



Licenciatura en Bilingüismo
con Énfasis en Inglés

**TEACHING ENGLISH THROUGH MULTISENSORY ACTIVITIES
IN A PUBLIC SCHOOL**

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CON ENFASIS EN INGLES**

2017

**TEACHING ENGLISH THROUGH MULTISENSORY ACTIVITIES IN A PUBLIC
SCHOOL**

*A classroom project presented as one of the requirements
To receive the undergraduate degree
Of
“Licenciado en Bilingüismo
Con Énfasis en Inglés”*

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Abstract

This project was carried out in a 9th grade classroom from a public, mixed gender institution of the municipality of Dosquebradas within the department of Risaralda, Colombia to verify and advocate for the utility of multisensory instruction in one or various phases of instruction within an English language learning 7th grade classroom. All of this was done through the structured use of organized, sensorial stimulating activities that promote linking of sensorial memory by activating interconnectivity within multiple receptor channels.

El presente proyecto fue llevado a cabo en una institución pública mixta en el municipio de Dosquebradas, Colombia con el fin de aplicar, verificar y advocar la utilidad de la instrucción multisensorial en una o varias sesiones de una clase de lengua inglesa de grado séptimo, a través del uso estructurado de actividades específicamente ordenadas para ser sensorialmente estimulantes promoviendo los enlaces entre la memoria sensorial que activa la interconectividad dentro de varios canales receptores.

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1. Introduction

How does the average student perceive and assimilate what is taught? Without a doubt a question that has driven the field of pedagogy to a continued reflection and improvement of content and instruction methodologies for years. Through direct exposure and involvement in Echeverri's 2016 "IMPLEMENTATION OF MULTI-SENSORY INPUT ACTIVITIES

AS AN ENGAGING SUPPORTIVE TOOL TO PROMOTE THE DEVELOPMENT OF VOCABULARY IN ENGLISH AS A FOREIGN LANGUAGE IN YOUNG LEARNERS”

, an interest in the versatility of this methodology arose within the participants of this project regarding its benefits in teaching other aspects of language and of language instruction in general , therefore a new focus was applied, and it was then established that the application of multisensory grammar instruction could enhance motivation in a young learner’s setting within the Eje Cafetero context.

Multisensorial activation was deemed important due to the fact that it has helped countless students with a wide range of learning disorders conquer and even overachieve in subjects they would normally find challenging. In our context due to a number of socio-affective factors many children need more active stimulation, along with a number of other supports, to achieve scholastic success, in the article Situación de la Infancia. (2017) UNICEF states that:

“El sistema educativo del país aún trabaja en proveer educación de calidad para la inclusión y la retención de niñas, niños y adolescentes en las escuelas, en especial para indígenas y afrodescendientes. De 100 estudiantes que ingresan a la escuela en las zonas urbanas, el 82 por completa su educación, en tanto que en las zonas rurales, sólo el 48 por ciento lo hace. Mientras que la tasa nacional de analfabetismo es de 7.4 por ciento, en los afrodescendientes e indígenas es de 11,2 y 28,6 por ciento, respectivamente.

Innovation in this context is important, we must attempt to create strong memories of

early learning experiences so that they will echo throughout student's lives. Multi Sensorial Instruction looks to activate different pathways with which to make memories in the brain, though, in a "traditional" environment mono or bi sensorial methods of instruction have been more prominent, this does not mean that they are an obstacle, as they have been the most tried and true methods of instruction for years. Nevertheless, constant expansion in the ways we learn calls for alternative forms of instruction and assessment. Thusly, never ending expansion in the ways we teach and motivate, and the senses we employ to do so, ought to be considered an important area of research so as successfully integrate beneficial input into our classrooms.

2. Justification

The initial purpose of this project was to find whether or not the application of multisensory teaching techniques would-be successful as a means to teach basic grammar principles, as it was in improving vocabulary in Echeverri's (2016) *Implementation of Multi-sensory Input Activities as an engaging supportive tool to promote the development of*

vocabulary in English as a foreign language in young learners". The idea was to promote this project as a second stage of Echeverri's work, so as to further reflect upon the reliable data available towards the utilization of multisensory teaching techniques in a specific Colombian context in terms of effectiveness and practicality. It is believed by all the participants involved that this could prove to be a positively prosperous methodology in our context, taking into account a number of factors like setting, procedures, and overall student willingness to adapt to a new form of instruction.

This classroom project was applied to a group 20 students of seventh grade of a public institution in the Dosquebradas municipality within the department of Risaralda, Colombia. This project took into consideration standards included in "Guia 22, Ministerio de Educación Nacional" and the school curriculum at the moment of planning the classes.

Teaching a foreign language in the Colombian context has been a challenge for the Ministerio de Educación Nacional (MEN), which aims to improve English proficiency in the country's public and private education sectors, through its bilingualism program, aptly named "Colombia bilingüe". Within the program's parameters, it stipulated that it is necessary to create teaching strategies in order to develop communicative competences in English for Colombian students. This initiative is supported by a number of institutions within the context, and additionally by theory, in his book "Foundation of Bilingual Education and Bilingualism, (Colin, 2011), states the importance of being bilingual in the XXI century regarding globalization and socio economic aspects such as employment, access to education etc., since a person that knows English, the lingua franca or global language nowadays, has more opportunities than a monolingual person to travel or to find a good

job.(Maurais, 2003) makes this clear by stating that “Speaking English has been deified as an asset in the sense that it only brings benefits to those who learn it, mainly as the access to a modern world characterized by technology, wider communication, economic power, scientific knowledge.”

Alongside this, the methods with which to achieve this must also be delved into. For one, there is a large number of information as to what pertains to multisensory instruction and the significance it might or might not have on learners. For example Dale’s pyramid (shown above) suggest some percentages which dictate the type of learning modality that the “average” person would find most successful, yet a graph like this can be misleading as Hernes and Letrud (2015) propose in the article “The diffusion of the learning pyramid myths in academia: an exploratory study”



Source: National Training Laboratories, Bethel, Maine

“...models have spread widely within subject didactics. ...the models have gained an unwarranted level of authority within several areas and ... they are considered valid despite their lack of empirical evidence. It is problematic that the learning pyramids have become an integral part of subject didactic studies. If these myths have become intertwined in the web of knowledge they could be substantiating

other models and conceptions. This can potentially reduce the trustworthiness of subject didactic research. It can also result in a waste of time, talent and money. Furthermore, the dispersal may have unwanted effects outside of academia. The already huge popularity these models enjoy is likely to be reinforced by these academic publications.

Hence, there is a risk that these conceptions become premises for professional and political discussions as well as decisions. The wide acceptance and longevity of the myths speak in favor of actively debunking them. Identifying and discrediting the learning pyramids in all their guises will hopefully remove these myths from educational and subject didactic research and prevent further diffusion of the models.
(pg. 6, 7)

With this in mind we aimed to accrue follow up information to connect with actual evidence that can either debunk the myths or be used to continue building concepts and theory in the field of ELT.

Considering that teaching English in public schools in our country is mostly associated with grammar translation, this project aims to change student's perspective towards learning a new language through multisensory activities that stimulate their senses (sight, hearing, smell, taste and touch kinesthesia). According to Oxford and Shearin (1994), the use of the target language can be influenced directly by how motivated and engaged the students are. For that reason, this project took into consideration student's preferences, ages, backgrounds and interests when planning the activities, expecting them to learn and enjoy at

the same time.

In addition, Hunter (2014) argues that motivation has a substantial responsibility when learning a foreign language. Then, it is relevant to mention that this classroom project intended to increase the desire of students of getting involved in the process of learning basic grammar structures by practicing them through multisensory activities.

Students' disposition can interfere at the time of developing multisensory activities, and from Hunter's perception, attitude is directly linked with motivation, these aspects affect students' performances during class ; being this relevant since the multisensory activities developed here require certain degree of positive responses.

On the other hand, in the Colombian context it is common to associate English language instruction with the Grammar Translation Method. For this reason, one of the main goals of this project was to implement non-traditional teaching grammar strategies with the aim of change students' perceptions towards learning a foreign language.-Bonilla (2013), criticized the method above mentioned with forceful arguments. From Bonilla's perspective, grammatical instruction has been through a process where practice and exposure are necessary to learn a foreign language, but translation and memorization of language items or phrases are already old fashioned in the language classrooms; students should no longer be expected to memorize and recall to show their language proficiency. Consequently, the activities implemented in this classroom project, include communicative goals in order to increase the student's' language proficiency in terms of grammar.

