUESTIONS**

- What characteristics of transversality can be identified in the educational processes at Champagnat School, Amalaka School, Gabriela Mistral School, Francisco Antonio de Ulloa School and Normal Superior High School?
- Why transversality is an alternative to put into practice in the school?

#### 6. METHODOLOGICAL ORIENTATIONS

As transversality can fit into different educational contexts, it is possible to implement some projects grounded on the characteristics of transversality. Education based on transversality broadens the possibility to establish relationships among all areas of knowledge, developing critical thinking and promoting social participation. Hence, in both rural and urban contexts, schools could work with local situations like environmental or social problems, in order to engage schools with the community for constructing a better society.

In response to this study of transversality, we carried out a qualitative research which permits us to analyze data from narratives, interviews, observations, and surveys, to interpret findings in terms of the meanings people bring to them. We also considered a quantitative approach in order to analyze the frequency of the type of answers provided in the surveys by the students in each one of the groups.

In order to understand the different concepts of transversality, we carried out a literature review and went over certain articles of the Colombian Constitution 1991 talking about Colombian education and the Educational Law 115 of 1994 that helped us to support this study.

For the data collection we implemented the following techniques: autoethnographies from high school, interviews to teachers at Champagnat School, Amalaka School, Gabriela Mistral School, Francisco Antonio de Ulloa School and Normal Superior High School, nonparticipant classroom observations of English classes and some other subjects (Math, Spanish, Agro ecology and Social Sciences) and surveys to students from different grades in the schools above mentioned.

#### **6.1 Type of Research**

First of all, the research group made a bibliographical review about transversality and different concepts and approaches that enrich this educational proposal. These concepts were constructivism, critical thinking, and complex thinking; the approaches were communicative language teaching, whole language education, content-based instruction, and project-based instruction.

Likewise, we used Qualitative method that has three kinds to collect data; they are interviews, observations and documents. These data collection instruments were useful to analyze different points of view and beliefs about transversality and understand its role in education. The information was gathered in some schools of Popayán; they were Champagnat School, Amalaka School, Gabriela Mistral School, Francisco Antonio de Ulloa School and Normal Superior High School.

As qualitative researchers, we were interesting in how people tackle different topics according to their experiences in their context. In the previous schools we interviewed some English teachers and other teachers from different subjects; we surveyed students from different groups, and we observed some English classes and other classes.

Qualitative findings grow out of three kinds of data collection: (1) - in depth, opened interviews; (2) direct observation; and (3) written documents. *Interviews* yield direct

quotations from people about their experiences, opinions, feelings, and knowledge. The data from *observations* consist of detailed descriptions of peoples' activities, behaviors, actions, and the full range of interpersonal interactions and organizational processes that are part of observable human experience. *Document analysis* includes studying excerpts, quotations, or entire passages from organizational, clinical, or program records; memoranda and correspondence; official publications and reports; personal diaries; and open-ended written responses to questionnaires and surveys (Patton M, 2002, p. 4).

According to Merrian (2009), there are four characteristics which describe the nature of qualitative research, they are focus on meaning and understanding; researcher as primary instrument of data collection and analysis; an inductive process and descriptive product.

Focus on meaning deals with the interests of the researcher which is how people interpret their experiences. The second characteristic is the research is the primary instrument of data collection since the researcher looks for understanding, and he/she can expand it thanks to the information. Inductive process is when researchers gather data to build concepts, hypothesis or theories (p. 14-15).

Merrian (2009) states that Qualitative research method has different types like basic qualitative research, phenomenology, grounded theory, ethnography, narrative analysis, and critical qualitative research (p. 22).

The research that we made is connected to Narrative Analysis since we worked on our experiences as students in schools, which were the starting point to carry out this study.

Besides, we analyzed interviews, surveys and classroom observation which reflected experiences of people whose we gathered information.

According to Merrian, Narrative Analysis deals with the use of stories as data. There are terms for the stories of experiences such as biography, life history, oral history, autoethnography, and autobiography (p. 32).

#### 6.1.1 Autoethnographies.

As a starting point, we found it important to reflect upon our previous experiences and the teaching process we have experienced at school, we realized that education is more than transmitting information; education is a process in which one can enrich the previous knowledge in order to construct a new one. By these autoethnographies we realized that education is not focused on students' interests and needs.

#### 6.1.2 Interviews.

Interviews were part of this research since we found it necessary to collect information about experiences in schools related to transversality. Teachers' experiences were useful to understand educational processes in these schools, then we analyzed projects and activities related to the subject matter to comprehend the role of transversality in schools and its possible influence in society.

For this purpose, we interviewed six English teachers and five teachers of other subjects and in the sample schools, two of them teach in kindergarten at Champagnat School; two at Amalaka School; three at Gabriela Mistral School, two at Francisco Antonio de Ulloa School and two at Normal Superior High School (See table 1). In these interviews we asked about the following topics: Transversality in the curriculum, previous knowledge and previous experiences of the students, interdisciplinary and transversal education, and construction of knowledge (See Annex 1 and 2).

	Number of English	Grades	Number of other Subjects
	Teachers		Teachers
Amalaka School	1	10 <sup>th</sup>	1 Agro ecology Teacher
Champagnat School	1	Kindergarten	1 Social Science Teacher
Francisco Antonio de	1	8 <sup>th</sup>	1 Spanish Teacher
Ulloa School			
Gabriela Mistral School	2	9 <sup>th</sup> -10 <sup>th</sup>	1 Math Teacher
Normal Superior High	1	$6^{\text{th}}$ -1, $6^{\text{th}}$ -2	1 Math Teacher
School			
Total	6		5

Table 1: Interview to teachers

#### 6.1.3 Classroom observations.

As teachers of OPE (*Orientación del Proceso Educativo*), we found some other ideas and examples of ways of teaching such as Interdisciplinarity, Cooperative Learning and working on projects related to current topics and student's context, these ways of teaching seemed to be linked to transversality. Taking into account our main purpose which is to analyze the characteristics of transversal education, we considered important to observe some classes. Thus, we carried out non-participant classroom observations, in order to analyze lesson plans, pedagogical strategies, activities, materials, and projects related to transversality in education and to find what characteristics of transversality can be identified in the observed schools.

We observed some English classes and other subjects such as Math, Spanish, Agro ecology, Social sciences, in five schools, which were Champagnat School, Amalaka School, Gabriela Mistral School, Francisco Antonio de Ulloa School, and Normal Superior High School; the first and the second one are private schools, while the others are public. In Champagnat school, these observations were done to a group of 20 students of Kindergarten, in Amalaka, to 10 tenth graders, in Gabriela Mistral School to 35 tenth graders and 36 ninth graders, in Francisco Antonio de Ulloa School to 36 eighth graders, and in Normal Superior High School to 64 sixth graders, in this school students were organized in two classrooms, 30 in sixth1 and 34 in sixth 2. (See table 2)

	Number of Students	Grades
Amalaka School	10	10 <sup>th</sup>
Champagnat School	20	Kindergarten
		_
Francisco Antonio de Ulloa School	36	$8^{\mathrm{th}}$
Gabriela Mistral School	36-35	$9^{th} - 10^{th}$
Normal Superior High School	30-34	$6^{\text{th}}$ -1, $6^{\text{th}}$ -2
1 8		, -
Total	201	7
	_01	,
	1	

Table 2: Classroom observations

#### 6.1.4 Surveys.

We administered surveys to the students whose teachers were previously interviewed and observed in order to broaden the information that they provided. In Amalaka School, these surveys were done to 10 tenth graders, at Gabriela Mistral to 35 eleventh graders, at Francisco Antonio de Ulloa School to 28 eighth graders, Normal Superior High School to 64 sixth graders (See table 3). The questions tackled topics such as environment, recycling, health, technology, plurality, arts and sports (See annex 3).

	Number of Students	Grades
Amalaka School	10	10 <sup>th</sup>
Francisco Antonio de Ulloa School	28	8 <sup>th</sup>
Gabriela Mistral School	35	11 <sup>th</sup>
Normal Superior High School	64	6 <sup>th</sup> -1, 6 <sup>th</sup> -2
Total	137	5

Table 3: Surveys to students

#### 7. REFERENTIAL FRAMEWORK

#### 7.1 Contextual aspects

Discussions about traditional and transversal education have been held in our learning process at the University inviting us to propose a new alternative in language learning and teaching. Thus, we have looked back at our experiences as students and taken them as a reference which shows us that traditional education can turn into a transversal one. We looked for some schools as fields to work on. after asking for permission in different schools of Popayán; Champagnat School, Amalaka School, Gabriela Mistral School, Francisco Antonio de Ulloa School and Normal Superior High School agreed to take the research in. To get the permission to do this study we sent letters to the principles and coordinators in those schools and coordinated some schedules to carry out the different collecting data activities.

#### 7.1.1 Champagnat School

This is a pretty well-known private school in Popayán. It is located on 9<sup>th</sup> avenue near the bus station. The school has a big building for elementary and high school students. Classrooms are designed for groups of 20 to 30 students. The building consists of the administrative offices, two yards, one soccer field, a pool, a cafeteria, an auditorium, a computer room, a chemistry lab, a video room and a media lab.

This school has an educational proposal that relates different aspects; for instance, the institution tries to get students involved enough in the school activities so that they feel part of the community; in this way, the school supports its students in their cognitive and social processes. Here, students receive the common classes that they find in any other place, but teachers try to keep their classes in close relation with other subjects. In other words, teachers of different areas are in permanent dialogue, they talk about their lessons and their experiences in the classrooms.

Teachers and students participate in different activities, which are not only academic but also political, economic and socio-critical which permit them to grow in their personal and collective dimensions. Thus, we can find at Champagnat School some projects that relate different subjects, students' specific knowledge, and experiences in order to produce materials like papers, journals, images, and videos, which are the result of their involvement in participatory processes where the main aim is the free development of their skills and their thinking capacity.

#### 7.1.2 Amalaka School

Amalaka is located on the northwest of Totoró municipality (km 8 via Popayán- Cali). People from Totoró belong to the indigenous ethnic groups such as Guambiano, Páez, Totoroés, and peasants. Totoró is bound by Silvia on the north, by Inza on the east, by Cajibio and Piendamó on the west and by Popayán and Puracé on the south. Amalaka is located in a green space; it offers people the chance to study both primary school and high school. In the institution there are six classrooms called "malokas". A maloka is an ancestral house used by natives of the Amazon region. Moreover, there is a library, a restaurant, a video room, ecological bathrooms; these bathrooms are used in order to save water. On the other hand, there are places to practice sports, and to interact with nature. Students can have contact with animals such as hens, ducks, rabbits, guinea pigs, dogs, cows, and geese. There is a lake and some area for cultivation.

In Amalaka, there are some environmental projects that students can develop. For instance, there is a project called "gallinas ponedoras". That is related to biology, environmental education, math, language and artistic education. They develop writing skill through free writing; in this activity, students express their point of view, taking into account their own experiences. Then, teachers share their writings and improve some aspects, encouraging students develop this skill. There other projects to are such as "Manejo de Residuos Sólidos", that is related to biology, environmental education, language, and artistic education. Students interact with nature and do research on it. They work on "lombricultura", using the organic material produced by worms to fertilize plants cultivated at the school. "Recuperando Territorio" is another project developed at this school. It is related to social studies, history and geography; this project allows students to perceive and identify their environment to generate identity, taking into account socio economic and cultural aspects of the region.

Another interesting aspect at Amalaka is the way students and teachers resolve conflicts in meetings called "*Asambleas*", where they express their points of view, without being judged, solving conflicts through dialogue. Amalaka implements very important and meaningful tools to create a different education, based upon students' different contexts, oriented towards the transformation of society.

Amalaka's mission is looking for an integral development of human beings, by means of processes of transformation in the individual and social fields, whose vision aims to promote educative, alternative, and community projects, within the framework of sustainable development, conservation of nature, and social environment.

# 7.1.3 Gabriela Mistral High School

Gabriela Mistral School is located on 48<sup>th</sup>N Street and 7<sup>th</sup> tranversal near Alpina's Company. This is a public high school constituted mainly by people from the lowest socio-economic strata on the north of the city. Apart from the classrooms and the administrative offices, there are yards, a soccer field, a cafeteria, a computer room, a media lab, and an auditorium. The open spaces in school permit students to have a direct contact with the environment.

The educational proposal in this school looks for students' integral development, giving them spaces to develop their skills in different fields like sports, technology, languages and arts. Although this school is focused on academic work, it encourages students to get involved in dancing, performing, singing and other kind of activities aimed to foster their abilities and their perspectives of life. The school also promotes values and attitudes such as respect, discipline, and cooperation leading students to the dialogue and participation in community projects.

#### 7.1.4 Francisco Antonio de Ulloa School

Francisco Antonio de Ulloa School aims to offer an education of quality, which promotes human development. The education process in the school is based on four principles, which are Sense of Belonging, Respect, Participation, and Autonomy. Respect is defined as the recognition of authority, acceptance, appreciation, and value the actions in their environment and the rights of every student. Participation helps students generate experience, interest, commitment, integration, and initiative regarding the educative processes at Francisco Antonio de Ulloa School. Autonomy enhances students' self expression, responsibility, actiontaking considering the common good. And the Sense of Belonging makes students feel part of a family, in which they are ruled by principles, and build identity which leads them to find their place in society.

Francisco Antonio de Ulloa School intends to promote education through reflection and rational participation leading students to develop self-critical thinking. Based on the Constructivist model, which is channel to all levels (pre-school, elementary school, and high school), students are expected to become successful in life.

### 7.1.5 Normal Superior High School

Normal Superior High School is a public, non-religious, mixed educational institution committed principally to the instruction of future teachers. It imparts formal teaching in different levels of education: preschool, elementary school (which belong to Anexa School), medium school and high school. Besides, the previous levels of education, Normal Superior High School has a complementary cycle which instructs students to be certified as *"Normalistas Superiores"*. Since tenth grade, students start working on several pedagogical subjects like psychology, pedagogy, teaching material development and so on. But, it is in the complementary cycle where students have a real approach to pedagogical subjects; they are trained to teach especially Spanish (in preschool and primary school) through a period that lasts 4 semesters.

Normal Superior High School aims to promote the integral formation. It is meant to provide different perspectives of life, grounded on responsibility, criticism, and analysis. It works on different levels of knowledge, namely: artistic, scientific, technical, and pedagogical. Moreover, it is committed to the region through teacher training, research, and social projection.

It was founded in 1934 as a Female school called: *Normal Nacional de Señoritas* in Valle del Cauca. Later, it was moved to Popayán. Nowadays, it is located in *Casona La Ladera* on the south of the city. It has 6 pavilions, which are divided into different "*Núcleos Pragmáticos*", *i.e.: Lenguaje y Comunicación, Científico Tecnológico, Pedagógico Investigativo, and Sociocultural y Humanístico*. These "*núcleos pragmáticos*" work taking

into account the relation among subjects. Furthermore, it has a volleyball court, an enclosed basketball court, a soccer court, an oval running track surrounding a grass field and there is a badminton field that is under construction (it is important to say that Normal Superior was the leader of Cauca's Badminton league). It also has lots of green zones, an art classroom, a computer room and a multimedia room.

# 7.2 Legal Framework

The General Law of Education 115 of 1994 stated by *Ministerio de Educación*, considers that education is the integral development of the human being. "ARTICULO 10. Objeto de la ley. La educación es un proceso de formación permanente, personal, cultural y social que se fundamenta en una concepción integral de la persona humana, de su dignidad, de sus derechos y de sus deberes" (p. 2). Taking into account this statement, education is seen as a means of constructing and sharing knowledge to live in society, education implies a possibility to comprehend the world and transform it.

This law also claims in articles number 13 and 14 that education has to do with the personal growth based on autonomy, responsibility, respect for human rights and diversity, self-knowledge and self- esteem.

ARTICULO 13. Objetivos comunes de todos los niveles. Es objetivo primordial de todos y cada uno de los niveles educativos el desarrollo integral de los educandos mediante acciones estructuradas encaminadas a:  a) Formar la personalidad y la capacidad de asumir con responsabilidad y autonomía sus derechos y deberes;

 b) Proporcionar una sólida formación ética y moral, y fomentar la práctica del respeto a los derechos humanos;

c) Fomentar en la institución educativa, prácticas democráticas para el aprendizaje de los principios y valores de la participación y organización ciudadana y estimular la autonomía y la responsabilidad;

d) Desarrollar una sana sexualidad que promueva el conocimiento de sí mismo y la autoestima, la construcción de la identidad sexual dentro del respeto por la equidad de los sexos, la afectividad, el respeto mutuo y prepararse para una vida familiar armónica y responsable;

e) Crear y fomentar una conciencia de solidaridad internacional;

f) Desarrollar acciones de orientación escolar, profesional y ocupacional;

g) Formar una conciencia educativa para el esfuerzo y el trabajo, y

h) Fomentar el interés y el respeto por la identidad cultural de los grupos étnicos.

ARTICULO 14. Enseñanza obligatoria. En todos los establecimientos oficiales o privados que ofrezcan educación formal es obligatorio en los niveles de la educación preescolar, básica y media, cumplir con: a) El estudio, la comprensión y la práctica de la Constitución y la instrucción cívica, de conformidad con el artículo 41 de la Constitución Política;

b) El aprovechamiento del tiempo libre, el fomento de las diversas culturas, la práctica de la educación física, la recreación y el deporte formativo, para lo cual el Gobierno promoverá y estimulará su difusión y desarrollo;

c) La enseñanza de la protección del ambiente, la ecología y la preservación de los recursos naturales, de conformidad con lo establecido en el artículo 67 de la Constitución Política;

d) La educación para la justicia, la paz, la democracia, la solidaridad, la confraternidad, el cooperativismo y, en general, la formación en los valores humanos, y

e) La educación sexual, impartida en cada caso de acuerdo con las necesidades psíquicas, físicas y afectivas de los educandos según su edad (Ministerio de Educación, 1994, p. 5).

# 7.3 Theoretical Framework

### 7.3.1 Transversality and Curriculum.

When thinking about transversality as an alternative to change and improve the quality of education, it is necessary to think about educational aspects such as curriculum and curricular transversality. Curriculum is a significant element which contributes to achieve an education that deals with the construction of a better society. Nowadays, education needs to be focused on school community needs. Students need an education which offers them the possibility to know and analyze their environment, looking for strategies to improve and transform society day by day. Transversal curriculum aims to feed current curriculum with contents or topics which can contribute to students' needs; that is an education for life. Besides, transversal curriculum looks for strategies to focus education on social fields.

According to the Colombian General Law of Education 115 of 1994, curriculum is defined as syllabus, programs, methodologies, and processes which contribute to the integral education and the construction of cultural, national, regional, local identity, including human, academic, and physical resources to carry out school policies. According to Moreno (as cited in Velásquez, 2009), we need a curricular reconstruction to overcome the current curriculum characterized by incongruity, centralized curricular design, and homogenization which disregard diversity. This curricular reconstruction gives students the opportunity to participate in the development of activities which are part of their own learning process in order to avoid a static education.

Students need an education that involves them in a real life, that is, they need syllabuses, classes, and contents which help them be part of society and agents of change in it. This can be enhanced through an education aimed to develop people's critical thinking and autonomy to construct knowledge, thus going beyond repetition and reproduction of knowledge.

Velásquez (2009), states:

Si bien los hoy llamados estándares curriculares definen los criterios mínimos de lo que debe saber y saber hacer cada estudiante en cada grado y asignatura, las instituciones educativas apenas pueden abordar una parte de dichos lineamientos, sin tener la posibilidad de realizar innovaciones o reformas en beneficio de la calidad de la educación; estos lineamientos traen consigo la homogeneización de conocimientos, competencias y actitudes, olvidando las diferencias individuales relacionadas con los ritmos y estilos de aprendizaje, así como los intereses y motivaciones de aquellos en proceso de formación, y lo peor, olvidando la diversidad sociocultural regional, elemento fundamental en todo proceso educativo (p. 34).

According to Velásquez (2009), the reality is different; it does not make up for the schools' necessities, the school community does not participate in the construction and reconstruction of the curriculum. Therefore, it is important to give opportunities to enrich the curriculum taking into account the community. The National Law of education promotes the individual's integral development and construction of identity, so by means of transversality, education in Colombia can be fortified because it deals with integrity and the construction of knowledge; this process suggests that students can learn to be autonomous in learning for life.

Henríquez and Reyes (2009) state:

Por lo tanto, se puede decir que la ética debe ser parte del proceso educativo y de la transversalidad, si se quiere formar personas integrales, es decir, que a la par que poseen conocimientos científicos y tecnológicos, posean también esa calidad humana, tan necesaria para vivir en paz, con justicia, solidaridad, respeto y libertad (p. 13).

As mentioned, transversality is an alternative that constitutes a way to connect education and reality; it is against the fragmentation of knowledge. In a traditional education, subjects are not integrated, they are separated and some of them are labeled as the most or least important ones. Then it is difficult to relate education and life if subjects do not have any relation among them. It is necessary to integrate subjects in order to learn in a significant way, relating topics, analyzing, and interpreting them from different perspectives. In this sense, students can increase their capacity to comprehend, analyze different topics, and relate them to society.

Looking for the origins of the concept of transversality, it is important to say that the word transversal comes from the Latin word trans-versus, that refers to a line that goes across two or more other lines. In an educational environment, the concept of transvesality goes beyond. Transversality is an educational proposal which aims at involving different aspects such as students' contexts, diversity, and interdisciplinarity, which in many cases are not taken into account in schools. Nowadays, Transversality plays a transformative role in education because its implementation in the curriculum contributes to the integral development of students, which is expected to be one of the most important goals of education in schools.

Curricular transversality deals with different ways to see the curriculum thinking about students' lives and their development in life. Moreno (as cited in Velásquez, 2009) states curricular transversality as:

El conjunto de características que distinguen a un modelo curricular cuyos contenidos y propósitos de aprendizaje van más allá de los espacios disciplinares y temáticos tradicionales, desarrollando nuevos espacios que en ocasiones cruzan el currículum en diferentes direcciones, en otras sirven de ejes a cuyo alrededor giran los demás aprendizajes, o de manera imperceptible y más allá de limites disciplinares impregnan el plan de estudio de valores y actitudes que constituyen la esencia de la formación personal, tanto en lo individual como en lo social (p. 6).

Transversality proposes to connect school with what is happening to students' life and contexts outside the school. In this sense, it looks for topics or contents based upon humanistic and axiological dimension (the study of values) for encouraging epistemological and sociological changes in society.

There are transversal contents or topics such as education for peace, sexual education, education for plurality, education for health, and environmental education. These contents are part of daily life and have large influence in society.

