

GUIDED DISCOVERY FOR VOCABULARY ACQUISITION

Using guided discovery to implement project-based learning for the acquisition of vocabulary in
ninth graders at a public school in Bogota (Colombia)

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Abstract

The purpose of this study was to observe if there were effects on the vocabulary acquisition process of some students, through the implementation of project-based tasks approach by the use of the learning strategy called Guided Discovery. In accordance with the previous purpose, 28 ninth graders of a public school in Bogotá (Colombia) were the participants of this study. Due to its characteristics the current study may be enclosed in the field of Action research since it let detect a real classroom problem to be solved in order to improve students' English learning process. The pedagogical intervention had three moments: pre, while and post implementation and the second one consisted on three cycles which corresponded to the same number of topics selected because of the interest they awoke on students. Vocabulary pre and post-tests, pre and post-questionnaires, eight teacher's journals and students' artefacts were utilized as instruments to collect data. Findings of this study revealed that students' vocabulary acquisition increased with the use of Guided Discovery approach, taking into account that high frequency and exposure to vocabulary are necessary. Additionally, that strategy combined with project-based tasks approach led learners to be self-regulated, more engaged, and more motivated with their English learning process, since they were aware of the impact high English proficiency may have on their personal and professional future.

Key words: guided discovery; vocabulary acquisition; project-based task; self-regulation.

Resumen

Este estudio tuvo como propósito principal observar si había efectos sobre el proceso de adquisición de vocabulario de algunos estudiantes, a través de la implementación del método de tareas basadas en proyectos por medio de la estrategia de Descubrimiento guiado. De acuerdo a este propósito, 28 estudiantes de noveno grado de un colegio oficial en Bogotá (Colombia) fueron escogidos para participar en la intervención pedagógica. El tipo de estudio utilizado aquí fue el de Investigación Acción, ya que permite detectar un problema real en el aula para ser resuelto y mejorar el proceso de aprendizaje del inglés de los estudiantes. La intervención pedagógica tuvo tres momentos: antes, mientras y después de la implementación y durante ella hubo tres ciclos correspondientes a la misma cantidad de temas que fueron seleccionados de acuerdo al interés que ellos despertaban en los estudiantes. Pruebas de vocabulario y cuestionarios aplicados antes y después de la implementación, diarios de campo de la profesora y productos de los estudiantes fueron utilizados como instrumentos para recoger datos. Los hallazgos de este estudio revelaron que la adquisición de vocabulario de los estudiantes se incrementó con el uso del método de Descubrimiento Guiado, teniendo en cuenta que la alta frecuencia y exposición al vocabulario son necesarias. Adicionalmente, Guided Discovery combinado con tareas basadas en proyecto llevó a los aprendices a ser auto-regulados, a estar más comprometidos y más motivados con su proceso de aprendizaje de inglés, ya que fueron concientes del impacto que un alto dominio del inglés puede tener en su futuro personal y profesional.

Palabras clave: descubrimiento guiado; adquisición de vocabulario; aprendizaje basado en proyectos.

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Chapter 1: Introduction

1.1 Introduction to the study

The lack of vocabulary is one of the most relevant aspects involved in the second language learning process because students are not able to establish any kind of communication when it is not possible to comprehend and / or express their ideas. Even more, vocabulary is the means necessary to develop all the language skills and generate any kind of output. As (Wilkins, 1972) declares,

There is not much value in being able to produce grammatical sentences if one has not got the vocabulary that is needed to convey what one wishes to say [...] While without grammar very little can be conveyed, without vocabulary nothing can be conveyed (pp. 110-111).

Learners often express their scare when they try to answer any simple question or state their opinion because they affirm not to know the words to do it (Wallace, 1982) and this fact leads to a feeling of embarrassment which goes along with the choice of being in silence. It is at this point where the teacher has to intervene as a facilitator, encouraging students to take risks and make efforts to discuss, argument and support ideas (Halx & Reybold, 2006) giving basic tools which enrich their vocabulary and enable them to communicate.

Students' behaviour observed during seven years of experience as an English teacher at a public school, added to some answers provided by ninth graders through a brief test, pointed the way to find out a lack of students' vocabulary set management which leads them to feed feeling of insecurity towards their English learning process since vocabulary learning is a complex task both for teachers and students (Wilkins, 1972).

That is the reason why this present study was based on the use of Guided Discovery approach implementing several Project-based Tasks which engaged students and awakened their interests while looking for an increase of their vocabulary set within an overall communicative benefit.

The following section will be initiated by the information which supports the fact of having selected Guided Discovery to implement Project Based Tasks for English vocabulary learning as the main constructs, which afterwards will be developed with their corresponding state of the art. Next, it will be determined the research design, its instruments, its pedagogical intervention, the implementation, the results, and the analysis and conclusions.

1.2 Rationale of the study

1.2.1 Needs analysis and problem statement

After seven years of being working at the same public school, different English learning obstacles had been perceived in students. Then, this research was conducted in a group of ninth graders from that public school in Bogotá, and it could be possible to identify different difficulties in their English learning process too. At the beginning it was assumed those difficulties were linked to a lack of critical thinking skills, and in order to confirm this pre-assumption a nine-question questionnaire based on a reading about hooligans was applied (see appendix A). The results suggested that students had had some difficulties answering it. Through a short and informal conversation, they manifested different troubles in their second language learning process which were more related to the English language abilities and grammar. However, they referred to lack of vocabulary as their biggest trouble, since it became a high obstacle to overcome the accomplishment of most of the tasks proposed during the English lessons. Consequently, to confirm these students' preliminary perceptions, a five-question survey about vocabulary (see appendix B) and a gap-fill activity about sports vocabulary (see appendix

C) were used not as instruments but as a support to make the decision of selecting vocabulary learning process as one of the focus of this research.

These need analysis questionnaires and activities based on vocabulary unveiled different problems in students' foreign language learning process, since they mostly expressed feeling scared in the moment of expressing orally any idea and being completely lost when writing paragraphs, because they established as a big difficulty their general lack of vocabulary, which made them feel little confident and insecure.

1.2.2 Justification of problem's significance

This research is focused on acquisition of vocabulary in order to give students a basis that may support their communication process with a large vocabulary set that enables them to perform in a foreign language, since learning vocabulary is challenging for a second language learner because of the need of accurate connections between form and meaning. Similarly, it is fundamental for the learner to obtain a significative amount of words which provide opportunities to comprehend the language and produce, be able to recall them when necessary, and acquire strategies for coping with gaps in word knowledge (Thornbury, 2002). Even more, managing a good set of vocabulary comprises different knowledge as meaning, pronunciation, spelling, use in communication and the diverse grammatical functions a word may have. As this becomes a complex task, the teaching of lexis must be presented to learners in a meaningful, useful and scaffolded way. Vocabulary turns into a basic function for learners, and that is the reason why without a range of English vocabulary, it is not possible to acquire a good command of the language (Jianmin, 2003).

1.2.3 Strategy selected to address the problem

As previous learners' observation and the needs analysis indicated deficiency in different essential aspects in English as a foreign language (EFL), specifically in vocabulary acquisition, it was

crucial to adopt a strategy that promoted different attitudes on students, necessary to get successful results in a foreign language learning process. The approach selected for this research was project-based tasks due to the fact that it tends to help students learn by leading them to increase their motivation, engagement and thought (Blumenfeld et al., 1991). This approach fitted perfectly because it is an instructional strategy which fosters students' collaborative work. They could create final products while engaging around a challenging specific topic assignment and looking for an outcome that approaches a meaningful result. Additionally, it comprised three learning cycles related to three topics selected to work on: horror, bullying and superheroes. They enabled students to work following different tasks sequences, looking for self-regulation and problem-solving attitudes (Prince & Felder, 2006).

In conjunction with Project-based Tasks, Guided Discovery seemed to be an appropriate approach to complement the vocabulary instruction process because it consisted on lessons prepared considering topics that were interesting for students. The lessons fostered students' comprehension, manipulation, production and interaction while there was a simple use of language (David Nunan, 2004) and acquisition of new vocabulary, looking for English communication among students and English proficiency increase. This strategy manages an inductive method which leads students in a scaffolding process to promote critical thinking. Ausubel (1961) declared it as a remarkable tool to solve problems in an effective manner, teach the scientific method, enrich the retention and transfer of meaningful learning.

1.3 Research question(s) and objective(s)

The study objective was to characterize the effects that the use of guided discovery framed in a project-based learning approach could potentially have on the acquisition of vocabulary of ninth graders at a public school. Students had a pre-A1 level in their English proficiency determined because of the

characteristics students demonstrate in their English performance, since they are able to understand daily expressions and use simple statements corresponding to specific needs in social life, they can talk about personal information about themselves and others, they are able to participate in very simple conversations using simple statements and using sometimes their mother tongue. The corresponding research question was: How does using guided discovery to implement project-based tasks affect the acquisition of vocabulary among ninth-graders at a public school in Bogota (Colombia)?

1.4 Conclusion

Giving learners an appropriate guide during the process of acquiring new vocabulary and supplying them with different opportunities to work in a collaborative way around a challenging assignment to make deductions and look for support by themselves in the pursuit of a final outcome, is a process that highlights the importance of vocabulary acquisition as a strong ability necessary to start the development of other English skills and effective communication in a second language. Three important elements were considered in this study: the acquisition of vocabulary, guided discovery strategy and project-based tasks approach as the main constructs to influence the manner to teach vocabulary.

Chapter 2: Literature Review

2.1 Introduction

This chapter provides a comprehensive literature review related to the constructs underpinning the vocabulary acquisition problem previously introduced. First of all, there is a definition and establishment of important aspects in vocabulary acquisition which are necessary to take into account in the search of its enhancement; the lack of vocabulary is a pertinent issue inside the second language learning process because based on Lewis, (1993) to have the competence of understanding and producing lexical phrases are an essential element of language acquisition since without them any kind of communication is not possible. Vocabulary is the means to develop all the languages skills and learners' output. Secondly, there is an approach to guided discovery strategy which fosters a deductive and inductive process on learners and facilitates the learners' comprehension and acquisition (C. Silver, Duncan, & Chinn, 2006). Finally, the chapter contains the approach and benefits of project-based learning which entail student centeredness and the promotion of essential collaborative and autonomous actions in their learning process (Kaldi, Filippatou, & Govaris, 2010).

2.2 Theoretical framework

2.2.1 Vocabulary acquisition

Vocabulary is a vital aspect in the process of a foreign language acquisition (Lewis, 1993) because it empowers a real successful communication. Without a satisfactory set of vocabulary, learners are not able to communicate their ideas or understand others (Lessard-Clouston, 2012). At schools it can be observed that young learners' English output is usually low because they do not possess a minimum set of words neither to establish communication (oral and written) nor to understand messages or ideas (either through listening or reading). Even more, that fact leads students to a sense of insecurity and a loss of interest in learning a second language (Blumenfeld et al., 1991). Teachers usually declare

students do not manage the vocabulary given in class because erroneously, they think this process simply consists in working with lists of words (Asyiah, 2017). Milton (2009) states that in previous English teaching and learning literature, vocabulary does not receive enough attention basically due to three reasons: highly pervasive approaches to language teaching, teachers' believe based on the possibility to become highly proficient in a foreign language with a very limited vocabulary, and the belief that incidental vocabulary is enough to manage a foreign language. Different to these affirmations, EFL lessons have demonstrated that vocabulary learning is a need which requires more attention since it is a sub-goal to complement the array of goals established in English language learning (Nation, 2001). It is important to bear in mind that we have incidental vocabulary learning which happens during an EFL lesson as the process of learning something during the act of learning another (Richards & Schmidt, 2002), and the intentional one when learning vocabulary is the pre-established lesson goal that leads to a high retention and production (Richards & Schmidt, 2002).

Additionally, to approach to the field of vocabulary in a text, it is also necessary to refer to classes of words, concept of vocabulary and its types. About the first aspect, four kinds of words are essential to be highlighted: high-frequency, academic, technical and low-frequency words (Nation, 2001). Thus, it is important for the teacher to handle these types of words before reading in order to get positive results in while and post-reading phases.

To continue with the concept of vocabulary we need to understand that it is not just formed by a cluster of words, but through the gathering of lexical chunks, phrases of two or more words learnt as single lexical units called formulaic sequences which are fundamental to reach a way of communication. Therefore, this results in a complex area for language teachers to draw their attention to as they teach vocabulary (Cameron, 2001; Schmitt, 2004).

Another matter of contention to take into consideration is the two classes of vocabulary learners can have: a productive or active (to use) and a receptive or passive (to understand). Regardless the language being acquired, in the early language development stages, learners are often able to understand more than they can produce (Melka, 1997).

2.2.2 Guided Discovery for Language Instruction

Guided discovery comes from the constructivist school of thought and merges the interest in what it takes to learn and the way to do it. That is why it can be established as an approach because of the conceptions in learning and teaching processes (Steffe & Gale, 1995; Marshall, 1996; Phillips, 1998). In the 1960s Bruner (1961) started approaching to discovery methods and described them as a way in which the learner is prompted to find rules and connect ideas rather than to memorize the information given. Since then, various forms of discovery methods appeared based on the solutions of the problem without help from the teacher or just with a little of assistance using some clues, direction, feedback, and sometimes modelling (Mayer, 2004).

Guided Discovery is a mix of deductive and inductive approaches to be used in different settings and contexts in order to approach to several levels and sets of language. Its most important characteristic is the necessary scaffolding process directed to students in all the written materials they receive, the interaction process among the students, and that interaction among students and teacher (C. Silver et al., 2006).

In the development of Guided Discovery approach, it is essential to take into account different steps (Gerver & Sgroi, 2003), that include:

- a) Select the content according to the level, age, context and other important characteristics, valid and meaningful in the teaching-learning process.
- b) State the aim and objectives of the lesson.

- c) Identify the prior knowledge and skills students need to solve different situations and produce different projects according to the objective.
- d) Set up a graphic organizer to make an outline and the flow of the lesson. This method is very useful to organize the most appropriate way to design the lesson.
- e) Write the lesson considering to intrigue students, waking up their curiosity and establishing a kind of mystery to be solved by them. The lesson also must be provoking, challenging, clear and creative.
- f) Use a naïve proof-reader to help teachers establish unclear instructions or mistakes.
- g) Write a follow-up activity to foster interest on students knowing they will be held accountable for the lesson concepts.
- h) Test and revise after the lesson has finished to write down what worked, what didn't and the arrangement to do for the next lesson to make it better, deeper and funnier.

2.2.3 Project-based learning

Project-based learning (PBL) approach has usually had an important role in teaching English as a foreign and second language because it brings different advantages, such as the use of a natural learning, the importance of meaning over form, the richness input students get on language issues, the great motivation it creates and the fluency it provides as a result of communication encouragement on students (Rod Ellis, 2009). It is composed in general by work held in the classroom which demands learners to comprehend, work with the information, and elaborate further through interaction and language use. Here the important issue is meaning not form (David Nunan, 2004), and the easy way to promote on students the use of different skills which finally results in a progressive teaching on how to think critically.

As PBL is a branch derived from the constructivism school, it leads students to work in real environments, deepening their understanding through problems which are meaningful for them for being

under their interests. They get engaged to construct their learning proposing questions and looking for their solutions, investigating new information, supporting their ideas and debating with others. This process is guided by the teachers who have the roles of coaches while the students practice some problem solving, and collaborative skills (Barrows, 1988). A classroom with project-based learning must be positive in terms of solving questions, giving the chance of exploration, working collaborately among students, teachers and even community if it is possible, and the production of different products which show the driving question (Krajcik & Blumenfeld, 2006).

This approach is an important element in research because it leads to a scaffolded students' learning process going beyond the current knowledge. That is very necessary in Colombian high school population who seem to lack motivation and participation in their learning process.