In the implementation of Echeverri (2016) it was found that using a multisensory approach to enhance the learning of vocabulary items was successful in terms of motivation

and the internalization of new words. In this project, it was intended to evaluate to what extent the application of multisensory procedures could facilitate and foster the learning and use of grammar structures with a functional, communicative aim. Hinkel and Fotos (2008) mention that teaching grammar is an essential part of learning a foreign or second language, and that teachers should help learners develop their language skills in diverse environments, and in different communicative settings. Conjointly, we should consider what Hinkel and Fotos (2008) address in Ellis (2008) when saying that the grammar component should be included in the curricula; it is important to do it in a subsequent, leveled way, as not all ages are cognitively prepared to receive explicit grammar instruction:

“Beginning students whose language base is comparatively small may not be ready for explicit grammar instruction.” (pg. 14)

For this reason, implicit grammar instruction was chosen and applied in this classroom project, as the average age of the learners did not reach a cognitively sufficient stage for an explicit approach in terms of grammar. Adopting implicit grammar instruction followed by multisensory practice of new language items was meant to offer learners motivating activities to practice the previously learned structures, fact that, as previously mentioned, affects the performance of students in the target language.

Many authors support the idea that applying multisensory techniques in the classroom can bring positive results in language teaching. Azmi (2013), argues that including multisensory activities enhances students’ motivation and promotes autonomous learning on the grounds that at the moment of stimulating the senses, learners are more open to participate and interact with the target language. In addition, Pitts (2012), mentions the importance of

including multisensory methodologies when planning lessons, since it allows students to embrace several learning styles and considers the fact that by incorporating most or all senses, more cognitive connections are created in the child's brain, and thus, there are more chances for the learner to succeed in the learning process.

3. Objectives

3.1 General teaching objective

Explore the possibilities offered by the use of multisensory stimuli activities in a young learner's english language classroom.

3.2 Specific teaching objectives

Foment varied teaching strategies to practice grammatical structures and have students use their senses with the purpose of producing simple English structures.

Observe and analyze the usefulness of and acceptance towards multisensory activities to practice the target language.

3.3 General learning objective

Students will show understanding and will be able to use simple language chunks to express personal information, describe themselves and others and say future plans, through practice activities that use the senses as a tool to learn.

3.4 Specific learning objectives

Have students take advantage of the tools that different practice activities offer them to interact with the language.

Identify how a multi sensory guided class affects the proficiency of students of a public secondary institution.

Motivate students to produce simple sentences in the target language when participating in multisensory activities.

4. Conceptual Framework

4.1 Grammar

The grammatical aspect of language has been largely discussed and debated by EFL and ESL field experts, but even now, researchers have still not been able to agree on the best methodology to teach grammar. The introduction of grammatical aspects of language in the classroom has become a growing concern for teachers, as the different methods used have all

been questioned and discussed; Ur (2009) mentioned that a “best way” to teach grammar has not yet been produced and decided, however she also affirms that there have been interesting insights and suggested methods to do so that teachers can use and analyze in order to find the best fit to every context and situation.

All around the world, including Colombia, teachers face the problem of introducing grammar appropriately, either they use it as the main component in their classes and make it the focus, or they try to skip it completely, which is not beneficial to student development either. What if there could be a more motivating way to present and practice language structures with students?

The approach taken by many institutions is based on the well-known Grammar Translation Method, that according to the British Council’s TKT Glossary(), is a method in which students study the grammatical rules and structures, and translate words into their own language. Yet though this method communicative interactions are not carried out often and the focus on speaking tends to be little or none. Taking into account this definition, we can notice that this might not be the best method to lead students to use grammar structures effectively, nor to communicate with them as is expected in the language learning process.

Many teachers have taught grammatical rules to students who seem to be able to apply them to drilling and reading tasks; however, when they write or speak, learners sometimes make simple grammatical mistakes. This shows that there has been certain difficulty in incorporating the communicative competence into the methodologies used to teach English in Colombian state schools, suggesting that alternative methodologies could help achieve more communicative aims in language learning. Widodo H. (2006) supports this view by

saying that

“...teachers, especially in the context of EFL, could benefit from learning some alternative teaching approaches for teaching grammar so that they can integrate grammar or structure into another language skill in such a way that the goal of learning language is ultimately achieved.” (pg. 123)

By this Widodo. H suggests that integrating language skills into an alternative approach can help students achieve the communicative component of language; as mentioned by Hinkel and Fotos (2002), grammar content should be taught recognizing the importance of including communicative activities. In this way, the learners are able to relate what they are being exposed to in terms of language, with real life situations.

Another concern in terms of how grammar should be delivered is if whether it should be taught implicitly or explicitly. Researchers that support the explicit way claim that raising consciousness about the grammatical rules help students internalize them better to later reproduce them in more communicative situations. But it is often seen that learners who have clear grammatical rules, face problems at the time of using them in real life situations. On the other hand, a completely communicative approach can also lack a grammatical focus that leads to incomplete or wrong use of language. Hinkel and Fotos (2008) cite Skehan (1996) to mention that:

“Communicative syllabuses are suggested to be equally inadequate because of their neglect of grammar instruction, tending to produce fossilization and

classroom pidgins.”

The abovementioned shows that it is important to stay in the middle of a Grammar Translation Method and a full Communicative Approach in order to give learners enough tools to perform successfully and accurately in a more or less authentic situation.

In this project, implicit grammar instruction was used during the presentation of new language structures, aligned with a multisensory practice of the same.-According to Hinkel and Fotos (2008) implicit knowledge is the ability to use a language “unconsciously developed through acts of meaning-focused communication” (pg. 6). For this project, this meant that students were presented a grammatical structure in an implicit way, focused on functionality, and it was later practiced through multisensory procedures; by exposing students to a meaningful presentation and practice of language items, we aim to increase motivation in the foreign language learning process and thus, achieve more significant knowledge and use.

4.2. Motivation

Motivation has been seen throughout the years as a paramount consideration when learning a second or foreign language. Oxford and Shearin (1994), state that motivation influences L2 learning strategies and how much time learners invest on their own language improvement. It is crucial for the teacher to know the type of learners, age, context and preferences in order to be aware of what really motivates them in order to plan activities that engage students to practice the target language. In addition, stating a learning goal can

motivate students since it implies some challenges which can work in favor regarding the time learners spend on the learning process. In relation with this issue, Crookes and Schmidt (1991), established a two-part structure: *internal*, regarding attitudinal factors and *external*, concerning behavioral characteristics:

“Internal, attitudinal factors: 1) Interest on the L2 based on existing attitudes, experience and background knowledge of the learner's part. 2) Relevance which involves the perception of personal needs. 3) Expectancy of success or failure. 4) Outcomes. External behavioral characteristics include the fact that learner: 1) decides to choose, pay attention and engage in L2 learning; 2) persists in it over an extended period of time and returns to it after interruptions; and 3) maintains a high activity level”. (p. 5)

As motivation plays an important role in the foreign language learning process, it is relevant to go deeper into what external and internal motivation are. Gagné and Deci (2005) argue that internal motivation refers to those activities or things that generate a pleasant feeling; by doing this, the person receives an amount of satisfactory emotions. On the other hand, external motivation derives from a stimuli or satisfaction that will arrive after doing something, it is the external reward what motivates learners.

For Gané and Deci (2005), internal motivation is positively affected when a task creates a sense of autonomy and self-competence, considering that people need to feel competent in order to maintain internal motivation. This gives a light on some aspects that should be taken into account at the time of carrying out activities that aim to be motivating

for students. Among these we have that, when students feel active parts of the class, and they face situations in which their contribution is expected and obligatory, they feel internally motivated. After facing the first challenging situations, and with the appropriate help from the teacher, learners emerge triumphant from the situation and feel motivated again for being competent. In the best of cases the student grows from the experience of being competent and autonomous, but in many cases in the Colombian state school context, teachers perceive that students are not motivated by school, and do not see it as a positive or beneficial aspect of their lives. In this case, the low interest that high schoolers of public institutions in Colombia have towards English means that most of the time, students do not have internal motivation.