According to Ministerio de Educación y Ciencia (MEC) 1993:

Los temas transversales contribuyen de manera especial a la educación de valores morales y cívicos, entendida ésta como una educación al servicio de la formación de personas capaces de construir racional y autónomamente su propio sistema de valores y, a partir de ellos, capaces de enjuiciar críticamente la realidad que les ha tocado vivir, e intervenir para transformarla y mejorarla (p. 13).

The current social problems should be a concern for everybody and the school needs to implement strategies in order to encourage students to be responsible, be aware of current problems, and work together to find possible solutions. Thus, transversal contents or topics become a way to relate real life and school, articulate all the subjects so that avoid the fragmentation of knowledge. For that reason, transversal topics or contents are not subjects of the curriculum that belong to a specific area of knowledge. They are linked to all the subjects for seeking equality in education not only among the subjects but also among teachers, and students. Transversality aims at involving the school community (students, teachers, and parents) to construct a better education based upon students' realities, taking collective decisions, and resolving conflicts. It is time to transform traditional education into a transversal one with the purpose of avoiding the constant reproduction of knowledge and data transmitted by traditional methodologies.

Transversality is the alternative to encourage the school community to improve education in Colombia taking into account students. It is a task for teachers to guide students in this new process of learning which challenge them to reflect upon the current education, recognize their needs and rethink about the educational process held in school.

#### 7.3.2 Constructivist Theory

According to what we have experienced with traditional education, we can say that it claims for a passive role on the part of those being educated, what suggests a one-way information provider and therefore, an unquestionable acceptation of what teachers want to impart. Students are not allowed the opportunity to make contributions in their learning process. Fortunately, this view has been changing little by little. Nowadays, thanks to innovating trends in education such as the constructivist theory, many teachers have realized that education makes sense when both teachers and students take an active role in class. This theory enhances students' autonomy and sense of belonging to their own learning.

Constructivism constitutes a very important perspective in current education research. It highlights that people construct their own understanding and knowledge of the world, through the acquisition and reflection on daily-life experiences. When something new is encountered, we need to reconcile it with our previous ideas and experiences; in this way, we can change our beliefs or discard the new information as irrelevant. In any case, constructivism proposes that we are the active creators of our own knowledge and it is constructed through the exploration and assessment of our world.

Through a bibliographical review, we found some of the theories that have contributed to this approach. First of all, Piaget (as cited in Cameron, 2002) who points out that the holistic approach, where a child constructs understanding, is given through channels such as reading, listening, exploring and experiencing his or her environment. Secondly, Vygotsky's theory (1978) refers to three principles in the learning theory: the community has a central role which affects the way students see the world (making meaning), there are some tools for cognitive development (culture, language and so on), and three levels of problem solving skills (those performed independently by the learner, those that are not possible to perform even with help and the last ones that can be performed with help from others). John Dewey (1910) states that education depends on action, knowledge emerges from situations where the reflection upon experiences a priori, making the learning process meaningful.

Constructivism emphasizes the importance of learner autonomy, which is initially acquired thanks to the direction of others. It states that teachers are called upon fostering self-directed learning in an environment where the students are exposed to different multi-sensory experiences (with active techniques such as experiments, real-world problem solving) to build more knowledge, then to reflect upon preexisting conceptions, talk about what they are doing, and how their information is changing, promoting in this way, introspection, understanding and active participation in community life. Constructivist teachers understand students' prior knowledge and guide them to use and transform it while reflecting on the process. They encourage students to constantly assess how school activities are helping them gain understanding of reality. By assessing their processes, students learn how to learn and develop strong abilities step by step to integrate information. Constructivist theory considers that teacher's role is to help students construct knowledge rather than reproduce a series of facts.

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Constructivist teachers offer tools such as problem-solving and inquiry-based learning activities with which students formulate and assess their ideas, conclude, and convey their knowledge in a collaborative learning environment. Constructivist teachers are the guide to students who construct their knowledge actively rather than just mechanically ingest information from the teacher or the textbook. They work with the innate curiosity about the world that students have and try to guide them to understand how it works.

The constructivist theory sustains that learning is not instantaneous; it is an active process whose construction happens throughout a series of steps. Constructivism also sustains that language and community are two important elements in the construction of knowledge. Besides, it points out that we cannot learn isolated facts; so, it is of paramount importance to work with the context, with students' beliefs, prejudices and fears. Constructivism promotes social and communication skills by exchanging ideas through different assignments like journals, research reports, physical models, and artistic representations.

A constructivist classroom works on big ideas, not in small bits of information. It always works on inquiries about the world and takes into account students' needs and interests, thus making the classroom student-centered. This theory proposes that education should support multiple perspectives or interpretations of reality, knowledge construction, context-rich, experience-based activities; that is why, it has to do with transversal education. Both constructivism and transversality focus on knowledge construction, not on knowledge reproduction; knowledge that is connected to society and its needs. Both work with authentic tasks which have real-world relevance and utility, aiming to a meaningful education. As opposed to what traditional education pursues, the constructivist theory of learning relates to the theory of the construction of knowledge and it is based on the reflection of experiences in order to construct understanding and critical thinking about the world.

Traditional education is different from constructivism regarding students' and teachers' roles and the value of students' experiences in education. In the following chart, there is a comparison between traditional classrooms and constructivist classrooms.

	Traditional Classroom	Constructivist Classroom
Curriculum	Curriculum is presented part to whole, with emphasis on basic skills.	Curriculum is presented whole to part with emphasis on big concepts.
	Strict adherence to fixed curriculum is highly valued.	highly valued.
Curricular Activities	Rely heavily on textbooks and workbooks.	Rely heavily on primary sources of data and manipulative materials.
How Students are Viewed	Students are viewed as blank slates onto which information is etched by the teacher.	Students are viewed as thinkers with emerging theories about the world.
Teacher	Generally, teachers behave in a didactic manner, disseminating information to students.	Teachers generally behave in an interactive manner, mediating the environment for students.
	Teachers seek the correct answer to validate student learning.	Teachers seek the students' point of view in order to understand students' present conceptions for use in subsequent lessons.
Assessment	Assessment of student learning is viewed as separate from teaching and occurs almost entirely through testing.	Assessment of student learning is interwoven with teaching and occurs through teacher observation of students at work and through student exhibitions and portfolios.
How Students Work	Students primarily work alone.	Students primarily work in groups.

Table 4: Traditional classroom vs. Constructivist classroom.

Brooks, J.G., & Brooks, M.G. (1993).In search of understanding: The case for constructivist classrooms. Alexandria, VA: ASCD. Retrieved onApril 5<sup>th</sup>, 2011 from <a href="http://woodard.latech.edu/~kklopez/EDCI424/Theory%20Connections.htm">http://woodard.latech.edu/~kklopez/EDCI424/Theory%20Connections.htm</a>

Nowadays, we need an education that offers the individuals the opportunity to learn by reflecting upon social aspects and the roles they can play in society. Transversality is an alternative in education that comprises educating people based on principles such as autonomy, diversity, creativity, culture, and environment. It deals with the improvement of education taking into account that it makes sense when it is aimed to improve life conditions and opportunities. This process is possible when knowledge is not fragmented into parts but conceived as a resource that once approached, can help bridge the gap that exists between education and people life.

According to Estupiñan, Sáenz and Forero (2004):

Students establish contact with their social context. Knowledge emerges from the living experience that they learn in relation to the environment, so they construct their knowledge beginning from their experiences. Teachers create learning environments taking into account students experience in order to enrich students' knowledge and to complement the topics in the different disciplines. (Our translation)

This research study, grounded on transversal education, becomes a challenge that we can assume in order to break with the traditional education based upon the transmission of information without any connection to the real world.

### 7.3.3 Complex Thinking

Our world is in continuous evolution and it changes in many ways day by day. Due to the fact that education can influence people behavior, educators' role is pretty important in the construction of society; in this way, they have the responsibility to help students during the learning process to comprehend the world and to develop strategies which permit them to face different situations around them.

Education is expected to allow human development and to give people more strategies to construct society, bearing in mind that the formative process as integral human beings should take place through activities related to real life. Edgar Morin proposes complex thinking as a path that leads to educative processes. Complex means the interaction of different elements and thinking is an intellectual faculty that allows us reasoning, imagining, creating, etc. Edgar Morin founded complex thinking under three main characteristics: heterogeneity, interaction and chance, thus every object of knowledge must be studied in relation to its environment. Complex thinking is able to join concepts even if they are opposite and if they are the simplest ones. It looks for the articulation of all the elements, dividing and connecting them at the same time; it is a concept that divides and reduces but that also distinguishes and combines in order to understand something.

According to Pupo (n.d.), complex thinking is divided into three principles:

1. El dialógico: No asume la superación de los contrarios, sino que los dos términos coexisten sin dejar de ser antagónicos. Valora en grado máximo la conexión como condición del sistema.

2. Recursividad. El efecto se vuelve causa, la causa se vuelve efecto; los productos son productores, el individuo hace cultura y la cultura hace a los individuos.

3. El principio hologramático. Este principio busca superar el principio de holismo y del reduccionismo. El holismo no ve más que el todo; el reduccionismo no ve más que las partes. El principio hologramático ve las partes en el todo y el todo en las partes (para. 5).

Morin states that while our knowledge becomes more and more specialized and fragmented, the problems that we have to face are more complex and global, and this generates a barrier between school and life. Unfortunately, education has contributed to this breaking, dividing sciences and humanities as isolated disciplines and applying methods that isolate objects from its environment. For this reason, teachers have the responsibility to reform one's thinking in order to rebuild our education.

> Así es que el pensamiento complejo está animado por una tensión permanente entre la aspiración a un saber no parcelado, no dividido, no reduccionista, y el reconocimiento de lo inacabado e incompleto de todo conocimiento. Esa tensión ha animado toda mi vida. Nunca pude, a lo largo de toda mi vida, resignarme al haber parcelarizado, nunca pude aislar un objeto de estudio de su contexto, de sus antecedentes, de su devenir. He aspirado siempre a un pensamiento multidimensional. Nunca he podido eliminar la contradicción interior. Siempre he sentido que las verdades profundas, antagonistas las unas

de las otras, eran para mí complementarias, sin dejar de ser antagonistas. Nunca he querido reducir a la fuerza la incertidumbre y la ambigüedad (Morin, 1994,

p. 23).

Both transversality and complex thinking place emphasis on knowledge which promotes an interdisciplinary and complex vision of the world that let us comprehend phenomena which are difficult to explain from a fragmented knowledge. Knowledge is not something that can be imposed by someone else's experiences, it starts from our own experiences without leaving aside all that is around us and influences us. Like complex thinking, transversality proposes to connect education with life in order to synthesize our intellectual, emotional, ethic and social capacities to construct knowledge; from a transversal perspective, education and life go hand in hand.

# 7.3.4 Critical Thinking

Critical thinking is a term that sounds steadily in educational circles because many educators have got interested in the teaching of "thinking skills" over the past years, it is to say, in getting students to create their own way of examining things from reality, judging them, and drawing conclusions as a way to encourage students' autonomy development and their participation in social phenomena.

Many authors have reflected on Critical Thinking as an essential step for education to transform itself and to permit students to transform the world. According to Dewey, "critical thinking is an active, persistent, and careful consideration of a belief or supposed form of knowledge in the light of the grounds which support it and the further conclusions to which it tends" (as cited in Fisher, 2001). In other words, critical thinking is more than receiving conceptions, ideas, and perceptions from others, it is an active process that allows participants to create their own prejudices, judgments and conclusions about any topic that is in discussion, and to elaborate alternatives for the different problems of the society.

In addition to Dewey's definition of critical thinking, Glaser describes it as: (1) an attitude of being disposed to consider in a thoughtful way the problems and subjects that come within the range of one's experience; (2) knowledge of the methods of logical enquiry and reasoning; and (3) some skill in applying those methods (as cited in Fisher, 2001).

Hence, it is possible to say that critical thinkers will have certain thinking skills and also an attitude to be willed to use them; it helps to analyze reality and to study its circumstances in order to get some conclusions that satisfy the needs of one's knowledge, permitting the participation of the individual in social transformation processes.

Bearing in mind these conceptions about critical thinking we find many elements to be considered in our research work. Critical thinking is a construction based on reason and reflection upon what we know, what we do and what we believe, in other words, we are the builders of our beliefs and our knowledge, and we are responsible of how to use this in order to get a better quality of life. The main objective of critical thinking is improving our perception of reality and the way of judging facts, credences, doctrines, and so on, in order to create a more sophisticated thought that allows us to enrich our mental skills, in this way, we will be able to reach new levels of knowledge and to raise awareness which enables us to grow intellectually day by day at any level of life.

### 7.3.5 Approaches related to transversal characteristics

## 7.3.5.1 Communicative Language Teaching

Communicative Language Teaching is an approach proposed in the 1970s for teaching a foreign or a second language. This approach is based upon the Communicative Teaching Methodology and it is focused on the development of communicative competence. For better comprehending what communicative competence is, it is necessary to talk about grammatical competence.

Education based upon the grammatical competence is a mechanical learning process in which students learn by heart and perform drills. They construct dialogues following a model and consequently they do not have the opportunity to make mistakes because learning is controlled by the teacher. On the contrary, the communicative competence makes learning meaningful because it takes into account some aspects which characterize this approach for instance, learners' interaction in the classroom, the use of authentic materials, and the involvement of students in their own learning process, learners' experiences and learners' context. These characteristics are the starting point which develops communicative competence and encourage not only communication, but also a meaningful language learning process. According to Richards (2006), Communicative language teaching is composed by principles which reinforce the development of communicative competence in second or foreign language learning. These principles are: the goals of language teaching, how learners learn a language, the kind of activities which facilitate learning, the role of teachers, and learners in the classroom (para. 3-4).

In foreign language learning, it is important to know the purposes and functions of learning a language. Besides, it is also essential to know the strategies and learning styles used by students in order to design activities which provide cultural information about the target language and motivate them to develop meaningful learning. In real contexts, we can say that there is a large gap between teachers and students; in other words, they do not interact with each other. In most of the cases, teachers acquire the active role in the classroom and students acquire the passive one. That makes you think that students just have the responsibility to attend classes and pay attention to the teacher. The implementation of this methodology in the classroom bridges the gap among teachers; then they give students the possibility to acquire more responsibilities and new roles in their own learning process. Besides, they have the possibility to share their knowledge, their experiences, and perform their skills.

This has influenced other approaches in language learning and its implementation in schools must break some barriers; for instance, traditional education at school, classroom diversity, learners' differences in terms of age, expectations, interests, learning skills, the acceptation of trial and error in a learning process, and at the same time, it has challenged teachers to apply and experience innovating ways of teaching.

Taking into account these characteristics and principles, a relationship between communicative language teaching and the concept of transversality in education is established. In this sense, transversality aims at linking education at school to students' reality where students belong to, in order to go beyond the transmission of information.

It also aims at helping students to construct knowledge based upon previous experiences, students' and teacher's interaction with the environment and students' motivation and interest towards their own learning process. Communicative language teaching is a methodology which proposes to transform traditional education by bridging the gap between educational environments and society. In the case of transversality, it is an educational proposal which spreads through all of the subjects by means of transversal contents which have to do with societal issues. Thus, a learning process in school is not static; it gives the students the possibility to have a critical position towards what is happening in society without reproducing information mechanically.

### 7.3.5.2 Whole Language Education

Initially, the term Whole Language Education (WLE) came from a reading research and it was used to emphasize the wholeness of language, as opposed to its fragmentation into pieces of phonemes, graphemes, morphemes and words; on the other hand, it looked for the interaction and interconnection between oral language (listening and speaking) and written language (reading and writing). It derives from how children acquire language and how learning to read and write is similar to learning the basic structures of the language as children learn to talk.

Language acquisition research shows us that children begin perceiving the wholes (sentences, emotions, intonation, patterns well before parts); it is based on a cognitive psychology research which establishes that human beings develop concepts through their own intellectual interaction with actions upon their world, so learning is not passive but active (Watson, 1989, para. 1).

Nowadays, WLE is being used to help people build meaningful connections between everyday learning and school learning. It has some characteristics such as acceptance of learners; all learners are accepted regardless their cultural and socioeconomic background, and acceptance of learners means also that, teachers develop the classroom environment and the curriculum for and with the students, to meet their needs and engage them in their learning process, they look for knowing about what interests them, as well as to cover essentials from the curriculum guidelines.

In a supportive classroom community, teachers help children develop skills for interacting with each other, solving interpersonal conflicts, and problems supporting one another in learning by taking substantial responsibility for their own behavior and learning.

When language skills are taught in context, students are engaged in real life tasks instead of being taught in isolation; for example, a phonetic lesson is taught mainly through discussion and activities derived from a text that children have read and reread with the teacher and through writing the sound they hear in words. Students, themselves, set future goals for learning, write about their efforts and learning; that is involving children in assessing their own work.

As well as transversality looks for an education focused on the interests, needs, and real context of the students, whole language education proposes to create an atmosphere derived from cooperative and participatory learning where the center is the student and his/her environment, where skills are integrated and practiced in real contexts and they can construct their knowledge based on their experiences, understanding society; taking into account that knowledge is better developed through actions, experiences, and experiments upon the environment; this is what whole language education and transversality propose in order to improve education, to carry out this labor in a more satisfactory and enriching way.

### 7.3.5.3 Content-Based Instruction.

Since the early 1980s, there has been a huge interest in education to integrate language and content instruction. It means not only to design the lessons based on contents that students will find in other areas, but also to plan on strategies that allow teaching and learning in a more dynamic process, constructing a path between the knowledge people have and a new knowledge to be acquired. Content Based Instruction (CBI) is a functional and useful process of getting knowledge as we learn a language.

According to Peachey, N (2003):

In recent years content-based instruction has become increasingly popular as a means of developing linguistic ability. It has strong connections to project work, task-based learning and a holistic approach to language instruction and has become particularly popular within the state school secondary (11 - 16 years old) education sector (para.1).

CBI is a proposal for students and teachers to avoid non-sense grammar learning and transform language learning in a natural process. Students can develop their skills (Argumentation, Analysis, and Comprehension) and learn something through language acquisition. Thus, the use of this teaching way has represented an alternative to students and teachers in order to advance in topics or contents of many fields of knowledge as they make a language process.

> The focus of a CBI lesson is on the topic or subject matter. During the lesson students are focused on learning about something. This could be anything that interests them from a serious science subject to their favorite pop star or even a topical news story or film. They learn about this subject using the language they are trying to learn, rather than their native language, as a tool for developing knowledge and so they develop their linguistic ability in the target language. This is thought to be a more natural way of developing language

ability and one that corresponds more to the way we originally learn our first language. Peachey (2003).

In this sense, CBI has broken the boundaries of traditional education in two ways; the first one is the attempt to link subjects and different kinds of knowledge in the same space, dealing with the similarities and the differences, and establishing a dialogue among them; the second one is the recognition of all kinds of knowledge not only as a valid but also as a powerful means to advance in both, cognitive and social dimensions.

Genesee (1994) suggests that content "...need not be academic; it can include any topic, theme or non-language issue of interest or importance to the learners" (p. 3). Chaput (1993) defines content as "...any topic of intellectual substance which contributes to the students' understanding of language in general, and the target language in particular" (p. 150). Met (1999) has proposed that "...'content' in content-based programs represents material that is cognitively engaging and demanding for the learner, and is material that extends beyond the target language or target culture" (p. 150). (as cited in Met, 1999).

Due to the fact that CBI can emphasize both, L2 and specific contents instruction, each way aimed to specific sectors of society according to their necessities, three different CBI's models, everyone designed to cover different needs and demands of education can be identified.

In agreement to Davies (2003), these are the types of Content Based Instruction.

### The Sheltered Model

Sheltered and adjunct CBI usually occurs at universities in English L1 contexts. The goal of teachers using sheltered and adjunct CBI is to enable their ESL students to study the same content material as regular English L1 students (para. 2).

# The Adjunct Model

Adjunct classes are usually taught by ESL teachers. The aim of these classes is to prepare students for "mainstream" classes where they will join English L1 learner (para. 3).

# The Theme Based Model

Theme based CBI is usually found in EFL contexts. Theme based CBI can be taught by an EFL teacher or team taught with a content specialist. The teacher(s) can create a course of study designed to unlock and build on their own students' interests and the content can be chosen from an enormous number of diverse topics (para. 4).

Content-Driven	Language-Driven
Content is taught in L2.	Content is used to learn L2.
Content learning is priority.	Language learning is priority.
Language learning is secondary.	Content learning is incidental.
Content objectives determined by course goals or curriculum.	Language objectives determined by L2 course goals or curriculum.
Teachers must select language objectives.	Students evaluated on content to be integrated.
Students evaluated on content mastery.	Students evaluated on language skills/proficiency.

Table 5: Content – Driven vs. Language-Driven.

Met, M. (January, 1999)

We identified CBI as a proposal with different elements to be taken into account to our research work. First, it is the dialogue established between the different subjects and contents (Academic and non-academic); this is a very important aspect since it claims a more dynamic process for the construction of knowledge; not only from some specific sciences or subjects but also from any source of information. Besides, it is the dialogue established among teachers of different subjects, while it creates alternatives to be implemented in the classrooms, it

becomes a powerful instrument to the process of education. Another important contribution that can be identified in CBI is the recognition of almost everything as a source of knowledge; it implies to recognize also students' experiences and previous knowledge as a meaningful and substantial aspect to be taken into account in class planning. Moreover, it suggests the dialogue between teacher and students and their permanent reflection on their surrounding world. Thus, the construction of knowledge and the cognitive processes will not be restricted to abstract contents, but it will be closely related to life and social phenomena, leading students to the transformation of their society.

### 7.3.5.4 Project-based instruction

Project-Based Instruction is an educational model which permits students to work on activities as parts of projects, where they are the center of the learning process, they construct knowledge based on their previous experiences and they can reflect on current problems of their society. It is grounded on the constructivist perspective. Regarding this knowledge acquisition is a process that takes into account different aspects of the students' context. Constructivism views learning as the result of mental construction; that is, children learn by constructing new ideas or concepts based on their current and previous knowledge (Karlin & Vianni, 2001).

Incorporating projects into the curriculum is neither new nor revolutionary. Open education in the late 1960s and early 1970s strongly emphasized active engagement in projects, firsthand learning experiences, and learning by doing (Katz & Chard, 1989). The Reggio Emilia approach to early childhood education, recognized and acclaimed as one of the best systems of education in the world, is project-based (Abramson, Robinson, & Ankenman, 1995; Edwards, Gandini, & Forman, 1993).