2.3 State of the art

2.3.1 Previous research on Vocabulary Acquisition

Vocabulary acquisition has always been a crucial factor to be considered in research, since it is a constant problem that students express to have and which becomes a barrier in the English skills development such as speaking and written production and listening and reading comprehension.

There have been several research studies focused on the acquisition of vocabulary through different means. Below there will be mentioned some of the most recent studies results related to this important issue, having in mind that they were selected due to the interesting strategies utilized to foster vocabulary acquisition and the results obtained, since they help researcher conceive a better manner to plan the research stages.

For instance, in “Spacing effects in vocabulary learning: Young EFL learners in focus” Lotfolahi & Salehi state that using spacing and retrieval practice techniques (with corrective feedback) offer a pedagogically powerful approach for learning vocabulary (Lotfolahi & Salehi, 2017). There were two different sets for studying new vocabulary: under massed or under spaced conditions. In the first state, learners had the possibility to study five-word pairs in session one and five-other word pairs a week after. In the second condition, 10-word pairs were studied in session one and restudied a week later. At the end of the study it was possible to perceive that spaced practice led to better long-term retention than massed practice.

Chou in his study “Assessing English vocabulary and enhancing young English as a Foreign Language (EFL) learners’ motivation through games, songs, and stories” affirmed that the use of those resources obtained an increasing on students’ English vocabulary. To establish this conclusion, five international festivals were selected to be taught during the English lessons. Each festival had its own story telling session including related vocabulary, a teacher’s presentation on vocabulary and marker sentences, three adapted games (monopoly, twister and crosswords) and associated songs which were sung and danced by learners. Results revealed that those strategies obtained positive effects because they increased students’ English vocabulary. They took a vocabulary test, and the ones in higher grades outperformed those in lower grades (Chou, 2014).

Kim’s research study focused on 262 kinder garden students demonstrated that multiple cognitive and language skills were related to vocabulary. Besides, results also indicated that although working memory is important, contributions of other language and cognitive skills should be considered in vocabulary acquisition (Kim, 2017).

In the same year, a study based on word learning during reading was carried out and demonstrated that there were some meaningful gains in acquiring vocabulary through reading. However,

the process of word learning can be similar for children with different language skill levels (Hill, Wagovich, & Manfra, 2017).

Finally, it was interesting to read about a study which worked on word meaning and fostering on learner word form practice. Its findings revealed that writing the words led to more benefits for initial word learning than meaning inferencing in a contextual word – learning situation (Candry, Elgort, Deconinck, & Eyckmans, 2017).

2.3.2 Previous research on Guided Discovery

Guided Discovery methodology has been continuously named in education research because it is declared to bring several benefits such as enhancing the process of memory, increasing the intellectual potency and motivation, and teaching students how to learn (Bruner, 1961); this process gives a deeper focus on the structures of knowledge rather than on the knowledge of facts and specific information (Anastasiow, 1967). These are aspects that need to be reached under the focus of learning improvement.

Some studies have argued that Guided Discovery approach makes teachers able to teach students how to be creative by giving them specific interesting topics (Barry & King, 1998) which make learners to think more, use their reason (Rowe, 2004) and drive them to observe the environment they are surrounded by in order to conceive opinions (Treffinger, 1980).

Guided Discovery started in the field of Medicine, where also there was a common use of questions as the centre of the learning process. The type of question used was opened and closed, clarifying, probing, and challenging ones (Todd & Freshwater, 1999). Despite the area of knowledge is different (chemistry, medicine, biology) the results are very useful because they show positive advances in learning and internalizing different concepts of those areas (Balasubramaniam, 2015; Carneiro, Parulekar, Shridhar, & Ladage, 2016).

Some researchers state that Guided Discovery, as the act of discovering concepts and processes, which requires high structure and guidance in order to get benefits in learning (Tuovinen & Sweller, 1999); others state it tends to be more efficient when it is necessary for students to master complex rules and principles but more effective to look for teachers' than students' behaviour change (Anastasiow, Sibley, Leonhardt, & Borich, 1970).

Other studies have concentrated on solving different problems in learning a second language such as reading in which its proficiency improved by a guided reading process (Massengill, 2004) and demonstrating that word recognition has a highlighted role in influencing all the skills in English learning (Stanovich, 1986).

Guided Discovery seems to be an excellent approach to promote constructivist learning; however, as there is not enough evidence of this, that is why its implementation constitutes a challenge in terms of knowing the way and the amount of guidance students need. It can foster autonomy and critical thinking and improve English proficiency, but requires focus on the teachers' guidance (Mayer, 2004).

2.3.3 Previous research on use of project-based tasks

Different studies have approximated to education through Project-Based Tasks, focusing first on different areas such as, Chemistry, Earth Science and Biology in which different strategies were developed to foster learning (Krajcik & Blumenfeld, 2006). After, several project-based tasks environments were designed to develop curriculum, materials and teacher training looking for the transformation of teaching according to the principles of this approach. For instance, the constructivist model is used in this approach because it has been found that students get deep understanding when they are the ones who build it acquiring content knowledge and group work skills (Kaldi, Filippatou, &

Govaris, 2010). In project-based learning, students engage in real meaningful problems that are important to them and similar to what scientists, mathematicians, writers, and historians do.

A project-based classroom allows students to investigate questions, propose hypotheses and explanations, discuss or challenge their ideas with others, and try out new ones. Research has demonstrated that students involved in project-based learning get higher scores than students in traditional classrooms.

Boubouka & Papanikolaou made the research study “Promoting Collaboration in a Project-Based E-Learning Context” in which some collaborative scripts were created in order to promote metacognitive knowledge in a project-based context. It was very interesting since students received sets of individual and collaborative activities with the purpose of fostering reflective thinking. In addition, researchers emphasized the increasing in metacognitive knowledge regarding project phases, students’ roles undertaken by their own, types of interactions, activities and products, and activity sequencing (Boubouka & Papanikolaou, 2010). This research study provided different ideas for the constructions of activities and the setting of research purposes of the current investigation.

The research study “Use of Project-Based Learning in Increasing Students' Vocabulary Knowledge & Communicative Ability” carried out in Iran was interesting since students learnt new vocabulary by the use of different resources such as newspapers, games, diaries and were able to write an article. The results were very positive since there was an increase in students’ vocabulary knowledge and in their communication ability (Shafaei, Poorverdi, & Parvizi, 2007).

In addition, a local research done at a public school in Boyacá (Colombia), reported a lack of motivation to learn English because students did not consider it necessary. After the use of PBL it was possible to conclude several asseverations: an increasing in the English skills and in some important values, students’ motivation increase for working in topics related to their context, the ability to recall

related vocabulary because of their involvement in pedagogical activities and finally, the strengthening of the relationship between students and teacher thanks to the use of mini-projects (Castañeda, 2014).

Also, there have been some pedagogical interventions in Bogotá (Colombia) as the one made at Universidad Minuto de Dios, which had some effects on the students, the teaching practices, and EFL learning. It was possible to perceive an increase of learners' class participation and on their ability to make decisions and work in a collaborative way (Vargas, 2012).

2.3.4 Justification of research question/objectives

The studies examined above have shown the importance and use of Project-based Tasks and Guided Discovery in different areas and in the second language learning. However, they have not been reported on the effect of Guided Discovery in the acquisition of vocabulary, which constitutes the central issue of this research and confirms why it is necessary to carry on the project.

2.4 Conclusion

The constructs approached above and the previous revision of related research indicate that Guided Discovery may be an appropriate strategy to foster some advance in English proficiency at any level and for this research in particular, vocabulary acquisition.

Lastly, Project-based Tasks is a good approach which may yield positive results in learners' vocabulary acquisition through the implementation of the Guided Discovery strategy; besides, it may influence the way they work in groups and their perception towards their learning process.

Chapter 3: Research Design

3.1 Introduction

The constructs presented in the prior chapter exposed how Guided Discovery strategy combined with Project-Based Task (Rod Ellis, 2009) affected the learners' acquisition of new vocabulary. This research used Guided Discovery to expose students to language and learn in an inductive way (Bruner, 1961) to help them get different benefits related to some critical thinking skills. They were involved in three vocabulary learning cycles which belonged to the three topics selected to work with students: horror, bullying and super heroes. Learners received instructions to be encouraged on how to make decisions and organize their plans in order to reach each cycle objective by fostering autonomy and collaborative work.

For this purpose, it was fundamental to take into consideration the type of research, the context, and the participants' information in order to select the most pertinent data collection instruments. Based on this, the instruments selected to collect the required information were a teacher's journal, two questionnaires (a pre and a post implementation process), a pre and a post-vocabulary tests and three group written stories which were taken as participants' artefacts. These instruments were piloted and validated in advance.

3.2 Type of Study

The type of study for this project fits in Action Research; it is a process based on reflection which allows teacher researchers to inquire, to look for answers or solutions to problems that happen day by day inside the classroom. In consequence, action research was suitable for this study because it helps to find an appropriate manner to improve classroom instruction at any educational institution and

increase learners' goals achievement after some research cycles such as implementation, validation, more observation, analysis, and conclusions (Ferrance, 2000).

3.3 Context

This study was carried out at a public school in Bogotá, Colombia which has two branches: one for elementary and other for high school. Its philosophy is founded on the conception of seeing its members as unique human beings who develop enough abilities, knowledge, interests and values through an integral education which has an effect on all the educational community, following the message of Education as the way to cohabitation through a methodology that lies in Teaching for Understanding method (Wiske, 1999) (Colegio Rafael Nuñez I.E.D., 2009).

The school offers two 85-minute English lessons per week for all the school grades. English is a part of The Humanities Department and its project draws on the Common European Framework standards (Council of Europe, 2001) and the national basic standards of competences in English as a foreign language established by the Colombian Education ministry (Vélez et al., 2006). At school, teaching is based on the teaching for understanding framework which establishes that comprehension is the main goal in the school process; also, it has particular stages that involve learners and equip them with metacognitive strategies to be the main characters in their learning process (McDonough, 2008).

3.3.1 Participants

A group of 28 students from ninth grade was selected for this study; twelve girls and sixteen boys, with ages ranged between 13 and 18 years old. Most of them live far from school and have social and economic limitations. This situation becomes an obstacle which does not support the students' learning process as it is required, since it leads them to a lack of concentration state, even more to a hopeless attitude towards the education purpose. Different research has found that poverty influences the

readiness children have for school affecting health, home life, schooling and neighbourhoods (Ferguson, Bovaird, & Mueller, 2007), and that is the reason why to establish healthy and positive relationships with these teenagers, it is necessary to take into account their affective needs and different physical, psychological and emotional changes. Some of them are aware about the importance of English for their future lives in spite of the fact that they consider difficult to learn it since they come from other schools with a few English lessons. Others think English is not useful in their contexts, due to their little possibilities to continue studying after finishing high school.

Now, making reference to their cognitive needs, teenagers' thoughts start becoming more abstract and there is a decrease in their egocentric thoughts (Piaget & Inhelder, 2007). That is why, in this point the perspective around thinking and reasoning gets wider. However, adolescents' cognitive improvement is relatively sudden and drastic, and their real improvement is focused on their thinking abilities centred on five areas: attention, memory, processing speed, organization, and metacognition (Linares, 2007). With this assertion, it could be inferred that the participants of this study have in general terms all the physical and psychological requirements to learn a foreign language although it is necessary to know and manage their existing needs in order to help them feel confident and be productive in their learning process. It is necessary to increase students' interest in learning English, making them realize it provides multiple opportunities to be successful in life.

Regarding English level of the group, students belong to A1 according to the Common European Framework (Council of Europe, 2001). In general, they are able to understand and use daily expressions as well as simple sentences directed to satisfy immediate needs. They can introduce themselves to others, ask for and give personal information, and establish simple communication relationships at an elementary level if the interlocutor cooperates by speaking clearly and slowly.

3.3.2 Researcher's role

The role of the researcher was an active participant and observer since the investigation process involved the teacher in a continuous evaluation of her classes, giving her the opportunity to reflect on the necessary decisions to improve her teaching practice through testing, verifying and adapting instruction using the guided discovery as a learning strategy and based on direct observation (Burns, 1999).

However, it can also be declared that the researcher's role consisted of specific functions such as the one of an observer during her lessons paying close attention in order to identify different needs and select one of those to formulate a research question; the one of a designer during the phase of planning because it was necessary to decide and devise the most appropriate manner to tackle the vocabulary acquisition lack through some lessons intervention; the one of facilitator leading participants to several learning procedures never practiced previously; and the one of statistician in the phase of collecting, evaluating and analysing quantitative data (Díaz, 2015).

3.3.3 Ethical considerations

There are some relevant principles in the action research process which must be followed: responsibility, confidentiality and negotiation (Reason & Bradbury, 2001). They are established to protect the identity of the people involved in the research process in order to reduce the possibility of being judged by others in any manner.

In this study, a consent letter (see appendix D) was sent in order to ask parents for permission to allow their children's participation and notify them about the research project objectives and purposes. There was just one student's permission which was signed expressing their disagreement with their son's participation. However, parents were explained about the process by the researcher and they finally changed their decision and their son became a participant in the research process. With the letters

left, an agreement was expressed through the parents' signature. As the researcher knew the students' identities, she declared not to release them to any other person. Also, it was clarified that neither classes were going to be interrupted or / and delayed by the research activities nor grades would be affected by them. Besides, protection of participants was guaranteed to help students feel free to participate actively with no possibility of being harmed in any way. Those consent letters were sent with the approval of the school's principal who demonstrated her support from the beginning.

As last ethical consideration to mention, it is necessary to say that from a total of 61 ninth graders at school, 28 were taken by random to be participants of the pedagogical intervention for the purpose of the study.

3.4 Data collection instruments

The data collection instruments were designed to collect information about the effect of guided discovery in some ninth graders' vocabulary acquisition process. Those instruments provided the possibility to analyse the implementation of new strategies and their effect.

3.4.1. Description

3.4.1.1 Questionnaires

This research applied a questionnaire in both the pre and post implementation stages in order to collect students' perceptions in regards with their process of vocabulary acquisition, Project-based Task method and Guided Discovery strategy since it is a pertinent manner of getting data about aspects which cannot be easily measured as feelings, emotions and judgments (Seliger & Shohamy, 1989). The questionnaire before the implementation stage (see appendix E) and after it (see appendix F) were made using google forms and students answered them online through the use of some tablets. However, the pre-questionnaire application had some constraints since there were some problems with school WI-FI

signal and a few students had to answer them on paper. Both pre and post – questionnaires were formed by multiple choice questions and some of them were constructed using several Likert scales (Likert, 1932).

3.4.1.2. *Vocabulary Pre and post tests*

Testing vocabulary before and after the implementation has usually been a procedure used in several research projects (Karabulut & Dollar, 2016; Chou, 2014; Yang, Shintani, Li, & Zhang, 2017) in order to measure real participants' vocabulary set and monitor the changes if any at the previous and subsequent stages from the implementation. Vocabulary assessment is essential because words are the basic units of meaning that form more complex structures such as sentences, paragraphs and texts and for that reason there are varied manners to do it (Read, 2000). Due to these aspects, a pre and a post-vocabulary tests were created taking as the vocabulary asked a set of 60 words grouped in three topics: horror, bullying and super heroes, because students' interests were focused mainly on them. After that, in order to select the words of each topic to be asked in the tests, the Corpus of Contemporary American English (COCA) was used to find high frequency terms, and then a specific array of twenty of them related to each topic was chosen (see appendix G). Finally, to convey word meaning the translation method was selected since it is very effective (Nation, 2001) and make students feel more confident due to the use of their first language.

3.4.1.3. *Participants' Artefacts*

Artefacts make reference to the visual or written resources which help researchers identify and comprehend different events, troubles and changes inside the classroom related to the situation under study (Merriam, 1997); they are generally students' products.