Motivation can also help in disciplinary issues. As Gané and Deci (2005) argue, when the dynamics get to raise internal motivation in students, and this is assimilated, it is less and less necessary to be controlling discipline, or to keep reminding students about what they have to do, the values and attitudes they should have in order to learn, and other factors that influence an autonomous learning process. These normal regulations we keep in class to help the development of the sessions, are lessened by constant motivating activities, as students are engaged in tasks and do not need to be told to do them. We can consider this as a means to avoid bringing grades into the strategies we use to control discipline, due to its resemblance to a threat: “If you do not behave, your grade will be affected”. This type of situations affect the external and internal motivation of the learners, as they need to be regulated to avoid a negative consequence. Gagné and Desi (2005) mention it:

“When externally regulated, people act with the intention of obtaining a desired

consequence or avoiding an undesired one, so they are energized into action only when the action is instrumental to those ends.” (Pg. 334)

With the last words we can see that people, in this case learners, are engaged into action when the means to their ends seem or could be affected by a grade, or by a regulatory, disciplinary action, thus they do not show to have an internal motivation towards what is being done, but an external motivation that leads them to achieve their outcomes but not learn.

Hsieh (2014), gives a light on how motivation influences directly on learners' outcomes, as a motivating process can lead the learner to consider it an outcome instead of an ongoing process; a high motivated student wants to find more information and to practice the subject that is considered interesting. Linked to academic achievements, students can see learning as an aim rather than an obligation.

Another aspect that is influenced by motivation is a comfortable environment and rapport; Webb & Barret (2014), mention the impact that having a good relationship and establishing rapport with students can have in terms of motivation and classroom management. Moreover, maintaining property communication with learners is crucial in the learning process considering the fact that it would help students to have confidence on the teacher which brings harmony to the classroom. Webb and Barret (2014) cite Roach, Cornett Devito, and Devito (2005), remark of the importance of including rapport in the classroom:

“Intuitively, an instructor who maintains positive rapport with students would also achieve a sense of liking from them, increase students' state motivation, and

enhance students' satisfaction, in part because student's feelings of liking for instructors often evolves into liking for the course and increased learning.” (p. 28)

Furthermore, creating rapport with students implies positive learning and teaching experience, which affects directly on student's outcomes and learning results. Webb & Barret (2014), also argue that rapport can be built by implementing verbal and non-verbal strategies such as creating proximity, direct eye contact, facial expressions, tone of voice, among others. Considering the aspects above mentioned, rapport plays a relevant role in motivation since students can change their perception towards the teacher and the subject, what brings positive results in the learning process.

4.3 Multisensory Instruction (MSI)

The perception of reality is a complicated dance of chemistry and physics that encompasses a number of receptor channels that have a direct pathway to the brain, and thusly create a general notion of what is or is not. This then extends into the field of learning and teaching by following the logic that by enhancing and focusing on the use of these various channels simultaneously, we can improve young learner's communicative abilities in the English language. Checa *et al.* cited by Gomez (2012), established that world perception is

developed in our cognitive system through sensorial stimuli; thus, multisensory integration will tackle how information from the different sensory receptors, such as: sight, sound, touch, smell, taste, self-motion and balance may be integrated by the nervous system resulting in meaningful perceptual experiences.

Many popular methodologies have ventured into the use of multisensorial activation strategies that allow children to assimilate different sets of vocabulary and varied grammar topics, even under adverse circumstances. Herein some of these methodologies will be presented so as to give a clearer picture of what types of activities were carried out with the students from the 7-B group of “Institución Educativa Fabio Vasquez Botero”.

First, there is the The Orton-Gillingham method which based on Kohler, (2015) focuses on the mix of sound, movement and touch to deliver instruction on the structure of language, moving from simple sound to grapheme connection and then progressing to more complex tasks; then, there is The Montessori Method which proclaims structure free multi activity environments in which children can interact with readily prepared activities within different parts of the classroom at their psychological need ("MONTESSORI FAQ's", 2017); the Barton Reading Program which is based on the classification of color coded titles to organize letters along with their sounds, then turning them into words, then into full sentences (Bright Solutions for Dyslexia, Inc., 2014).

Many of these methodologies are replicated in special education classrooms everywhere, where children have special needs due to various affective, cognitive and environmental factors. These methodologies triumph in these sort of contexts because they access memory building channels in the brain, allowing students to reach conceptual

retention and achievement of objectives while fully engaged in the learning. It is easier to integrate multiple sources of information during learning when the material is physically integrated, audibly and visually, than when information is presented to each modality separately (Mousavi, Low & Sweller (1995)). Additionally, Pitts (2012) states the following:

“Studies have shown that we rely heavily on our senses to process information when learning, and engaging more than one sense when teaching can help information processing. Using multiple senses allows more cognitive connections and associations to be made with a concept. This means it is more easily accessible to students as there are more ways the information can be triggered and retrieved from their cognitive learning center.”

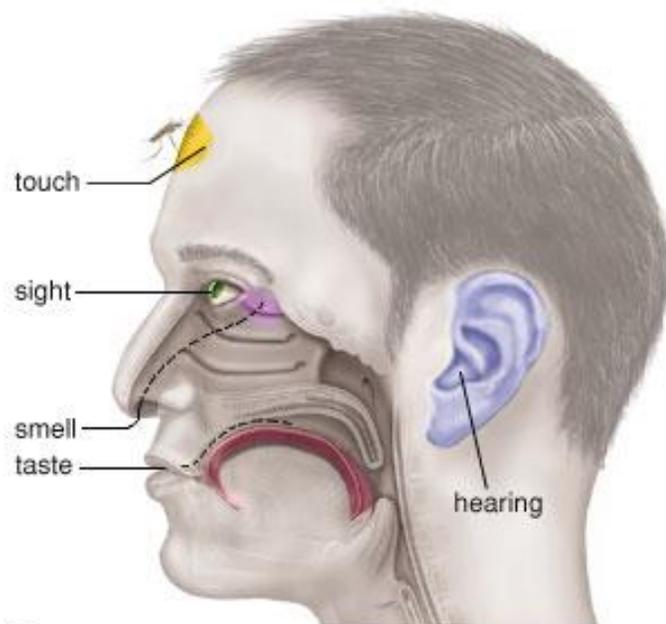
So, if multisensory instruction can be used as an effective tool in challenging context, then why not in the language learning context, where a necessity of action memory is fundamental and almost essential part of the overall process.

By having students perform tasks which engage their senses, i.e., crafting a creature with modeling clay (Play-Doh) after having been instructed in parts of the body, colors etc., and then having them perform through the use of previously presented grammatical forms, students spend a sufficient amount of time being exposed to language through different channels of perception.

In a study carried out in the Max-Planck Institute for Biological Cybernetics, Tübingen, Germany (Newell, Bühlhoff and Ernst (2003), found that object identification through cross modal perception increased recognition times as opposed to unimodal perception of the same objects. This can provide the argument of multisensory instruction, by appealing to the notion that if we add not only repetitions to auditory input and visual comprehension/ recognition activities, but also haptic stimuli and even olfactory references amongst others, we can enhance students motivation by positively impacting their communicative performance

To wholly understand the importance of multisensory instruction, we must delve into a slightly more concrete aspect that illustrates its intended purpose and perceived usefulness