Project-Based Instruction emphasizes on students' participation in projects. "Projectbased instruction is an authentic instructional model or strategy in which students plan, implement, and evaluate projects that have real-world applications beyond the classroom" (Blank, 1997; Dickinson, et al, 1998; Harwell, 1997). This encourage students to work on the funds of autonomy and self-assessment of their learning process. To achieve this purpose teachers must plan their classes in agreement with their students realities and the other subjects that they attend. "Learning activities that are interdisciplinary, long term, and student centered are emphasized, rather than short, isolated lessons" (Challenge 2000 Multimedia Project, 1999).

Particular benefits of project-based instruction include:

- ✓ Preparing children for the workplace. Children are exposed to a wide range of skills and competencies such as collaboration, project planning, decision making, and time management (Blank, 1997; Dickinson et al., 1998).
- ✓ Increasing motivation. Teachers often note improvement in attendance, more class participation, and greater willingness to do homework (Bottoms & Webb, 1998; Moursund, Bielefeldt, & Underwood, 1997).
- ✓ Connecting learning at school with reality. Students retain more knowledge and skills when they are engaged in stimulating projects. With projects, kids use higher order

thinking skills rather than memorizing facts in an isolated context without a connection to how and where they are used in the real world (Blank, 1997; Bottoms & Webb, 1998; Reyes, 1998).

- ✓ Providing collaborative opportunities to construct knowledge. Collaborative learning allows kids to bounce ideas off each other, voice their own opinions, and negotiate solutions, all skills that will be necessary in the workplace (Bryson, 1994; Reyes, 1998).
- ✓ Increasing social and communication skills
- ✓ Increasing problem-solving skills (Moursund, Bielefeldt, & Underwood, 1997)
- ✓ Enabling students to make and see connections between disciplines
- ✓ Providing opportunities to contribute to their school or community
- ✓ Increasing self-esteem. Children take pride in accomplishing something that has value outside the classroom (Jobs for the Future, n.d.).
- ✓ Allowing children to use their individual learning strengths and diverse approaches to learning (Thomas, 1998).
- ✓ Providing a practical, real-world way to learn to use technology (Kadel, 1999; Moursund, Bielefeldt, & Underwood, 1997).

In brief the benefits of Project-Based Instruction are the impact it has on the students; it involves students in deciding which topics to study, it fosters participation and autonomy, and it recognizes the students as the center of the learning process and as important agents of society, allowing them to take part in transformation processes. Project-Based Instruction develops students' abilities in different fields, it increases social and communication skills and it responds to different needs, interests and backgrounds of the students.

### 7.3.6 Language teaching materials

Most teachers relate the term "language teaching materials" to the language course books which propose what and how to study the lessons. However, when we refer to language teaching materials, we are talking about everything that promotes language learning. They can be used by both, students and teachers, in order to facilitate the learning of a language. Examples of these materials are: videos, podcasts, movies, songs, workbooks, reading books, CD-ROMs, newspapers, dictionaries, photographs, live talks, and blogs. It answers questions like what should be given to the learners and what can be done to promote language learning.

Traditionally, teachers have resorted to course books and activity books in their language lessons to increase the learner's experience with the language but, sometimes, it seems not to be enough. This is one of the first features every single material developer has to take into account. Materials have to be evaluated constantly, that is to say, it is of paramount importance to measure the value of materials, considering the following questions: How difficult is the material for the learner? Is the learner enjoying the experience of working with the material? Is the material potentially useful to the learner? Is the material giving opportunities for output? Is the material providing a comprehensible input?

In the second instance, materials have to be measured by their impact, which is variable depending on contexts. The impact is seen from the angles of novelty (is the material unusual? Does the material use different illustrations and activities?), variety (is the activity unexpected?), attractive presentation ( is the material using colors, graphics, charts, capital or lower case letters?), appealing content (what is it about). Then it is essential to take into account the target learners and their needs and to think about the possibilities of getting their attention.

From this point of view, impact is really important in a language course. Unfortunately, we have witnessed that most language courses do not take into account learner's needs, because they have been created for a standard student, leaving aside the heterogeneity of thoughts, previous experiences and so on. Some of the language courses we use at languages schools have been created for teaching languages in a global context. In other words, they are not in accordance with the specific needs that each student faces. There is a lack of relationship between learners' needs and the material itself. That is why, it is crucial to identify the students' likes, interests, and desires, in this way, we can foster meaningful language learning.

In third instance, while identifying students' likes, interests, and desires, we can make students feel at ease because they can relate the topics with their identities, their own cultures and, this can provide a really good environment to learn where there is little anxiety. According to Dulay, Burt & Krashen (1982) "The less anxious the learner, the better language acquisition proceeds. Similarly, relaxed and comfortable students apparently can learn more in shorter periods of time" (as cited in Tomlinson, 1998).

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Furthermore, when students talk about what they know, they can feel relaxed, selfconfident, and willing to "invest" interest, effort, and attention on the activities. In addition, materials need to provide opportunities to use the target language, not only followed and guided by the teacher (materials do not need to rely too much on controlled practiced); learners need to use the target language in different situations, in which interaction with others occurs.

When the features that have been already said belong to the material development, it becomes easier for the learner to create output and construct knowledge and there might be impact because the student is getting curious about what s/he is learning and will look for new ways to acquire more information about it.

In this sense, material developers have to be resourceful; they do not need only to resort to course books designed for another group of people. They need to look for new ways to stimulate and foster language learning. But two questions arise here: what happens when we use authentic material in our language learning classes? What happens if we talk about unknown cultures? Is that negative?

Authentic materials are texts which are not written or spoken for language teaching purposes. The use of blogs, magazines, songs, TV series, and some others are example of this kind of materials. The exposure to these materials is important in language course, because they provide authentic use of the target language in every single level. This group of material is rich and varied, then, we need to use them in our classes because they give us an idea of what culture is through language, due to the fact that it is a vehicle for expression. To learn a language is to learn about a culture, but sometimes students do not feel comfortable talking about other cultures that are "exotic-like" for them, because they do not know them. They feel at ease talking about what they know. It does not mean materials do not have to talk about foreign cultures because they are not taking into account the social and cultural reality of learners. On the contrary, the use of language materials should provide opportunities for learners to learn about other cultures and their own, making them share and widen their cultural awareness.

Finally, learning materials is a wide topic, but sometimes, as we have said before, teachers get into the tiny world of a course book, which is not good. Teachers should take into account the words "creativity", "resourcefulness", and "production", because in this way, they are providing an atmosphere where the student is really involved in his/her education process, in which his/ her experience is a tool to teach and learn.

## 8. DATA ANALYSIS

As previously mentioned, this research was intended to find out whether or not transversality is being held at some schools in Popayan. Therefore, we implemented data collection instruments, such as autoethnography, interviews, surveys, and observations.

## 8.1 Autoethnography

We took a glance at our own processes in school to track if there was evidence of transversal characteristics in our high school English classes. By means of these reflections, we identified some aspects and experiences of transversality during high school, as well as some of its contributions to our learning process.

## 8.1.1 Student Researcher 1

In my high school the learning process was profitable, but it could have been better. We used to work out grammar exercises in a mechanical way, we usually solved drills and worked based on a textbook, we did not practice so much listening and speaking skills, besides, we learned vocabulary by rote and this practice was not useful since English classes were seldom focused upon students' experiences. Moreover, we only repeated and reproduced knowledge. when people learn a foreign language it is necessary to relate their lives to their learning process; in this way students can learn a foreign language in a more meaningful way, developing their skills, taking into account their interests and background, it means integrating their lives and social reality in their educational process. La transversalidad se constituye en una manera de lograr una educación más ligada a la vida y una vida social más educativa, dando de este modo respuesta a uno de los propósitos centrales de la educación, lograr mejores condiciones para vivir y convivir (Velasquez, J. 2009, p. 36-37).

In high school we carried out some activities which contributed to improve our learning process through practice; for instance, in biology class there was a project about reforestation; in a wide area in the school, students had to plant a tree and look after it. We also had a recycling project, additionally, we explained to people how to classify garbage into organic and inorganic waste. In chemistry class, we made some products such as soap, shoe polish, moisturizer, and we learned to make yogurt too. These kinds of activities were beneficial since students interacted and learned in a practical way, they learned by doing and exploring. Somehow, these activities were a contribution to our lives because these kinds of activities are part of our daily life. For example, making vogurt was good and useful since many students made it at home instead of buying it. This class encouraged students to take care of nature, and realize that people need to become aware of the environmental problems. In English class, we did not do activities like the previous ones. Instead, it was focused on drills, readings, grammar and translation. If English class had had a relation to other subjects, we would have learned it in a more meaningful way, and we would have learned how to explain some activities related to Biology and Chemistry in English, and at the same time, we would have improved vocabulary as supported by content-based instruction.

Content-based foreign language instruction encourages students to learn a new language by playing real pieces- actually using that language, from the very first class, as real means of communication. Furthermore, the philosophy of content-based instruction (CBI) aims to empowering students to become independent learners and continue the learning process beyond the classroom (Stryker &Leaver, 1997, p. 3).

I would have liked a learning process without any fragmentation of knowledge and have learned useful topics for life. As a way of illustration, in English class students can learn about other subjects such as history, biology, geography, social science and so on. We can learn more about our culture, like typical food, geography, customs, music, etc; covering many issues related to different subjects. I remember that we read some articles related to a specific topic to translate and look for unknown vocabulary, but we neither discussed them, nor wrote or expressed our point of view. Nowadays, it is important to take into account students' background since they need to explore their skills and develop them. Sometimes, teachers are concerned with teaching their classes without paying attention to what students need to comprehend how to construct knowledge. When we learn in a significant way, we learn for life. Languages education should be focused on students' reality and educating autonomous and creative people.

In my high school, I had few experiences related to topics to be analyzed and discussed in class. By means of languages, it is possible to cover topics which show students' interests, as a way of illustration, transversal topics like environmental education, education for peace,

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sexual education, social problems, which offer students elements to analyze and encourage students to think about them; at the same time, foster values which are part of students education, for example, topics in class can be related to justice, peace, equality, democracy and so on. In my personal case, English class was not focused on topics such as current problems or issues which could be useful to know something new or analyze familiar topics for students.

To educate upon transversality bases, it is necessary to work together taking into account transversal characteristics. School community needs to work as a team to enrich students' learning process and their own role. In this sense, transversality works as a learning and teaching alternative which looks for a useful and fruitful education.

## 8.1.2 Student Researcher 2

English classes usually appeared abstract and sophisticated spaces, where for teachers, students' experiences and their previous knowledge in other fields did not have any importance in the learning process; dialogues were not considered an option to get students involved in the class, and the lessons were almost ever devoted to non-sense activities of repetition and non-reflective translations. In my view, education needs to be dynamic, it has to be connected to real issues and phenomena of the surrounding world; it also has to take into consideration the individual processes of students, their skills, experiences and knowledge; what we, as future teachers, should try to reach through education is to bridge the gap between school and life. In the specific case of English learning, I think that it is important to be aware

of the link between language and culture, and the responsibility that English educators have in the construction of knowledge, the reflection and comprehension of social phenomena, the encouragement of critical thinking and the search for alternatives to transform our world. In this way, it is fundamental to review how English education can become more dynamic and committed to the transformation, as well as explore different strategies which let educative communities share their experiences and knowledge to deal with their specific problems.

By reflecting on my experience in school, I can identify in transversality's characteristics some aspects that could have made my education process more significant.

While transversality proposes to encourage critical thinking, the interaction between different subjects, the promotion of values, the search for a better quality of life, the comprehension of phenomena around schools and societies, and the community involvement in social transformation processes, my education in school was mostly based upon absolute ideas of values that students could not refute. We did not have the possibility to dialogue. The construction of knowledge was limited to the transmission of information from books and teachers, we, students were not given the opportunity to illustrate our point of view or our previous knowledge and experiences. Subjects were focused only on the topics they were supposed to cover without taking into account the doubts students had in other subjects.

In most of the cases, English classes were really isolated spaces that did not have any relation with topics, experiences or situations from other subjects or from our lives. They were restricted to grammar and drilling exercises taken from books. The process did not go beyond learning by rote and the repetition of some structures, because of that, students' writing and oral expression were very poor, there were few times when we could use our knowledge and express ourselves at the same time.

English teachers never referred in their classes to relevant aspects for the transformation of society, the comprehension of phenomena like violence, environmental issues, diversity and poverty did not take place in any class. English classes were spaces just for grammar out of context.

# 8.1.3 Student Researcher 3

I studied at two high schools. In the first one, the class was based on Grammar Translation Method. Students were just supposed to translate sentences from Spanish into English and vice versa. The major focuses of our language course were reading and writing skills. The language lesson was based on a set of grammar rules we had to learn by rote, in order to make new sentences. There was not any connection with what we were interested in learning. We used a textbook which was only based on drillings. In our classes, there was not any invitation to think critically about something or to create new stuff. We just had to use the book, do the exercises and nothing else. Even though the book talked about Colombia, especially about the festivals like *La Feria de las Flores*, the teacher did not foster any other activity rather than translating the texts; it could have been really interesting to talk about other holidays in Colombia, because that's what we know and they are familiar topics to students.

In my second high school, the teacher delivered the lesson in a more creative way. We used puppets to learn vocabulary about animals, paper dolls to learn about clothes, we worked on journals and we acted lots of story tales. I think this experience was more meaningful to me because just with the use of skits, we could take an active role in our classes. We were the people who decided what to do and what to say and the tales provided a space for discussion about social problems. Once, we worked on Oscar Wilde's tales. It was awesome. We studied his life and that gave us a lot of topics to talk about because he had a really controversial life at that time. That was interesting because spoken language was given its importance considering our context. In the same way, with this kind of activities, tolerance, respect for the difference, teamwork were fostered.

We also wrote journals about what we did on holidays or on the weekend. It was good because the teacher tried to explain the grammar to us depending on what we had written; then the lessons were not boring because we did not exactly worked on a series of grammar rules, like traditional education does. The lessons were quite dynamic and we had the opportunity to choose what we wanted to study.

# 8.1.4 Student Researcher 4

C.T.S+I (science, technology, society plus innovation) was a pedagogical proposal carried out at Inem High School and designed by Professor Miguel Corchuelo. This alternative to teach and learn was closely related to transversal education since it attempted to be a means to integrate school and students' lives; what made learning a meaningful process. On the one

hand, having experienced this kind of transversal education allowed me to have an interdisciplinary perspective of learning because the subjects were connected to each other in order to avoid the fragmentation of knowledge caused by traditional education, which was experienced in previous grades, and reflected upon topics and current problems in society such as sports, unemployment, water pollution and so on. On the other hand, C.T.S. +I let me experience an education based on a humanistic approach. We played an active and dynamic role in our own learning process by means of activities such as presentations, researches, role-plays, debates, with materials designed for our own learning what helped us explore our skills and develop our creativity and abilities. We felt familiarized with the topics in class what helped us gain confidence in learning.

The English class was a means for fostering the relationship between school context and students' lives by exploring current topics which concerned us. For instance, the English teacher brought some readings about the current topic proposed for the term (e.g. Water Pollution), so we not only learnt vocabulary related to the topic but also reflected upon it.

Through activities carried out in the English class, our lives were connected to school context in order to improve students' lives. Working on a current topic was useful because it allowed the creation of a harmonic environment between students and our context, since the topics were problems which concerned us as part of society. The subjects were integrated, thus we had the possibility to comprehend the current topic proposed for the term from different fields, for instance, Maths, English, Spanish, and History and thus we could hold on a position towards the topic. For that reason, this pedagogical proposal presented a humanistic dimension

since all the subjects were connected by means of a current topic in order to raise students' awareness of the social problems. Students and teachers' role changed in the classroom, that is, teacher was a guide who promoted students' critical thinking taking into account their previous knowledge and experiences. In this way, an English class was an environment where values such as responsibility, freedom, equality, solidarity, democracy and justice were fostered through activities which allowed students to gain ownership of their learning process.

The activities were mostly in groups, for that reason, the results at the end of the activities were responsibility of the whole group. One of the characteristics of transversal education has to do with the interaction between the values mentioned above and knowledge. To develop the interaction in the English class, we were exposed to group work activities which were not easy since we were accustomed to work alone due to the influence of traditional education experienced in previous years. It was so hard to work in group in order to carry out a common activity like looking for possible solutions to current problems in society, based upon our experiences and knowledge, but when we did it, it was useful since we learnt to play roles in the groups with responsibility, equality, justice, democracy, solidarity, and freedom. Interdisciplinarity, another aspect present in school activities, played an important role in the learning process as different aspects such as context, students' previous knowledge, experiences and school context. The relationship of English with other subjects allowed students to work in groups and have the possibility to work on the topics belonging to the different areas of knowledge, analyzing different perspectives and positions useful to find possible solutions or alternatives to the problems.

In conclusion, C.T.S+I was a pedagogical proposal that involved characteristics of transversal education since this kind of education aimed to foster the integral development of students, integrating their family context and school, by connecting all subjects reinforcing intellectual and moral aspects, valuing students' experiences and previous knowledge, which enhanced the development of critical thinking and encouraged universal values useful in society.

### 8.1.5 Student Researcher 5

When I was a student, I was not informed about teaching methods that were being implemented by teachers in my educational process, many classes were really boring and monotonous, and students behaved in a submissive way. My high school has a beautiful environment and many green zones, its care depended on who were punished, or who needed to improve a grade then, it was a lack of sensitizing and encouragement of the importance to protect the environment.

In other subjects we talked about our culture, daily life news and some other topics, but I realized something very important in education and the attitude of the teacher because some of them tended to believe that they were the only ones who knew, or simply they delivered the class only to those students who knew or understood more about the topic and the other ones did not matter.

Our English class was different, the teacher used real situations. We worked with the land; it was a kind of project related to life. It was about the growing of some plants specially sunflowers; each of us was in charge of three seeds from this plant, thus, its cultivation and progress depended on us; so we searched everyday about its process and treatment. At that time, we experienced interdisciplinarity because we talked to teachers of other subjects such as Biology and Physics; and then, when we had the fruit and made some products, we had to use drawing and computer science within it, to continue the project.

Our English teacher brought this idea to the class and we had to develop it through our experience, as constructivism theory in which the teacher is a guide and allows students to participate actively in class. We were the active creators of our own knowledge through the exploration and experimentation of something close to our life. Every week, we had to report in a kind of diary all what was happening to our plants and talked to other teachers in other subjects. We learnt many new and different things. It made us responsible for our learning evidencing transversality. It proposes process, students' active participation. These experiences and daily life's reflections on real problems and real contents favor the development of knowledge and attitudes, abilities and values. Moreover, with this project implemented by our English teacher, we improved our interpersonal relationships sharing with teachers of other subjects, classmates, and community; it even helped us clarify and improve our knowledge of other fields of education. Besides, as we worked with nature, little by little we were aware of its importance. At the same time, we were acquiring new vocabulary on the area. We elaborated our sunflower diary and looked for information to follow the process. This gave us the opportunity to experience a different education from the one that is oriented inside a classroom.

This project was only made in English class, but it changed enormously our traditional education in our high school.

#### 8.1.6 Student Researcher 6

My English class experience at school was a good one, I had very good teachers who were always concerned with my learning process; they always created an atmosphere that broke the routine, that is to say, the English class was a course in which I could learn a lot about my own environment and my own contexts, thanks to their ways of teaching, but it was not the tools and materials that they used, it was how teachers used them to teach.

For instance, I remember a class in which I learnt how to make "*empanadas de pipián*" since my teacher was taking a course of cooking and she took advantage of it, everybody brought the ingredients to the class that morning and we started to make the "*empanadas*" following the teacher's instructions. That session was funny and meaningful to me because it was related to our own culture. That was the kind of stuff that we used to do in the English class. That day, I learnt something good: if somebody wants to learn or teach something, one of the best ways is to do things that belong to the context where we live in.

This experience in the English course was meaningful because it looked for the connection between the school context and our lives as students by going through topics that had to do with reality, that is to say, about what was happening at that time in the world. As another illustration, one day the teacher brought to us a reading about the 9/11. In that session,

we could learn something more about the topic that we were studying in Social Science; we were able to reflect upon it by using new vocabulary that allowed us to enrich our English performance.

I think that in my school, tranversality was a fundamental part in the learning process since in most of the subjects the teachers carried out transversal projects which involved students, teachers and community, projects whose main objective was to create a relationship between the school and the surrounding environment, in this way, we as students could be aware of our own social reality and its problems and work on the search of ways for improving life quality.

In Biology class, we studied deforestation, its consequences and the ways of fighting them, for that reason we sowed many plants seeds of plants and trees on a piece of land where we used to take the English class and learn about the topic. This kind of projects inspired us to have a principle of reflection upon our environment and what is important in life. Thanks to education based on transversality, I started not only to develop critical thinking, but also a positive attitude that helped me to face and overcome the adversities that reality put on my way.

Somehow, all the subjects were linked in order to get a better comprehension of the topics, not only for academic purposes but for social objectives. This pedagogical alternative of education enhanced the human part of the learning process since, we as students reached new levels of understanding about what happened outside the school. That is, in the social context.

An example of this was the interaction that existed between English class and Ethics class whose main objective was to foster values such as responsibility, equality, solidarity, and justice by doing activities that looked not only for individual work but also group work. For instance, we wrote fables individually and in Ethics class we had to make small groups, join the fables, and perform some plays. This kind of activities allowed us to think individually, but at the same time we learned to share thoughts and ideas in order to foster interaction based on tolerance and respect.

In this way, interdisciplinarity was an important strategy to build some knowledge from the connection of all the subjects and the interaction that existed among them in order to perform better, not only as students but also as individuals who belonged to society.

To conclude, the strategy carried out in my school through all the subjects, incorporated the characteristics of transversal education and its main objective was to integrate the school context and the students' reality with the purpose of raising social awareness and principles.

From our experience as students we have reflected on educational aspects which allow us to see transversality as an alternative to overcome some current social and educational problems such as environmental problems, poor sexual education, diversity, disrespect and others. Transversality proposes the recognition of students' knowledge and experiences as important components of daily classroom life and learning processes. Thus, Transversal education aims at connecting students' life and school in order to contribute to the integral education which fosters values, principles, attitudes and behaviors. Moreover, transversality deals with interdisciplinarity, that is, the interaction between subjects and their relationship with current topics in society; these transversal characteristics are helpful to encourage students' critical and reflective thinking.