In this study, a varied set of activities such as vocabulary guides and workshops were applied during the implementation lessons and organized in three cycles corresponding to the three topics

selected from the beginning. The purpose of those cycles was to provide more contact with the vocabulary proposed through fostering more collaborative work and participants' curiosity and autonomy. Each cycle had as a closure the production of a written story based on the topic assigned from initial stage. These cycles final products were a graphic horror story, a comic strip and a story about a new super hero, and the artefacts were utilized to collect data.

3.4.1.3. *Teacher's journal*

Having in mind that teacher's journals help preserve the outstanding positive and negative events during the lessons in order to make reflections about them and look for a solution (Mills, 2007), it was selected for this study, making emphasis on the general registration of participants' reactions, then on the development of the activities through the lessons and finally on the direct effect on the three project constructs: Guided Discovery, Project-based Tasks and Vocabulary Acquisition (see appendix H). These eight journals were written every week after gathering all the important researcher's notes taken during and right after every implementation lesson.

3.4.2 Validation and piloting

As aforementioned, this study was framed as action research. Therefore, some procedures followed a validation and piloting processes with the help of colleagues and the university faculty, which optimized their reliability and legitimacy. The first validation process was done through a team work process with my research teachers and my thesis director. Then, the questionnaires were checked by two colleagues who made a proofreading of the instruments and gave some advice about necessary adjustments. In addition, two students who were in tenth grade answered the pre-questionnaire and based on their doubts and hesitant behaviour during that process several items were subjected to further modification. Then, a new version of the questionnaire was also applied to five students belonging to the other ninth grade who did not participate in the project; this allowed to make other slight changes.

In general terms, the observations made were simple but important in order to make questions clearer and bias free. For instance, there was a question asking the amount of time they had studied English, but it was not clear if that action was focused just at school or if it was considering other places or English courses outside it. These procedures were very useful to improve the instruments and have more possibilities to reach the goal established from the beginning of the study.

Making reference to 'triangulation', as the strongest support for research validity, Cohen et al. (2007) define it as the act of using two or more data collection methods in order to study any phase or characteristic in human behaviour. Previously, it was affirmed that four different manners to collect data were utilized in this study: Vocabulary pre and post-tests, participants' perceptions pre and post-questionnaires, participants' artefacts and teacher's journal. These four instruments were extremely useful since they permitted the researcher to avoid predispositions or partiality, confirm the categories of each instrument and detect the junction among them to answer the question of this research process.

3.5 Conclusion

This third chapter clarified relevant aspects of the design of this project under the action research procedures because of the fact that a problem exists as well as different opportunities to set and reach possible solutions. In addition, there is information about the participants, their needs and context, and the objectives of this research. Also, there is information related to the necessary permissions to work with the population selected, a description of the instruments used and the way to validate and pilot them. Therefore, in following chapters will be found a detailed description of the implementation process including the three stages in which it was divided and the procedures carried out during them.

Chapter 4: Pedagogical Intervention and Implementation

4.1 Introduction

The present chapter outlines the theoretical support of this study by means of the vision of language, learning and curriculum, as well as the steps and procedures followed before, during and after the pedagogical intervention of this study, referring to the instruments utilized to collect data around the research question. These instruments provided several scenarios to know participants' perceptions, their management of vocabulary, application, and teacher's observations through their own curiosity and discovery, taking advantage of collaborative work settings. In addition, there is also a description of the cycles which took part during the lesson planning appliance and the reasons to have them.

4.2 Visions of language, learning, and curriculum

4.2.1 Vision of language

Acquiring vocabulary is an essential component in the field of learning English as a foreign language, since the more vocabulary a person obtains, the more language management they acquire and vice versa (Nation, 2001). Traditionally, there have been different methods for teaching vocabulary such as Grammar Translation in which there is an intensive use of arrays of words organized in lists to be learnt and of grammatical rules to translate sentences in a correct manner from second to first language (H. D. Brown, 2001). Even more, (Nation, 2001) makes reference to four strands which forms a harmonious language learning, in which the first one is the meaning-focused input based on the learning of new vocabulary through listening and reading; the second one the language-focused learning which implies a direct teaching and learning of vocabulary; the third strand, named meaning-focused output, is based on providing opportunities to increase language knowledge through speaking and writing; and finally, the fourth strand consists in the development of fluency by the practice increasing with known vocabulary. Therefore, this research project was led applying basically the first and third Nation's

strands, since participants were provided with readings and activities around it to have enough contact with vocabulary. At the end of each cycle, they had the possibility to put into practice and show what they had acquired by writing their own story.

4.2.2 Vision of learning

The predominant theory support for the present implementation process makes reference to meaningful learning since the combination between prior and new knowledge, through the use of different aural – oral drilling is effective to develop life-long learning (D. P. Ausubel, 1963). That is the reason why the activities utilized to have more contact with the vocabulary set proposed, were varied and included several thinking skills (Krathwohl, 2002) to avoid rote learning and reach a meaningful one. Apart from this, in this research it is also taken into account the vocabulary learning hypothesis proposed by Krashen (1989) in which he affirms that an appropriate and effective manner of acquiring vocabulary is providing clear and understandable input by the use of reading. Moreover, he adds that a high level of vocabulary competence is the result of a constant vocabulary practice which becomes automatic and leads to a conscious learning.

Regarding this study, and searching a successful experience for participants, it was necessary to make strong efforts to provide more lessons a week in order to allow more contact with the activities proposed; however, at the school where the study was applied, the amount of lessons is limited to two classes per week. In addition, scaffolding procedures were provided by the guided discovery methodology (see chapter 2) which started by exposing learners to practice with diverse sources of knowledge such as texts, data, videos, graphics, and artefacts (H. Silver, Strong, & Perini, 2007) having as a purpose to internalize and use that vocabulary in context leading to engagement in their own learning process.

4.2.3 Vision of curriculum

According to Nunan (1989, p. 9) curriculum has two different manners of being understood: as a “statement of intent of a language program as set out in syllabus outlines, sets of objectives, and various planning documents” and as a that real situation which happens inside the classroom. The most appropriate curriculum would be a balanced unification between them. At the institution where the study was carried out, the curriculum was formed following the standards of Teaching for Understanding. This approach consists on fostering the ability of thinking and acting with a relative flexibility through the use of a common language and promoting the collaborative work as a bridge between theory and practice with a constructivist axis (Stone, 1999).

Comparing that previous approach to the guided discovery characteristics, it is admissible to affirm that they possess similar attributes; in consequence, institutional curriculum was not an obstacle to accomplish the objectives established for this study. These kinds of approaches and methodologies ask for requirements such as high frequency lessons, physical infrastructure to foster group formation, and information and communication technologies (ICT) tools with their technological basic aspects to provide variation and interest learners (Passey, Rogers, Machell, & McHugh, 2004). However, the lack of those conditions represented some limitations during the implementation process and it became an example of how the educational projects intentions differ from public schools’ real life.

4.3 Instructional design

The researcher of the present study evidenced students’ diverse difficulties in their English output phase and the possible causes were linked to the lack of critical thinking abilities. In order to prove this, a reading questionnaire about hooligans was applied and students’ answers showed they copied the answers from other students. Through an informal feedback session, learners expressed they

had too many difficulties with English, establishing vocabulary lack as the most important need which required attention for being the main component in all the foreign language abilities.

4.3.1 Lesson planning

The main objective of this study was to provide participants enough opportunities to be in contact with sets of vocabulary in order to reach life-long learning by using guided discovery methodology within a project-based task approach. Therefore, lesson plans were organized in three cycles related to three interesting topics for students which were horror, bullying and super heroes. The former topic was composed by eight lesson plans, the one made for bullying was formed by six lesson plans and the topic related to super heroes was formed by five. Each plan was applied in an eighty-minute lesson and all of them presented a similar structure, showing the main objective, and the activities required for reaching it with their corresponding purpose, description, time allocated and manner of organizing students.

At the beginning of each cycle, the starting activity was a not complicated reading related to the cycle topic, then participants had tasks such as recognizing its vocabulary, discovering new one, classifying and categorizing it, practicing and recycling it by varied drilling exercises, sharing opinions, organizing information through mind-maps, preparing and then making a final product, and providing self and peer feedback.

4.3.2 Implementation

The implementation was carried out during the second academic semester in 2017 as shown in the timeline below (Figure 1).

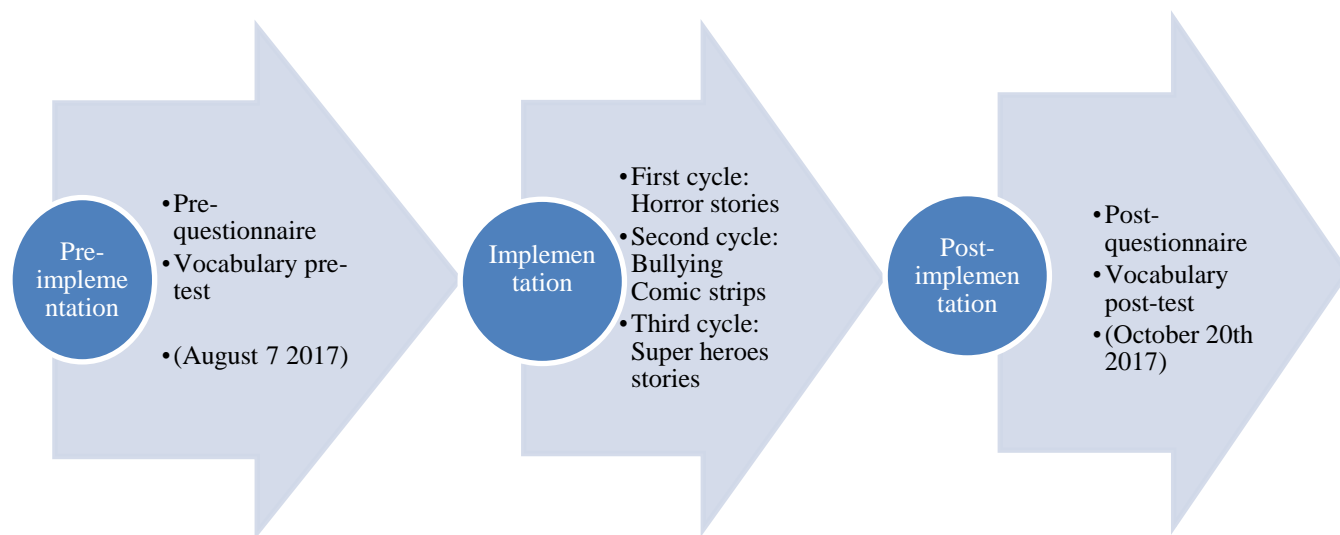


Figure 1. Implementation phases

The implementation process was divided in three big stages as it is demonstrated in table 1:

Table 1

Implementation stages

Pre-implementation stage	Activities/tasks	Number of hours	Number of lessons	Instruments	Purpose
Pre – questionnaire	Questionnaire on line filled in by participants	1	1	Pre - questionnaire	To know students' perceptions about the three constructs (Vocabulary acquisition, Guided Discovery and Project-based Tasks) before the pedagogical intervention.
Vocabulary pre-test	A test formed by 60 words (20 corresponding to each topic) which were asked to be written in Spanish	1	1	Pre - test	To measure the amount of words related to horror, bullying and super heroes students know before the pedagogical intervention.
While-implementation stage	Activities	Number of hours	Number of lessons	Instruments	Purpose

First cycle Horror stories	Through the use of a reading and some images about horror stories, participants had some lessons working with some vocabulary in order to create a short horror story as a final product.	10,6	8	Teacher's journals	To observe and write the relevant events related to the study that happen during the lessons
				Students' artefacts	To check students' ability to write short stories and the use of the vocabulary studied in context.
Second cycle Bullying	From a poem about Bullying, participants were provided different sessions in which they worked with vocabulary related to bullying to produce at the end a comic strip.	8	6	Teacher's journal	to observe and write the relevant events related to the study that happen during the lessons.
				Students' artefact	To check students' ability to write short stories and the use of the vocabulary studied in context.
Third cycle Super heroes	From a reading called super dog, participants worked on the necessary vocabulary to write a short story about "what their own super hero did yesterday".	6,6	5	Teacher's journal	To observe and write the relevant events related to the study that happen during the lessons
				Students' artefact	To check students' ability to write short stories and the use of the vocabulary studied in context
Post-implementation stage	Activities	Number of hours	Number of lessons	Instruments	Purpose
Post – questionnaire	A questionnaire similar to the one applied at the pre-implementation phase was answered	1	1	Post - questionnaire	To gather students' perceptions about the implementation stage process
Vocabulary post - test	The same vocabulary test which was applied at the pre-implementation stage was taken by participants	1	1	Post - test	To measure again students' vocabulary set related to horror, bullying and super heroes and analyse if it changed in comparison to the pre-test.

4.3.2.1. Pre-implementation stage

This stage began with the consent letter submission (see appendix A), having as the main purpose to obtain students' parents' permissions to participate in the research process. This step was essential as a part of the ethical considerations in order to provide the necessary validity. Once they accepted to participate, a need analysis was applied and represented a five-question survey about

vocabulary (see appendix B) and a gap-fill activity about Sports vocabulary (see appendix C); they were used to confirm participants' feelings towards vocabulary learning.

After this, a Google online pre-questionnaire was carried out in order to know students' perception towards Vocabulary Learning, Guided Discovery and Project-based Task which are the constructs of this study (see appendix E).

Subsequently, a vocabulary pre-test formed by a list of 20 words related to horror, 20 to bullying and 20 to super heroes was carried out in order to check the amount of vocabulary learners had before the implementation process (Nation, 2001). In order to select the words of each topic to be asked in these tests, the Corpus of Contemporary American English (COCA) was used to find terms of each topic (horror, bullying and super heroes) with high frequency of use, and then an array of twenty words were selected.

4.3.2.2. Implementation stage

During this stage, 29 lessons of 80 minutes were held in order to apply the three cycles created as a response to the selection of three topics that were the core of the vocabulary to work with according to participants' interest: horror, bullying and super heroes. From the first lesson, participants were organized in six groups in order to foster collaborative work which was another weakness perceived on them, and provide confident conditions to create the final products for each cycle. They received an array of activities which always began with a short reading related to the cycle topic as a model which provided appropriate vocabulary to be studied and used in the production of the cycle final project. The activities were linked to different levels of thinking skills (Krathwohl, 2002), having as a main purpose to provide enough exposure to the vocabulary proposed from an initial stage. For instance, the text students received initially worked as factual knowledge, since it contained the basic vocabulary they

needed to practice. Then, conceptual and procedural knowledge consisted on the relationships learners created among the vocabulary set provided by the teacher and the one discovered by them which could help them reach the purpose of creating some final products (stories and comic strips), and on different categories they established to organize and internalize all the vocabulary gathered. Finally, some learners reached metacognitive knowledge providing them the possibility to be aware of their own understanding.

While the first stage was in progress, it was observed that there were some groups without any type of leadership to encourage others and help them organize the activities completion. That was the reason why to start the second cycle, the teacher organized the groups as she thought was more appropriate, selecting as leaders the ones who had a higher English level and some leadership characteristics. Since the development of that second cycle was better in terms of collaboration and task completion, for the third cycle other groups were conformed. However, it was necessary to open a short space for reflection making them realize about the importance of collaboration and self-evaluation to improve their individual and group work.

4.3.2.3. Post – implementation stage

This stage involved the application of an online post – questionnaire created in Google forms as well as a vocabulary post – test. The former instrument had as a main purpose to know the participants' perception about the implementation process, providing opportunities to analyse data and check if there were variations in terms of the research constructs (see appendix F).

In reference to the vocabulary post-test, it was exactly the same applied in the pre – implementation stage (see appendix G). This means that learners were asked to write in their first language the

translation of sixty words (twenty corresponding to each topic). In general terms, there was an evident increase in the amount of words they could remember.