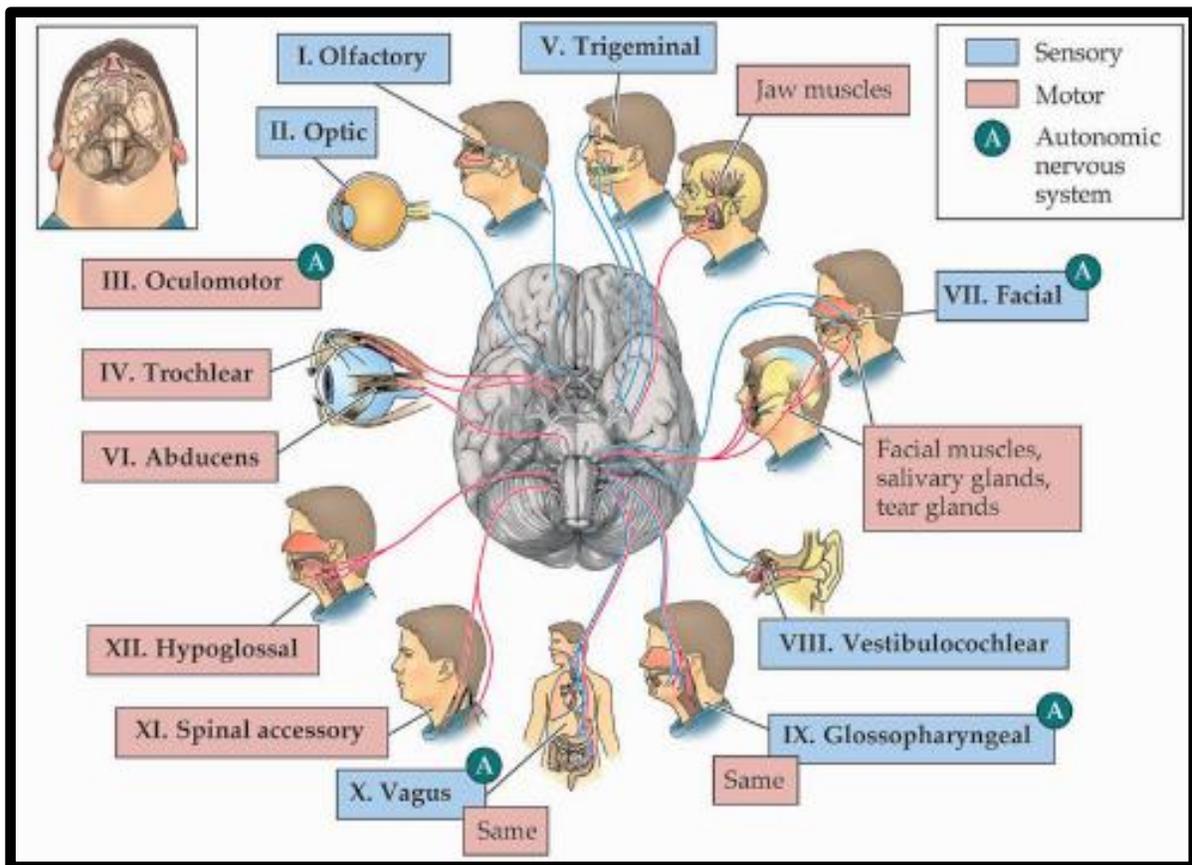
Fig. 1 the main receptor pathways.



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The physical conditions of both students and the classroom must be considered heavily when attempting to apply MSI, as any irregularity can cause unintended difficulties for students and teacher. The amount of receptors that can be activated in a lesson deem a short explanatory look at the information reception pathways (Encyclopedia Britannica, 2017, February 17) to aid in the understanding of the amount of stimuli that is received and processed at any given moment.

Fig 2. The twelve cranial nerves (CN)



4.3.1 Touch

The skin, being the largest organ on the human body, holds a number of stimuli receptors that react to environmental changes such as in temperature and changes to outside pressure, the nerve endings, aided by hairs on the skin and hands, can recognize patterns, textures and temperatures while establishing a pathway through which one might classify or recall an object.

4.3.2 Sight

The ocular nerves and visual organ aid the brain to interpret light patterns and respond to those interpretations accordingly, either through a physical response or a linguistic one. This system plays a part in the connection between the sense of hearing with the vestibular system to provide a navigation system for the brain by relaying information from the physical world to the brain.

4.3.3 Smell

The olfactory system which is housed high in the nasal cavity is one of the most curious ones as its physical arrangement has it interact with two sections of the brain that deal with emotions and other immediate responses, this making smell a particularly strong memory stimulating pathway. When air is drawn in particles from the environment are introduced into the cavity until reaching the olfactory bulbs and further sections, where they are classified depending on the different ranges of smell, which have been classified generally as fruity, flowery, resinous, foul, spicy, and burned. It is often seen that those who suffer PTSD are triggered by smells similar to gunpowder, gasoline or smoke, as they trigger

memories of strong emotional distress, as they can also trigger positive feelings.

4.3.4 Taste

What in our case might be considered the most limited sense in terms of language teaching application is the sense of taste; although food can be a part of the curriculum, as is seen in other countries, in Colombia it's not often that in class activities include food. Generally speaking, it is difficult to integrate due to resource availability, student commitment and local institution policies. Regardless, it's important to keep in mind that adding these types of activities can stimulate positive responses to the language learning process and the inherent potential for classical conditioning is exploitable in a number of ways across different topic types.

4.3.5 Hearing

The sense of hearing is part of a complex system that coordinates motion, balance and spatial awareness. First there is the outer ear, here waves are conducted through the ear canal down to the tympanic membranes to reverberate and be interpreted by the brain as implicit or explicit messages. Here, within the middle ear the components which control balance are also contained. They sense when the body is rotating and sense the corresponding messages to the brain, which calibrate the body using the tendons and muscles all over our bodies.

5. Related studies

A great number of relevant research articles, investigations and case studies were taken into consideration as support at the time of developing this classroom project, yet some provided very important perspectives that served as a backbone. These academic articles were individually focused on the three main pillars of the project: multisensory instruction, motivation and grammar.

5.1 Motivation

When talking about motivation in relation with learning a second or foreign language, Hsieh, (2014) in his research about motivation titled, “Motivation matters? The relationship among different types of learning motivation, engagement behaviors and learning outcomes of undergraduate students in Taiwan”, develops an idea about how motivation can interfere in the learning process and students’ outcomes. This study was applied to 231 language students of a university in Taiwan (China). Student’s background characteristics, five different types of motivation and three different kinds of engagement behavior, were considered to analyze student’s outcomes.

Moreover, this investigation aimed to see the role that motivation played in relation with how confident students were at the moment of using the target language. In the same sense, in this study, the author highlighted the impact in terms of motivation with engagement behavior has in relation with achieving language learning goals considering that if the students are highly motivated, they are going to be more interested what would make them looks for more resources in order to go deeper and search more than what is being taught in

the classroom what represents positive aspects for the student's academic process.

Furthermore, Hsieh, (2014), finds that working on motivation brings advantages in terms of intrinsic motivation regarding participation, interaction with the target language, efforts and how often students' use of the L2 language during and after the class.

5.2. Multisensory

The concept of Multisensory is more often related to other disciplines closer to aesthetics or entertainment than to pedagogical strategies. Currently, a number of pedagogs are exploring the possibilities and applications of this enhancement to traditional unisensory instruction. One particular article that mirrored the focus of our project and the realities of our context was Garimella & Srinivasan's (2014) "A Large Scale Study of the Effectiveness of Multi-Sensory Learning Technology for Learning English as a Second Language" which was the first study to follow a massive number of classrooms and gauge how adding multisensorial activities enhanced their general reading performance.

In this study a reading / language learning program was used to enhance ESL instruction in 100 state schools across India with over 20,000 students from grades 6, 7 and 8. In the Colombian context similar programs were proposed by the Ministry of Education in their 2014 initiative "Colombia Bilingue" which aims to renovate language instruction across the country through an influx of culturally conscious material and workshop immersions for teachers. The results of this article seemed quite promising and their input fundamental after they state that "The results indicate that MSLE proved to be highly effective in English language learning in highly constrained, infrastructurally challenged

settings.” Important aspects that have to be considered, especially when attempting to find methodologies befitting of the context which local teachers interact with.

In this article other important statements are made based on strong evidence that points to the supremacy of multimodal teaching practices, and ultimately to the possible applications and importance of further field research related to Multisensory Structured Learning Education. One highlight that is important to mention is the statement that technology covers a wide array of tools, both physical and pedagogical, and that the effectiveness of these tools is based on innumerable environmental and causal variables. Which leaves the instructor as a central lynchpin to connect the dots and use the multisensorial techniques that will best benefit the group, situation, needs etc.

This article provides a fountain of information regarding the application of multisensory enhancement. On the one hand its procedures, designs, and methods seem to fit the local context, providing valuable information in terms of sources, methodologies, and strategies. On the other hand, it showcases the importance of understanding technology as a number of devices both physical and philosophical that allow us to practice and apply what we learn on a day to day basis, and not just a screen with internet access. Many things can be done to achieve a multisensory classroom environment that will encourage and enhance learning of a foreign language.

5.3. Grammar

Widodo's (2006) article "Approaches and procedures for teaching Grammar" proposes a five-step procedure that involves several concepts developed and implemented during this classroom project, being these: practice, consciousness raising, and explicit and implicit knowledge. Due to the above mentioned, Widodo's article is especially relevant as it is the base for the teaching procedures developed in this paper.

Regarding practice, Widodo (2006) argues that it is generally accepted that learning a language needs practice, to which she references Ellis (2002) and Richards (2002) and summarizes in a list of five features that can usually be found in practice methodologies:

- “1. A specific grammatical feature is isolated for focused attention;*
- 2. The learners are required to produce sentences or statements comprising the targeted feature;*
- 3. The learners will be provided with opportunities for repetition of the targeted feature;*
- 4. There is expectation that the learners will perform the grammatical feature correctly;*
- 5. The learners receive feedback (immediate or delayed) on whether their performance of the grammatical structure is correct or incorrect (Ellis, 2002; Richards, 2002).” (pgs. 123, 124)*

The list sheds a light on the need of controlled, semi-controlled and free activities in order to practice both the structural aspect of language and the fluency and accuracy in spontaneous communication, aspect considered for the implementation of this project.

A key concept in the design of the methodology used for this classroom project is awareness, for Widodo (2006) consciousness-raising, which refers to providing students with tools to understand a specific grammatical feature, assimilating it as declarative knowledge, often applied to drills instead of communicative activities. The latter is the concept given for Widodo (2006) to consciousness-raising; however, for this study the concepts mutates to awareness, which refers to the process of ‘noticing’ a specific grammatical feature, applying it to drilling and carrying out repetition, but being also applied to other types of more communicative activities and tasks, for instance songs, games, rhymes, etc. This concept is linked to what Noonan (2004) argues about the importance of noticing for students, suggesting that explicit knowledge can influence implicit knowledge.

According to Widodo (2006), implicit knowledge is:

“Implicit knowledge is gained in the natural language learning process. It means that a person applies a certain grammatical rule in the same way as a child who acquires her/his first language, but does not have access to an explanation of those rules explicitly” (pg. 125)

Whereas she refers to explicit knowledge as:

“It is conscious knowledge of grammatical rules learned through formal classroom instruction. Explicit knowledge is generally accessible through controlled processing.” (Widodo, 2006, pg.125)

There are supporters for both the implicit grammar instruction and the explicit grammar instruction, making it a controversial topic in ESL and EFL fields. According to Krashen (1987) it is not plausible that explicit instruction and knowledge can become implicit knowledge due to the fact that they locate in different parts of the brain; however there is another point of view that points out that through constant exposure and use of the target language structures, there can actually be an impact from explicit to implicit knowledge.

As a conclusion, helping students notice specific grammatical features can aid their general use of the target language, as it balances the communicative objective that sometimes lacks grammar accuracy, and the completely grammar focused instruction that usually fails to provide useful tools for communication. Implicit instruction, as language acquisition, should be the best approach to instruct learners on the target language; however, explicit instruction and noticing specific grammatical features also aids students in the process of learning a foreign language; they can use the knowledge consciously in their interactions, and this way transport that explicit knowledge into the implicit knowledge area of the brain.

6. Methodology

6.1 Context

The implementation of this project took place in a public school located in Dosquebradas, Risaralda-Colombia. The classes were carried out at “Institución Educativa Fabio Vasquez Botero”. Current references, such as the standards from “El Reto” (Guía 22- *Estándares Básicos de Competencias en Lenguas Extranjeras*), and the information from the in-service teacher were considered when implementing the classes.

This institution is recognized as one of the biggest schools in Dosquebradas with three

Primary and two secondary branches in the city. The school has around 700 hundred students with several groups for each grade; it is also located in a low socio-economic strata area.

6.2 Participants

6.2.1 Learners

The course chosen for the implementation of this classroom project was the 7-B group. The group had a total of 20 students; the student’s age is estimated to vary between 12 and 15 years. Based on the institution's standards, Guía No 22 (*Estándares Básicos de competencias en Lenguas Extranjeras*), and information given by the teacher, the proficiency English level of the students was A2.

6.2.2 Teacher's role

This project was implemented, by three ninth semester students of “Licenciatura en Bilingüismo con Énfasis en Inglés”, a licensure offered by the Universidad Tecnológica de Pereira. The pre-service teachers played the roles of designers and planners as well as observers and implementers depending on the class’ objective. The observer's job was to monitor both student’s and teacher’s roles, attitudes, and reactions along with language proficiency in hopes of obtaining products that would allow reflections about how the classes impacted the students’ English competence development when using multiple senses at the time of practicing new language structures.

The in-service teacher was a woman in her 50’s who held a master in didactics from Universidad de Caldas. The teacher was one of the two English teachers of the Institución Educativa Fabio Vasquez in Dosquebradas. This teacher was also in charge of conducting the English classes in the 8th; 9th, 10th and 11th grades. The in-service teacher’s role during the implementations of the project was to help pre-service teachers in cases of discipline issues.

The implementation of the current project took place once a week every Wednesday during the mornings for one hour from 6:10 A.M to 7:10 A.M. The first session was developed in the third week of September 2016 and the last lesson was applied on the fourth week of October 2016.

6.3 Resources

The physical facilities that the institution had at the time of implementation include a covered multi-use field, a garden, the classrooms, a restaurant and a little park. Additionally, technological devices such as speakers, computers and video beams were also used in the implementations along with flashcards and posters that were designed in consonance with the aim of every lesson.

6.4 Instruments

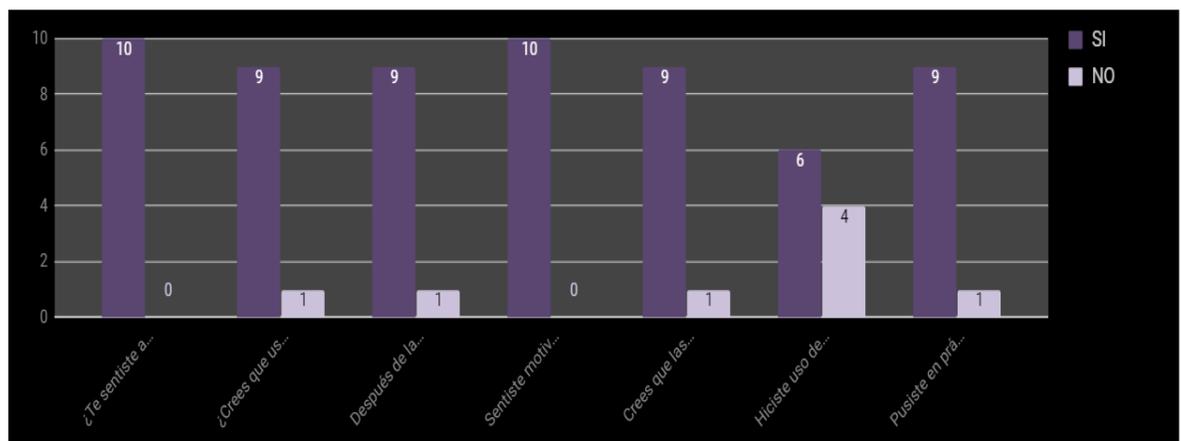
6.4.1 Quizzes

One of the tools that was implemented for testing the students` language use was using quizzes. This was done with the purpose of collecting data, for which written exercises like fill in the gaps, complete and organize sentences were used. Some of the aspects about testing that Cohen, Manion and Morrison (2007) proposed were taken into consideration at the time of designing the quizzes, for instance the objective, the type, the design, the format, the validity and reliability of the quizzes.

6.4.2 Surveys

A written survey was used at the end of the teaching implementations to collect data about specific actions and feelings of students. This instrument allowed direct responses without the risk of feeling intimidated by an interview or similar interaction, thus offering the benefit that anonymity brings, and permitting students to feel more comfortable with being honest. To carry this out, during the last session, the students were asked to complete the survey individually; they were given a format of seven “Yes-No” questions. The questions were designed with the purpose of measuring the degree of student’s motivation regarding participation, use of English and language improvement. The results of the questions mentioned above were analyzed as shown in the following graphic, as can be seen, the students found the methodologies used during their classes to be a welcome change, that assured an increase in overall interest in their English lessons and their involvement within them. (The complete set of questions can be found in Annex #6.)

Figure 3 Classroom Survey Data



6.4.3 Observations

Two general observations of impact were implemented before starting with the project, one was carried out during the first day while the students were having a normal class with the in-service teacher, with an interest of analyzing of students' English proficiency level, the relationship between the in-service teacher and the students as well as the behavior and the classroom environment. This first observation was useful at the moment of planning each class and also when thinking about anticipated challenges in order to consider possible strategies to solve them. The other observation was in the eighth session of the implementations and was done with the purpose of identifying how the multi-sensory activities affected students in different aspects during the learning process; for example, if they successfully remembered the structures when they had the chance to learn them through a different sensorial channel or not. In terms of teaching objectives, the preservice teacher's development was also commented upon.

6.4.4 Reflections

According to Loughran (2010) reflection helps practitioners think about issues and to find alternative solutions to confront those situations so, keeping this in mind, reflections that had a teaching and a learning focus were done after each session. Besides mentioning how the lessons met the objectives or not, what went well, what went wrong, and how the students reacted to the practices done and each stage of the teaching methodology, this instrument also includes students' attitudes, participation, language use, and motivation.

Learners' performance and responses to the quizzes and speaking exercises are also considered here, as well as the external factors from school such as teachers, weather, transportation, etc. The reflections were written at the end of each session in order to be able to remember the relevant information of the class. Nine journals were completed for this classroom project taking into consideration that nine teaching sessions were guided.

7. Instructional Design

7.1 Planning

The main purpose of this classroom projects was to see how multisensory stimuli affects students in the practice portion of an EFL class. Many aspects were considered at the time of planning the implementation of the project.

The PEI (Proyecto Educativo Institucional) was contemplated along with the current syllabus used by the in-service teacher at the time of designing the activities. This was taken into account as well as the learner's background and their language proficiency. In addition, linguistic competences incorporated by “Guía 22: Estándares Básicos De Competencias En Lenguas Extranjeras: Inglés” were included in the lessons, regarding 7th graders competencies.

The planning time of the class procedures was also assigned to preparing the multi-sensory activities for every session, and designing the specific materials that were to be used, for example, images, realia, videos, and objects.

The time in which the classes were going to take place, the first hour in this case, was taken into account in terms of motivation and energy levels, and so as to start the beginning of the sessions with a warm-up activity to wake them up. Multi-sensory activities were a fundamental part at the time of planning the sessions considering that Azmi (2013) stated that integrating multisensory delivery in language teaching has several benefits regarding motivation and autonomous learning.

The planning was done every week, some days in advance of the class so as to have time for preparing the necessary materials. This process was done by both pre-service teachers following the cycle proposed below. For the planning, the reflections made in the previous session were also considered in order to improve and rethink the way the activities and the cycles were being carried out. The estimated time spent for planning each lesson was from 2 to 3 hours once a week depending on the objectives.

7.2 Implementation

To implement the multi-sensory activities and the rest of the procedures that would take place in the class, a specific cycle was followed. It proposed a first stage in which students received input by means of modeling, pictures, flashcards, or in general with materials that showed them what the topic was going to be about, and what they would be asked to perform at the end.

In a second stage the pre-service teachers went deeper into the topic, structures, and vocabulary in order to have students understand and start practicing them. It is important to mention that in this part the goal of the lesson was written on the board for students to know it. During this stage, skills like inference, elicitation, brainstorming, deducing, correlating, and other mental processes that enhance the foreign language learning development were performed. These activities led to the next stage, where through experiential activities and procedures, students got a better understanding and a successful consolidation of the previously presented content, and were asked to practice the new language in a less controlled way. During the last part, students were assessed in terms of understanding, new language usage, grammatically correct structures, fluency and risk taking.

In the next section, how each stage of the methodology was evidenced is briefly explained and the concepts are reviewed in order to show the relevance of each of these in the results.

7.2.1 Lead-in

The input was presented to students indirectly through different resources that aimed

to expose them to the language without having the feeling of a usual class. This part of the class considered what Azmi (2010) suggested about multisensory delivery in EFL classrooms. It is stated in this document that the use of senses include several benefits in the learning process; having this in mind, the topic was presented in an implicit way using flashcards, images, videos, etc, with the purpose of stimulating students' senses and mind.

7.2.2 Awareness

In this part, students were expected to understand the real linguistic purpose of the class through questioning, and further elicitation carried out by the pre-service teachers in order to lead them to deduct what the purposes and objectives of the activities were.

Loughran (2010) states not only the importance of organized procedures but also asking questions and eliciting information from students. Additionally, the aforementioned author mentioned the impact that including questioning procedures in the lesson has at the time of establishing rapport, as students have the opportunity to share who they are with partners and teacher; which enables smoother interaction, a crucial element in lowering their anxiety levels, creating a satisfying classroom experience for all parties involved. The first class was implemented with the aim of being aware of student's preferences with the purpose of collecting information about what they are interested in, in order to build confidence and rapport from the first session.

The learners were asked to participate by saying what they retained from the lead-in in order to build a simple structure sentence which could serve as the linguistic aim. In this section of the class, the students were given instructions more explicitly, showing them the

procedures, and depending on the class objective, the linguistic aspects were noted and mentioned, not as metalinguistic forms to be studied and explicitly handles, but, for example, emphasizing the correct spelling or pronunciation of a specific item when conducting the activities. By these means, students learned the function of the language used instead of the grammatical rule.

7.2.3 Experience

The “Experience” stage aimed to create confidence in students so that they could use the previously learned language along with the new one in activities where they practiced what was being assessed and controlled by the teacher. Here, students had different multisensory stimuli so that they could gain a better understanding through different channels; not only a visual or auditory channels. In general terms, it was more likely that learners internalized a new word if, for instance, they first listened to it, creating an auditive connection, then they saw it, engaging their visual memory, in some very specific vocabulary items like food they could also smell it and touch it, creating an olfactory and sensory channel that would reinforce the first understanding of the word. In the cases in which it was not possible to achieve for instance an olfactory understanding, the words and structures were practiced through TPR activities or tasks that involved moving. This concept is well expressed by Pitts (2012):

“Studies have shown that we rely heavily on our senses to process information when learning, and engaging more than one sense when teaching can help information

processing. Using multiple senses allows more cognitive connections and associations to be made with a concept. This means it is more easily accessible to students as there are more ways the information can be triggered and retrieved from their cognitive learning center.”

Following the previous information mentioned by Pitts (2012), during this stage the pre-service teachers assigned students tasks that involved their senses in order to have them interact with what they were currently learning. They also accompanied them during the process of the task with corrections, new language, doubts and any other needs that they had, so far that in the Assessment stage they were able to produce what they practiced more freely. During the Experience part of the session, multisensory stimuli was included, even when the multisensory materials had already been used in previous stages.

7.2.4 Assessment

Assessing students' performance is always a difficult task that demands a lot of reflection from the implementers, as normal standardized evaluations tend to be unreliable because they do not show students real proficiency, and aspects such as fluency or pronunciation are not usually taken into consideration; for this reason, in the assessment part, students were asked to use language autonomously. They also performed and showcased what they had learnt during the lesson without the help of the teacher. In this stage, the pre-service teachers had the opportunity to verify whether the previous stages had been successful or not, and also to reflect on where the improvement might be done so as to assure better

understanding from students, and therefore, better performance.

This stage was developed using different tasks that allowed the students to use the grammatical structures learnt in activities such as written tests, oral and written descriptions, fill-in the gaps, and written products so as to have reliable data and evidence. Spoken and experiential tasks were carried out too in order to check the other aspects mentioned before.

7.2.5 Ethical considerations

For this classroom project, specific permissions and agreements were needed. One of the most relevant considerations is that this project was the second stage of a previous classroom project called *“Implementation of Multi-sensory Input Activities as an Engaging Supportive Tool to Promote the Development of Vocabulary in English as a Foreign Language in Young Learners”* conducted by Echeverry (2016). This author was formally asked permission to use his classroom project as a base for this second stage. He also consented in our taking some particularly useful sections of his work as theoretical framework as a support for this new project focused on the grammatical aspect of multisensory instruction. It is important to mention that two of the participants of the current project were part of the first stage for a year, something that greatly helped the process of continuation. In addition, a written permission was given and signed by the principal of the institution where this project was implemented.

8. Reflective Stage

This stage of this classroom project consists on looking at the data collected during

the implementation process. Positive and negative aspects regarding the use of Multisensory activities in an EFL class are taken into consideration. Reflective journals and quizzes as well as oral and written activities were used to support the following results.

8.1 Professional growth

During the seven implementations of the classroom project, some aspects regarding English use and classroom management techniques were evidenced as strengths; on the other hand, some challenges were also faced referring to the use of materials and methodology.

8.1.1 Strengths

The use of English in each class was one of the most relevant aspects of this project. Both of the implementers used the target language most of the time while teaching. Since the beginning of the implementations, the students were told that one of the teachers did not speak Spanish, fact that obligated the learners to try to use English every time they wanted to ask or say something to her; for example in eliciting exercises, when they were asked to name the objects they brought to class, or something like an object or action that they felt identified with. The second teacher used both languages (English and Spanish) but mostly English. Spanish was used at certain moments of the class if the students asked for clarifications in order to make sure that they understood instructions or when materials were required as a homework for the next session. During the first two implementations the students asked to use be addressed in Spanish the whole class but then they got used to the dynamic of the class and started to participate using English as well, for instance, from simple things like using “teacher” instead of “profe” to call the pre-service teachers, or when asking

for permission to go to the bathroom, they would say ‘bathroom, go, please’; the same happened when the pre-service teachers demanded for English at the moment of asking or answering questions; they were able to use some words in English from what had been practiced in the class, and from their previous knowledge. It was evident that this strategy worked effectively considering that the learners made use of what they were learning in the exercises proposed. A good example of this change could be observed during the play dough activity, when students were learning the parts of the body. Although some words were easier to understand than others, they could relate the word for each part of the body with the gestures, pictures and examples they received, what showed understanding. They were also able to use some words without translating them, for example, a big percentage of students stopped saying ‘piernas’ or ‘cabeza’ and said ‘legs’ and ‘head’ instead. Moreover, they asked in many opportunities for the way to say common sentences like: “how do you say this or that in English?” or “Could you explain again, please”.

Regarding classroom management, many positive aspects were evidenced as well. On the first class and at the beginning of the second and third classes, there was an agreement about ground rules with the aim of having a good classroom environment. The ground rules were established, explained and shared with the students in the first session. The first five minutes of every class the teachers asked the students to review the ground rules. One of the strategies adopted was having always three happy faces on the board since the beginning of the class; each time they broke a rule, one happy face turned into a sad face; if they had three sad faces, a change in the methodology would be done. Students had already seen the multisensory methodology in the class, so it would be carried out through games, interactions

and movement, but when they completed the three sad faces, a class sitting in rows, “explaining” the topic, filling the board or giving explicit grammar rules would be carried out instead. Just in one class they got two sad faces, however, some of them were always reminding the others that they could not get the three sad faces.

Another important aspect to mention in terms of classroom management is the rapport that was established between the teachers and the students, which was always included as an aim in each of the lesson plans. Rapport played a significant role in the implementation of this project having in mind that the multisensory activities required a good classroom environment as they were usually carried out in groups or in a round table, and often required the students to move, interact, talk, and handle objects, situations that might easily be a cause of disruptive behavior, and through which the multisensory activities could have not been done; thus, by establishing rapport and a good class environment with the students, activities that might have left place for misbehavior could be done successfully.

8.1.2 Challenges

During the implementation of the multisensory activities in the class, one of the most remarkable challenges was the use of the material. In order to develop the multisensory activities, some materials were required in each class, but most of the times students did not bring their materials and the pre-service teachers had to look for different ways to carry out the activities. One example of this was evidenced during the 3rd class, where the pre-service teachers at the time of reflecting on the class, mention the following

“For this session, the students were asked to bring an object they felt

identified with in order to teach them how to express what they plan to be in the future, but the main obstacle was the lack of objects from students, who did not bring their object; this was a big percentage of students (only 3 students from about 18 brought it), fact that impeded to carry out the outdoor activity.”

This was also evidenced in the 4th class when a play dough activity was going to be carried out:

“In the previous session, the students were asked to bring Play dough to the class. Some of the groups did not bring the material but the teachers thought about this as an anticipated problem and some play dough was brought to the class for the groups that had no material.”

As observed here, the pre-service teachers anticipated the problem with the materials by the second time they asked students to bring them, and they could manage the situation by providing them with the necessary materials. At the end of the implementations, even though getting students' to bring the material was sometimes difficult, the pre-service teachers learnt how to deal with this situation and provided students with alternatives so the activities could be carried out successfully.

Another important obstacle to mention is the language proficiency level of the students, and the previous knowledge they were supposed to have. This was found as an obstacle, at the beginning , when talking to the in-service teacher, who assured that they had previous knowledge about different content, but at the time of eliciting and testing student's

proficiency, they showed a notorious lack of understanding and use of basic structures as verb to-be, introducing themselves, answering to simple commands or expressions like ‘How are you?’ and knowledge of classroom vocabulary like ‘notebook’ ‘pencil’, etc.; fact that was evidenced during the classes when students were not able to follow instructions or understand what was being said. The pre-service teachers documented this situation in their reflective journals. Some excerpts are shown below:

“When they were asked to create one similar sentence by themselves, some of them showed to have problems of understanding of instructions and production by saying things like “soccer, play soccer” instead of “I like soccer, I am going to be a soccer player” or “I am going to play soccer”. In general, the order and structure of the future was mistaken.”

“The second stage was to say what they would like to learn in these classes with the pre-service teachers, instruction they could not understand very well as nobody answered and simply looked at each other for a response or help.”

This challenge was mostly evidenced at the beginning of the implementations, when the pre-service teachers were still profiling the students’ language proficiency. When it was clear that they did not know what they were supposed to know, some strategies and language use in the class was modified in order to fit the students’ needs, for example, the use of true cognates (words that sound and mean the same in both languages) to help students understand

what was being said, a big amount of gestures and body language was also used, visual aids when possible in order to support the spoken language, and a change in the register to make language easier for students.

8.2 Students Responses

This section of the project covers two relevant aspects in relation with the learning process, one of them are the strengths, specifically of the multisensory methodology used and the motivation of the students, on the other hand, the main challenge faced in terms of learning was the student's perception towards English and the English class.

8.2.1 Strengths

In relation with the learning process, this project aimed at using alternative practices different from writing on the board, or the Grammar Translation method in order to teach new structures and vocabulary. In the project, the senses were included with the purpose of having the students interact with the practical and sensorial use of language. For that reason we used strategies as for instance touching an object that was being described, smelling it, or using it at the time of learning its name in English. One of the activities, for instance, was about creating a new "Pokémon" using modeling clay in order to describe each part of the creature in terms of physical appearance and abilities.

In this activity the students had the opportunity to make use of some senses like touch, sight, and hearing, to learn basic grammar structures such as "it has four eyes or it can fly". The final linguistic result of this exercise was to be able to present the new Pokémon in a

short oral presentation in front of the class. This activity had positive results since the learners were actually looking, touching and feeling their Pokémon at the moment of the presentations which meant they were using their senses at the moment of using English. They finished the activity successfully, demonstrating that they could produce the basic grammar sentences such as “This is my Pokémon, its name is Pikadroll”, “It has three legs and two eyes”, and “It has a big tail”

We could also observe that applying a multi-sensory methodology brings many benefits in terms of motivation since it was evident during the sessions that the students could change some of the aspects of the paradigms of traditional learning and teaching such as sitting in rows all the time and just using their notebook) while the teachers relied basically on the use of the board. During the implementations, a learner- centered approach was used all the time considering that the students’ needs were always taken into account. From the beginning of course the students were asked to say what they wanted to learn during the classes, their ideas were considered at the time of planning the classes. In the same sense, the student’s role was of active participation in the sessions. Motivation was evidenced in their attitude and interest while developing the multisensory activities; while developing an activity in which they were asked to bring an object to class to identify in the future, (something they could see, touch and smell) with the grammatical purpose of using “I am going to be”, “he/she is going to be” and “you/we/they are going to be”, the whole class participated actively in an oral exercise. Every time one of the students made a mistake, the teacher asked him/her to say the sentence again in order to correct the mistake.

Additionally, in the survey applied at the end of the whole implementation of the

project, in the last class, 10 students were asked to answer questions in their mother tongue, about how Multi-Sensory classes influenced their English learning process. Questions like: “¿Crees que usar tus sentidos te ayudó a aprender más fácil”, “¿Sentiste motivación por participar en las clases” and “¿Después de las clases sientes que tu nivel de inglés es mejor?” were answered affirmatively for all the students interviewed which shows that they have a positive perception towards the learning process they were guided through during this classroom project implementations, fact that is helpful in the teaching development growth of the implementers.

8.2.2 Challenges

One of the aspects regarding learning challenges was the students’ perception towards English at the beginning of the course. The fact that the teachers did not use Spanish during the classes was a difficult factor for the learners to assimilate as it wasn’t usual for them to take a class completely in English. This was evidenced in the class observation made before carrying out the project. One of the ground rules established since the very beginning of the implementations, was the mandatory use of the target language during the whole class. When the class conditions were set, the students made comments like “Qué pasa si no sabemos hablar en inglés” or “Es que nosotros sólo sabemos decir hello”. The pre-service teachers clarified that they were going to learn how to ask for different things. This specific challenge was positive for the learners since it was possible to change the paradigm that the English class is in both mother tongue and the target language, and that it was not possible to understand the teachers when talking completely in English.

9. Conclusion

Throughout the whole of this project many questions were raised regarding the utility and actual applicability of multisensory instruction to practice simple grammatical structures. This was due to the fact that successful multisensory activities are elaborate to plan and if not executed carefully can lead to disarray in the classroom. In this particular case, it was found that the application of multisensory grammar instruction did in fact aid in the enhancement of motivation at the time of engaging in an English lesson at the Institución Educativa Fabio Vasquez Botero. It was found that through the application of multi-sensory activities students were able to retain language, and use it more functionally during the practice activities, and that this caused a positive effect in terms of their level of participation and interaction with others, and thus, in their learning process.

During the first classes of the implementation many of the student's felt uneasy with the usage of English by the teachers, (and their own perceived lack of knowledge) yet, by the end of the pre-service teachers' involvement with this group, many students felt more confident and more connected with the classes. The usage of multiple sensory channels allowed them, and the teachers, to create a space for understanding through association.

The implementation of this project shed a light on how multi-sensory activities to practice basic English structures can foster motivation in students and help teachers create rapport with the group, a reaction that was evidenced as students showed some reluctance towards the pre-service teachers during the first classes, but with the passing of the sessions students participated more freely and were more willing to take risks at the time of speaking.

Changing the educational environment from known procedures and practices, to more dynamic, engaging and active activities, offered students different possibilities to internalize the structures and sequences of the basic grammar of English. Innovative procedures also had a downside in the sessions regarding discipline, as students were engaged and motivated, they tended to be noisier, which added some difficulty at the time of developing the activities, and demanded more control from the teachers. Although implementing multi-sensory activities had benefits and challenges, it presented itself as a motivating, effective and fun methodology to teach students a foreign language.

References

- Azmi, N. (2014). Multi-Sensory Delivery in EFL ‘Smart’ Classrooms: Students’ Perceptions of Benefits, Limitations and Challenges. *Journal Of Educational And Social Research*, Vol. 3, 33-41.
- Bonilla Carvajal, C. A. (2013) "Grammar-Translation Method": A linguistic historic error of perspective: Origins, dynamics and inconsistencies. *Praxis & Saber*, 4(8) ISSN-e 2216-0159
- Bright Solutions for Dyslexia, Inc. (2014). Bright Solutions | How to Get Help. Dys-add.com. Retrieved 27 November 2017, from <http://www.dys-add.com/getHelp.html#anchorReading>
- Crookes, G. and Schmidt, R. (1991) Motivation: Reopening the research agenda. *Language Learning, a Journal of Research in Language Study*, December 1991, Vol.41, (4), pp. 469-512.
- Criado, R (2013) A critical review of the Presentation-Practice-Production Model (PPP) in Foreign Language Teaching. In R Monroy (Ed) *Homenaje a Francisco Gutierrez Díaz*. (pp. 97-115)
- Cohen, L., Manion, L., and Morrison, K. (2007) *Research Methods and Education*, Ed 6. Taylor & Francis e-Library, 200, NY.
- Dale, E. (2017). Dale's Pyramid. Retrieved from <http://acrlog.org/wp-content/uploads/2014/01/learningpyramid4.jpg>

- Gagné, M. and Deci, E. (2005) Self Determination Theory and work motivation. *Journal of Organizational Behaviour*, June 2005, Vol.26 (4), pp. 331-362. John Wiley & Sons, Ltd.
- Gómez Gómez, M. (2012). Aulas multisensoriales en educación especial. México, D.F.: LIMUSA.
- Human Sensory Reception. (2008). Encyclopedia Britannica. Retrieved 20 October 2017, from <https://www.britannica.com/science/human-sensory-reception>
- Hinkel and Fotos (2008) New Perspectives on Grammar Teaching in Second Language Classrooms. From Theory to Practice: A Teacher's View. Lawrence Erlbaum Associates
- Krashen, S. (1987). Applications of psycholinguistic research to the classroom. In M. Long & J. Richards (Eds.), *Methodology in TESOL* (pp. 33-44). New Jersey: Heinle & Heinle Publishers.
- Letrud, K., & Hernes, S. (2015). The diffusion of the learning pyramid myths in academia: an exploratory study. *Journal Of Curriculum Studies*, 48(3), 291-302. <http://dx.doi.org/10.1080/00220272.2015.1088063>
- Loughran J. (2010) Reflection through Collaborative Action Research and Inquiry. In: Lyons N. (eds) *Handbook of Reflection and Reflective Inquiry*. Springer, Boston, MA.
- Maurais, J. (2003). Towards a new global linguistic order? In J. Maurais & M. Morris (Eds.), *Languages in a globalizing world* (pp. 13-36). Cambridge: Cambridge University Press.

- Ministerio De Educación De Colombia. (2006). El Reto: lo que necesitamos saber Y saber hacer (pp. 7- 40). Bogotá, Colombia: Imprenta Nacional.
- MONTESSORI FAQ's. (2017). Montessori.edu. Retrieved 27 November 2017, from <http://montessori.edu/FAQMontessori.html>
- Mousavi, S., Low, R., & Sweller, J. (1995). Reducing cognitive load by mixing auditory And visual presentation modes. *Journal of Educational Psychology*, 87(2), 319-334. <http://dx.doi.org/10.1037//0022-0663.87.2.319>
- Newell, F., Bühlhoff, H. H., & Ernst, M. O. (2003). Cross-modal perception of actively Explored objects. In H. S. Oakley & S. O'Modhrain (Eds.), *Proceedings EuroHaptics 2003* (pp. 291-299). Dublin, Ireland: Trinity College Dublin.
- Oxford R. (1999) *New Pathways of Language Learning Motivation*. Language Learning Motivation: Pathways to the New Century. O Second Language Teaching & Curriculum Center, Hawai'i.
- Oxford, R., & Shearin, J. (1994). Language Learning Motivation: Expanding the Theoretical Framework. *Modern Language Journal*, 78
- Pitts, A. (2012). Learning Is Multi-Sensory: How to Engage All the Senses So Children Really Benefit - How to Learn | Powerful strategies to master any new skill or subject. How to Learn | Powerful strategies to master any new skill or subject. Retrieved 27 November 2017, from <https://www.howtolearn.com/2012/12/learning-is-multi-sensory-how-to-engage-all-the-senses-so-children-really-benefit/>

- Singh, N. J., K. Danell, L. Edenius, and G. Ericsson. 2014. Tackling the motivation
To monitor: success and sustainability of a participatory monitoring program.
Ecology and Society **19**(4): 7. <http://dx.doi.org/10.5751/ES-06665-190407>
- Situación de la Infancia. (2017). Unicef.org.co. Retrieved 27 November 2017, from
<https://unicef.org.co/situacion-de-infancia>
- Skehan, P. (1998). Task-Based Instruction. *Annual Review Of Applied Linguistics*, 18,
268-286. <http://dx.doi.org/10.1017/s0267190500003585>
- Ur, P. (2009). TEACHING GRAMMAR: RESEARCH, THEORY AND PRACTICE.
Presentation, University Of Vienna.
- Widodo H., (2006) “Approaches and procedures for teaching grammar English teaching”,
Practice and Critique, May 2006, Vol.5 (1), pp. 122-141, (retrieved from
<http://education.waikato.ac.nz/research/files/etpc/2006v5n1nar1.pdf> pp. 122-141).
- Webb, N. and Barrett, L. (2014) Instructor-Student Rapport in Taiwan ESL Classrooms.
Teaching Learning Inquiry, the ISSOTL Journal, May 2014, Vol.14 (2), pp 14-28.
Indiana University.