Taking into account the experiences in our high school, we can say that 50% of our research project group experienced a very traditional education, it was not related to transversal characteristics whereas the others evidenced transversality in their classes. In the first case English classes were limited to the transmission of information, focused on grammar exercises and learning by rote, which did not permit students to go beyond repetition and reproduction of information. It was extremely different from what transversality proposes, education should help students and teachers to understand their world, comprehend social problems and propose alternatives to overcome them. Regarding the other half of our research project group, they experienced a transversal education but without being aware of it. Education was partly based upon the context in which they interacted. The lessons and its activities were related to their needs and interests. There was not any fragmentation of the subjects, on the contrary, they were put together in order to get some projects done. Students worked with the community on social problems like water pollution, unemployment, recycling, cultural environment comprehension, involving themselves in projects to face those situations and foster their identity.

According to half of the group in previous experiences in high school there were events which showed a close relationship with the characteristics of transversality, by way of illustration, there were projects and activities based upon humanistic dimension associated with social problems, which permit a connection between school and students realities. One example was the growing of plants as a way to face deforestation and unemployment. During those experiences students expressed their point of view through written reports in English. Another example of this was given in the recycling campaigns performed after the reflection of current environmental problems as water pollution, measured exploitation of natural resources, refuse wastes and the need to deal with them. In addition, making "*Empanadas de pipián*" and CTS+I were also spaces which showed students alternatives to know more about their culture, their society, their current world and at the same time, they gave them the opportunity to generate economic incomes alternatives. Carrying out these projects was really important to foster values such as respect, responsibility, and justice, and also encouraged students to comprehend their surrounding world in order to construct their identity. In this sense, the integration of different subjects and fields of knowledge was very helpful, because it allowed students the opportunity to reflect upon their reality, develop critical thinking and approach their world from different perspectives.

## 8.2 Interviews

One of the instruments used to collect information was the interviews that were carried out in some schools in Popayán such as Champagnat School, Amalaka School, Gabriela Mistral School, Francisco Antonio de Ulloa School and Normal Superior High School. The purpose of these interviews was to know the perception that teachers had about the role of transversality in these schools and how it was applied in their classes. The questions were based on transversality and its main characteristics, the relationship school - students' context, the construction of knowledge based on students' previous experiences and knowledge, the development of critical thinking linked to values, the integration of the individuals to society and their participation in transformation processes which could allow them to construct society. The interviewed teachers answered questions taking into consideration their own experience and knowledge. And the analysis of the data collected were distributed and analyzed school by school, and then teacher by teacher in order to get a better comprehension of the answers provided.

This process allowed us to study each interview, and then with the common aspects and the different features, to draw general conclusions that show the role that transversality plays in the educational institutions where we carried out the research.

## 8.2.1 Champagnat School

Interviewees: English teacher and Kindergarten teacher

### 8.2.1.1 English teacher

The teacher was aware of the transversality concept. She claimed that teachers in this school have broad knowledge about transversality, since they had reviewed different documents proposed by the National Law of Education, and they had used that information to plan their classes.

Para nuestra planeación anual nosotros realizamos la revisión de algunos documentos de acuerdo con la ley, esto se hace en acuerdo con el plan que se plantea para las clases, y el concepto que se tiene en el colegio sobre transversalidad.

She defined transversality as those processes that have to do with all the fields of knowledge and guide the learning of the students. "La transversalidad para nosotros son todos los procesos que son eje de los procesos de enseñanza y aprendizaje, tiene que ver con un conjunto de acciones que tocan las diferentes áreas del aprendizaje".

Besides, she asserted that transversality is aimed to make the learning process a significant and useful experience for students, one which permits integration of life and school.

Yo creo que el rol de la transversalidad es lograr un aprendizaje significativo, lograr un aprendizaje que parta de todas las necesidades de los estudiantes y desde las diferentes dimensiones del ser humano, no solamente desde la parte conceptual del inglés, sino tratar de articular todos los procesos que el niño vive a diario, lo cual se puede hacer mediante distintos proyectos.

The teacher said that her classes are planned to fit the activities, topics and projects of other subjects. She stated that teachers in this school have as objective to work on real life situations which students can identify easily, giving them the opportunity to start thinking of ways to face life out of school. "Desde mi punto de vista y desde la metodología que se trabaja en el área de inglés ese es el objetivo, trabajar con situaciones de la vida real, de la vida cotidiana".

She also highlighted the importance of previous knowledge in the learning process and claimed that she does consider important students' experiences and knowledge to plan her classes.

Finally, she mentioned some projects that are carried out in the school to handle current social issues as sexual education and environmental problems. Those projects reflect the commitment of this school to give students a significant educational process and opportunities to reflect on their context.

> Hay proyectos como por ejemplo el de educación sexual y el PRAE que es el de medio ambiente, y todos esos se tienen en cuenta para la planeación, en el plan de asignatura y en el plan de clase que nosotros llevamos a cabo.

## 8.2.1.2 Kindergarten teacher

This teacher defined transversality as the integration of the different subjects in order to study specific topics. "La transversalidad tiene que ver con el hecho de que no se trabajen las áreas como aisladas, sino que se incluyan dentro de toda la temática que se está trabajando diariamente". She emphasizes on the importance that it has for education and for the school.

> La transversalidad me parece básica, uno no puede volverse solo profesor del área, llegar, dar la materia y salir, tiene que integrarse con todo lo que los

chicos están trabajando. La idea es que desde preescolar se maneje el concepto de transversalidad porque con ellos se maneja un trabajo integrado.

The teacher asserted her classes are totally related to transversality, since the topics are taught in a holistic way that permits to reinforce the knowledge of every subject as the students advance in the topics.

Besides, she claimed the previous experiences as fundamental elements to get new knowledge and to enrich previous ones. "Las experiencias previas son básicas para la construcción de nuevos conocimientos o para mejorar los conocimientos que ya se tienen". She said it is very important to think of students' needs, delights and interests to plan the classes.

Con los chicos de preescolar se hacen las clases a partir de las necesidades y las particularidades de ellos. Esto se tiene muy en cuenta. Se hace un análisis de necesidades para hacer los proyectos específicos. Así si vemos que hay una necesidad relevante en el aula, algo que está llamándoles la atención o un tema específico se aborda y a partir de ese tema se trabaja en los demás conceptos y las demás actividades. Se trata de que todo lo que a ellos les llame la atención se enfoque en el área de aprendizaje.

She also explained that in the school, teachers try to encourage them to build identity and foster children's thinking skills, giving them strategieson how to make decisions related to their life. La idea es crear en ellos esa capacidad. Yo tengo un proyecto particular con los niños que es un pacto de convivencia, se llama Viviendo al derecho y con deberes, en ese proyecto manejamos ante todo que los niños aprendan a crear su autoimagen, su auto concepto y la capacidad de tomar decisiones, de responder y de opinar. Lo mismo en el proyecto de filosofía para niños, lo que más se trabaja con ellos es la capacidad de opinar, de analizar, de ir más allá de quedarse en la simple respuesta. Yo creo que con todas las actividades que se realizan y los proyectos específicos del colegio se está potencializando esa parte de los chicos.

Finally, the teacher said the school has some specific projects and all teachers are responsible for them.

Sí, la idea del colegio en este año es manejar al máximo la transversalidad de todos los proyectos, sobre todo teniendo en cuenta que el colegio tiene unos proyectos exclusivos. Todos los docentes estamos encargados de manejarlos desde las diferentes asignaturas que orientamos.

From these interviews, we could grab the following elements:

Teachers in this school seemed to be engaged with transversality concept comprehension and its use in their classes, law reviewing and a clear educational school proposal appeared as the basis of transversality implementation. They understood transversality as those processes which permit the integration of different subjects or fields of knowledge to study one similar topic. They find that transversality has a very important role in education as it means a meaningful learning, which deals with the study of similar topics from very different scopes, allowing students the integration of their knowledge in a holistic view of their reality.

They considered that the previous experiences and the previous knowledge of the students are quite important for the construction of knowledge, as well as it is a process enriched by every single experience of the participants. Thus, it is fundamental to take into account students' experiences, interests, and needs in their lesson plans; those constitute a very important way for teachers to integrate their classes to students' life and vice versa.

Finally, teachers' goal is to support their students to build their identity. To achieve this, they proposed situations from the daily life based on current problems and dynamics to their students, which permit them to elaborate their own view and make responsible decisions in front of the phenomena of the world. In this way, English teachers relate their classes to other subjects by dealing with common themes and projects that they identify during the lesson planning as important to their students, so students can advance in their process of learning, by thinking topics and problems from different scopes, and practicing what they know from other subjects.

In conclusion, from the interviews' findings in Champagnat School, it is possible to identify some aspects which show transversality in their educational dynamics. First, teachers have knowledge about the concept of transversality and its implications in education and life. Second, the school has projects based on transversality, which every teacher of the school must think about for their lesson planning. Third, teachers take into account different elements of transversality to develop their classes; for instance, students' previous experiences, needs and interests, current social phenomena and knowledge from different subjects.

#### 8.2.2 Amalaka School

Interviewees: English teacher and Agro ecology teacher

# 8.2.2.1 English teacher

This teacher highlighted some ideas about transversality; first of all, she related transversality to Freinet approach.

La pedagogía Freinet y el énfasis de la escuela Amalaka proponen que se trabaje todo transversalmente, entonces integramos por ejemplo el área de Inglés con la Agro ecología; se intentan desarrollar los proyectos más importantes de la escuela en transversalidad con todas las demás áreas. En biología trabajamos lo de ganadería, lo de los abonos. En sociales se trabaja lo mismo, en Inglés se apoyan los proyectos.

Besides, she defined transversal education to the integration of subjects.

Dejar de lado el concepto de la materia única, lo que intentamos es que todo tenga que ver un poquito con todo, por ejemplo la matemática no es solo aprender a sumar o a restar sino que puedo trabajar las matemáticas desde el inglés, pienso que es a lo que apunta la educación ahora, que es no separar las cosas sino integrarlas. According to the class plan and its link to transversality, she asserted that there are projects related to each group.

Yo manejo de forma transversal sobre todo el énfasis técnico de la escuela que son los proyectos que tiene cada grado. En alguno de los periodos siempre hay un proyecto de inglés que tiene que ver con los proyectos de cada curso.

On the other hand, interdisciplinarity is one of the characteristics of transversality and the teacher explained how she uses transversality in her class plans. She has related English to agro, and students write reports about activities developed in class.

> Es muy chévere hacer los trabajos de campo, y luego hacer textos libres que siempre tienen imperfecciones y un poco de problemas, pero se piensa construir un texto libre a partir de los trabajos de los chicos, entonces vamos y trabajamos con séptimo cuyo proyecto es abonos naturales; vamos y trabajamos en el compost, usamos las palas, las herramientas y luego escribimos lo que hicimos, escribimos para qué sirven los abonos, y eso se va puliendo por decirlo de alguna forma a lo largo del periodo, al final del periodo hay que tener un material que es el resultado del trabajo de los chicos.

Students' previous experiences and knowledge are part of transversality; in relation to this the teacher claimed that students' previous experiences and knowledge are the starting point in a class.

> Pienso que es la base de partida, más que importante es el origen de lo que puede pasar en una clase, porque es como lo que pasa al leer, yo no puedo

entender un texto si no tengo un background sobre el tema, igual en cualquier área.

She considered that the relationship between students' previous experiences and construction of knowledge allow to progress in the educational process. "Con las lenguas extranjeras es un poco más difícil porque es mucho más abstracto, pero pensaría que la relación entre lo que se sabe y la construcción de conocimiento es lo que permite avanzar en el proceso de educación".

She highlighted that students' previous experiences and skills fortify the educative process.

Todos tenemos la experiencia de la vida, cada uno con experiencias particulares y ahí interviene mucho los tipos de saberes que tenemos, la forma en que aprendemos. Las experiencias anteriores nos fortalecen esas habilidades, que tengamos más aptitud para ciertas cosas es lo que vamos construyendo a lo largo de la vida y del proceso educativo.

The participation of students is fundamental in school; the teacher claimed that the school looks for creating students' identity and they can propose activities to be carried out in class.

Pienso que en toda la dinámica de la escuela eso es lo que se busca crear como en el carácter de los chicos, como una identidad propia, como un criterio, y poder hablar de eso. Si lo intento porque de todas formas las clases aquí son muy participativas. Finally, this teacher affirmed that there were students from different socio-economic strata and there were not many social prejudices in Amalaka.

Yo creo que la diversidad cultural se respira en Amalaka porque aquí tenemos una población no muy estandarizada, así como hay niños de muy bajos recursos, hay chicos con un poco más de recursos, hay chicos que pertenecen a los cabildos, hay chicos que son más de la ciudad, de pronto no se hable mucho en las clases de ello, pero si se vive en la escuela todo el tiempo, entonces aquí creo que no se manejan muchos prejuicios sociales que en muchas escuelas se pueden presentar.

# 8.2.2.2 Agro ecology teacher

This teacher highlighted that education has been working on transversal processes during the last years. "Hace unos años se viene tratando la educación con procesos transversales es decir hacer que los jóvenes en su educación básica y secundaria comiencen a generar procesos a través de estrategias con materias transversales".

He claimed that in Agro ecology class, the idea is to relate it to the other subjects in a transversal way, to him, a transversal subject is a subject which enriches itself in a cultural, politic, economic or social field. "El que sea transversal una área se define que pueda enriquecerse de su entorno, ya sea cultural, social, económico o político para que trascienda en cada uno de los estudiantes y más en la sociedad donde ellos se desarrollan."

According to the class plan and its link to transversality, the teacher manifested that the integration of different subjects in the syllabi is important.

Integrar el área de matemáticas en la definición de alguna técnica, por lo menos la recolección de insectos, entonces ahí se integra el área de biología con la de entomología, la matemáticas en la medición de áreas para siembra, entonces se trata de que no solo el docente sea el encargado de dar la agro ecología, sino que la agro ecología sea transversal a las demás áreas y que ellos sientan la necesidad de que deben integrarlas, las matemáticas, comunicación o lenguaje, biología y sociales.

to interdisciplinarity, he pointed out that it was necessary to work on groups with other teachers to plan strategies in order to integrate subjects by means of workshops, questions, and activities.

Se deben crear primero unos espacios que se generen de concertación dos o tres docentes de diferentes áreas, o sea que cuando estén armando los horarios del estudiante se puedan generar esos espacios, una vez generados esos espacios donde se puedan reunir tres o cuatro profesores una media hora o una hora, se crean estrategias de integración a partir de talleres, preguntas, actividades, y eso es lo que va construyendo proceso dentro de una institución, además de que las materias sean transversales unas con otras.

Construction of knowledge and previous experiences were topics tackled in the interview, and the teacher stated that students have previous knowledge from their environment; the task is to construct concepts in a collective way from their knowledge, or construct new ones.

Se parte siempre de la pedagogía activa, de la pedagogía popular que en uno de sus principios es partir de lo que se tiene; todos los estudiantes vienen con conceptos previos de su entorno, lo que hay que hacer es que a partir de esos conceptos que ellos traen tratar de construir colectivamente en grupo, participativamente conceptos que ellos puedan pulir, o nuevos conceptos que se puedan generar a partir de la clase misma.

He remarked that students' previous experiences and knowledge are useful to the classes' development, and he also pointed out that teacher cannot ignore students' culture and context. "Por ejemplo en la zona rural los estudiantes traen conocimientos previos, inclusive conocimientos tradicionales de sus padres y abuelos, sino se tienen en cuenta este tipo de conocimientos rompemos su cultura y su entorno". "Por ejemplo en la agricultura ecológica el conocimiento que traen los estudiantes en la zonas rurales den mucha importancia y se trata de que ellos se sientan identificados con lo que saben y lo valoren".

Besides, he stated that conceptual classes and transmission of knowledge do not generate anything in students, since their previous experiences are not taken into consideration. "Tener en cuenta el conocimiento que ellos traen, el construir con ese conocimiento en clase hace que ellos se sientan identificados con el nuevo conocimiento y lo puedan apropiar, y lo puedan replicar en su entorno". The teacher also talked about the participation of students in education and he explained that he worked on an active pedagogy, where teachers and students participate with their knowledge and construct interesting classes.

La pedagogía en que estoy trabajando es una pedagogía activa, la palabra activa quiere decir que esta en continuo cambio, mi plan de estudio no va ser parecido al del próximo año porque es una educación activa, es decir que participa el docente con sus conceptos, el estudiante con sus conocimientos previos y el entorno o la situación en la cual nos encontremos; a partir de allí se van construyendo las clases según la pertinencia y la necesidad del estudiante para que sea atractiva a ellos y para que se apropien de ellos.

Furthermore, he mentioned that Cauca Department has a diverse population; such as indigenous, peasants, and afro people, so it is possible to know more about each culture and share knowledge with others.

La interculturalidad nos genera por lo menos en el departamento del Cauca que se manejan tantas etnias, donde en un salón pueden convivir indígenas, campesinos, afro descendientes, estudiantes de zona rural, estudiantes de zona urbana, entonces todo ese conglomerado cultural es el que los docentes deben aprovechar y no ser lineales en sus clases sino tomar de cada cultura, de cada etnia un conocimiento y así transmitírselo a los estudiantes para que ellos se sientan identificados con su cultura.

From these interviews we could grab the following elements:

According to their answers, the English and the Agro ecology teachers related transversality to the integration of subjects, which is one characteristic of transversality.Besides, the English teacher pointed out that in Amalaka there are different projects to carry out and by means of them, it is possible to work interdisciplinarity. Projects in the school are useful to encourage research spirit, and teachers can use them to teach their subjects not only by transmitting information, but also encouraging students to develop an active role. The English teacher focused on projects developed in Amalaka, she claimed to use them in her class to learn English. Agro ecology teacher added that the syllabi have to be integrated to students needs for confronting the gap between school and life.

The English teacher and the Agro ecology teacher did not explain how they can integrate subjects; the English teacher said that she only related English to Agro because of the emphasis of the Amalaka School. The Agro ecology teacher highlighted the usefulness of working in groups with teachers to create a link among subjects.

Regarding students' experiences both teachers claimed that previous knowledge and experiences are relevant points to bear in mind in class. In this way, there is a close relationship between students' life and school environment as a starting point to create participatory environment in school. In addition, The English teacher and the Agro ecology teacher considered students' previous knowledge and experiences as fundamental factors to encourage the construction of knowledge, and as a means of progress in cognitive processes and recognition of students' knowledge and culture. The English teacher stated that previous experiences fortify students' learning process through life, while the Agro ecology teacher pointed out the importance of teaching based on students' background. Nevertheless, they mentioned different points in their answers, the English teacher talked about ways of learning according to student's skills and she stated that the task of teachers in a classroom was to recognize students' skills in order to design strategies to improve students' learning. The Agro ecology teacher said that teaching by transmission of knowledge does not generate any impact on students; this affirmation confirms the relevance of teaching taking into consideration the characteristics of transversality.

Otherwise, both teachers pointed out the emphasis of the school that looks for fostering the students' identity and the active pedagogy. According to their answers, students have the possibility to have an active role, taking part of their learning process with their ideas and interests.

Finally, teachers recognized a diverse population in Cauca and mentioned indigenous, Afros, peasants, and people who live in the urban zone. Agro ecology teacher talked about sharing knowledge and this is relevant, since it evidences recognition of culture, and it can encourage students to think about diversity in order to respect differences and learn about different kinds of customs and thoughts. Then this statement is related to integral education which is another characteristic of transversality.

As conclusion, the English and Agro ecology teachers interviewed in Amalaka related transversality to the integration of subjects, and highlighted projects developed in the school as significant elements to link subjects. They explained that transversality in their classes can be presented in the integration of subjects, creation of projects and syllabi according to students' needs. Teachers pointed out the importance of students' previous knowledge and experiences to be taken into consideration in their classes, and to construct knowledge. Both teachers considered important the participation of students in society and they try to cover this aspect in their classes. Finally, they recognized the importance of talking about topics like cultural diversity, and pointed out that cultural diversity is significant to share knowledge.

# 8.2.3 Gabriela Mistral School

Interviewees: English teacher No.1, English teacher No. 2 and Mathematics teacher.

### 8.2.3.1 English teacher No.1

This teacher defined transversality as an alternative in education which permits the integration of different subjects in order to deal with specific topics. "La transversalidad es la manera en que cada una de las materias se relacionan en temas específicos, que el estudiante no sienta que cuando llega a cada materia llega a un mundo totalmente diferente". She emphasized that the role of transversality is to give tools to the students, so they can make proper decisions in respect to their social reality. "Integrar el conocimiento para darle al estudiante herramientas de análisis frente a una realidad donde todo está integrado, y así él sea capaz de tomar decisiones eficientes respecto a su entorno". Besides, she said that teachers in this school try to apply transversality on their classes as much as possible.

Hemos intentado trabajar en cada período un tema específico. Trato que el estudiante aprenda de una forma interesante y cercana a su realidad, así no se olvida de lo visto en clase tan fácilmente. En ocasiones el proceso es más lento pero en cada clase se intenta trabajar algo que tenga que ver con su contexto.

The teacher asserted that students' previous experiences and knowledge are quite important in the learning process, and for this reason, teachers have to take them into consideration in their lesson plans.

> Claro, tú tienes que partir de lo que ya existe, el estudiante nunca es una mente en blanco, él debe de tener conocimientos, y a partir de lo que él sabe hay que empezar a trabajar. Precisamente por eso hay que tener en cuenta los intereses del estudiante y el medio social en el que se desenvuelve, porque tal vez los temas que uno maneja o el mismo lenguaje no se adaptan a su realidad ni a su contexto.

Finally, she said that one of the school proposals consists of motivating students to comprehend social phenomena around them. "Uno de los principales objetivos del colegio consiste en que lo que se les enseña a los estudiantes les sirva para su vida y su desempeño fuera de este"

## 8.2.3.2 English teacher No. 2

The teacher asserted that transversality can be defined by some projects that foster students to comprehend social phenomena around them.

Se habla de transversalidad con proyectos como por ejemplo el de educación sexual y el de educación ambiental, proyectos transversales que deben hacer parte de la educación formal y que buscan un acompañamiento de los estudiantes en temáticas de relevancia social.

Besides, she pointed out the relevance of transversality for the students' life as a path to bridge the gap between school and life.

El rol de la transversalidad es no mostrar cada cosa por aparte, sino como un todo. Evitar crear en los estudiantes dinámicas fragmentarias, donde lo que se ve en una materia solo sea útil para esa materia y no para la vida en general.

She said that teachers in this school carry out different projects and activities to make their classes transversal, to tackle social current issues and help them to make decisions for their own lives.