4.4 Conclusion

The present chapter characterized the manner in which this research process provided both opportunities for learners to express their needs towards their English learning process and exposure through planned activities to promote vocabulary acquisition based on guided discovery and project-based tasks constructs. Furthermore, it was described the phases which composed the implementation, the instruments utilized to gather data and some preliminary results.

Chapter 5: Results and Data Analysis

5.1 Introduction

The present chapter presents the course of action followed to analyse and interpret the data gathered through the instruments selected which were a pre and post-questionnaire, a vocabulary pre and post-test, a teacher's journal and some written participants' artefacts. It is necessary to emphasize that this was an action research study, since a teacher establishes as the main purpose to effect transformation in his/her own teaching (A. Brown & Dowling, 1998) and in the classroom environment which refers to students and at the educational institution where he/she works (Ferrance, 2000). In addition, it can be said this is also a mixed methods research because there is a combination of qualitative and quantitative elements such as data collection, analysis, and inferences in order to obtain wider and deeper comprehension and confirmations (Johnson, Onwuegbuzie, & Turner, 2007).

5.2 Data management procedures

The present chapter presents the course of action followed to analyse and interpret the data gathered through the instruments selected which were a pre and post-questionnaire, a vocabulary pre and post-test, a teacher's journal and some written participants' artefacts. It is necessary to emphasize that this was an action research study, since a teacher establishes as the main purpose to effect transformation in his/her own teaching (A. Brown & Dowling, 1998) and in the classroom environment which refers to students and at the educational institution where he/she works (Ferrance, 2000). In addition, it can be said this is also a mixed methods research because there is a combination of qualitative and quantitative elements such as data collection, analysis, and inferences in order to obtain wider and deeper comprehension and confirmations (Johnson et al., 2007).

5.2.1 Validation

Validation is a relevant step in research because through it the researcher verifies the nature and efficiency of the instruments selected to collect data, having as a main purpose to demonstrate the study is credible (Creswell & Miller, 2000). In this research, the first validation process was piloting, because it was necessary to test some of the instruments before they were given to participants to check there were not language inconsistencies in the instructions as well as in the questions. All the instruments were revised by this research's director, two research teachers and two work colleagues, who helped providing comments and suggestions about the best language use in order to be very clear and accurate for students, and this is the reason why, the pre and post-questionnaires instructions were administered in English and Spanish. Additionally, the online questionnaires were filled in by two tenth graders and three ninth graders from the morning shift.

The second validation step of this research study was the triangulation, having in mind that its purpose is to find centralization of varied information from several origins forming themes and categories (Creswell & Miller, 2000). In order to reach the previous purpose, comparison and contrast procedures of the information gathered through the four instruments selected and applied during the three stages of the implementation were used, and they led to identify connections and similarities which formed categories.

5.2.2 Qualitative data analysis methodology

The process applied to analyse the data of the current study was based in the grounded theory approach, which consists on the assemblage of specific steps necessary to provide security in the production of a well-constructed theory (Glaser & Strauss, 1967). It is a result of a deep process of being in a close contact with the data obtained through the selected instruments in order to establish common themes, variables and categories and the relationships among them. The specific steps inside this

approach are: open, axial, and selective coding, clarifying that coding makes reference to the act of taking several fragments of data and labelling them according to their nature, extracting, classifying and establishing connections with data from other instruments (Charmaz, 2006).

After utilizing the grounded theory steps, the qualitative information obtained was supported, compared and completed by qualitative and quantitative results gaining validation and a strong answer to the research question.

5.2.3 Quantitative data analysis methodology

Simultaneously with the grounded theory analysis, it was necessary to manage basic concepts which belonged to descriptive statistics, having as a main function to show quantitative data and its analysis in a simple manner (Trochim, 2006); in this study it was possible to find out important gains before and after implementation.

The table 2 exhibits the manner in which quantitative and qualitative data appeared in this research study:

Table 2

Quantitative and qualitative data

INSTRUMENTS	PARTICIPANTS	NATURE OF DATA	DATA ANALYSIS METHOD
Pre and post questionnaires	Students	Qualitative and quantitative	Grounded theory Descriptive statistics
Vocabulary pre and post – tests	Students	Quantitative	Descriptive statistics
Artefacts	Students	Qualitative and quantitative	Grounded theory Descriptive statistics
Journals	Teacher	Qualitative	Grounded theory

5.3 Categories

The figure below represents the three relevant steps in grounded theory established by Glaser & Strauss, (1967) and followed in this study:

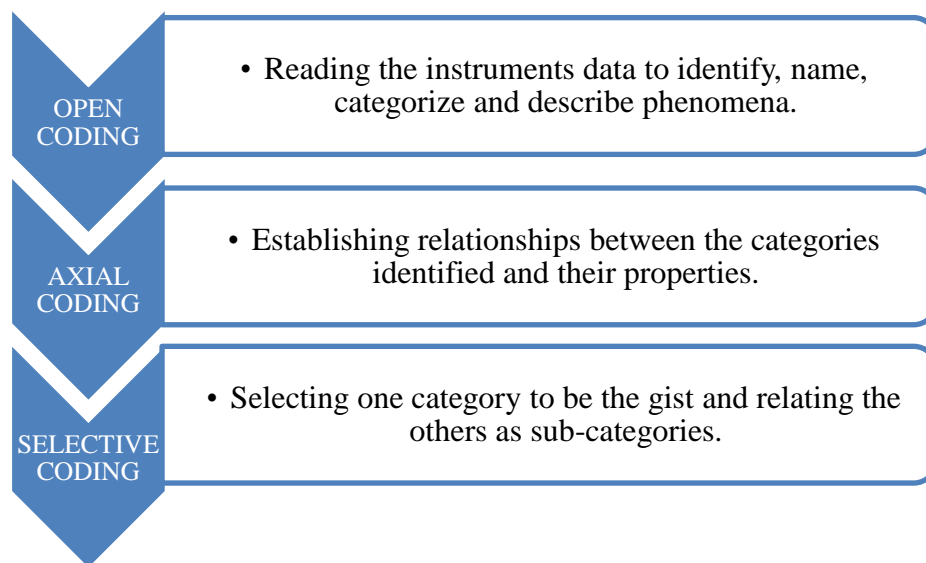


Figure 2. Three relevant steps in Grounded theory

5.3.1 Overall category mapping

5.3.1.1 *Open coding*

In order to start the analysis process, all the data obtained through the four instruments selected were organized in an excel matrix which provided opportunities to organize, discriminate relevant from unimportant information and start the step called initial coding which permits to establish comparisons between the elements found in data and build more abstract concepts based on those elements (Charmaz, 2006, pág. 80-81). This initial coding consisted on reading several times the data obtained and then through colour coding to start finding patterns (Bergaus & Stottok, 2010). Below there is an example from this procedure (see table 3):

Table 3.

Fragment of data color-coding process

COLOUR CODING PATTERNS	QUESTIONNAIRE QUESTION	STUDENTS' ANSWERS
Vocabulary improvement	How easy is it for you to learn vocabulary now? / ¿Qué tan fácil es para usted aprender vocabulario ahora? Why? / Why not? Explain	S3: porque con ayuda de la lectura y las conversaciones aprendo el vocabulario mas facilmente
Collaboration awareness	How do you prefer to learn English now? / ¿Cómo prefiere aprender inglés ahora? Why? / why not?	S12: porque con ayuda de cada uno podemos darnos ideas que otros no sepan
Writing ease	How is it for you the process of writing short stories? / ¿Cómo es para usted el proceso de escribir historias cortas? Why? / Why not?	S7: Entre mas cantidad de vocabulario es mejor para escribir historias

5.3.1.2 Axial coding

As it was explained previously, axial coding is the process of finding relationships among the patterns, and codes established in the open coding step (coding paradigm) and the research question (Strauss & Corbin, 1990).

In the following table 4, it will be shown the emerging patterns, subcategories and categories established by the four instruments utilized along this research study.

Table 4

Categories, subcategories and students' samples

CATEGORIES	CODES	SAMPLES
Vocabulary acquisition	*Vocabulary improvement *Vocabulary retention *Vocabulary usefulness *Vocabulary increase *Vocabulary understanding *Vocabulary learning ease *Vocabulary discovery *Vocabulary acquisition	St. 9: “Pues ya tengo mas reconocimiento de algunas palabras”. St. 13: “Por que aprendi palabras nuevas”. St 22: “Porque con ayuda de la lectura y las conversaciones aprendo el vocabulario mas fácilmente”.
Self – regulation	*Vocabulary discovery	St. 12: “Pues cada vez que hacemos evaluación ahí sabemos y aprendemos en qué momento nos estamos equivocando y podremos tener una mejor evolución”.
Critical thinking	*Discovery of vocabulary *Establish word relationships *English improvement awareness *Creativity increase *Making decisions autonomously	“It is noticeable the engagement now students have. Today, they just arrived from the brake, said hello, gather in their work groups and started working without asking for help or instruction”.

		St. 22: "Porque algunas personas del grupo aprenden más rapido que otras ya que no todos tienen la misma forma de aprender el vocabulario"
Skills mastering	*Better pronunciation *Writing ease *Guide from reading	"Que esta muy bien por que aprendemos a relacionar mas las palabras". "Porque con más vocabulario es más facil, se puede escribir mas expresiones". "Porque con el vocabulario que uno aprende puede expresarlo en oraciones o más avanzadamente en grandes textos".
Motivation	*More practice *Better methodology *Entertainment *Variety *Innovation	"Que se pueden poner en practica diferentes cosas a las de siempre". "Es un método bueno para aprender". "Pues muy buena metodología ... nuevas palabras y cosas nuevas".
Lifelong learning	*Fast results *Visible results *Better learning *Comprehension increase *Appliance increase *Better future professional possibilities	"Poder aprender para algún día ir a otros países". "Me gustó todo...los trabajos son muy divertidos y obvio pude aprender mas". "Pues en el día de hoy piden un excelente vocabulario en cualquiera profesión". "Por que puedo trabajar en cual quier lugar del mundo".
Vocabulary learning limitations	*Vocabulary lack awareness *Vocabulary search lack *Pronunciation difficulty	"Me falta un poco unir el vocabulario y aprender mas para poder implemetar una historia".
Collaboration awareness	*Work Group attitude change *Group support *Collaboration awareness *Group better learning *Group work ease *Group effectiveness	"Es mas fácil porque entre los compañeros se ayudan a resolver dudas y demás". "Porque me confundo con algunas palabras".

5.3.1.3 *Selective coding*

Making reference to the categories and subcategories established previously in the axial coding, the next stage is the selective one which has as a main purpose to embed and refine theory (Strauss & Corbin, 1990). The following figure (see figure 3) represents the categories found in this study. In the bottom of the graphic we have four subcategories: vocabulary acquisition, reading and writing mastery, life-long learning and motivation, which were the most specific goals reached in this project. The first and second one (Vocabulary acquisition and reading and writing mastery) were essential to develop the category 1 (Discovery Learning), since they helped participants be aware about their importance and as a consequence they started looking for manners of accomplishing the tasks objectives with high quality. The third and fourth subcategories led students to realize collaboration is essential in English learning

because it brings benefits for their future. Finally, self-regulation was the one assigned to be the main category since it was the most remarkable change students demonstrated, starting following all the steps for the completion of their tasks with an appropriate management of time, creating strategies, looking for resources and materials and involving for real in the construction of their products.

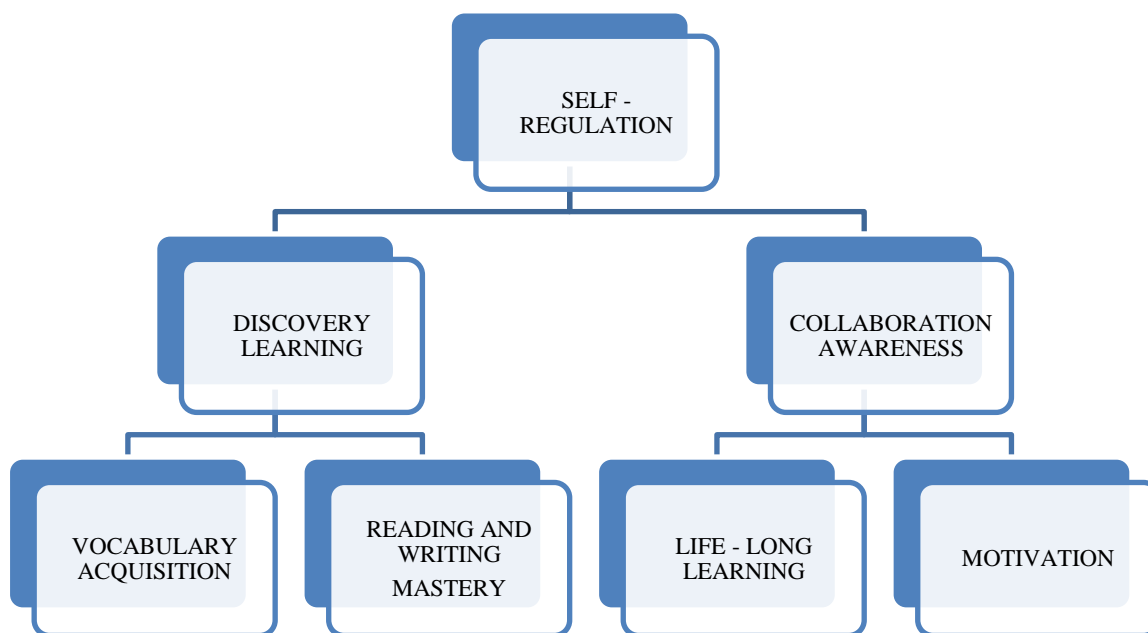


Figure 3. Selective coding

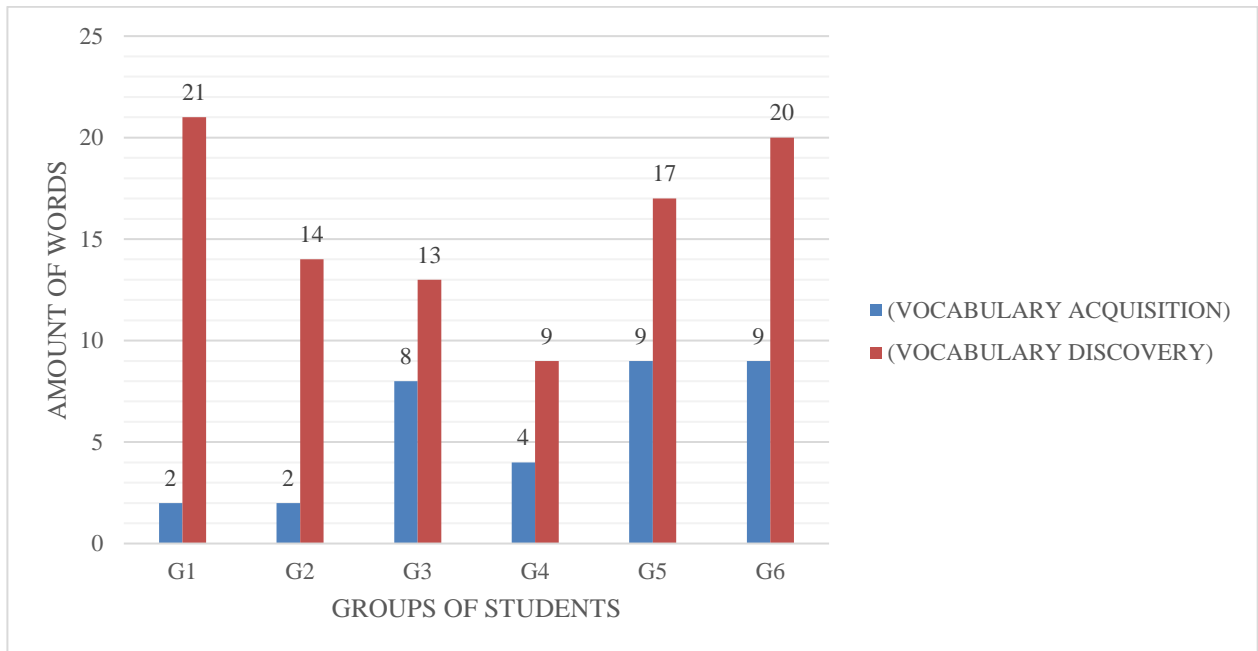
5.3.2 Discussion of categories

The main purpose of this study was to find through different instruments the answer to the following research question: How does using guided discovery to implement project – based tasks affect the acquisition of vocabulary amongst ninth – graders at a public school in Bogotá (Colombia)?

The section below explains the categories shown previously in figure 3 and established through the grounded theory analysis which finally answered the research question.

5.3.2.1 Category 1: *Discovery Learning*

During the three cycles which composed the implementation stage, students were provided with a set of activities related to vocabulary practice around a specific topic and a reading model to supply enough vocabulary exposure and more tools for the creation of their final product. The activities were focused on different thinking skills such as understanding, analysing, interpreting, evaluating and creating. During that process students started making decisions in terms of planning, organization, and preparation and those actions made them aware of the need of appropriate vocabulary to accomplish with the final tasks' requirements. Through the observation of students' artefacts which were utilized as a research instrument, it was possible to observe that students used some of the words provided by the teacher during the implementation development. However, students were aware of the need of knowing more words and made the decision of looking for new appropriate vocabulary autonomously to fulfil the requirements of the assignments asked in a successful manner. The following graphic (see graphic 1) represents this comparison, having at the X axis the six groups of students formed for the implementation process, as it is described in the first paragraph of implementation stage on page 38, and at the Y axis the amount of words used in their artefacts, and two colours of bars representing the amount of words provided by the teacher and used in the artefacts (blue bars), and red bars for the amount of new words discovered by students autonomously. Through this graphic it can be observed that the amount of words discovered by students autonomously was higher than the one related to the vocabulary provided by the teacher during the implementation process (see graphic 1).



Graphic 1. Comparison between words provided by teacher and words discovered autonomously

Last graphic also shows other analytical observations that could be done from a statistical perspective. For instance, the blue bars show that from 20 words provided by the teacher, the 6 groups of students used 6 words with a standard deviation of 3, which means that most of students utilized between 3 and 9 words from the initial 20. On the other hand, the red bars led to the conclusion that Guided Discovery as a methodology fostered on students the search of new vocabulary in an autonomous manner. In average they found 16 new words with a standard deviation of 5, so it means that most of students used a range between 11 and 21 new words which is higher comparing it to the range of words used provided by the teacher. These results expose a real relationship between Guided Discovery, vocabulary discovery, and self – regulation which is the core category (see figure 3). All these data are summarized in the following table (5):

Table 5.

Comparison between words provided by teacher and words discovered autonomously

AVERAGE	6	16
STD. DEVIATION	3	5
VARIATION COEFFICIENT	59,8%	29,0%
	Heterogeneous	Less Heterogeneous

Although the previous findings based on the words provided by the teacher display heterogeneity, there is an interesting decrease of that heterogeneity with the vocabulary discovered by students which means the results had more homogeneity.

Discovery learning is established as a main category here since the students were provided with clues and guides, which led them to obtain answers by themselves, solving a situation through the use of their prior knowledge, and interacting with their classmates (Alfieri, Brooks, Aldrich, & Tenenbaum, 2011). The excerpt 1 illustrates the teacher's considerations towards students' behaviour and decisions during a lesson belonging to the second cycle of the implementation process, in which they had to select ten words from different categories of vocabulary they had established previously, record their correct pronunciation, and later send the file to the teacher.

Students were aware of the need of help in order to record the selected words correctly, and because of this, they utilized the tablets provided surfing in search of a dictionary which could offer the vocabulary pronunciation. It was amazing to see it was their own decision and their engagement with the task.

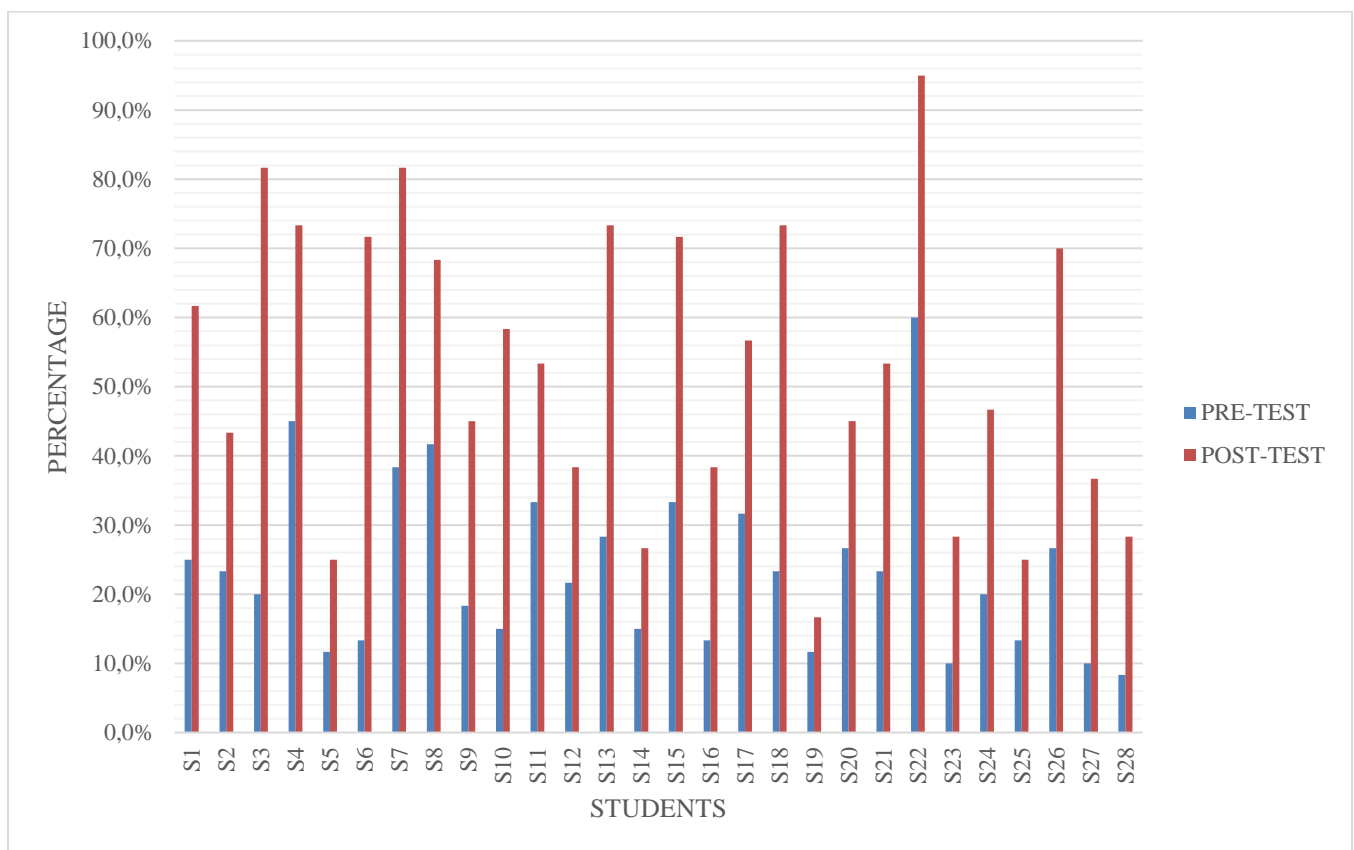
Excerpt 1. Teacher's journal. Second cycle observation

Gathering the prior category explanation, below the subcategories are exposed.

5.3.2.1.1 Subcategory 1: Vocabulary acquisition

The current subcategory is related directly with the main purpose of this research which consists in observing if vocabulary acquisition is affected by Guided Discovery methodology. The three cycles of the

implementation provided students more exposure to vocabulary through diverse activities, and as a consequence there was implicit vocabulary learning since the phonetic and phonological aspects for instance were approached (R. Ellis, 1994). The instrument adopted to measure this subcategory was a test (see appendix G) formed of a set of 60 words in English related to the three topics worked during the pedagogical intervention: horror, bullying and super heroes, and students took it before and after the implementation. The graphic below (see graphic 2) illustrates the clear increase in the amount of words acquired by students after the implementation procedures:



Graphic 2. Comparison between the percentage of words students knew in the pre and post - tests

The following table (see table 6) shows the average and the standard deviation of the pre-test and demonstrates that the total of students (28) knew in average 14 words from the 60 asked, with a standard deviation of 7 words. This means that most of students knew between 7 and 21 words. In this regard, the variation in percentage is 50%, which means that data are homogeneous enough.

Table 6.

Pre-test average and standard deviation

AVERAGE	STANDARD DEVIATION
14	7

It is important to have in mind that in this research study the population considered to make the pedagogical intervention was a small sample of students in ninth grade. For that purpose, 28 students were chosen randomly from all the ninth graders (N=61) in order to work during the pre, while and post-implementation stages.

Consequently, the following table exhibits the results of post-test where the total of students knew 32 words in average from the 60 asked, with a standard deviation of 13 words, which means that most of students knew a range of words between 19 and 45. Besides, the variation in percentage is 40,6% which demonstrates that there is still heterogeneity but with less variation than in the pre-test.

Table 7

Post-test average and standard deviation

AVERAGE	STANDARD DEVIATION
32	13

Subsequently, to estimate the confidence range for the demographic mean the total of ninth graders (61), the number of students in the sample (28), and the amount of words known in the post-test were considered with a confidence level (CL) of 90%. This means that the following procedures were done to estimate the amount of words that the complete ninth graders population would obtain if conditions were arranged.

Due to the facts that the sample is fewer than 30 students, the population variance is not known and the data distribution is normal, a t – student distribution was utilized with 27 degrees of freedom (FD). The formula is:

$$\hat{\mu} = \bar{x} \pm t_{\frac{\alpha}{2}} \frac{s}{\sqrt{n}} \sqrt{\frac{N-n}{N-1}}$$

The information we have is:

$$\bar{x} = 32, s = 13, n = 28, N = 61, NC = 90\%, \alpha = 10\%, gl = 27, t_{\frac{\alpha}{2}} = 1.703$$

$$\hat{\mu} = 32 \pm (1,703) \frac{13}{\sqrt{28}} \sqrt{\frac{61-28}{61-1}}$$

$$\hat{\mu} = 32 \pm (3,10)$$

$$\hat{\mu} = 32 \pm (3)$$

$$29 < \hat{\mu} < 35$$

The previous statistics analysis estimated that if guided discovery was used with all the ninth graders, most of students would know between 29 and 35 words.

Additionally, the post – questionnaires applied also after the implementation stage evidenced positive students' perceptions towards their vocabulary acquisition process in different circumstances such as their perception that this stage helped them increase their vocabulary management. The excerpt 2 is a sample of these affirmations:

QUESTION: *What do you think about the implementation process / ¿Qué piensa sobre el proceso de implementación?*

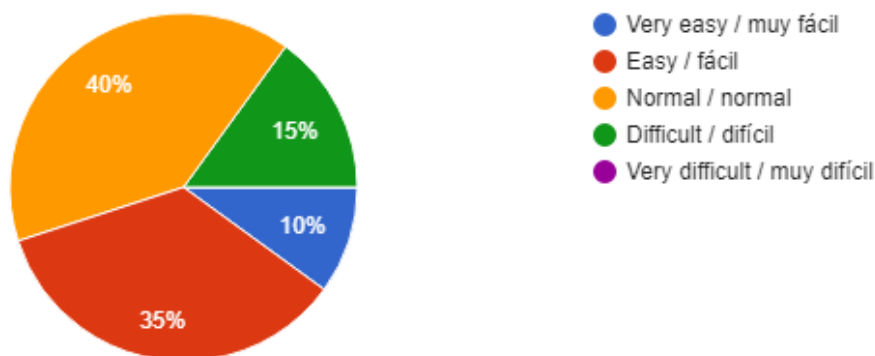
STUDENT'S ANSWER: *Es un buen proceso, porque nos ayuda a aprender mas vocabulario y de una forma que nos quede en la mente (It is a good process because of helping us how to learn more vocabulary in such a manner it stays in our minds) .*

Excerpt 2. Post – questionnaire applied to students

Furthermore, in the pre and post – questionnaires students were asked to answer some questions about their ease to learn vocabulary using several Likert scales (Likert, 1932) (see section 3.4.1.1) and the results illustrated a change in this category. Below, graphic 3 and graphic 4 will show the results found:

How easy is it for you to learn vocabulary now? / ¿Qué tan fácil es para usted aprender vocabulario ahora?

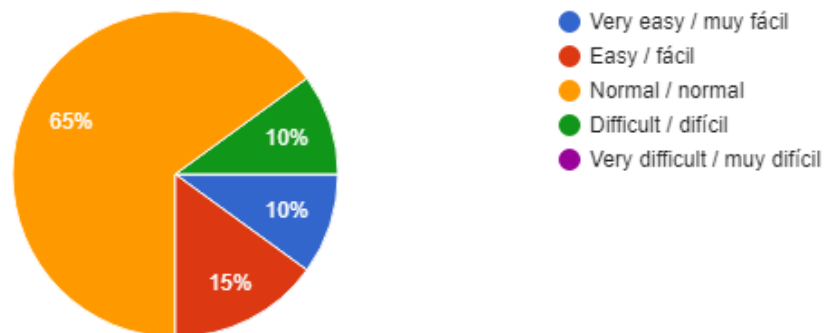
20 respuestas



Graphic 3. Pre – questionnaire question 8.

How easy is it for you to put into practice the vocabulary you learn? / ¿Qué tan fácil es para usted poner en práctica el vocabulario que aprende?

20 respuestas



Graphic 4. Post – questionnaire. Question 4.

The graphics displayed in the post – questionnaire a decrease in the “normal” scale selected by students which meant vocabulary acquisition was sometimes easy for them and sometimes it was not. That reduction happened, because the 15 % of students modified their selection from “normal” to “easy” scale which got an increase from 15% to 35%.

5.3.2.1.2 Subcategory 1: Reading and writing mastery

Nation, (2001) establishes four necessary strands for a successful English vocabulary acquisition, and they were applied during the implementation stage. The first one refers to learning from listening and reading activities (input) and each cycle at this stage started with a reading which was provided to offer a model to students for the construction of a final product. Through post – questionnaires students expressed positive perceptions towards reading after the implementation (see excerpt 3):

QUESTION: *What would be the benefits of discovering and learning new vocabulary in English?*

STUDENT'S ANSWER: *con mayor vocabulario uno puede leer textos en inglés (a*

Excerpt 3. Post – questionnaire applied to students

Furthermore, some teacher's journal observations established as a relevant aspect the ease students obtained to read during second and third cycle experiences, as it can be read in the following excerpt (see excerpt 4):

It is excellent to see that the process of understanding the reading about superheroes was much faster and easy, so they could continue with the rest of the activities spending less time and demonstrating comprehension for their positive attitude.

Excerpt 4. Teacher's journal. Third cycle observation

The third Nation's strand (Nation, 2001, p. 2) is focused on meaning output, affirming that writing activities lead learners' attention to the information they need to transmit in a different manner than through listening and reading, besides reinforcing the prior vocabulary they have. Post – questionnaires demonstrated students' improvement feelings towards writing after the implementation stage, as it is presented in the following excerpts (see excerpt 5 and 6):

QUESTION: *Do you consider there is a relationship between the amount of vocabulary you know and your ability to write stories?*

STUDENT'S ANSWER: *si porque cuando uno aprende más vocabulario se le facilita escribir una historia corta ya que es como la base principal para escribir una historia (yes, because when a person learns more vocabulary, it is easier to write a short story, since vocabulary is the support to do it).*

Excerpt 5. Post – questionnaire applied to students

Students are constructing their super heroes story checking the model and having different lists of vocabulary and the activities done during the cycle. They feel confident about the activity and are spending less time than in the previous two writings.