> Hemos diseñado distintos proyectos y actividades que nos permiten hacer nuestras clases transversales. Por ejemplo, para trabajar los auxiliares modales trabajamos los derechos del niño y sus deberes, hicimos jornadas de reflexión respecto al tema y elaboramos una cartelera para el colegio.

En el colegio se está trabajando un proyecto en el cual los estudiantes pueden explorar un poco opciones para su vida al terminar el colegio, es muy rico cuando los estudiantes te dicen: Ya sé lo que quiero hacer, lo que hicimos en clase me motivo a hacer tal cosa.

Finally, she stated that it is necessary to take into account students' previous experiences and knowledge to facilitate the learning process.

Respecto a al conocimiento previo de los estudiantes, es claro por ejemplo cuando se hacen ejercicios de Reading, lo primero que se hace es preguntar a los estudiantes que saben del tema y si ellos tienen conocimiento del tema es más fácil la lectura.

## 8.2.3.3 Mathematics teacher

This teacher defined transversality as the integration of different subjects. "La transversalidad es algo que nos permite integrar distintas materias en torno a distintos temas" "El rol de la transversalidad es permitir a los profesores y estudiantes avanzar simultáneamente en distintas áreas, afianzando los conocimientos previos y avanzando en los procesos educativos".

He stated that he tries to articulate his classes to topics of different fields of knowledge.

Cada que es posible intento integrar temáticas de otras áreas a mi clase, para así permitir al estudiante avanzar en distintos tipos de conocimiento, por ejemplo,

en estadística hago a mis estudiantes recolectar datos de acuerdo a situaciones reales o inmediatas a ellos.

Besides, he pointed out the importance of recognizing students' previous experiences and knowledge to make his classes more useful and practical.

Cuando un estudiante sabe acerca de un tema es mucho más fácil avanzar en el proceso, así mismo todas las experiencias de los estudiantes pueden ser útiles para la clase. Al saber cuáles son las experiencias de mis estudiantes puedo saber qué tipo de estrategias utilizar en mis clases.

Finally, he claimed that the school has many spaces to deal with some current social problems such as drug addiction, prostitution, unemployment, environmental issues, and others, but he does not spend his class time to this purpose.

La verdad creo que me quedo corto en este aspecto, hay profesores que lo hacen pero para mí es difícil debido al tiempo y al gran número de situaciones que se pueden presentar. Además el colegio tiene espacios específicos para tratar ciertos temas, y creo que es mejor usar el tiempo de clase en otros aspectos.

From these interviews, we could grab the following elements:

Teachers in this school, defined transversality as the integration of different subjects in order to deal with different topics and projects, letting students explore in a multidimensional way, the topics as well as integrate students' life to the cognitive process. They stated that transversality aims to the integration of different kinds of knowledge which permit students and teachers to advance in the cognitive processes and develop useful skills in world's phenomena comprehension. Besides, they agreed that there are several ways to make of their classes transversal spaces, and they have committed to avoid knowledge fragmentation by integrating topics of different subjects in their lesson plans, performing activities which allow students to participate and link their experiences to the learning process and connecting classes to surrounding phenomena. They also claimed that it is highly important to take into account students' previous experiences and knowledge in their classes, since those are the starting point to work, the more you know students' needs and interests; the more effective strategies you can develop to improve your classes. In this sense, it is necessary to have in mind students' context all the time. Finally, teachers in this school said to be aware of the importance of participating in decision making processes; nevertheless, one of them explained that there is not enough time to complete the activities linked to this purpose in his class. Additionally, the other two teachers affirmed that participation is one of the main goals in their classes.

As conclusion, the interviews at Gabriela Mistral School reveal some transversal elements in the school. First, teachers have some knowledge about transversality concept, teachers identify the importance of it in education and life and they intend to relate it to their classes. Second, teachers take into account aspects of transversality such as students' previous experiences and knowledge, students' interests, and knowledge from other subjects, to develop

their classes. Third, the school develops activities and projects which could lead students to transversal processes both to advance in cognition and to comprehend surrounding phenomena.

## 8.2.4 Institución Educativa Francisco Antonio De Ulloa

Interviewees: Spanish teacher and English teacher

## 8.2.4.1 Spanish teacher

This teacher stated that transversality consists of strategies in education processes, which permit teachers and students to take into account previous knowledge and integrate different subjects in order to study a specific topic.

> Basada en mi experiencia, la educación transversal se da inmersa en la medida en que uno aborda los temas, los estudiantes tienen sus conocimientos previos, consultan cuando se les ha dado el tema a tratar y se tiene que ver todo lo relacionado en las áreas en general. No podemos hacer una isla porque todo viene conjugado en un solo término.

She claimed that her class plans are flexible, the questions and doubts of her students are taken into account to satisfy their needs and interests. However, the teacher does not have a class plan focused on transversality.

Así como decir que yo me pegue a un plan, ni en mi vida misma porque muchas veces la experiencia le demuestra a uno que una cosa es lo que se planea y otra es la que se da en el momento.

The teacher asserted that previous experiences are important to build knowledge and for this reason, it is fundamental to take into account students' thinking and interests. "Hay que escucharles, atenderles porque algunas veces uno está tocando un tema y la imaginación de ellos es tan grande que están pensando en algo similar pero totalmente distinto al tema y hay que ampliar esos conocimientos".

She also pointed out that the construction of knowledge is a process that has to do with the students' context, their social level, experiences, and people that surround them.

> Para mí, la construcción del conocimiento va paso a paso. Tiene que ver mucho con el entorno, el nivel social, las experiencias de las personas que rodean al discente, lo que él ha vivido sentido experimentado. La construcción de conocimiento va a partir de lo que él observa, vivencia, saca sus propias conclusiones.

Finally, the teacher claimed that there are spaces during the classes that allow students reflect upon their context, dialogue and propose alternatives to face some situations around them.

Hoy llevaba mi clase preparada pero los estudiantes tenían una inquietud a nivel social de su cafetín que les fue quitado y para muchos ese era su almuerzo y comida y me pidieron el favor que los dejara hablar sobre ese tema para buscar posibles soluciones con las directivas y pues me parece tan importante eso como mi clase y me satisface que ellos sean capaces de resolver sus propios problemas por lo cual no me ceñí que ya tengo este plan y lo vamos a desarrollar.

## 8.2.4.2 English teacher

This teacher asserted that transversality deals with the integration of subjects. "Aquí en el colegio, algunos profesores trabajan los temas transversales, quiere decir que se relacionan con otras materias. En el área de inglés, la relación que existe entre los diferentes temas de otras materias pero trabajadas en ingles". She also said that there are some topics that allow working on transversality, but not all the topics are transversal. "No todos los planes de clase son transversales porque depende del tema. Hay temas que se prestan más para trabajar con los estudiantes, con facilidad y otros no. No todos los temas son transversales".

The teacher said that the students' previous knowledge and experiences could be important, although classes are based on a textbook, instead of students' experiences and previous knowledge. "Algunas veces. Ahora estamos trabajando con texto, nos limitamos a los temas del texto y allí se desarrollan los temas."

Finally, she said that there are some topics which are useful to work on, thus the teacher gives to the students some material related to them. "Muchos temas se prestan para trabajar con ellos cuando han preparado, por ejemplo, una exposición, una actividad o han visto una película, y sobre la película trabajan."

From these interviews, we could grab the following elements:

Teachers in this school related the concept of transversality to interdisciplinarity, as a possibility to work on a specific topic from different areas of knowledge. Spanish teacher also mentioned students' previous knowledge as another characteristic of transversality. It is possible to establish a relationship between previous experiences and the construction of knowledge, since students have a background and an environment that allow them to interact with topics that they will see in class. However, while the Spanish teacher asserted that previous experiences and knowledge of students is important in the learning process, the English teacher did not pointed out that students' previous knowledge is a key to plan the classes.

Teachers recognized students' needs as an important part of the learning process, and try to integrate students' life in their classes. The English teacher identified some topics related to transversality. Nevertheless, both teachers stated they have not established any transversal proposal for the classes.

Due to the fact that teachers considered students' experiences as relevant elements in their classes, we could say that this is one important step to link school and life, giving students the opportunity to think about their contexts, participate in transformation processes and make decisions to solve daily life situations.

### 8.2.5 Normal Superior School

Interviewees: Mathematics teacher, English teacher, Academic Coordinator.

## 8.2.5.1 Mathematics Teacher

This teacher related transversality to the integration of subjects. "Se trata de que el conocimiento sea para todas las áreas y no se quede en la especialidad". He emphasized that it was necessary to know student's world which is separate from school, and their world is valuable. He added that sometimes syllabi are cut off from students' reality.

Es necesario saber en el mundo que ellos viven que es un rompimiento con la escuela y es un mundo valioso porque generalmente uno da una serie de conocimientos, los conocimientos que da son los que están en los planes de estudio y a veces están desligados totalmente de la realidad y entonces el conocimiento queda como una base que no tiene una solidez.

Regarding the implementation of transversality in class, the teacher said: "El conocimiento es uno solo, y debe ser integral", "El conocimiento debe estar en toda una función para un progreso y para ponerlo al servicio de una comunidad". "Se pueda ver una unidad entre el conocimiento como una construcción total".

Regarding the integration of subjects he stated that the integration of subjects is an opportunity to have a global knowledge, without dividing knowledge where mathematics does not have any relationship with social science, natural sciences, and even foreign languages.

La integración en esa parte que nos da esa posibilidad de que el conocimiento sea único sea global, que no sea parcelado donde la matemática nada tiene que ver con las sociales, con las ciencias naturales, inclusive con los mismos idiomas extranjeros.

Students' previous knowledge and the construction of knowledge are associated with transversality, in this way, the teacher emphasized that students' world is valuable and it is necessary to know student's context which is often separated from school. Sometimes syllabi are cut off from students' reality.

Es necesario saber en el mundo que ellos viven que es un rompimiento con la escuela y es un mundo valioso porque generalmente uno da una serie de conocimientos, los conocimientos que da son los que están en los planes de estudio y a veces están desligados totalmente de la realidad y entonces el conocimiento queda como una base que no tiene una solidez.

At last he recognized students' background. "Claro por ejemplo en la forma más sencilla el niño desde su casa ya trae un mundo que ha vivido".

In relation to the participation of students and making decisions in society the teacher claimed:

En estos niños de grado sexto si se ve esa gana ese deseo de aprender esa emotividad tan grande que tienen ellos, pienso que si el dialogo con ellos, la correlación del intercambio de saberes el trato de niños, retomando a Piaget el niño no puede pensar como un adulto y uno tiene que bajarse al nivel de los niños. Lógico la amistad está por encima de todo y el factor humano está por encima de todo.

## 8.2.5.2 English teacher

This teacher related transversality to a project developed by students during the school year, which has transversality characteristics.

Hace tres años venimos trabajando un proyecto que se llama práctica pedagógica social cuyo proyecto hemos venido, hemos utilizado esta forma pedagógica con elementos de la transversalidad no en un cien por ciento pero si le damos unos acercamientos a este propósito pedagógico.

Besides, he recognized some problems to carry out transversality in schools.

Si hacemos un promedio de la transversalidad en mis clases podrá ser un diez, un cinco por ciento por eso te explicaba hace un instante desde un proyecto que tenemos intentamos o damos puntadas sobre transversalidad no obstante cuando uno habla de transversalidad, intenta aplicar la transversalidad se encuentra con los lineamientos y los estándares que están emanados desde el ministerio, pero el ministerio también plantea algunos proyectos para manejarlos en transversalidad pero no da ni el tiempo, ni prepara a los docentes para el manejo de esos temas en transversalidad, además de que no los hago mucho entiendo que no hay ni el espacio ni los requerimientos que emana el ministerio para ello.

The respondent highlighted that the relationship between subjects was associated with projects, and students 'context. 'La clase de inglés trabajamos mucho el ámbito social, el aspecto sicológico, desde un componente como te decía hace un instante, desde el componente que es el proyecto y también desde el contexto en el que viven nuestros estudiantes''.

The teacher took into consideration students' reality and previous knowledge as important elements to foster students' participation and making decisions in society.

Es una de los principales razones de nuestro proyecto el entender que no solo somos nosotros los que conocemos sino que debemos partir también de la realidades de nuestros estudiantes por tanto si es muy, muy importante las experiencias que traen nuestros estudiantes.

He also pointed out that experiences and previous knowledge need to be reinforced.

Claro que si las experiencias, este tipo de experiencias las plantea Piaget y es todo lo que uno es como ser humano desde su infancia son experiencias son conocimientos y lo que a veces o lo que debe hacer el maestro es reforzar esos conocimientos que traen desde la casa los estudiantes, por tanto no se puede desligar las experiencias previas a un conocimiento nuevo.

The teacher stated that in his class students have the opportunity to talk and analyze social topics and express their point of view about them. "Si porque nunca dejamos que ninguno de los temas que revisten importancia social, los dejamos pasar por alto y siempre los analizamos con los estudiantes donde cada uno de ellos plantean su punto de vista".

Finally he related cultural diversity to recognition of differences.

Cuando se habla de diversidad cultural el respeto al otro a la diferencia del otro ese es el fundamental y el entender que no somos únicos y que solo nuestra cosmovisión es la que deben tener los demás, la diversidad cultural es eso, el respeto al otro.

#### 8.2.5.3 Academic Coordinator

The coordinator highlighted that transversality deals with the development of projects which work with contents of different subjects.

Está relacionado especialmente al desarrollo de proyectos ya que mediante se puede trabajar contenidos de diferentes áreas, por ejemplo los proyectos ambientales pueden ser de educación transversal porque en los proyectos ambientales entran áreas como las matemáticas, el lenguaje, las ciencias naturales y las ciencias sociales y hasta la educación artística.

He stated that he has tried to check that transversality is applied in classes. "Bueno en este momento, desde mi cargo de coordinador, lo que trato es que las áreas que se orientan en la escuela normal tengan un buen componente de transversalidad, de que las clases abarquen contenidos de diferentes áreas".

The coordinator recognized the importance of working on concepts from other subjects without playing them down.

La idea es que se traten conceptos de otras áreas y que no se les reste importancia, por ejemplo dentro de la clase de matemáticas no se le reste importancia al lenguaje, a las relaciones sociales, a los contenidos ambientales, a los contenidos de ciencias, etc.

The coordinator considered students' previous knowledge and experiences as fundamental in education. "Me parece fundamental considerar las experiencias y el conocimiento previo de los estudiantes, creo que es el punto de partida". He claimed that previous experiences are vital to construct knowledge. "Las experiencias previas son el fundamento, la base sobre la que se construye el conocimiento".

According to the students' participation and making decisions he asserted that it was important to encourage students to transform society.

Yo si considero que es importante motivar a los estudiantes para que de alguna manera transformen su sociedad, empezando por la familia que es la sociedad más cercana que tienen ellos. De igual manera, pues que en un futuro alcancen a influir positivamente en su barrio, en su cuadra, en su comuna.

Conclusively the coordinator mentioned tolerance as a way of cultural diversity, which permits to accept differences.

Los beneficios inmediatos de tratar temas de diversidad cultural es la tolerancia. Uno tiene que aceptar que hay muchas formas de ver y vivir la vida, tenemos que apreciarla, tenemos que tolerar, si es el caso, algunas manifestaciones culturales y apreciarlas como parte de nuestra cultura.

From these interviews we could grab the following elements:

The Mathematics teacher, the English teacher and the coordinator linked transversality to interdisciplinarity, they talked about projects which cover topics of different subjects.

In accordance with teachers' answers they have not planned their classes based on transversality, the Mathematics teacher answer was not clear. The English teacher recognized that he has not worked so much on transversality because of the lack of time, and training about transversal projects. The coordinator said that he worked to achieve classes with different contents, but there was not any evidence of this in teachers' answers.

The implementation of transversality in teachers' classes was a relevant point to know about the way teachers worked based on transversality; the Mathematics teacher mentioned the importance of the integration of subjects, but not how he did it. The English teacher said that she integrated language to social and psychological fields. There was not an explanation about the integration to other subjects. Coordinator explained that the idea was to integrate subjects, concepts and contents, but neither the Mathematics teacher nor the English teacher discussed about this idea.

Besides, teachers agreed with the relevance of students' previous knowledge, and, each one argued different ideas. The Mathematics teacher pointed out that students' world was separate from school and sometimes syllabi were not focused on their reality. This claim is associated to one of the characteristics of transversality, which looks for unifying the relationship between school and students' life. The English teacher mentioned something important related to the power, teacher cannot be the person who knows, and controls a group of students by means of fear; students need to develop an active role in their education, contributing to their knowledge and skills.

The relationship teachers found between previous experiences and construction of knowledge was attached to knowledge people acquire from childhood. In this way the task of teachers is to foster students' knowledge and skills in order to advance in their cognitive process. When they mentioned previous experiences from childhood it is pertinent to analyze

that parents play a fundamental role since students need to be educated from home, and it is a process which is developed in school. In this sense, teachers' role is indispensable to create an appropriate environment to construct knowledge taking into account previous experiences.

In line with teachers' answers they do motivate students to participate and make decisions regarding society. The Mathematics and the English teachers emphasized that they used the dialogue to motivate students. The English teacher explained the use of dialogue by analyzing social topics and taken into consideration students' points of view. The coordinator considered the participation of students relevant to transform society.

Finally, the English teacher and the coordinator associated cultural diversity to respect and tolerance, which are values that help to comprehend the importance of recognizing differences and accept them as an enriching element in our society. The Mathematics teachers did not present a clear answer about it.

In conclusion the interviewees had different points of view, but there are similar ideas, which showed their knowledge about transversality in education.

The idea of transversality was associated only to interdisciplinarity, they did not mention any more characteristics of transversality, nevertheless, when they explained transversality in their classes they evidenced that it is not applied as part of their syllabi, which contradicted the coordinator's answer. A similar case happened with the integration of other subjects, they considered this as an important component of education, but from their answers, we can realize that it is not applied in their classes. In spite of this, they just related transversality to interdisciplinarity, teachers made allowance for some elements for education such as students' previous experiences, and their participation in the transformation of processes with the aid of dialogues.

As a matter of conclusion we identified in the interviews applied to teachers in Champagnat School, Amalaka School, Gabriela Mistral School, Fransisco Antonio de Ulloa School, and Normal Superior High School, that transversality deals with the integration of different subjects. Projects related to transversality are carried out in most of schools, integrating topics of different subjects to study a specific theme. Francisco Antonio de Ulloa teachers did not mention any project; they associated transversality to previous experiences as a way to construct knowledge.

According to teachers' answers, they try to do transversal classes by means of some strategies which include projects and topics studied from diverse subjects.

Teachers consider students' previous experiences as a fundamental aspect to be taken into account in their classes, besides they claim that recognizing students' context and needs is the basis of the educational process, since teachers' role is to foster students' skills and encourage them to participate in the solution of social problems.

Some teachers were concerned about the lack of training and practices on transversal proposals.

## 8.3 Surveys

The following data analysis was done with the surveys carried out at Amalaka School, Gabriela Mistral School, Francisco Antonio de Ulloa School and Normal Superior High School, keeping in mind the characteristics of transversality such as fostering the relationship between school and context, improving the quality of life, having a humanistic and interdisciplinary dimension for responding to social problems, contributing to the integral development, considering the universal values like justice, liberty, democracy, equality and solidarity and encouraging critical thinking.

In addition, the transversal themes such as peace, environmental and health education, education for citizenship and education for sexuality which are fundamental to find out whether or not transversal education is being held in these schools, is promoted especially from the English area. The information obtained was put into diagrams; with the percentages we made a written description, and found evidences of transversal education and its characteristics from each one of these schools.

## 8.3.1. Amalaka School

The survey was administered to 10 tenth graders at Amalaka School. According to figure 1, 30% of participants are 16 years old, 20% of them are 14, 15 and 17 years old respectively. And the remaining 10% did not answer the question

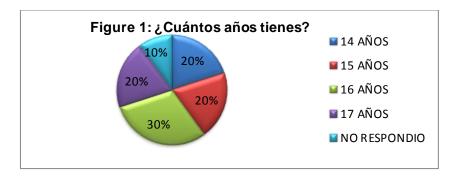


Figure 1: Age of the students

10 survey respondents

In figure 2 it is observed that 60% of students like English while 40% do not.



Figure 2: Students' preferences about English at Amalaka School.

As it is evidenced in figure 3, the main topics worked in English class are environmental issues, history and culture with 70% each one. 60% of students pointed out arts theme, 40% mentioned sports and plurality respectively. 30% indicated recycling, health sexuality and math correspondingly. And, 20% said that technology is a topic worked in the English class.

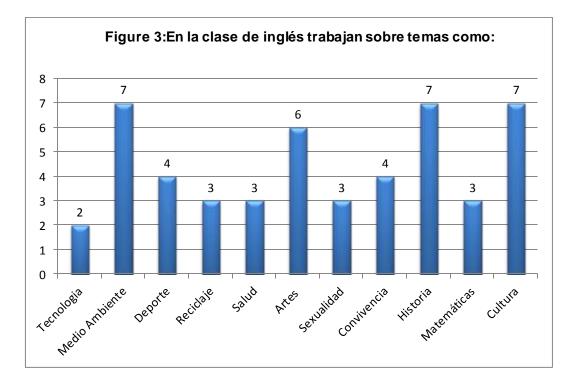


Figure 3: Transversal topics on the English class

Regarding the question about the technological means used by teacher in the English class, 90% of students answered that they use a TV and recordings respectively. 60% of the students answered that a computer is also used. And 10% did not answer the question. (See figure 4).

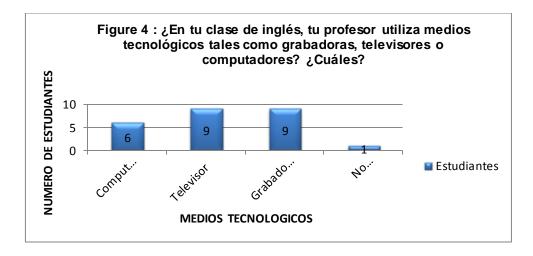


Figure 4: Technological means in the English class

Results obtained for the fourth question about the spaces to talk with teachers are reported in figure 5, which shows that 90% of students have spaces for talking with their teachers while 10% answered that they do not.



Figure 5: Spaces to talk to teachers

Likewise, according to the question about opportunities to share with classmates and teachers what is learnt outside the school, it is shown that 70% of students have these opportunities but 30% do not. (see figure 6).



## Figure 6: Relationship between school and students' life

10 survey respondents

Additionally, in figure 7 it is shown that 80% of students dialogue with their teachers

about the things they like to do while 20% of them do not do it.