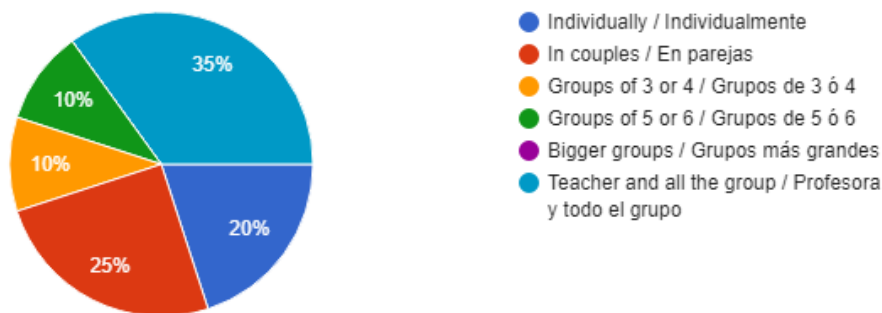
Excerpt 6. Teacher's journal. Third cycle observation

5.3.2.2 *Category 2: Collaborative work*

With the pre – questionnaire it was possible to find that students favoured teacher-centred lessons, since he / she leads the activities offering all the necessary information, and even materials going step by step in an open-class arrangement framed in a traditional language learning approach (K. Brown, 2003). In the following graphic this opinion can be observed (see graphic 5):

How do you prefer to learn english? / ¿Cómo prefiere aprender inglés?

20 respuestas

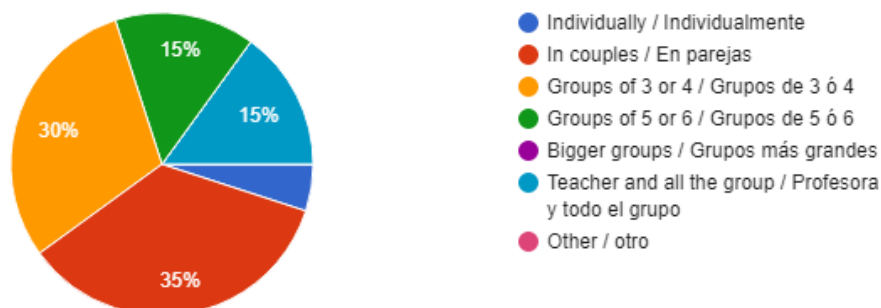


Graphic 5. Pre – questionnaire. Question 15

The highest percentage refers to the 35% of students who expressed their preference of receiving English lessons from teacher because they relate teacher's explanation with higher understanding. However, after the implementation stage that percentage decreased to a 15%, having the work in couples the highest percentage with 35% and the group work (3 or 4) the second score with 30%. See graphic 6:

How do you prefer to learn english now? / ¿Cómo prefiere aprender inglés ahora?

20 respuestas



Graphic 6. Post – questionnaire. Question 15

One of the most valued findings here was the collaborative work awareness which was originated by the groups formed in each implementation cycle. Students could realize they obtained a personal progress, while planning to reach a common goal. They shared what they knew and were accountable to one another recognizing their strengths and weaknesses and feeling proud of their final products (H. D. Brown, 2001). Excerpts 7, 8 and 9 shows some students' opinions which reflect this:

QUESTION: *How do you prefer to learn English now? Why?*

STUDENT'S ANSWER (S2): *En grupo por que hay unos compañeros que ya saben mas y nos pueden ayudar (In group because there are some classmates who know more about English and can help us).*

STUDENT'S ANSWER (S13): *En grupo es más fácil porque entre los compañeros se ayudan a resolver dudas (It is easier in group because classmates are able to help each other to solve doubts).*

Excerpt 7. Post – questionnaire applied to students

QUESTION: *How do you consider the task to prepare a final product in group for a lesson? why?*

STUDENT'S ANSWER: *Para nosotros los estudiantes debe ser normal vivir en comunidad y aprender a trabajar en equipo (Living in community and learning to work in group must be a normal aspect).*

Excerpt 8. Post – questionnaire applied to students

QUESTION: What did you like of the implementation process?

STUDENT'S ANSWER: *pues que pude compartir mas con mis compañero, trabajar con todos y no solo con mis amigos y pues además de aprender mucho vocabulario (what I liked was the opportunity I had to share and work more with all my classmates, not just with my friends, and also to learn more vocabulary).*

Excerpt 9. Post – questionnaire applied to students

They received teacher's help when necessary but just clarifying issues to foster investigation among them. Even more, they wrote some plans making different decisions to be successful with the production of their final writings.

5.3.2.2.1 Subcategory 1: Life – long learning

Findings in post – questionnaires revealed that the implementation process caused a positive impact on students, since they perceived that the direct and frequent exposure to vocabulary lead them to gain better opportunities for their professional future development, because it became a tool for getting a higher English proficiency. Below there are some excerpts which demonstrate these perceptions (see excerpt 10 and 11):

QUESTION: *What do you think about the implementation process?*

STUDENT'S ANSWER: *es importante mejorar este idioma ya que es muy necesario saber y entenderlo en la actualidad, a nivel profesional y porque no a nivel personal (It is important to improve English language, since currently it is necessary to know it and understand it at a professional and maybe at a personal level).*

Excerpt 10. Post – questionnaire applied to students

QUESTION: *What would be the benefits of discovering and learning new vocabulary in English?*

STUDENT'S ANSWER: *se puede trabajar en cualquier lugar del mundo (It is possible to work in any place of the world).*

STUDENT'S ANSWER: *pues en el día de hoy piden un excelente vocabulario en cualquier profesión (currently excellent vocabulary is required by any profession).*

Excerpt 11. Post – questionnaire applied to students

Ausubel (1967) was who brought the original concept of meaningful learning affirming that it leads to better long – term retention when different connections are established between the memory system, the previous and the new knowledge. Usually, the vocabulary learning tends to turn into rote one because it is taught in isolation. However, Mezynski (1983) makes reference to a relation between vocabulary knowledge and reading comprehension implying that a manner to improve learner's reading performance is increasing their vocabulary.

5.3.2.2.2 Subcategory 2: Motivation

Gardner (1985) has affirmed that motivation is an essential factor in the process of English learning since it can be conceptualized as that booster which makes something worthy and interesting to be done (Harmer, 1991). He also refers to two important classes of motivation which were observed at this study: the short- and long-term goals. It can be said that there was an adjustment from short to long

– term goals, since first students started doing the activities they received in order to obtain a stamp teacher was giving when they had ended each one of the activities. Nevertheless, time and activities were passing and they felt better at receiving the next activities, because they thought they had gained experience and tools to do them in a better manner. The following observation done by the researcher can support this idea (see excerpt 12):

QUESTION: *What did you like of the implementation process?*

STUDENT'S ANSWER: *es más emocionante y uno le pone más ganas (It is more exciting and engaging for me).*

STUDENT'S ANSWER: *me gustó que hay cosas más dinámicas (I liked there are more dynamic aspects).*

Excerpt 12. Teacher's journal. Second Cycle.

Additionally, it is plausible to supplement this observation with students' comments written when answering the post – questionnaire (see excerpt 13):

QUESTION: *What did you like of the implementation process?*

STUDENT'S ANSWER: *es más emocionante y uno le pone más ganas.*

STUDENT'S ANSWER: *me gustó que hay cosas más dinámicas.*

STUDENT'S ANSWER: *todo...los trabajos son muy divertidos y obvio pude aprender más.*

Excerpt 13. Post – questionnaire applied to students.

5.3.3 Core category

The main purpose of this study was to find through different instruments the answer to the following research question:

How does using guided discovery to implement project – based tasks affect the acquisition of vocabulary amongst ninth – graders with pre – A1 (CEFR) L2 English?

Following grounded theory in order to elucidate the data gathered through the instruments selected generated the following core category (see figure 4):

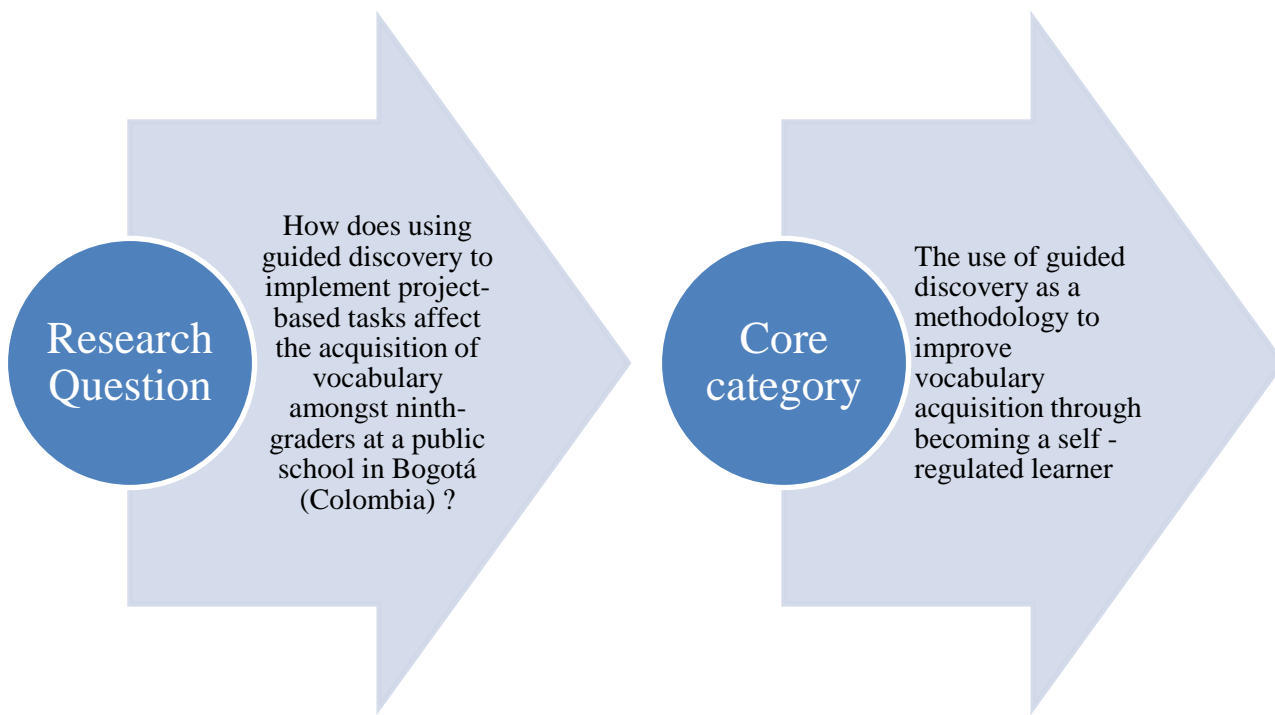


Figure 4. Core category

The procedures followed to answer the research question and come upon the core category are represented in the following figure (see figure 5):

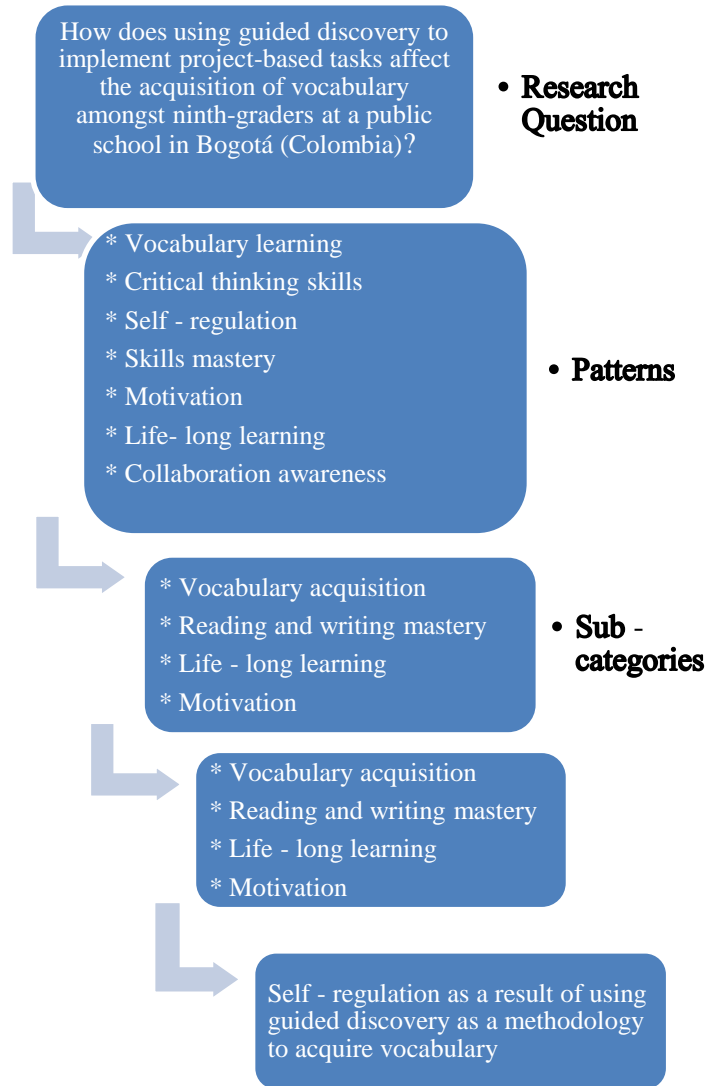


Figure 5. Process to find the Core category

Reaching self – regulated behaviour refers to four levels (Schunk & Zimmerman, 1997):

- The first level is observation in which learners recognize a model (Bandura, 1986) because it offers essential information for them . Linking this step with the implementation stage, students were provided with a reading which had the purpose of being a model at the beginning of each cycle for the construction of their final products.

- b) The continuous level refers to the learners' action of imitating the model provided but doing it in their own manner. During this process, they used the vocabulary to perform the activities provided and at the end built their products.
- c) The third level is related to the self-control, because learners start becoming independent of the teacher. At the teacher's journal it is possible to evidence this level on students, since from the second cycle they began demonstrating more interest and engagement on all the assignments they had to perform by looking for information and tools to make tasks in a better manner. See excerpt 14:

It was surprising to see students looking for a tool in the web which could help them pronounce correctly the words they selected for the task, by using the tablets. They rearranged the plans to be successful. It is amazing.

Excerpt 14. Teacher's journal. Second cycle.

- d) In this fourth level self-regulated procedures are done by learners, adapting to the context of each situation. Learners' behaviour changed tremendously since they just needed a few teacher's instructions to advance in their tasks. During the third cycle they just arrived in the classroom, greeted, organized their work groups, got ready the materials, and continued working according to the plans they had already arranged. The excerpt 15 will show a students' comment found in the post – questionnaire which supports this idea:

QUESTION: *How easy is it for you to put into practice the vocabulary you learn now? why?*

STUDENT'S ANSWER: *fácil porque en la clase tomo nota del vocabulario que me enseñan y con ayuda de imagenes me acuerdo mejor lo que me explicaron en la clase (easy because I take notes about the vocabulary taught during the lessons and with the help of images, I am able to recall it).*

Excerpt 15. Post – questionnaire applied to students

5.4 Conclusion

The overall findings revealed that the use of guided discovery methodology linked to project-based tasks has a vital role in order to develop the following aspects mainly: the acquisition of vocabulary, mastery of reading and writing skills, life - long learning, motivation and self – regulation.