Figure 7: Spaces to dialogue about students' likes

10 survey respondents

As suggested also in figure 8, it is evident that 100% of students expressed that their teachers allow them the opportunity to talk about their likes, interests and needs.



Figure 8: Students' likes, interests and needs

10 survey respondents

As seen in figure 9, the most important activities at school are recycling and field trips with 90% respectively, while, participating in pedagogical days and making crafts are in second place with 80% of students who mentioned it. Besides, practicing sport, drawing and singing are indicated by 60% of students correspondingly. Painting is an activity done by 40% of them. Moreover, 30% mentioned dancing, followed by 10% who pointed out that acting is an activity carried out in this school. And, 10% of them did not answer the question.

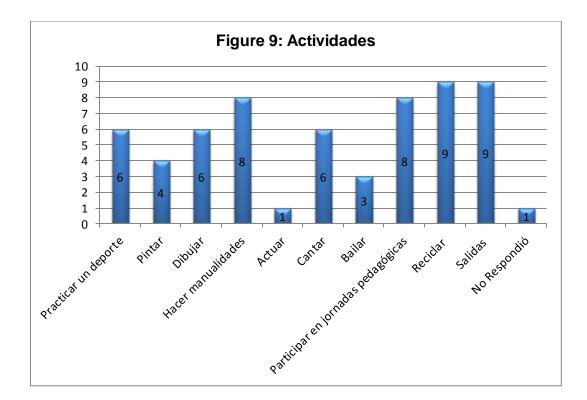


Figure 9: Transversal Activities in the School

10 survey respondents

According to the results of the survey, we can say that there are two dimensions in this high school. On the one hand, there is an interdisciplinary dimension since there is an equitable integration of different topics to the English class. On the other hand, there is a humanistic dimension because students have the opportunity to play an active role in their learning process. The humanistic dimension is also evident in the opportunities students have to talk with their teachers. It is necessary to highlight that most of students make these opportunities profitable expressing what they like to do. Then we can say that there is an active participation of students in their learning process since they feel confidence to talk with their teachers.

Besides, there is a connection between students' previous knowledge and school for the construction of knowledge because most of them expressed that they have the opportunity to share with their teachers what they learn out of school, at home with their family. There is, thus, a possibility to involve not only teachers and students, but also the family in the learning process, fostering the relationship between school and students, taking into account students' likes, needs and interests.

## 8.3.2. Gabriela Mistral School

The survey was administered to 35 eleventh graders at Gabriela Mistral School who are aged between 14 and 18 years old. According to figure 10, 51% of students are 16 years old. 26% of students are 17 years old. 14% of them are 15 years old. Besides, 6% are 18 year-old students while the remaining 3% is composed by 14 year-old students.

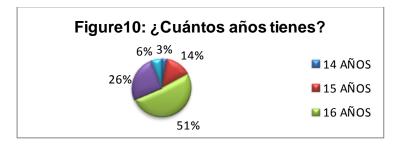


Figure 10: Age of the students

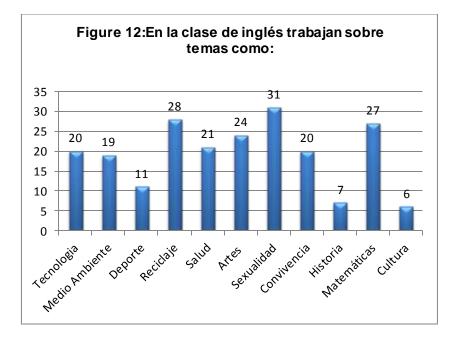
35 survey respondents

In figure 11 it is shown that 69% of students like English while 31% of them do not like it.



# Figure 11: Students' preferences about English at Gabriela Mistral School 35 survey respondents

The topics they have been studying in the English class are sports, according to 31,42% of students and environmental issues with 54,28% of them. 57,14% expressed that they have also worked on plurality and technology respectively. 60% of students said that health was a topic work in class. Moreover, 88,57% of students mentioned that they have studied about sexuality and 77,14% of them pointed out math. In the same way, 80% of students said that recycling was worked in class. Finally, history was mentioned by 20% of students, culture by 17,14% of them, followed by Arts theme with 68,57% of students. (See figure 12)





35 survey respondents

Regarding the question about the technological means used by teacher in the English class, 74,28% answered that they use a TV while 57,14% said that they use recordings. Besides, 28,57% mentioned that they use computers and 8,57% said that they use video beam. Finally, 22,85% answered that they do not use any technological means. (See figure 13).

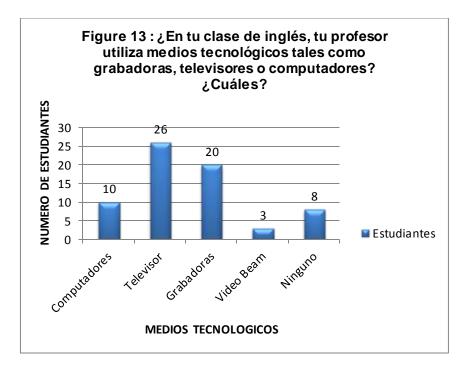
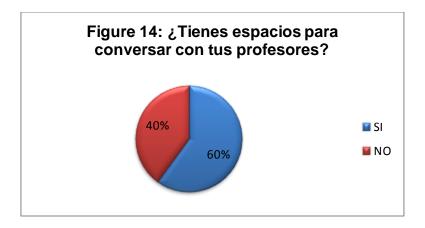


Figure 13: Technological means in the English class

35 survey respondents

Results obtained for the fourth question about the spaces to talk with teachers are reported in figure 14, which shows that 60% of students have spaces for talking with their teachers while 40% answered that they do not.



## Figure 14: Spaces to talk to teachers

35 survey respondents

Furthermore, according to the question about opportunities to share with classmates and teachers what is learnt outside the school, at home and with their family, it is evidenced that 71% of students have it but 29% do not, (see figure 15).

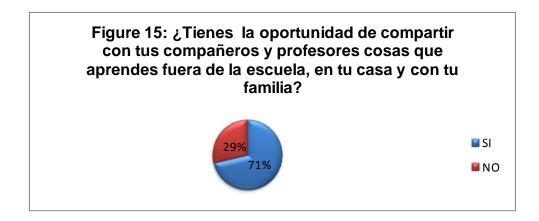
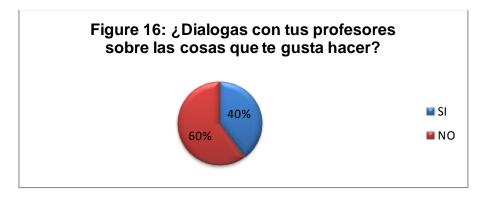


Figure 15: Relationship between school and students' life

35 survey respondents

Additionally, in figure 16 it is shown that 40% of students talk with their teachers about the things they like to do whereas 60% do not do it.



## Figure 16: Spaces to dialogue about students' likes

## 35 survey respondents

As suggested also in figure 17, 66% of students mentioned that their teachers give them the opportunity to express their likes, interests and needs, whereas 34% of them expressed the contrary.

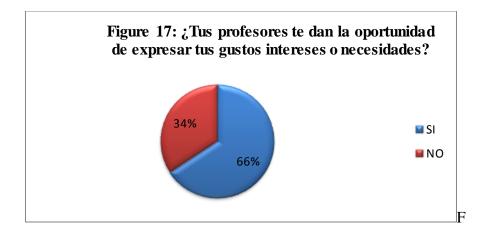
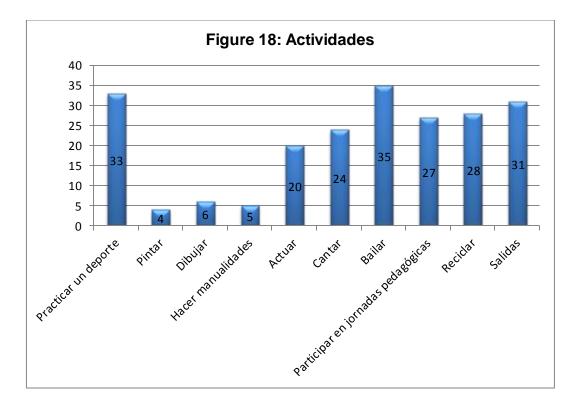
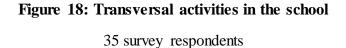


Figure 17: Students' likes, interests and needs

## 35 survey respondents

As seen in figure 18, dancing is the main activity since 100% of students mentioned it, followed by practicing sport with 94,28% and field trips with 88,57% of students. Besides, recycling was mentioned by 80%, while, participating in pedagogical days by 77,14%, followed by singing with 68,57% of students. 57,14% of students said that acting and, 17,14% of them said that drawing was an activity carried out in the school. Finally, making crafts was stated by 14,28% of students and painting by 11,42% of them.





In this school, students expressed that they have spaces to dialogue with their teachers but they said that the main topic is about the class; they also talked about other topics but not often. Moreover, the result of the surveys shows that there is a connection between school and students' experiences because most of them agreed that they can share and express their knowledge, interests, likes, and needs. It seems to be that the students do not make profitable the spaces or moments to dialogue, in order to get a transversal education reflecting upon the social reality, both individually and collectively, and at the same way, promote an education that helps students to find possible solutions to some social problems. In spite of this situation, English class seems to be very varied, according to the surveys, it is worked from an interdisciplinary perspective. Topics such as technology, environment, sports, recycling, health, arts, sexuality, and history, are studied in this subject.

## 8.3.3. Francisco Antonio de Ulloa School

This survey was administered to 28 eighth graders at Francisco Antonio de Ulloa School. According to figure 19, 36% of students are 13 years old. 28% are 14 years old. Besides, 11% are 12 years old while 7% are 15 and16 years old respectively. And the remaining 11% of students did not answer the question.

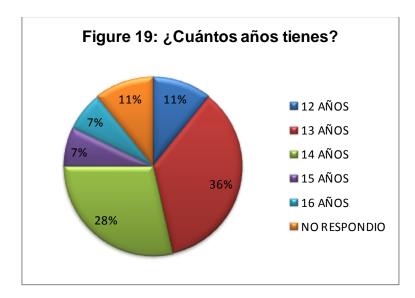


Figure 19: Ages of the students

28 survey respondents

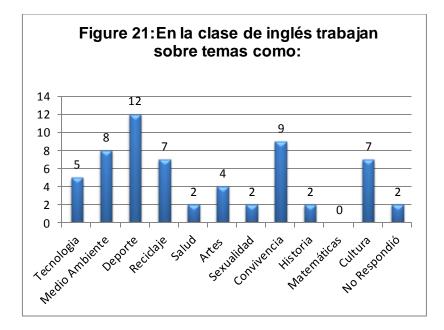


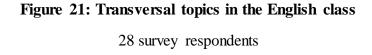
Figure 20 shows that 75% of students like English while 25% of them do not like it.

Figure 20: Students' preferences about English

## 28 survey respondents

The topics they have been studying in the English class are sports, according to 34,28% of students. 25,71% expressed that they have also worked on plurality. Moreover, 22,85% of students mentioned that they have studied about environmental issues. In the same way, 20% of them pointed out that culture and recycling were worked in class correspondingly. 14,28% of students expressed that technology has been worked in class. Arts theme was mentioned by 11,42% of students, followed by health, sexuality and history by 5,71%. Finally, 5,71% of them did not answer the questions. (See figure 21).





Regarding the question about the technological means used by the teacher in the English class, 20% answered that they do not use any, just a book. 20% answered that a computer is also used. Besides, 11,42% said that they use a recording and 5,71% that they use laptops, videos and TV respectively. 22,85% do not use technological means in their English class and 11,42% of them did not answer the question. (See figure 22).

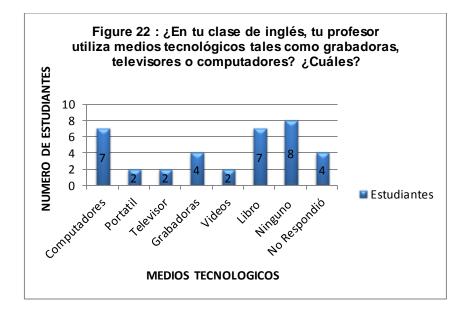
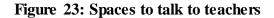


Figure 22: Technological means in the English class

## 28 survey respondents

Results obtained for the fourth question about the spaces to talk with teachers are reported in figure 23, which shows that 53% of students have spaces for talking with their teachers while 43% answered that they do not, and 4% did not answer the question.





28 survey respondents

Furthermore, according to the question about opportunities to share with classmates and teachers what is learnt outside the school, at home and with their family, it is evidenced that 32% of students have some opportunities but 68% do not, (see figure 24).

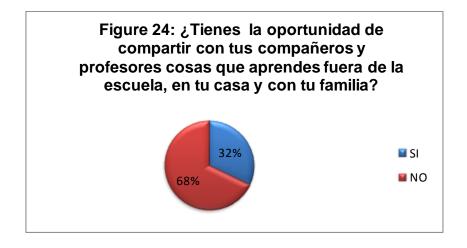
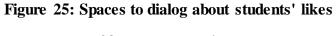


Figure 24: Relationship between school and students' life

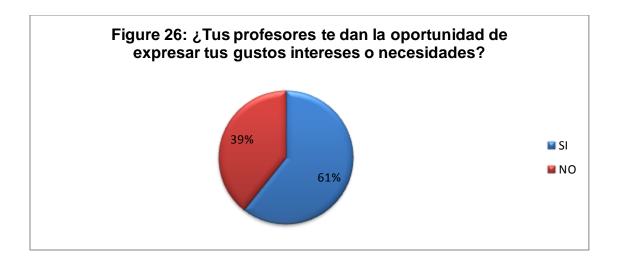
Additionally, in figure 25 it is shown that 29% of students talk with their teachers about the things they like to do whereas 71% do not do it.





28 survey respondents

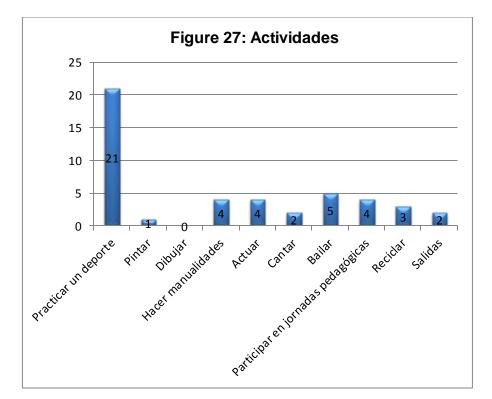
As suggested also in figure 26, 61% of students mentioned that their teachers give them the opportunity to express their likes, interests and needs, whereas 39% of them expressed the contrary.

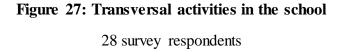


#### Figure 26: Students' interests, likes and needs

#### 28 survey respondents

As seen in figure 27, to practice sport is the main activity since 60% of students mentioned it. In second place, it is dancing with 14,28%, while, making crafts, acting and participating in pedagogical days were mentioned by 11,42% of students correspondingly. Recycling was pointed out by 8,57%. Field trips and singing by 5,71% respectively, and painting was stated by 2,85% of students.





According to the results of the survey, we can say that transversality is being held rarely or that there is an attempt to implement transversal education in this school. On the one hand, there is an interdisciplinary dimension since different topics are integrated in the English class such as sport, plurality, recycling, culture, environment, technology, arts, sexuality, health and history. However, math is not a topic worked in the English class. Then there is a connection between the English class and the topics which have to do with students' context and what they are learning in the other subjects. On the other hand, there is a reduced humanistic dimension since students have the opportunity to express their likes, interests and needs and they have the spaces for talking with their teachers. According to some students, they mainly talk about the class, the school performance and behavior. Sometimes, they talk about topics such as the right to life and social studies and history; however, it is evident that most of students do not make the most of this opportunity as they do not dialogue with their teachers about the things that they like to do, and most of them do not share with their teachers what they learn out of school, at home with their family. Thus, we can infer that there is not an active participation of students in their learning process due to the fact that they do not feel confident to share their previous knowledge in class.

### 8.3.4. Normal Superior High School

The survey was administered to 68 6<sup>th</sup> graders at Normal Superior High School who are aged between 11 and 15 years old. According to figure 28, 2 % of students are 9 years old. 4% are 10 years old and 55% are 11 years old. Besides, 25 % are 12 years old, 4% are 13 year-old students, while the remaining 4% is composed by 15 year-old students.



Figure 28: Age of students

68 survey respondents

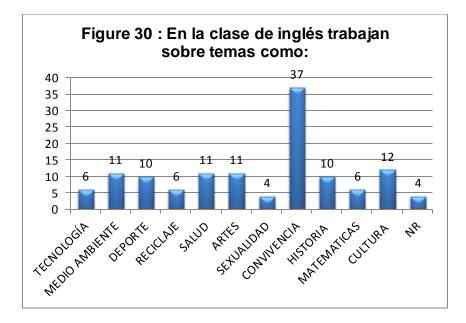
In figure 29 it is shown that 97% of students like English, 1 % more or less, and 2% do not like English.

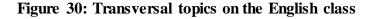


# Figure 29: Students' preference about English

68 survey respondents

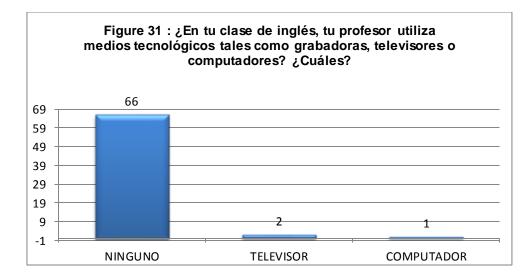
Even though, as it is evidenced in figure 30, they have just worked on basic topics because, at elementary school they did not have English class.





# 68 survey respondents

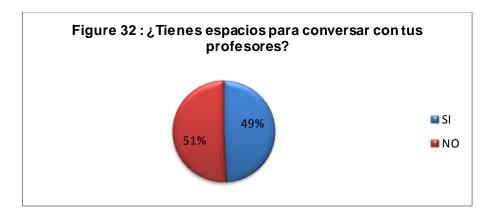
Besides, they do not use any electronic device (95.6 % students said that), just 2,89% of students said that they use the TV and 1,44 % of students said that they have used a laptop. They just work on vocabulary and writing. (See figure 31).

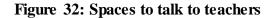


# Figure 31: Technological means in the English class

#### 68 survey respondents

Results obtained for the fourth question about the spaces to talk with teachers are reported in figure 32, which shows that 51% of students have them while 49% answered that they do not. From that 51% of students said that primarily they talk about school matters like evaluation, assessment, homework and the ways to behave. In a second place, they talk about life events.





68 survey respondents

Likewise, according to the question about opportunities to share with classmates and teachers what is learnt outside of school, it is evidenced that 70% of students have it but 27% do not, while 3% of students said that they have it more or less. (See figure 33).

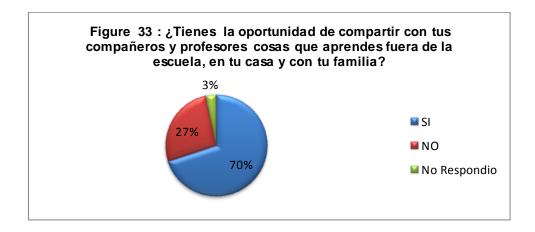


Figure 33: Relationship between school and students' life

Additionally, in figure 34 it is shown that 64% of them dialogue with their teachers about the things they like to do while 36% do not do it.





68 survey respondents

As suggested also in figure 35, it is evident that 80% expressed that their teachers give them the opportunity to talk about their likes, interests and needs, while 20% mentioned that they do not.



Figure 35: Students' likes, interests and needs

As seen in figure 36, there are certain important aspects when they talk about the activities carried out at school. 53,6% of students practice sports in Physical Education, while, Art theme is in second place with 52,2% of students who mentioned it. In third place, students go on field trips (47,8%). Besides, 27,7% expressed that acting is an activity done at school, followed by dancing (36,2%), singing (31,8%) and recycling (27,7%). And, there is 1,4% of students who did not answer the question.

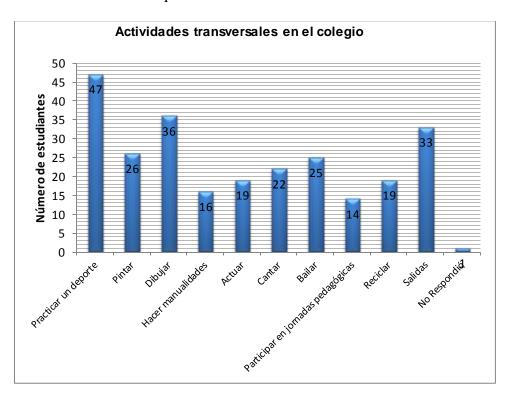


Figure 36: Transversal activities in the school

As the teachers from Math, Science, Religion, and English work together on a project, students said that sometimes in the English class they talk about the project, but most of the times, they just talk about school aspects like grades, homework and behavior at school. The project they are carrying out is with the Fundación Colombia-Ponte. It is a non-profit making organization which aims at proposing and realizing some projects with populations in vulnerable situations. This organization works in company of Italy. They have a program called "Aguapanela con Amor", which offers the students another vision about what life is. They go to certain places in Popayan to offer a hot beverage and a piece of bread while exchanging experiences among students and people in conditions of vulnerability; through this activity, they want to promote students' integral development; they are trying to give them other perspectives of life while raising some values, like tolerance, respect, caring and responsibility. Taking into account the characteristics of transversality, it is evident that in Normal Superior High School, there is an attempt to implement transversal education based mainly upon the integral formation of students. Moreover, there is a connection with students' background and educational environments, as it can be seen in the results obtained, which show that most of students feel free to express what they think or like to do.

Results obtained in the previous surveys show that there is an attempt to implement transversal education, because in some schools they are promoting values, aiming at the integral development of the being. In the same way, some schools are integrating the transversal themes to the school subjects, as it happens in Amalaka school (environmental education), Normal Superior High school (education for the population, civics and morality, education for citizenship), Francisco Antonio de Ulloa School (education for sexuality and Health). Moreover, bearing in mind the characteristics of transversality, these schools are offering interdisciplinary visions to the students, through the integration of different subjects to the English class. Finally, there is a permanent construction of a social and critical thinking based upon the reflection of social realities, as it is evidenced in the projects carried out in Normal Superior High School and Amalaka School.

# 8.4 Analysis of classroom observations

The following analysis of classroom observations was done in this way: the classes were observed in different schools, we filled out a format bearing in mind the number of students, the grade, the subjects, the use of materials, the topics, and the development of the class. Then, we found the commonalities between the subjects of every school considering the conceptual orientation which contains the Constructivist Theory, Transversality, Complex Thinking, Critical Thinking and Approaches such as Communicative Language Teaching, Whole Language Education, Content Based Instruction and Project-Based Instruction. Finally, we could corroborate in which schools teachers know about transversality and attempt to implement it.

## 8.4.1 Champagnat School

In the classroom observations at this school, it was possible to identify some elements that showed transversality as one important component of the activities carried out there. For instance, in the Social Science class, teacher used a poster illustrating two children, one boy and one girl, in a room, the room is plenty of toys, and it is possible to say that the room is messed. Students had to look at the poster and describe the objects there, then they had to explain the situation described by the picture, after being in agreement about what the image wanted to say. The idea was they had to recognize the objects which were in the right place and the ones that were not. The teacher worked on some concepts and situations where the students had the opportunity to think about values as order, respect and sharing; the teacher also told the students about their right as Colombian citizens to play and have fun. Students had to try to understand one situation, think about its implications and to recognize the right and wrong attitudes in it. Finally, the teacher asked students their opinion about the situation presented in the class. The students had to explain constantly their thinking, to propose alternatives and solutions to some situations from their own experience and knowledge, allowing the recognition of students' experiences and previous knowledge and fostering active participation. Besides, in the social science class was applied the Constructivist theory because there was an integration of contents that can be related to students' daily life, what was useful for interpreting and comprehending situations and the materials used for the development of the activities played an important role since students had the possibility to express what they think, adopting a position and constructing critical thinking in order to propose alternatives for

solving situations. One of the characteristics of the Constructivist classrooms, according to Brooks, J.G and Brooks, M.G. (1993), has to do with the active participation of students which is different from traditional classrooms where students play a passive role in their learning process. At Champagnat School, students played an active role because they explained constantly their thinking about the events in class and they also asked questions.

On the other hand, in the English class, there was an integration of themes from different subjects which made the learning process a more valuable experience for children. These classes attempted to bridge the contents of the course and the students' life since the language learnt was useful for students to describe the world around them and the activities allowed them to interchange ideas, establish relationships; thus, encouraging attitudes and behaviors which aimed to facilitate dialogue and cooperative learning. We could see that students understood the topics because they responded to the activities appropriately as the themes were related to their own lives. The use of situations that students had to reflect on was a very important aspect in classes, especially because it could help them make decisions and take attitudes towards them. Moreover, in the first observation of an English class, it existed an integration of useful contents to students' daily life in the class and the activities tried to develop different students' skills. For example, teacher spoke in English most of the time, giving lots of examples and miming to explain the meaning of some words to the students; the vocabulary in this class was useful to students to describe their classroom, their school, their house, their classmates, their family, etc. Thus, there was a relation between the class and the students' context.

Regarding the language teaching materials, the teacher used music, flashcards and a book; we can say that those materials facilitated learning because they were appealing to the students. It also promoted students participation and their involvement in the English class which are the important aspects of Communicative Language Teaching. Besides, one of the English class integrated contents that was useful for students to describe their world and encouraged their attitude and behavior to facilitate dialogue and cooperative learning at the time of developing the activities.

# 8.4.2. Gabriela Mistral School.

Classroom observations at this school showed elements of transversality like the recognition of students' experiences as valuable information for the process of learning, the use of topics related to students' experiences and current events of society was important, in the sense they permitted them to do the activities more easily; the class was focused on events that students could identify and describe using some specific structures of English, students could use any vocabulary of their own choice to make the sentences, they were free to choose what to talk about, it let them to construct their knowledge, making the learning process meaningful. Moreover, the curriculum of this high school is based on integral education giving the students the opportunity and spaces in class to express their needs, likes, doubts, learning for life, at the beginning of the class teacher encouraged the students to share their experiences and knowledge about some topics, inviting them to talk about their own life, making English learning a more dynamic process, promoting dialogue, and team work. We could evidence

communicative language teaching because teachers offered the students the possibility to work on some topics freely; the teacher was a guide who promoted interaction and encouraged an active participation of the students; the teacher gave examples of the sentences that students could make using information from them, motivating them to share their experiences and knowledge about some topics; she gave students topics close to their own experiences and others which they could recognize easily around them. Besides, she was always attentive to students' questions and to give feedback every time it was necessary.

#### 8.4.3 Amalaka School.

In the classroom observations at this school, we could identify some characteristics of transversality such as the relationship between school life and students' context during the development of the activities, and the improvement of quality life through the learning and the practice of knowledge in context. Moreover, we could find some principles of communicative language theory such as teachers and students' role in the learning process and the kind of activities which motivate learning.

In general, the kind of activities developed in the classes were based upon the constructivist theory since there is a connection between students' daily life and school learning in order to construct understanding and knowledge. For example, one activity carried out in the English class was about answering some questions related to topics such as food, music, and animals. By means of this activity, students put into practice comparatives and superlatives then, they answered the questions based on their points of view and the

experiences about the topic. Thus, the students participated actively fostering social and communication skills, and values such as respect towards someone position.

At the same time, in the second English class observed, students worked on a collage where they had to narrate a story in a chronological way, using materials such as magazines, newspapers, scissors and glue, using pictures to recreate their stories. Then, we can say that Whole language education was applied because of the kind of activities that helped students to connect daily life with their school learning in order to construct understanding.

One of the principles of Communicative Language Teaching has to do with the kind of activities which motivate learning. This activity gave the students the opportunity to create a story according to their interests and topics that called their attention, in this way, they could improve their English level. Besides, this kind of Language teaching materials used in the English class promoted learning because they involved students' creativity at the time of creating a story based upon pictures. And the environment played an important role because the library was an appropriate space as they were listening to music and talking while they worked. This was a comfortable space since they explored a different environment, it was not the typical classroom organization, where the teacher uses the board and they repeat.

The Agro Ecology class was based upon an environmental project of Amalaka, students of tenth grade had to clean, and shovel in the truck garden of this school. Students worked in group and the teacher worked with them too. Some of them shoveled, others cleaned and marked the area; students with more experiences were like a model for the others with less experience in this activity thus, students' previous knowledge was fundamental because some of them knew about farm work, and their contribution was so useful. Students without experience in farm work, learned to use farm tools. The teacher mentioned that he used Freinet's technique called cooperative work.

Finally, we can say that agro-ecology class was focused on some of the characteristics of transversal education because the activity encouraged values such as respect someone else's points of view. In fact, students shared their knowledge and experiences about how to use the tools for the farm work fostering teamwork and cooperative work. Thus, learning becomes an interactive process since students constructed their knowledge based on what they already know or experience and share their knowledge in class.

#### 8.4.4 Francisco Antonio de Ulloa School

In this school, we could observe the huge differences between a school that promotes or attempts to promote transversal proposals and the other in which the class is enclosed in a topic where the teacher disseminates it and the students are there to receive it and store it; students lost the interest of the class very often and easily. According to the classes observed, the integral development is not fostered because they do not have in mind students' interests, needs, and overall their likes for planning the classes. She implemented some elements of transversal education for example, she gave students the opportunity to express their points of view about a topic however, the strategies that she used were not enough effective for the class. Moreover, there was not an active participation and the topic developed did not connect the educative activity to the social reality.

#### 8.4.5. Normal Superior School

The observations at Normal Superior School were carried out in Math and English classes. It is important to mention that there is a project, 6<sup>th</sup> grade students and teachers are working on. It is called "Agua de Panela con amor", in cooperation with Colombia Ponte. Colombia Ponte Foundation is a non-profit making organization which aims at proposing and realizing some projects with populations in vulnerable situations. This organization works in company of Italy.

"Aguapanela con Amor" project offers the students another vision about what life is. They go to certain places in Popayan to offer a hot beverage and a piece of bread while interchanging experiences among students and people in conditions of vulnerability. Both the Math and the English teacher work together on the development of the project, before the class started, sixth grade students and the teachers had a meeting. In the meeting they talked about the project and the ways to get better grades in the second term. It was evidenced that teachers are looking for the integral development of students. They are trying to give them other perspectives of life raising some values, like tolerance, respect, caring, and responsibility.

In the Math class, we could identify certain important aspects that have to do with transversality. First of all, the teacher has developed certain techniques – diary and class record – which foster in students critical thinking due to the fact that students can express what they feel and perceive from the previous class. They also have the opportunity to give some pieces of advice to the students or the teacher, which allows them to play an active role in the educational community because they can think of what they can contribute to improve the

educational context. For example, there was a student who created a proposal on the ways to overcome the difficulties of a student in that class, like misbehavior and irresponsibility with the due tasks for the day. In the same way, as these activities are in group, teamwork is encouraged.

As the teacher prepared certain games with the material kids have designed, they are encouraged to play an active role in their educational process. Likewise, interaction between learners is fostered. This lesson was student-centered in which the strategy chosen by the teacher was a game. At the end, they received feedback from the teacher who was the input provider.

In English class, the teacher seemed to be concerned with the assignments of other subjects. There was an event in the class in which a student told a story about a friend. The class was expected to take into account students' background and context. Later, the teacher started the class, kids had an assignment: to write the numbers from 0 to 99. Perhaps, the class went back to grammar translation method because they were just writing and memorizing the words. After that, they had to work on error correction which was really good because for kids it is more meaningful when they are allowed to participate in the activities. Even though, it was an English class, the only materials the teacher used were the dictionary and whiteboard. He did not use too much English so, he did not seem to get students use the language as a means to communicate.

In conclusion, according to the observations we could identify that there is an approach to the implementation of the transversality because most of teachers were concerned with students' context and background, they used it as a way to get students involved in their learning process.

In the English class, most teachers used a constructivist theory of learning and a communicative language learning theory, but there was a teacher who was still using the grammar translation method, in which memory and drillings were the main focus. Besides, teachers are really concerned with fostering critical and analytical thinking in students. As mentioned before, they are presenting new perspectives of life to students, as it happens in Normal Superior School where a project is being developed to work with vulnerable communities.

#### 9. TRIANGULATION

In order to enhance the credibility and persuasiveness of our research and increase our understanding of the topic being studied, we took the study emerging from all the data gathered from the interviews, surveys, and observations. According to the findings obtained in Champagnat School, Amalaka School, Francisco Antonio de Ulloa School, Gabriela Mistral School, and Normal Superior School, we can say that in some of these schools the concept of transversality was associated to the integration of subjects where the teachers took into account students' previous knowledge during the development of their classes, and tried to involve students in their learning process by recognizing their needs and interests, giving them the possibility to participate in the solution of problems; particularly regarding the findings from the surveys and interviews. Besides, we observed some classes where we could corroborate what we found in the previous instruments to get information, as a way of illustration, there were some similarities in the information obtained that are the integration of subjects, the recognition of students' needs interests and contexts, the importance of previous experiences for the construction of knowledge and the development of critical thinking in students.

During the analysis of the reflections on previous experiences at school English classes, we noticed that half of the students worked on grammar, drills exercises and learning by rote vocabulary. Besides, it was common among students, the experience of fragmentation of knowledge since the English classes did not bear in mind their previous experiences and contexts. At the same time, the students researchers recommended how should an English

class be; for example, they said that it is necessary to connect students' lives to the school, take into consideration students' needs and interests, work on current topics or events in society for the construction of knowledge and development of critical thinking, and integrate other subjects to the English for having an interdisciplinary perspective of education.

We can say that the classroom observations were instruments that helped us to corroborate the information obtained in the interviews to the English teachers and other subjects. In Champagnat School was evident that the answers given by teachers about their beliefs and knowledge about transversality were reflected during their classes because they considered students' needs, previous experiences for the construction of new knowledge and they also talked about the General Law of Education in order to plan their classes. In the observations, we could verify all the information given by the teachers in the interviews. For example, in one of the classes observed, students had the opportunity to express their thinking proposing alternatives and solutions to the different situations from their own experiences and knowledge.

In Amalaka School, transversality is implemented in this school because Amalaka considers the Pedagogy of Freinet for developing projects. Teachers expressed that transversality is manifested through the interdisciplinary dimension useful and profitable for students. During the observations, we realized that English teacher and Agro ecology teachers gave students the opportunity to express their opinions about a topic based students' experiences and knowledge. For example, in the English class, students freely created a story

based on their likes and appealing to a topic. In the Agro ecology class, students worked on an environmental project where they interchanged experiences regarding farm work and fostered some values such as responsibility, tolerance, cooperative and teamwork.

In Gabriela Mistral School, the English teachers stated that transversality is related to interdisciplinarity and English subject is not isolated and allows students to have a whole dimension of their reality in order to be part of their environment. The English teacher also talked about transversality as way to work in projects that have to do with current situations. It was evident that the English teacher was a facilitator who recognized students' experiences in class. For example, teacher gave students the opportunity to choose a topic freely guiding but not imposing her knowledge on students' ones.

In Francisco Antonio de Ulloa, English teacher related transvesality to interdisciplinarity and students previous experiences for the construction of knowledge. She also said that the English class was limited to a textbook. We could confirm what teacher told us in the interview since students worked on grammar exercises and drills which had not relationship among the other classes and students' previous experiences. On the other hand, the Spanish teacher

In Normal Superior High School, the English teacher worked on elements of transversality but its implementation was limited because of the curricular guidelines proposed by Ministerio de Educación such as time for developing projects and lack of training. In spite of this, teacher tried to introduce a project related to a social problem in her English class. In the English class, we observed that students discussed about a topic that concerned them, it was about violence in adolescence. Then the classes became a class focused on grammar and memorizing of vocabulary.

In the survey administered at Gabriela Mistral School, it was evident that students' did not participate actively in class since most of students answered that they had the spaces to talk with their teachers and teacher gave them the opportunity to express themselves but they did not dialogue with their teacher about the things that they liked to do. We can say that this case is similar to Francisco Antonio de Ulloa because most of students asserted that they had the spaces to talk with their teachers but most of them expressed that they did not have the opportunity to share what they learnt with their classmates and teachers what they learnt out of school at home, with their family. Likewise, most of students said that they did not dialogue with their teachers about the things that liked to do. However, most of them asserted that teachers gave them the opportunity to express their likes interests and needs. We can infer that there is a lack of motivation of students to participate actively in class because it was common to find that during the spaces students have; they mainly talk about behavior, school performance and grades. But students were not encouraged to go beyond and look for the possible factors that were affecting their performance at school and the possible alternatives to overcome this problematic.

In relation to the findings emerging from the data collected in Amalaka School and Champagnat School, we noticed that there are transversal projects which are focused on the relationship between school and students' lives outside of it, the integration of subjects, the construction of knowledge based on previous experiences, and the promotion of values for improving the quality of life

In Gabriela Mistral School and Normal Superior High School, we identified that the educational proposals carried out in these schools have to do with some elements of transversality; namely, the recognition of the students' reality, the encouragement of values in the students to face current situations and interdisciplinarity to comprehend and study diverse topics from different perspectives and subjects, and the use of students' experiences in the classes. Nevertheless, they have been not completely developed due to the fact that these schools are still starting the process of integrating transversality to the school activities. Finally, in Francisco Antonio de Ulloa School, we realized there were not projects related to transversality, although the teachers knew about the concept of transversal education, it was not evidenced in the development of the classroom activities that we observed. For instance, the English class was based on grammar activities in which there was no sign of the characteristics of transversality. Instead, there was a lack of motivation from teachers towards students when they spoke about needs, likes, interests, and personal experiences.

Finally, from our previous experiences in school, we can say that the half of the group experienced an education almost transversal because the activities developed in class reflected some of the characteristics of transversality for instance, the connection of school with our lives, the improvement of quality of life based on the development of projects, that let us face current situations, on the one hand, unemployment, environmental problems and on the other hand, the recognition of the culture and the society where we lived; these kind of activities helped us foster values and have an interdisciplinary and humanistic vision of education. The other half of the students researchers experienced a traditional education, where they learnt by rote playing a passive role in their learning process and they did not have the possibility to express and share their opinions, ideas and needs which did not allow them to develop critical thinking and construct knowledge.

#### **10. CONCLUSIONS**

On one hand, this research project named *An Overview to the Implementation of Transversality At Some Schools In Popayán*, invites the school community to rethink about its role to transform society that is, bearing in mind students' social contexts and previous experiences for the construction of knowledge and the development of critical thinking. On the other hand, the research of transversal Education at some schools of Popayán (Champagnat School, Amalaka School, Gabriela Mistral School, Francisco Antonio de Ulloa School and Normal Superior School) let us perceive the way in which transversality is being held.

This research enriched our formation as future foreign language teachers since it illustrated some ways to tackle with transversality, giving students the opportunity to learn a foreign language based upon their interests, working on topics related to their background, support integral education associated to values, and cover construction of knowledge in their learning process.

From our research on transversal education, we realized that transversality deals with the relationship between school and life, the construction of knowledge and the development of critical thinking linked to values, which encourage individuals to integrate themselves to society, comprehend their environment and participate in transformation processes that allow them to deconstruct society. For this reason, education must be adapted to the needs of the individuals in society, and at this point is when transversality plays an important role. It keeps in mind some themes that are mainly education for peace, sexual education, education for citizenship, education for health, and environmental education as the basis of education.

Bearing in mind our environment, we recommend constructing an education which responds to social needs and expectations based on the characteristics of transversality. Then to undertake it, it is necessary to reflect upon transversality concept and its implications in society, thus to guarantee school communities' engagement in this process, and encourage different ways of teaching and learning, as well as the attitudes that permit to transcend traditional education and bridge the gap between school and life.

In our research project, we carried out some interviews, surveys, and classroom observations in Champagnat School, Amalaka School, Gabriela Mistral School, Francisco Antonio de Ulloa School and Normal Superior High School, which enabled us to assert that these schools have proposals associated to transversality. Nevertheless, we observed lots of limitations in most schools to develop a transversal education; the interviewed teachers limited the concept of transversality to interdisciplinarity, there is not training in teachers for developing transversal projects, and there are not well described guidelines to achieve this purpose.

Regarding current situations and the role of education in the transformation

Our research let us state that teachers' role is fundamental in making transversal educational proposals; on this aspect, teachers need to be willing to allow students participation, consider students' knowledge and previous experiences, use innovated materials, develop a research attitude and work on projects.

# **11. LIMITATIONS**

- To get the permission in some schools was very difficult because even though coordinator accepted to be part of the research, teachers were not willing to be observed or interviewed.
- While collecting data with the instruments like interviews, surveys and classroom observations, we had to face certain difficulties because there were differences among our schedules and schools' ones, or schools had some events or activities that could not be postponed.
- In some primary schools, we got the permission to carry out the study of transversality. We realized that the English teacher was the one who taught all the subjects, without any previous foreign language teaching course. However, teachers said that they did it in order to make students approach to the basics of English at Elementary school.

#### **12. PEDAGOGICAL IMPLICATIONS**

According to *Proyecto Educativo del Programa de Licenciatura en Lenguas Modernas Inglés-Francés* (P.E.P) 2010 of Universidad del Cauca, the educators' profile states that professionals are aimed to link to the educational, cultural, and social processes of Colombia, and whose mission is to accomplish field tasks of their education, by being integral educators with a research and critical mind that allows them to assume their work in foreign languages teaching, as an action that benefits the integral and qualitative development of his labor context and the transformation of society. (Pag. 19,20 P.E.P)

Taking into account the characteristics of *Proyecto Educativo del Programa de Lenguas Modernas Inglés - Francés* from the University of Cauca, and the characteristics of transversal education, professionals from this program are expected to take part in processes that aim to comprehend social phenomena and to have spaces where students can develop skills and attitudes which permit them to reach out this purpose. From our experiences in this program, we consider the OPE (Orientación Del Proceso Educativo) as a great opportunity to carry out educational projects related to the characteristics of transversality; that is why OPE orientation should be reviewed to foster Modern Languages students' participation into transversal processes.

A second pedagogical implication from our research on transversality has to do with the integral formation of students. With the evidences of transversal education found in Champagnat School, Amalaka School, Francisco Antonio de Ulloa School, Gabriela Mistral School, and Normal Superior High School, students can know that there are alternatives that make learning a dynamic and meaningful process thus, they can feel motivated to express their likes, interests, needs in a free way, and construct their knowledge based upon their previous experiences. Besides, our study can raise awareness in the school community about the relevance of implementing transversal contents in order to examine a different alternative that pursues the transformation of Colombian education. The improvement and effectiveness of education through transversality depends a great deal on teachers' commitment to work as a team on planning the curriculum, in which appealing strategies can be implemented.

As future teachers of foreign languages, this research challenges us to think about an education aiming to break traditional trends about teaching and learning and to propose an alternative that enhances the development of students' autonomy, responsibility, and respect for other human beings, diversity, and to promote their active participation in the construction of society.

At the same time, it is of paramount importance to review the strategies teachers are using at the Modern Languages program. It could be really interesting to work the English and French subjects on a transversal based syllabus. In this way, students could get more vocabulary and fluency in daily life topics, and an integral development could be fostered

To avoid the English class to be taken as a grammar course at schools, it is essential to break paradigms and see it as a means to communicate the individual's reality. Thus, English classes should be focused on several topics, adapting the different transversal themes that go beyond linguistic aspects, giving way to content-based instruction as proposed by Brinton, Snow, & Wesche, 1989. Let us remember that the transversal themes are: environmental education, education for peace, sexual education, ethics, morality and civics. In this way, teachers have good and great possible topics to teach. As future language teachers and based on our experiences and background, we have proposed certain topics to work on in the English class, which are presented further in this chapter.

It is important to highlight that language teachers must foster a communicative competence with a cognitive and affective domain, at the same time an integral education; it is possible, for example, to take the most relevant problem about environmental matters and begin to raise students' awareness of it, then encourage students to comment on the topic, express their feelings, daily life situations related to it, ask for and propose problem solutions through activities that involve both students and teachers from different subjects, even parents and the school community, this process can favor our capacities and creativity facing social and common problems.

In an English class, transversal education can be promoted by planning and developing activities that foster cultural diversity. This could be done through the use of readings, videos, recordings, documentaries, blogs and other kind of materials and resources, from which students can share their opinion, relate the content to real life experiences and propose alternatives for the common good.

Likewise, students can know about other cultures through the implementation of Webs to communicate with other students from other countries, there are websites that offer collaborative opportunities of learning with other classrooms around the world. It provides students with authentic material, project-based learning and the understanding of different cultures. In this way, through the development of online activities, global awareness, criticalthinking abilities and values like tolerance and respect are promoted.

In addition to this, teachers should show a predisposition to tolerance, by considering that they are axiological models to students with a humanistic approach towards acceptance and respect for others. Besides, teachers should keep a continuous updating upon the topics that are related to students' reality in different fields to improve their personal and professional development. By doing this, teachers and students will be able to create an environment in which knowledge can be transformed into a knowledge more meaningful and more lasting in the interests of everyone.

# 13. GUIDELINES FOR ENGLISH LESSONS BASED ON TRANSVERSAL CONTENTS

These guidelines were designed having in mind the transversal themes like education for sexuality, environmental education, civics education, education for plurality, education for peace and health. These guidelines comprise our own ideas taking into account that we have read and analyzed on the subject matter. They were focused on the characteristics of transversality that are the relationship between school and students' lives, the improvement of students' quality of life by fostering values, the construction of knowledge and interdisciplinarity. Here, we are proposing some guidelines based on materials and activities linked to students' needs and interests, which foster their skills and creativity to construct knowledge, and share their point of view with their classmates and teachers.

# 13.1 Theme: Environmental education

Topic: Water Pollution

Objectives

- To recognize a current problem to raise students' awareness of this situation.
- To develop students' skills such as argumentation, analysis, and comprehension.
- To transform language learning in a natural process in order to avoid non-sense approaches. Students will be good at expressing their ideas, points of view, feelings, beliefs using vocabulary and simple grammar structures.

Recognition of the problem: students express their ideas and feelings about environmental issues, mainly in water pollution; recognizing the problem in their context, its causes, consequences and possible solutions. In addition, students discuss about this problem in order to get sensitized about this situation by means of these questions:

- What do you know about water pollution?
- Does this problem exist where you live?
- Which are the causes and consequences of water pollution?
- What can be the possible solutions to this problem?

#### Materials:

• Videos:

(http://www.houseofthechildren.org)

- Samples of contaminants (dust, plastic materials, washing liquids and the polluted water of the sewer system)
- Projects and Programs (http://www.houseofthechildren.org)
- Readings about cleaning polluted water

http://www.sciencedaily.com/articles/w/water\_pollution.htm

Procedure:

With this topic, teachers can develop different activities that involve students' senses like smell, touch, and sight in order to study water pollution; for example, they can compare samples of clean and polluted water and identify the characteristics of each sample. Then, students can study the causes and consequences of polluted water for human health. Besides, students can learn about some methods to clean polluted water and develop some possible solutions for this problem.

#### 13.2 Theme: Civics

Topic: Aspects to be taken into account when you are driving Objectives:

- To know the cautions to have in mind when you are a driver or a pedestrian
- To encourage road safety responsibility in the community, raising people's awareness of daily road events.

Recognition of the problem: students express their point of view about the current situation allied to daily road events like drivers and pedestrians' behavior, rates of accidents on the road and other issues as pollution and health problems. For this purpose, questions such as these could be used:

- Which situations have you lived on the road?
- Which problems do you recognize on the road?
- Can you propose some alternatives to solve these situations?

Materials:

• Videos

http://think.direct.gov.uk/motorcycles.html

• Articles and reviews

http://www.barnsley.gov.uk/services/transport-and-streets/road-safety/

• News and journals

http://www.roadsafetygb.org.uk/

#### Procedure:

In relation to this topic, teachers can develop some activities to learn and reflect upon the topic. For instance, the study of road signs, the research on rates of road accidents, pollution, and health problems. Teachers can also carry out role plays where students can develop their creativity, recreating real situations that they have lived or evidenced. In this sense, students could practice the language, show their experiences on the road and raise awareness of different problems related to this topic. Teachers can also offer students training on first aids.

### 13.3 Theme: Education for Sexuality

Topic: Violence against women.

#### Objectives

- To guide students and teach them about this social problem.
- To encourage students to participate in campaigns that raise awareness in the community.

Recognition of the problem: This is a topic which affects all the levels of society, and the students express their feelings and thoughts about it. The teacher could ask students questions such as:

- What are the indicators of violence towards women?
- What are the causes of this social problem?
- What do you think about this scourge that hits women?
- What would you do to stop it?

These questions could awake the interest of students, make them aware of this problem, and make them look for possible solutions.

#### Materials

- Authentic testimonials from women who have been victims of these situations.
- Videos.

http://www.guardian.co.uk/society/video/2012/oct/19/refugee-women-violence-1bn-rising-video

- Talks with people who belong to different organizations that work for women's rights.
- Articles

http://www.omct.org/violence-against-women/about/ http://www.amnestyusa.org/our-work/issues/women-s-rights/violence-againstwomen/violence-against-women-information

### Procedure

Students can be given the opportunity to talk about some events they have witnessed about violence against women. They can draw up some conclusions on the possible solutions to this problem.

Students can watch certain videos on violence against women and through a debate, and talk about the situations.

Later, a person who belongs to an organization that aims at the protection of women's rights can be invited to give a talk about what you can do about it.

Students can be guided to do a project about what they can do to raise the community's awareness of the existing problematic.

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#### **15. ANNEXES**

#### Annex 1: Interviews

Teachers in the schools we worked (Champagnat School, Amalaka School,

Grabriela Mistral School, Francisco Antonio de Ulloa School, Normal Superior High School)

- Are you familiar with the concept of transversality?
- Can you define the meaning of transversal education based upon your experience as a teacher?
- Do you consider important the experiences and the knowledge students have for your classes?
- Can you establish any relationship between previous experiences and the construction of knowledge?
- Do you consider the previous experience as important ones for constructing knowledge?
- How transversal are your classes? Your lesson plans?
- Do you integrate your classes, lesson with different subjects? How do you do it?
- Which benefits could it bring to talk about topics like cultural diversity in the classrooms?
- Do you consider that your classes foster students' participation and decision making regarding the society?

#### **Annex 2: Surveys**

Surveys to students in the schools Amalaka School, Grabriela Mistral School, Francisco Antonio de Ulloa School, Normal Superior High School)

### **STUDENTS' SURVEY**

1. ¿Cuántos años tienes?

2. ¿Te gusta el inglés? Si\_\_\_\_ No\_\_\_\_

3. ¿Cuántas horas de clase de inglés tienes en la semana?

4. ¿Qué temas se desarrollan en la clase de inglés?\_\_\_\_\_

5. ¿Tienes espacios para conversar con tus profesores? Si\_\_\_\_ No\_\_\_\_¿De qué temas hablan?

6. Realizan actividades en el colegio tales como:

\_\_\_Practicar un Deporte

\_\_\_\_Pintar

\_\_\_Dibujar

\_\_\_\_Hacer Manualidades

\_\_\_\_Actuar

\_\_\_Cantar

\_\_\_\_Bailar

\_\_\_\_Participar en Jornadas Ecológicas

\_\_\_\_Reciclar

\_\_\_\_Salidas

7. ¿Tienes la oportunidad de compartir con tus compañeros y profesores cosas que aprendes fuera de la escuela, en tu casa o con tu familia? Si\_\_\_\_ No\_\_\_\_

8. ¿Dialogas con tus profesores sobre las cosas que te gusta hacer? Si\_\_\_\_ No\_\_\_\_

9. ¿Tus profesores te dan la oportunidad de expresar tus gustos, intereses o necesidades? Si\_\_\_\_ No\_\_\_\_

10. En la clase de inglés trabajan sobre temas como:

\_\_\_\_Tecnología

\_\_\_\_Medio ambiente

\_\_\_Deporte

\_\_\_\_Reciclaje

\_\_\_\_Salud

\_\_\_\_Artes

\_\_\_\_Sexualidad

\_\_\_Convivencia

\_\_\_\_Historia

\_\_\_\_Matemáticas

\_\_\_Cultura

11. ¿En tu clase de inglés, tu profesor utiliza medios tecnológicos tales como grabadoras, televisores o computadores? ¿Cuáles?

¡Gracias!

# Annex 3: Classroom observation

# **OBSERVATION CHART**

Fecha		
Hora de inicio	Hora de finalización	
Lugar		
Número de estudiantes		
Clase		
observada	Observador	
¿Qué eventos en la clase revelan o	evidencian la presencia de	transversalidad?
Materiales		
Tiempo Profesor		
Tiempo Estudiantes		
Actividades, tipo de actividades		

Temáticas

Producción a partir de las temáticas

Trascendencia de las temáticas

Correspondencia entre los temas y las necesidades de los estudiantes.

Asociación de la temática con conocimientos previos.

Evidencia de una relación entre tema y contexto.

\_\_\_\_\_

Respuesta, reacción y/o seguimiento del profesor frente a las dudas e intereses del estudiante

\_\_\_\_\_

Seguimiento de lo aprendido anteriormente o lo aprendido en otras materias

Notas

\_\_\_\_\_

#### **Annex 4: School Permission Letter**

Popayán, 07 de septiembre de 2011

Señor (es):

Ciudad

Asunto: Carta de Autorización

El grupo de investigación del Programa de Licenciatura en Lenguas Modernas Inglés -Francés de la Universidad del Cauca está interesado en realizar un estudio sobre el papel de la transversalidad en la enseñanza y el aprendizaje del inglés en instituciones educativas de Popayán. Este proyecto es parte del proceso de formación que adelantan los estudiantes como futuros licenciados. Para tal efecto, dentro de la metodología de la investigación se szvimplementarán entrevistas, observaciones de clase y encuestas con estudiantes y profesores.

Yo, \_\_\_\_\_\_ identificado con el número de cédula de ciudadanía N° \_\_\_\_\_\_ de \_\_\_\_\_ autorizo al grupo de investigación para que utilice la información que proporciono a través de la aplicación de: a. la entrevista (\_), b. la observación de clase (\_) y c. la encuesta (\_).

Para constancia, firmo a los \_\_\_\_ días del mes de \_\_\_\_\_ del 2011.

Atentamente,

Carmelina Encarnación

Profesora del Depto. de Lenguas Directora del proyecto

Estudiante Investigador

### Annex 5: Lesson Plans

### Lesson Plan 1:

### Civics

Lesson Number: 01	School: Public-Private
Number of Students: 15	Teacher:
Grade: 10 <sup>th</sup>	Hour: 8:30 am – 10:30 am

#### **Inappropriate behaviors in roads**

Lesson Plan Title

**Lesson Objective:** To discuss a current issue of our society, learning English vocabulary and expressions related to the topic.

**Rationale:** Students need to think about problems which affect everybody, in this case the consequences of driving after drinking, a practice that has generated many tragic accidents in our community

# **Course Aims**

Pedagogical Aims:

• To foster students' English learning using civics as a relevant themes of transversality, which is linked to our community

#### **Research** Aims:

• To encourage the construction of knowledge by recognizing students' previous experiences.

### **Pragmatic Aims:**

• To raise students' awareness of the risks of driving while drinking and infringe on other traffic rules

### Standards

*Listening:* Comprendo el sentido general del texto oral aunque no entienda todas sus palabras

Reading: Hago inferencias a partir de la información en un texto

Writing: Planeo, reviso y edito mis escritos con la ayuda de mis compañeros y del profesor

*Monologue:* Narro en forma detallada experiencias, hechos o historias de mi interés y del interés de la audiencia.

Conversation: Uso mis conocimientos previos para participar en una conversación.

### Materials:

- Article
- Videos

• Dictionary

### **Lesson Contents**

Thematic Contents	Grammatical Contents
<ul><li>Traffic rules</li><li>Cautions as drivers</li></ul>	<ul> <li>Vocabulary related to traffic rules</li> <li>Expressions</li> <li>Use of must/ have to</li> </ul>

# Procedures & Teaching Actions (step by step)

- 1. The students read the article Road Safety: Alcohol & Drink Driving. (10 min) http://www.dpti.sa.gov.au/roadsafety/Safer\_behaviours/alcohol\_drink\_driving
- 2. Teacher asks students to highlight the main ideas from this article. (5 min)
- 3. Students watch two videos about drink and drive. Videos suggested:
  - ✓ <u>http://www.youtube.com/watch?v=ymiF-okrdMg</u>
  - ✓ <u>http://www.youtube.com/watch?NR=1&v=r5hxzdwQ7HA&feature=endscreen</u> (2 min)
- 4. Teacher asks students their opinion about these videos. (10 min)
- 5. Students mention other behavior which could generate traffic accidents. (5 min)
- 6. They watch some videos associated to other car accidents (3 min)
  - $\checkmark$  <u>http://www.youtube.com/watch?NR=1&v=23xr3JF-tz0&feature=fvwp</u>
  - ✓ <u>http://www.youtube.com/watch?v=yl2xhfVUu0Y&feature=related</u>

✓ <u>http://www.youtube.com/watch?v=CWwbAgmE3N4&feature=relmfu</u>

- 7. Teacher explains the use of must, have to, and some vocabulary and expressions from videos (20 min)
- 8. Students write a reflection paper about inappropriate behaviors in roads (40 min)
- 9. Students share their writings in groups (20 min)

Assessment (based on goals)

- Attendance
- Participation questions, contributions, attention, dialogue and debate
- Writings grammar use of must and have to. Vocabulary, expressions, coherence, and accuracy

# Bibliography

- ROAD SAFETY: ALCOHOL & DRINK DRIVING <u>http://www.dpti.sa.gov.au/roadsafety/Safer\_behaviours/alcohol\_drink\_driving</u>
- Videos:
  - ✓ <u>http://www.youtube.com/watch?v=ymiF-okrdMg</u>
  - ✓ http://www.youtube.com/watch?NR=1&v=r5hxzdwQ7HA&feature=endscreen
  - $\checkmark http://www.youtube.com/watch?NR=1&v=23xr3JF-tz0&feature=fvwp$
  - ✓ <u>http://www.youtube.com/watch?v=yl2xhfVUu0Y&feature=related</u>

#### ✓ http://www.youtube.com/watch?v=CWwbAgmE3N4&feature=relmfu

#### Lesson plan 2:

### **Education for sexuality**

Lesson Number: 01	School: Public-Private
Number of Students: 30	Teacher:
Grade: 6 <sup>th</sup>	Hour: 8:30 am – 10:30 am

### Women vs. Men

**Lesson Objective:** To analyze students' positions and reactions about the topic proposed for the class, and encourage them to learn English in dynamic and meaningful way

**Rationale:** This lesson plan is based on the transversal theme, Education for sexuality. It considers learners'different personalities, interests, needs and overall previous experiences. Bearing in mind that transversal education is based on students' lives and social contexts, we plan to guide students from different perspectives of learning: humanistic and interdisciplinary, in order to foster in them universal values and integral development. (Henríquez, C & Reyes J. (2008) *La Transversalidad: Un Reto para la Educación Primaria y Secundaria. Coordinación Educativa y Cultural Centroamericana. Colección Pedagógica Formación Inicial de Docentes Centroamericanos de Educación Primaria o Básica. Retrieved from <u>http://unpan1.un.org/intradoc/groups/public/documents/icap/unpan039738.pdf</u>)* 

# **Course Aims**

### **Pedagogical Aims:**

- Encourage students' interest in English learning by studying this topic, which is relevant at their age.
- Get the students to try to communicate in English their opinions about the role of women and men in society.
- Integrate the English area with other subjects.

### **Research Aims:**

- Identify the students' experiences, feelings and thoughts regarding the topic in the class (doubts, troubles, knowledge)
- Analyze and comprehend the perception of students about this topic in order to contribute to their integral development.

### **Pragmatic Aims:**

- Recognize vocabulary and expressions related to this topic.
- Motivate students to reflect on the importance of women and men in society, as well as understand the responsibilities of them to live in equal conditions.
- Promote universal values such as justice, tolerance and respect.

### Standards

*Listening:* Comprendo mensajes cortos y simples relacionados con mi entorno y mis intereses personales y académicos.

Reading: Identifico la acción, los personajes y el entorno en textos narrativos.

*Writing:* Escribo un texto corto relativo a mí, mi familia, mis amigo, mi entorno o sobre hechos que me son familiares

Monologue: Narro o describo de forma sencilla hechos y actividades que me son familiares.

### Materials:

- Videos about violence against women.
- Readings about Women's right
- Paper for creating a card.

# **Lesson Contents**

Grammatical Contents
<ul> <li>Vocabulary about values and human rights</li> </ul>
• Simple present tense of the verb To Be.
• Adjectives related to the transversal theme.

### **Procedures & Teaching Actions** (step by step)

- 1. Teacher will introduce the topic to the students using a video. (5 min.) Videos suggested :
  - ✓ <u>http://www.youtube.com/watch?v=eF0-IuocqXE</u>
  - $\checkmark http://www.youtube.com/watch?v=EafItwpZl4k$
  - ✓ http://www.youtube.com/watch?v=DFFjCPN3fQI&feature=fvwrel

- 2. Teacher will encourage students to talk about the topic expressing their opinions, feelings, and positions, asking about what they understand or do not understand. (15 min.)
- 3. Students will read a short text in English in order to get familiarized with the vocabulary and expressions about the topic values and rights in English. (15 min.) Readings suggested:
  - ✓ http://www.un.org/documents/ga/res/48/a48r104.htm
  - ✓ http://www.lutheranworld.org/LWF\_Documents/EN/Lwfviolence-EN.pdf
  - ✓ <u>http://www.hawaii.edu/hivandaids/Domestic%20Violence%20Against%20Women</u>
     <u>%20and%20Girls.pdf</u>
- 4. Students will describe their experiences and previous knowledge about the topic in a written way using the vocabulary and expressions learnt in class. (10 min.)
- 5. Students will have the possibility to share their writings in class. (Optional/10 min.)
- 6. Teacher will explain and encourage students to describe themselves with an adjective related to values using a card. (20 min.)
- 7. Then, the English and the Social Sciences teachers will discuss about the equality and likeness between genres for human rights. At the same time, with the Biology teacher students will discuss the differences of physiological capacities. They will talk about the importance of values such as tolerance, love, respect, friendship. (30 min.)

#### Assessment (based on goals)

- Students are able to express in an oral or written way their point of view about the topic Students will participate actively in class sharing their opinions about the Violence against women
- Students will learn vocabulary and expressions useful for expressing their ideas, thoughts and previous knowledge about the topic.
- Students will learn integrating knowledge from other subjects to the English class.
- Students will be able to propose some possible alternatives to overcome violence against women in their social context.
- Students will put into practice universal values such as respect, tolerance, justice etc. and they will promote these values in the classroom and then in the school.

# **Bibliography**

- Video: <u>http://www.youtube.com/watch?v=eF0-IuocqXE</u>
- Video: <u>http://www.youtube.com/watch?v=EafItwpZl4k</u>
- Video: <u>http://www.youtube.com/watch?v=DFFjCPN3fQI&feature=fvwrel</u>
- Reading: <u>http://www.un.org/documents/ga/res/48/a48r104.htm</u>
- Reading: <u>http://www.lutheranworld.org/LWF\_Documents/EN/Lwfviolence-EN.pdf</u>
- Reading: <a href="http://www.hawaii.edu/hivandaids/Domestic%20Violence%20Against%20Women%2">http://www.hawaii.edu/hivandaids/Domestic%20Violence%20Against%20Women%2</a> <a href="http://www.hawaii.edu/hivandaids/Domestic%20Violence%20Against%20Women%2">http://www.hawaii.edu/hivandaids/Domestic%20Violence%20Against%20Women%2</a> <a href="http://www.hawaii.edu/hivandaids/Domestic%20Violence%20Against%20Women%2">http://www.hawaii.edu/hivandaids/Domestic%20Violence%20Against%20Women%2</a>
- Henríquez, C & Reyes J. (2008) La Transversalidad: Un Reto para la Educación Primaria y Secundaria. Coordinación Educativa y Cultural Centroamericana. Colección Pedagógica Formación Inicial de Docentes Centroamericanos de Educación Primaria o

Básica. Retrieved from

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- Burbano, C. Lopez, M. Lopez, J. Muñoz, C. Tálaga, P. Zambrano, Y. Transversality, An Alternative to Transform Colombian Education. 2012
- Ministerio de Educación. El Reto. http://www.colombiaaprende.edu.co/html/mediateca/1607/articles-115375\_archivo.pdf

### Lesson Plan 3:

Lesson Number: 01	School: Public-Private
Number of Students: 15	Teacher:
Grade: 7 <sup>th</sup>	Hour: 8:30 am – 10:30 am

#### **Environmental Education**

### Me and the environment

Lesson Plan Title

Lesson Objective: To talk about themselves and their active role in their environment.

**Rationale:** "Our leaders need to comprehend far more about what works and what does not. The public needs true education on the environment. We need to improve the quality and delivery of lifelong education on the environment – to grasp its original promise and make it work. We need to build more support for resource stewardship through education and use an informed public to mitigate some of the adverse effects of our actions on the environment"

Kevin J. Coyle Former President, NEETF

#### Course Aims

#### Pedagogical Aims:

• To encourage students to express their interests and needs by using the language.

#### **Research** Aims:

• To observe how students react towards the self-expression of the being and the use of art in the English classroom.

### **Pragmatic Aims:**

• To take into account students' contexts in order to make students learning process meaningful.

#### Standards

Listening: Demuestro comprensión de preguntas sencillas sobre mí, mi familia y mi entorno

*Writing:* Escribo un texto corto relativo a mí, mi familia, mis amigos, mi entorno o sobre hechos que me son familiares

Monologue: Narro o describo de forma sencilla hechos y actividades que me son familiares.

### Materials:

- Flash cards Magazines
- Recycled material: paper.

• Colors, paint, scissors.

#### **Lesson Contents**

Thematic Contents	Grammatical Contents	
<ul> <li>Personal information</li> <li>The family</li> <li>Activities</li> <li>Colors</li> </ul>	<ul> <li>Adjectives for describing people</li> <li>Simple present tense.</li> <li>Verb to be</li> <li>Possessive of nouns</li> <li>WH- Questions</li> </ul>	

#### Procedures & Teaching Actions (step by step)

- 1. Seating arrangement in horseshoe
- 2. The teacher will put some flashcards on the whiteboard and students will be asked to say the vocabulary they already know.
- 3. The teacher will introduce the topic by means of an example. For instance, he will talk about himself and the things he likes to do. It may be a good idea to use images or photographs of him doing certain stuff.
- 4. With recycled material, they will design a scrapbook of themselves, talking about their families and likes and dislikes.
- 5. Students will present to their classmates their work orally and they will be asked some questions about it.
- 6. After doing the presentation, the teacher will hand out some images with occupations. Students will tell what occupations there are and what their role in the society is.

7. Game: guess who! This game is played to review the vocabulary learnt in class. They will play hot potato, in which players gathering in a circle and tossing a ball. The player who is holding the "hot potato" when the person stops saying "hot potato" has to answer a question.

### Assessment (based on goals)

- Students express their interests and needs by using the language.
- Students will start the picture dictionary with the family vocabulary, colors, occupations and leisure activities.

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- SASLOW J, K. Spin B. Longman Pearson.
- GENEVIEVE J. Kocienda. Spin B. Longman. 2003