About the first aspect, it was noticeable the increase of vocabulary related to the three topics worked through the implementation, due to the exposure students had with vocabulary, the type of activities they did which led them to be curious and start discovering more words and tools in order to accomplish with the assignments, the improvement and proud they perceived for having been able to reach goals which made them feel more motivated. Additionally, two aspects which are essential for students' future professional development for being twenty first century skills were found out through guided discovery: they were life - long learning and self – regulation. These two aspects are highly important since provide students tools to be successful at all the tasks they will have to face as students, citizens, and professionals.

Chapter 6: Conclusions and Pedagogical Implications

6.1 Introduction

This final session is the product of the deep and complete analysis on the effects on EFL vocabulary acquisition process of ninth graders through the use of guided discovery to implement project – based tasks at a public school in Bogotá (Colombia). The information used to establish the conclusions of the current study are highly important since they can be utilized as a manner to tackle the great problem that lack of vocabulary presents in most of students. Furthermore, the findings also can be used as a beginning to further research by identifying similar problematic situations at other English teaching institutions having in mind that it is possible not just to work to decrease vocabulary acquisition problems, but fostering self – regulation, collaborative work, long – life learning and in general critical thinking.

The present chapter initially presents a comparison between the results of this research study between the ones identified in the state of the art; then, the significance of the findings; next, the challenges that appeared and the recommendations necessary to help others who are interested in doing a similar study or continue this; later, tools, procedures, topics and / or options that may be approached in further research to keep on doing research in this field; and finally a conclusion emphasizing the essential results which answered the research question.

6.2 Comparison of results with previous studies' results

The results of this study revealed that the use of the strategy Guided Discovery with the support of Project-based Tasks approach affects positively the vocabulary acquisition process. On the one hand, making reference to some previous studies focused on vocabulary acquisition, several findings were identified such as the one which established that spaced practice of vocabulary led to better long-term retention than massed practice with corrective feedback (Lotfolahi & Salehi, 2017), and other which

affirmed that whole class teacher supported by speech and language therapists improve receptive and expressive oral vocabulary skills of adolescents with significant vocabulary difficulties (Murphy et al., 2017). These results disagreed to the ones coming from the current study because of different reasons, such as the first fact that the largest exposure to vocabulary manifested better results than spaced practice, and the second one which affirms that students-centred classroom with Discovery Learning Tasks lead to better vocabulary development than whole class-teacher. On the other hand, other studies obtained comparable results than this one, such as the positive effect that stories have on learning and increasing the students' English vocabulary (Chou, 2014); and the gains in knowledge that words in context and not in isolation have (Hill, Wagovich, & Manfra, 2017). In this study, students definitely were able to use some vocabulary provided during the pedagogical intervention in their final assignments and what was more successful, to obtain incidental vocabulary learning (Saragi, Nation, & Meister, 1978) because of the great exposure to it and their learning from context, accompanied by their autonomous search of words necessary for the accomplishment of tasks.

In regards to Guided Discovery previous studies, and in spite of the fact that it has been used more in research in other areas of knowledge different to English language learning, the overall results provide positive benefits after its use such as enhancing of memory, increasing of intellectual potency, motivation, and learning awareness (Bruner, 1961). Through the use of Guided Discovery students have learn how to be creative if they are provided by interesting topics (Barry & King, 1998), fostering a deeper reasoning and thinking (Rowe, 2004) and making them aware that observation is important to have the possibility of giving opinions (Treffinger, 1980). The use of Guided Discovery in the present study led students to realize about the need of extra vocabulary besides the one provided by the teacher, the reading, and the set of activities proposed for each cycle. Thus, they searched more appropriate vocabulary and useful tools which could help them fulfil their tasks with high quality and on time, fact

that was representative in students' final written stories in which the amount of words found by them in an autonomous way was higher than the amount of words which had been provided through the activities.

Finally, making reference to the last construct of this research which is Project-based Tasks, previous studies have shown that this approach has been used having as a main purpose to transform learning environments by making learners aware of their important role in acquiring and constructing any kind of knowledge (Krajcik & Blumenfeld, 2006), in providing tools to solve problems by living a collaborative experience (Preetha, Ram, & Sprague, 2009), and increasing knowledge and communication ability (Shafaei, Poorverdi, & Parvizi, 2007). In the present study similar findings were established, as the self-regulated behaviour students started adopting after some sessions of the implementation. Several obstacles were overcome through the pedagogical intervention, because at the beginning learners did not trust their classmates to work and construct a product; they considered as the best possibility to work individually to be successful in all the assignments. However, this students' perception changed assertively since they were able to complete the vocabulary activities and build up their written stories preparing a complete plan previously in which there was an assignment of roles among them and opportunities to make decisions.

6.3 Significance of the results

In regards to the research question: How does using Guided Discovery to implement Project-based Tasks affect the acquisition of vocabulary amongst ninth-graders at a public school in Bogotá (Colombia), the analysis of the results leads to affirm that Guided Discovery methodology in conjunction with project – based tasks are an excellent compound to foster several important educational aspects on EFL. First, and the most important conclusion is that the process of vocabulary acquisition

works better because of several reasons. Self – regulation, an ability that needs to be developed for the 21st century students in order to help them be successful, is highly promoted in this study and established as the main category. It was reached by a scaffolding process in which learners started at a basic level following models and instructions being very close to the teacher, until reaching the state of adapting to the situation context (Schunk & Zimmerman, 1997). Additionally, the resulting evidences in this study turned into a chain, because self – regulatory behaviour conducted students to acquire a “discovery” performance by searching more vocabulary in order to reach an established goal. Furthermore, that goal was easier to find by working in groups in a collaborative manner and this is as vital as critical thinking which is another skill for the 21st century. Even more, instruments as the post-questionnaires showed that this study increased English learners’ confidence, motivation, and even ambitions, since some students could finally perceive that English was a determining tool not just to move on to the next grade or to fulfil a requirement, but to obtain better future possibilities to be successful in life as a person and a professional who makes better decisions, have self-regulated behaviour, and work collaborately at any circumstance.

6.4 Pedagogical challenges and recommendations

For future researchers interested in this field of knowledge related to vocabulary acquisition through the use of Guided Discovery, it is important to say the reason why they should care about it. Lack of vocabulary is a usual weakness students express when trying to demonstrate their output abilities, but teaching and learning vocabulary strategies do not have a place in the school curriculums (Asyiah, 2017). Teachers must be aware that knowing a word involves form, meaning and use (Nation, 2001), and this requires to include different aspects of vocabulary pronunciation, spelling, associations,

grammatical functions, collocations, and constraints on use, which were covered in varied manners in this study.

It is important to suggest Guided Discovery as a methodology to be standardized, since students express the lack of learning and motivation with the application of a traditional teaching one. But, in order to use it, it is highly relevant to follow the recommendations below:

- To provide sufficient exposure as well as frequency of work with the vocabulary to study, through the activities to assign.
- To prepare varied and attractive activities according to students' pace, learning styles and multiple intelligences, considering topics that are interesting for them and providing models to be followed.
- To promote group work among students, having in mind that initially groups must be arranged by the teacher, providing a balance among the ones who are more confident with English with the ones who are not, and then they will learn to make right decisions when forming groups.
- To provide different opportunities for students to make decisions about aspects related to their assignments.
- To select interesting topics for students in order to increase their eagerness not just towards tasks accomplishment but English learning.

6.5 Research limitations

The development of this research study had some limitations based on timing and particular issues related specifically to the public school where the researcher was carried out the project.

Referring to timing, one of the highest obstacles was a national strike which lasted thirty seven days and

as a consequence this study took much more time to be completed, since there were not students at school at the moment of doing the implementation task. This same event made the activities at school to be accumulated and when the strike ceased, it was troublesome to continue with the plans arranged previously for the implementation. To have the possibility to implement and carry out all the face to face lessons planned, it was necessary to ask for hours to other teachers and make extra work with students in different schedules of English subject, and that fact was tiring not just for students but for researcher.

Besides this, the amount of English lessons a week are definitely not enough to get the minimum contact not just with vocabulary, but with all the relevant aspects for second language learning. It is simply contradictory to establish goals for public schools' students to be bilingual soon, when the importance of English is reflected neither in the institutional curriculum nor in its schedule.

As an additional limitation, it can be mentioned the struggle based on changing students' mind set after being using traditional methodologies for much time, since students at the beginning were not comfortable working in groups formed by teacher due to the lack of confidence on others to be successful in the fulfilment of their assignments. Also, at the beginning they did not have experience in searching for more information, or looking for tools to help themselves, since they were very dependable on teacher.

6.6 Further research

If different interests appear in order to do some research focused on any of the constructs of this study, it would be helpful to know some relevant issues about them. In order to work with vocabulary acquisition frequency and continuation among lessons are essential to get positive results in research implementation stage and real English lessons. Working with Guided Discovery requires the previous preparation of all the activities per lessons and a teacher's mind-set eager to promote n students the

ability of constructing their knowledge. In terms of Project-based Tasks group work is vital in order to promote collaborative work which contributes to students' production. Finally, about teaching issues it is important to provide high exposure to English, and facilitate sceneries, materials, and situations, taking into account students' learning styles and multiple intelligences. Applying the approach of this study usually may lead to a useful self-regulatory students' behaviour in which they keep reading and completing their assignments with or without the presence of a teacher in their classrooms.

Further research could be made because Guided Discovery is an approach which can be used not just in grammar and vocabulary teaching, but in other EFL aspects in search of those positive results found out in this current research, such as in the other skills, and also in other grades because activities can totally be adapted according to students' grade, age, and curriculum.

Due to the nature that Guided Discovery approach presents, allowing its appliance with different contexts and topics, further research may be possible in order to work with interdisciplinary projects directed for using knowledge not only focused on English learning but other areas.

6.7 Conclusion

After the opportunity of having carried out this action research study and have analysed the data collected through the instruments selected with their corresponding results, it is possible to come into view the following conclusions:

- The use of Guided Discovery strategy definitely affects learners' vocabulary acquisition process, if there is enough exposure to the vocabulary proposed inside the lessons and high frequency of encounters.
- The teacher's role in the implementation of Guided Discovery must be focused on providing students opportunities to go further tasks, giving objectives to be reached, and

clear instructions to be accomplished which foster curiosity and need of looking for issues to complement their tasks while practicing different critical thinking skills as making decisions, autonomy, and self-regulation.

- The blending of Guided Discovery approach and Project-based Tasks approach is favourable for a discovery learning environment, because not just curiosity but collaborative work is fostered, leading students to be aware of the diverse learning possibilities that emerge when they trust and respect their classmates.
- The use of Guided Discovery in combination with projects encourage students to be self-regulated since they have the possibility to decide how to accomplish their assignments making decisions, writing their plans to reach goals, and assigning roles inside their work groups.
- Motivation, engagement, and life-long learning are abilities that can be reached in English lessons if learners are aware of their important participation in their learning process and in their future lives to be better citizens and professionals.
- Reading and writing skills may improve if they are used as input and output activities for vocabulary acquisition process.
- Modelling definitely has a main role in learners' understanding and confidence towards any kind of assignment and project proposed.
- It is essential in English teaching to make students realize the impact that language may have in their future lives, because it turns into a challenge to be reached and a means to help themselves and improve.

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Appendix A:**I SURVIVED FROM A FIGHT BETWEEN HOOLIGANS IN BUCARAMANGA**

Student's name: _____ Grade: _____

Read carefully and choose the best option for you.



Santiago, a young man from Bucaramanga and a member of Club Atlético Nacional Hooligans, participated in a fight against los Comandos Azules de Millonarios in San Pio Park in Bucaramanga.

It was a Saturday and the Nacional team played against Chico in Medellin. Santiago and his friends agreed to meet in San Pio Park to watch the football match in a pub. They used to meet early to talk. So, that day he left home at 1:30 pm in spite the match was at 5 pm. He was wearing a Colombian Selection t-shirt and White shorts.

When he arrived there were some “buddies” so, he sat down and they started talking about last week fight. They told him that Millonarios hooligans chased their friends out of the park and became its owners. They were angry. That park had always been a South hooligan’s territory, so they could not take it away. Santiago’s gang had to recover it.

When everybody came, they went to a pub to watch the match, but when they crossed the 33rd avenue, the policemen appeared and put them against a wall. Santiago was carrying “the shovel” (a knife) in his shorts pocket but he did not hide it. The policemen took some “grass” and four “shovels” to the others. He was waiting for the policemen to search him, but they were tired and let them go. He thought he was so lucky. When they arrived in the bar, asked for some beer and relaxed. He just drank five bottles of beer because he had no money. In that football match, Nacional team won 2 against 0 at the Atanasio Girardot stadium. They felt full of energy because of the triumph. So, they thought it was time to go and look for the “hens” to recover their park.

They were around fifteen people. They all walked to San Pio Park. When they crossed the 33rd avenue and saw the Comandos azules de Millonarios they started throwing stones and bottles. Those blue hooligans were around 30 people. Santiago’s buddies began running but “El Tatareto”, who is dead now, said that they had to go and hit the blue ones and recover the San Pio Park, because it was their home. So, the green hooligans just walked to the park. It was killing or dying. Santiago was the first man facing

the group. He thought that the ones from the south of Bucaramanga had to be respected. One man called “El borracho” walked towards Santiago and hit him with a stick on his left leg. Then, that man slipped and fell on the floor, so the others kicked him continuously. Santiago went away for a while because he heard people shouting “stop, don’t be murders”. Suddenly, Santiago turned his head and saw somebody who picked up a stone and dropped it on the man’s head.

The police cars sirens sounded and all the people ran. Santiago and his friends got in a bus to go back home. Then, he arrived in home and as there was a party because of his cousin’s birthday, so he drank alcohol and relaxed. However, Santiago was scared of being chased or that any person said something. Next day he did not go out. Three days later Santiago’s mother woke him up with a newspaper on her hands and she read to him that “El borracho” was 16 years old, had received ten stabs and had been in a surgery. His mother asked Santiago if he had been there and he obviously deny it. Santiago only thought that “El borracho”’s friends did not help him and that he had survived because of the people’s shouting.

Santiago said he did not feel guilty because the man survived. He now continues being a hooligan but he does not look for fighting. He does not want to repeat that experience.

1. What happened in the story?
 - a) There was a fight among thieves and the police
 - b) There was a fight among fans of different football teams
 - c) There was a fight among the police and poor people
2. Which conditions are necessary for fights among hooligans?
 - a) Lack of respect for the police
 - b) Lack of respect for colours
 - c) Lack of respect for other people’s likes
3. What do you think about Santiago’s reaction of not feeling guilty because of “El borracho”?
 - a) He is right, because the man survived
 - b) He must be in jail
 - c) He must die
4. What do you think about fighting for a park?
 - a) It is not correct because parks are a public space
 - b) It is correct because this park was their home

- c) It is correct because parks are for all the people
5. What do you think about “El borracho’s friends?
- a) They are good people because they helped him
- b) They are good people because they kept in silence
- c) They are bad friends because they did not fight against their enemies
6. What do you do if a person steps on the flag of your football team?
- a) I disregard him / her
- b) I say bad words to him / her
- c) I hit him / her
7. What would the president do to finish the hooligans’ fights?
- a) Finish the football in Colombia
- b) Forbid people to go to the stadium
- c) Forbid the use of football teams t-shirts
8. How do you react when your team makes a goal?
- a) I shout and say bad words to the other team’s fans
- b) I muck of other teams’ fans
- c) I speak in low voice, so the others cannot listen what I say
9. How can we help to finish these fights?
- a) Not watching football matches
- b) Using more policemen in the stadiums
- c) Wearing Colombian selection t-shirts

(Photograph: File/VANGUARDIA LIBERAL)

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Appendix B: Needs analysis questionnaire**COLEGIO RAFAEL NÚÑEZ I.E.D.**Docente: Lilett Garzón Asignatura: inglés**Estimado estudiante:**

Teniendo en cuenta que su opinión es muy importante para la profesora de la asignatura inglés, por favor conteste las preguntas de la manera más honesta justificando sus respuestas cuando sea requerido:

1. ¿Cómo considera usted el inglés: Fácil o difícil? ¿por qué?

2. ¿Considera que la falta de vocabulario afecta directamente su desempeño en el aprendizaje del inglés? ¿Por qué?

3. ¿Es fácil o difícil para usted aprender vocabulario en inglés? ¿Por qué?

4. ¿Qué estrategia usa para aprender nuevo vocabulario? ¿Le funciona completamente esa estrategia? ¿Por qué?

5. ¿Para qué le serviría dentro del aprendizaje del inglés saber una buena cantidad de vocabulario?

¡¡GRACIAS POR SU VALIOSA OPINIÓN

Appendix C:



CAMBRIDGE ENGLISH
Language Assessment
Part of the University of Cambridge

83. Gap fill sentences – SPORT

These can be used with a word search, crossword, another exercise or just on their own.

- a. The Olympiccan hold 80,000 people.
- b. There are eleven players in a football
- c. Manytook part in the olympics.
- d. Theorganised all of our training.
- e. Eightran in the race.
- f. There was ato see who was the strongest man.
- g. The team played badly which led to a big
- h. Our team are bottom of the
- i. The British footballbegins in August and ends in May.
- j. I was theof the school football team.
- k. His brother had great football
- l. Wimbledon tennisis held every June.
- m. She won goldat the Olympics.
- n. Acan earn a lot of money.
- o. Thehad problems controlling the teams.
- p. They won 4-0 in front of over 40 000 cheering
- q. Phoenix managed a 135-114over Denver.
- r. The competition was only open to

Appendix D: Consent letter

COLEGIO RAFAEL NÚÑEZ

Formato de Autorización – Padres de Familia

Bogotá, D.C. Abril 29 de 2016

Proyecto de Investigación: Design of Tasks-Based Readings Centered on Bloom's Cognitive Domain to Develop the Critical Thinking in English as a Foreign Language

Maestría en didáctica del Inglés con énfasis en ambientes de aprendizaje autónomo

Señores Padres de Familia – Estudiantes Octavo Grado

Ciudad

Respetados Padres de Familia:

La presente tiene como fin poner bajo su conocimiento, que en la asignatura de inglés se pretende llevar a cabo un estudio de investigación titulado “Using Guided Discovery to implement Project-based Tasks for the acquisition of vocabulary in ninth graders at a public school in Bogotá (Colombia)” como producto de investigación de la Maestría en Didáctica del Inglés como Lengua Extranjera de la Universidad de La Sabana, de la cual soy estudiante actualmente. Dicha investigación está dirigida a estudiantes de octavo grado, con el propósito de implementar diferentes tareas de comprensión lectora que van aumentando de complejidad de acuerdo a los niveles de pensamiento establecidos en la taxonomía de Bloom para así fomentar el pensamiento crítico.

Durante la implementación de este proyecto, los estudiantes desarrollarán algunas encuestas, actividades y talleres guiados y se tomarán fotografías por parte de la docente. Cabe mencionar que la ejecución de este proyecto no entorpecerá ni atrasará la planeación de clases o actividades inherentes al currículo del área y tampoco tendrá incidencia alguna en las notas correspondientes al curso.

A los participantes se les garantiza estricta confidencialidad con la información que se obtenga y completa anonimidad.

Para que quede constancia que conocen esta información y aprueban la participación de su hijo (a), por favor firmar el presente consentimiento y marcar con una X su decisión.

Agradezco de antemano su valioso aporte para llevar a buen término mi investigación.

Atentamente,

Vivian Lilett Garzón Bernal

Docente de Inglés

Nombre Estudiante: _____

Firma padre: _____

Firma madre: _____

Estoy de acuerdo: _____

No estoy de acuerdo: _____

Appendix E:**VOCABULARY PROJECT DIAGNOSTIC - SURVEY / PRE - QUESTIONNAIRE**

Dear student: the following questionnaire is aimed to know your perceptions about your vocabulary learning regarding its importance in the English learning process, Remember there are not correct or incorrect answers. Please, read and select what you think the best option or options are. Your confidentiality will be respected and your answers will be used just for research and education purposes. Thanks for your participation,

Estimado estudiante: el siguiente cuestionario tiene como propósito conocer sus percepciones acerca de su aprendizaje vocabulario, teniendo en cuenta su importancia en el proceso del aprendizaje del Inglés. Recuerde que no hay respuestas correctas o incorrectas. Por favor lea y selecciones la mejor o mejores opciones para usted. Su anonimidad será respetada y sus respuestas serán usadas únicamente con fines educativos e investigativos. Muchas gracias por su participación.

***Obligatorio**

1. Dirección de correo electrónico *

2. Marca solo un óvalo.

Opción 1

3. Grade / grado *

Marca solo un óvalo.

901

902

4. Code number / Número de lista *

5. Gender / Género *

Marca solo un óvalo.

Female / Femenino

Male / Masculino

6. Age / Edad *

Marca solo un óvalo.

14 years old / 14 años

15 years old / 15 años

16 years old / 16 años

17 years old / 17 años

18 years old / 18 años

7. How much time have you been studying English at school? / ¿Cuánto tiempo ha estado estudiando Inglés en el colegio? *

Marca solo un óvalo.

- Less than a year / Menos de un año
- Between 1 to 3 years old / Entre 1 y 3 años
- Between 4 to 6 years old / Entre 4 a 6 años
- More than 6 years / Más de 6 años

8. Which of the following aspects would you like to work on to learn english more easily? Choose as many options as it is necessary / ¿Cuál de los siguientes aspectos le gustaría trabajar para aprender inglés más fácilmente? Escoja tantas opciones como sea necesario. *

Selecciona todos los que correspondan.

- Wider range of vocabulary / Un rango mas amplio de vocabulario
- Complex grammar lessons / Clases complejas de gramática
- Frequent reading / Lectura frecuente
- Frequent listening / Escucha frecuente
- Frequent writing / Escritura permanente
- Frequent speaking / Habla permanente
- Otro: _____

9. why? Please explain / ¿Por qué? Por favor explique *

10. How much time do you read stories in English a week? / ¿Cúanto tiempo a la semana lee historias en Inglés? *

Marca solo un óvalo.

- Never / Nunca
- 15 minutes / 15 minutos
- 30 minutes / 30 minutos
- 1 hour / una hora
- 2 hours / 2 horas
- Otro: _____

11. **why? Please explain / ¿Por qué? Por favor explique ***

12. **How do you consider your level of vocabulary to write a story in English? / ¿Cómo considera usted su nivel de vocabulario para escribir una historia en inglés? ***

Marca solo un óvalo.

- Excellent / Excelente
- Good / Bueno
- Not very good / No muy bueno
- Bad / Malo

13. **why? Please explain / Por qué? Por favor explique ***

14. **How easy is it for you to learn vocabulary? / ¿Qué tan fácil es para usted aprender vocabulario? ***

Marca solo un óvalo.

- Very easy / muy fácil
- Easy / fácil
- Normal / normal
- Difficult / difícil
- Very difficult / muy difícil

15. **why? Please explain / Por qué? Por favor explique ***

16. **How easy is it for you to put into practice the vocabulary you learn? / ¿Qué tan fácil es para usted poner en práctica el vocabulario que aprende? ***

Marca solo un óvalo.

- Very easy / muy fácil
- Easy / fácil
- Normal / normal
- Difficult / difícil
- Very difficult / muy difícil

17. **why? Please explain / Por qué? Por favor explique ***

18. **What strategies do you use to learn new vocabulary in English? Choose more than one option if it is necessary / ¿Qué estrategias utiliza para aprender nuevo vocabulario en inglés? Escoja más de una opción si es necesario. ***

Selecciona todos los que correspondan.

- Memorize the new words / memorizar las palabras nuevas
- Take notes about the vocabulary / Tomar notas del vocabulario
- Frequent use of the vocabulary / repetición del vocabulario
- Use of imagery / uso de imágenes
- Infer from context / inferir de acuerdo al contexto
- Answer questions about words / responder preguntas sobre palabras
- Classify words / clasificar palabras
- Otro: _____

19. **why? Please explain / Por qué? Por favor explique ***

20. **What would be the benefits of discovering and learning new vocabulary in English? / ¿Cuáles son los beneficios de aprender más vocabulario en Inglés? ***

21. **How do you prefer to learn english? / ¿Cómo prefiere aprender inglés? ***

Marca solo un óvalo.

- Individually / Individualmente
- In couples / En parejas
- Groups of 3 or 4 / Grupos de 3 ó 4
- Groups of 5 or 6 / Grupos de 5 ó 6
- Bigger groups / Grupos más grandes
- Teacher and all the group / Profesora y todo el grupo
- Otro: _____

22. **why? Please explain / Por qué? Por favor explique ***

23. **Have you ever prepared a final product for a class in group? / Alguna vez ha preparado un producto final para una clase en grupo? ***

Marca solo un óvalo.

- Yes / Si
- No / No

24. **why? Please explain / Por qué? Por favor explique ***

APPENDIX F

VOCABULARY PROJECT POST - QUESTIONNAIRE

Dear student: the following questionnaire is aimed to know your perceptions about your vocabulary learning after the implementation process, Remember there are not correct or incorrect answers, Please, read and select what you think the best option or options are. Your confidentiality will be respected and your answers will be used just for research and education purposes. Thanks for your participation. Estimado estudiante: el siguiente cuestionario tiene como propósito conocer sus percepciones acerca de su aprendizaje de vocabulario después del proceso de implementación. Recuerde que no hay respuestas correctas o incorrectas. Por favor lea y seleccione la mejor o mejores opciones para usted. Su anonimidad será respetada y sus respuestas serán usadas únicamente con fines educativos e investigativos. Muchas gracias por su participación.

*Obligatorio

1. Dirección de correo electrónico *

2. Gender / Género *

Marca solo un óvalo.

- Female / Femenino
 Male / Masculino

3. Grade / grado *

4. Code number / Número de lista *

5. What do you think about the implementation process / ¿Qué piensa sobre el proceso de implementación? *

6. How do you consider your level of vocabulary to write a story in English is now? / ¿Cómo considera que su nivel de vocabulario para escribir una historia en inglés es ahora? *

Marca solo un óvalo.

- Excellent / Excelente
 Good / Bueno
 Not very good / No muy bueno
 Bad / Malo

7. why? Please explain / ¿Por qué? Por favor explique *

8. How easy is it for you to learn vocabulary now? / ¿Qué tan fácil es para usted aprender vocabulario ahora? **Marca solo un óvalo.*

- Very easy / muy fácil
- Easy / fácil
- Normal / normal
- Difficult / difícil
- Very difficult / muy difícil

9. why? Please explain / Por qué? Por favor explique *

10. What strategies do you use now to learn new vocabulary in English? Choose more than one option if it is necessary / ¿Qué estrategias utiliza para aprender nuevo vocabulario en inglés ahora? Escoja más de una opción si es necesario. **Selecciona todos los que correspondan.*

- Memorize the new words / memorizar las palabras nuevas
- Take notes about the vocabulary / Tomar notas del vocabulario
- Frequent use of the vocabulary / repetición del vocabulario
- Use of imagery / uso de imágenes
- Infer from context / inferir de acuerdo al contexto
- Answer questions about words / responder preguntas sobre palabras
- Classify words / clasificar palabras
- Otro: _____

11. **How easy is it for you to put into practice the vocabulary you learn now? / ¿Qué tan fácil es para usted ahora poner en práctica el vocabulario que aprende? ***

Marca solo un óvalo.

- Very easy / muy fácil
- Easy / fácil
- Normal / normal
- Difficult / difícil
- Very difficult / muy difícil

12. **why? Please explain / Por qué? Por favor explique ***

13. **What would be the benefits of discovering and learning new vocabulary in English? / ¿Cuáles son los beneficios de descubrir y aprender más vocabulario en Inglés? ***

14. **why? Please explain / Por qué? Por favor explique ***

15. **How is it for you the process of writing short stories? / ¿Cómo es para usted el proceso de escribir historias cortas? ***

Selecciona todos los que correspondan.

- Very easy / muy fácil
- Easy / fácil
- Normal / normal
- Difficult / difícil
- Very difficult / muy difícil

16. **why? Please explain / Por qué? Por favor explique ***

17. **Do you consider there is a relationship between the amount of vocabulary you know and your ability to write stories? / Usted considera que hay una relación entre la cantidad de vocabulario que usted sabe y su habilidad para escribir historias ***

Marca solo un óvalo.

- Yes / Si
- No / No

18. **why? Please explain / Por qué? Por favor explique ***

19. **How do you prefer to learn english now? / ¿Cómo prefiere aprender inglés ahora? ***

Marca solo un óvalo.

- Individually / Individualmente
- In couples / En parejas
- Groups of 3 or 4 / Grupos de 3 ó 4
- Groups of 5 or 6 / Grupos de 5 ó 6
- Bigger groups / Grupos más grandes
- Teacher and all the group / Profesora y todo el grupo
- Other / otro

20. **why? Please explain / Por qué? Por favor explique ***

21. **How do you consider the task to prepare a final product in group for a lesson? / ¿Cómo considera la tarea de preparar un producto final en grupo para una clase? ***

Marca solo un óvalo.

- Very easy / muy fácil
- Easy / fácil
- Normal / normal
- Difficult / difícil
- Very difficult / muy difícil

22. **Why? Please explain / Por qué? Por favor explique ***

23. **Do you consider that working with projects has any influence in the process of learning vocabulary? / ¿Considera usted que trabajar con proyectos tiene alguna influencia en el proceso de aprender vocabulario? ***

Marca solo un óvalo.

- Yes / Si
- No / No

24. **Why? Please explain / ¿Por qué? Por favor explique ***

25. **What did you like of the implementation process? Explain please / ¿Qué le gustó del proceso de implementación? Explique por favor ***

APPENDIX G



VOCABULARY PRE AND POST TESTS



STUDENT'S NAME: _____

GRADE: _____

1. Horror _____
2. Haunted _____
3. Scare _____
4. Death _____
5. Noise _____
6. Strange _____
7. Forest _____
8. Darkness _____
9. Mansion _____
10. Spirit _____
11. Ghost _____
12. Shadow _____
13. Monster _____
14. Feel _____
15. Basement _____
16. Abandoned _____
17. Blood _____
18. Dream _____
19. Scream _____
20. Cemetery _____
21. Cyberbullying _____
22. Aggressive _____
23. Behaviour _____
24. Depressed _____
25. Lonely _____
26. Self-esteem _____
27. Harassment _____
28. Conflict _____
29. Teasing _____
30. Hazing _____

31. Name calling _____
32. Pick-on _____
33. Sarcasm _____
34. Hate _____
35. Joke _____
36. Hit _____
37. Intimidation _____
38. Terrorizing _____
39. Threat _____
40. Isolation _____
41. Then _____
42. Next _____
43. Finally _____
44. Gadget _____
45. Power _____
46. Hero _____
47. Clothing _____
48. Protect _____
49. Weapon _____
50. Thief _____
51. Smile _____
52. Look _____
53. Feed _____
54. Cry _____
55. Walk _____
56. Appear _____
57. Answer _____
58. Fly _____
59. Take _____
60. Give _____

APPENDIX H

TEACHER'S JOURNAL

Date: _____ Observation time: _____ Class N°: _____

Phase in Process Writing: _____ Number of students: _____

OBJECTIVE

To characterize the effects that the use of guided discovery framed in a project-based learning approach could potentially have on the acquisition of vocabulary of ninth graders with A1

(CEFR) L2 English

RESEARCH QUESTION

How does using guided discovery to implement project-based tasks affect the acquisition of vocabulary amongst ninth-graders with pre-A1 (CEFR) L2 English?

Class Objective:

Activity Description:

Students' attitudes and behaviours during the lesson:

Teacher's impressions:

- a) About vocabulary acquisition

b) About guided discovery

c) About project task based

What went well:

What went bad:
