

People's Democratic Republic of Algeria
Ministry of Higher Education and Scientific Research
Mouloud Mammeri University of Tizi-Ouzou
Faculty of Letters and Languages
Department of English



Domain: Foreign Languages

Branch: English Language

Speciality: Language and communication

**Dissertation Submitted in Partial Fulfillment of The Requirements For The
Degree of Master in English**

Title:

**The Implementation of Bruner's Constructivist Theory in Middle School
EFL Classes: An Experimental Study on Vocabulary Acquisition.**

Presented by:

Ms. HAMDANE Melissa

Ms. HAMMAMI Assia

Supervised by:

Dr. BELKHIR Sadia

Board of Examiners:

Mr. AOUINE Akli, "MAA", Mouloud Mammeri University of Tizi-Ouzou, **Chair.**

Dr. BELKHIR Sadia, Professor, Mouloud Mammeri University of Tizi-Ouzou, **Supervisor.**

Ms. AKIR Malika, "MAB", Mouloud Mammeri University of Tizi-Ouzou, **Examiner.**

Academic year: 2022-2023

Dedication:

I want to dedicate a heartfelt tribute to the two extraordinary individuals who have shaped me into the person I am today –my beloved mother “Houria” And my father “Ahmed”. Their unwavering love, sacrifices, and guidance have been the cornerstone of my life’s journey, and I am forever grateful for their presence.

I dedicate this achievement to my brothers and sisters. Your unwavering belief in me and your constant encouragement have propelled me forward .Your presence has given me the courage to dream big and the strength to preserve.

To all those who have helped me ,I dedicate my achievements and successes to you. Your support , encouragement ,and belief in my potential have propelled me forward during moments of doubt and uncertainty .I am humbled by your presence in my life and forever grateful for the impact you have made.

With all my love and gratitude,

Melissa

Acknowledgement

We would like to offer our sincere gratitude to everyone who helped us accomplish our master's thesis and contributed to its success.

Prior to anything else, we would want to express our sincere gratitude to our supervisor,

DR. BELKHIR SADIA. The direction and quality of this thesis have been greatly influenced by her insightful observations and helpful criticism.

We would like to express our deepest gratitude to **MmeCHALLAL** for generously allowing us to conduct the experiment in her classroom. Her support and cooperation were instrumental in the successful implementation of this research project. We would also like to extend our appreciation to **Kerkache Middle School** for their support and permission to carry out this study. This experience has been invaluable in furthering our understanding of educational research.


A special thanks goes out to the board of examiners for reading this work and for any suggestions they may have for improvement.

Our sincere thanks and appreciation go to each and every one of our teachers at MouloudMammeri University's English department.


Abstract

The present study investigates the effectiveness of Bruner's constructivist theory to enhance learners' vocabulary acquisition. It is concerned with the First-Year pupils and teachers in Middle School. Finding out how crucial the Discovery learning approach is to the teaching process is the goal of our research. It also aims to determine the opinions that EFL teachers have concerning the application of the above method to the growth of English language. The investigation also seeks to explain how the Discovery Learning approach affects the growth of learners' English vocabulary; communication abilities and active engagement. For the collection of the quantitative data, an experimental method has been carried. In addition, (38) First-Year pupils participated in an experimental study, and unstructured interview was done with seven Middle School teachers at "Brothers Kerkache" middle school in Tizi -Ouzou. In regards to data analysis, qualitative content analysis (QCA) is used to analyze the findings from the study of classroom observations. Additionally, the pre- and post-tests findings are interpreted in terms of numerical data manually entered in the form of percentages in a Microsoft Excel document, and then presented as diagrams (pie charts , bare graphs) , using the rule of three, the percentages are calculated. The interview' findings revealed that almost all of the teachers have favorable opinions about the Discovery Learning strategy because it is thought to be an effective way to help students develop their skills, particularly their critical thinking, and generally to give them the opportunity to express their own ideas in a creative way while constructing their own knowledge. However, some of the teachers hold opposing opinions about the idea behind this technique due of its time and resource requirements. Additionally, the outcomes of the experimental research show that the Discovery Learning method benefits students by encouraging them to actively participate in vocabulary learning, as the participants in the experimental group outperformed the ones in the control group in the post-test. Embracing the discovery learning method, which creates an engaging and student-centered classroom environment was also found to promote confidence, fluency, and deep understanding, leading to more effective and enjoyable vocabulary learning experiences and creates positive attitudes toward learning English.

Key terms: Discovery Learning, Bruner's constructivist theory, teachers' attitudes, active engagement, deep understanding, vocabulary acquisition, communication abilities.



List of abbreviations



List of abbreviations

CNR: control group.

EFL: English as a Foreign Language.

ELT: English language teaching.

EXP: experimental group.

FL: foreign language.

FLL: Foreign language learning.

Hp: hypothesis

L1: First language /Mother Tongue.

L2: second language.

LLS: Language learning strategy.

LTM: long term memory.

MS: middle school.

Q: Question.

QICA: qualitative content Analysis.

SLA: Second language Acquisition.

SPSS: Stastical package for the social sciences.

TL: Target language.



List of Diagrams



Diagram 1: the participants' age.

Diagram 2: the participants' English background.

Diagram 3: the language used by the participants to watch cartoons.

Diagram 4: the percentage of participants 'love for the English language.

Diagram 5: the means of learning new words by the participants.

Diagram 6: the frequency of learning English.

Diagram 7: the discovery learning method as a facilitating method of the teaching process.

Diagram 8: the frequency of difficulty in learning English vocabulary.

Diagram 9: teacher's frequency of encouraging pupils to learn English vocabulary through games, cartoons and songs.

Diagram 10: the importance of using visuals and initial situations in introducing a new vocabulary.

Diagram 11: the pre test results of the control and experimental group.

Diagram 12: the post test results of the control and experimental group.

Contents

Acknowledgements.....	I
Dedications.....	II
Abstract.....	III
List of Abbreviations.....	IV
List of Figures.....	V
List of Bar Graphs.....	VI
List of Tables.....	VII

General Introduction

Statement of The Problem.....	1
Aim and Significance of The Study.....	3
Research Questions and Hypotheses.....	4
Research Techniques and Methodology.....	5
Structure of the Dissertation.....	5

Chapter 1: Review of The Literature

Introduction	6
1.1 Definition of Vocabulary.....	6
1.2 The Process of Learning a New Word.....	7
2. Types of Vocabulary.....	8
2.1 Productive and Receptive Vocabulary.....	8
3 The Role of Vocabulary in The Language Skills.....	9
3.1 Vocabulary and The Writing Skill.....	9
3.2 Vocabulary and the Reading Skill.....	9
3.3 Vocabulary and The Listening Skill.....	10
3.4 Vocabulary and Speaking Skill.....	10

4. The Importance of Vocabulary in Foreign Language Teaching and Learning.....	10
5. Difficulties in Learning Vocabulary.....	11
6.1 What is Constructivism.....	14
6.2 Constructivism and Education.....	14
7. Dimensions of Constructivism.....	16
7.1 Cognitive Constructivism.....	16
7.2 Social Constructivism.....	18
8. The Constructivist Learner.....	20
8.1 Role and Characteristics of constructivist learner.....	20
9. The Constructivist Teacher.....	21
9. Role and Characteristics of constructivist teachers.....	21
9.2 Teaching Methods in The Constructivist Environment.....	22
10. Main Concept of Bruner Theory.....	24
11. Discovery Learning Theory.....	24
12. Scaffolding.....	25
13. Advantages of The Discovery Learning Theory.....	26
Conclusion.....	27

Chapter two: Research Design

Introduction.....	28
1. Procedure of The Experiment.....	28
2. Procedures of Data Collection.....	29
3. Instruments.....	29
4. The Questionnaire.....	29
5. Piloting of The Study.....	30
6. The Pre Test.....	31
7. Treatment.....	31
8. The Post Test.....	31

9. Memorization Test	32
9.The Interview.....	32
10 Classroom Observation.....	33
11 Procedures of Data Analysis.....	34
11.1Quantitative Data Analysis.....	34
11.2Qualitative Data Analysis.....	35
Conclusion.....	36

Chapter three: Presentation of The Findings.

Introduction.....	37
1. General Information About The Participants.....	37
2. Presentation of The Teachers Interview.....	41
3.Presentation of The Results of The Expiriment.....	45
3.1Presentation of The Pre Test Result.....	45
3.2Presentation of The Result of Post Test.....	46
4.Presentation of The Findings Gathered From Classromm Observation.....	47
5.Presentation of The Results of Memorization Test.....	49
Conclusion.....	52

Chapter four: Discussion of The Findings.

Introduction.....	53
1.1Discussion of The Results Obtained From The Teachers Interview.....	53
2. Discussion of The Results Obtained From the Pupils Questionnaire.....	56
2.1General Information About the Participants.....	56
3.Observation of The Experimental Group During The Treatment.....	57
4. Observation of The Control Group.....	58
1. Discussion of The Findings Obtained From the Experimental Research.....	60

1.1 The Pre Test.....	60
1.2 The Treatment.....	62
1.3 The Post Test.....	64
2. Discussion of The Memorization Test Results	66
3. Discussion of Classroom Observation.....	69
4. Discovery Learning Impact's on Vocabulary Acquisition Analysis.....	71
4.1 Vocabulary.....	71
4.2 Language Production.....	72
4.2.1 Oral Production.....	72
4.2.1 Written Production.....	72
4.3. Role Plays.....	72
4.4. Fluency.....	73
4.5 Comprehensibility.....	73
4.6 Interaction.....	74
Conclusion	75
• General Conclusion	76
• Bibliography	
• Appendices	



General Introduction



- **Statement of The Problem**

One of the crucial aspects of learning a foreign language is vocabulary. Wilkins and Thornbury's study conducted in 2002 underscores the paramount importance of vocabulary acquisition in the process of learning a foreign language, particularly English. They posited that vocabulary is an indispensable cornerstone of language learning, coining the axiom that "without grammar, very little can be conveyed, without vocabulary, nothing can be conveyed." In essence, their assertion highlights the foundational role of vocabulary, where a deficiency in vocabulary comprehension obstructs the comprehension of grammatical structures and the conveyed concepts. Consequently, individuals with limited vocabulary often confront challenges when attempting to engage with the English language, perceiving it as a formidable subject due to their restricted lexicon and linguistic proficiency. As a target language, learning English vocabulary is one of the keys to sustain other English language skills. Conversely, a large number of learners do not feel comfortable with English in the classroom. They think that it is a hard subject to study because of their restricted vocabulary and mastery of language competence. Moreover, Kamil and Hiebert's (2005) study focused on the relationship between vocabulary and language skills, specifically, listening and reading comprehension. They conducted research to investigate how an individual's vocabulary size influenced their ability to understand spoken and written language. The key discovery from their study was that individuals with a limited vocabulary faced significant challenges in comprehending both spoken and written language. The research emphasized the crucial role of vocabulary in overall language proficiency. It demonstrated that a robust vocabulary is not only essential for effective language skills but also for academic achievement and comprehension of complex textual and spoken contexts. Kamil and Hiebert's (2005) findings underscored the importance of vocabulary acquisition in language education and highlighted the need for effective vocabulary instruction methods. Their study likely contributed valuable insights to the field of language

education, informing educators about the significance of vocabulary development in language learners. That is to say, before the students learn four skills, they should first start by learning vocabulary.

Acquiring vocabulary is central to the development of learners' English language skills. Moreover, the process of learning new words is essential to student's long-term language proficiency. An adequate vocabulary is necessary for academic success, effective communication and the comprehension of complex texts and discourse. English language teachers quite often face problems about what should be taught in vocabulary. Moreover, teaching vocabulary is not something that can ever be fully mastered; it is a task that expands and deepens over the course of a lifetime. As Panel (2000) claimed, there is no single research based method for teaching vocabulary using a variety of direct and indirect methods of vocabulary instruction. According to the National Reading Panel (2000), to develop vocabulary intentionally, students should be explicitly taught both specific words and word learning strategies.

Richard and Schmidt (2002) in the field of foreign language teaching and learning have observed that learners face big difficulties in the acquisition and retention of the vocabulary of the target language. The learning style can differ from one pupil to another. Thus, teachers are required to find ways and methods in order to facilitate the learning and memorization of vocabulary. Among these methods "the discovery learning method" which involves the learners to learn by doing and hands on action, that is to say this method is a learning process by which they interact and participate to gain knowledge. Bruner (1960) introduced a theory, which afford new opportunities for pupils to memorize as much as possible words and foster

vocabulary learning, based on the idea that students construct their knowledge through experiencing and interacting with the environment. However, this theory does not receive much attention in the Algerian classroom settings. First-year pupils need recent and effective methods to cope with the difficulties that they face while acquiring new words or memorizing them when the traditional methods are applied. Thus, we want to explore the effectiveness of Bruner's constructivist theory as an active tool to enhance first year middle school learners' vocabulary acquisition and to demonstrate its importance in motivating learners to English learning. Furthermore, it seems that this topic has not been researched at the middle school level, in Tizi-Ouzou, Therefore, it would be advantageous to conduct the present investigation to fill this gap

- **Aim and Significance of The Study**

The present study aims to examine the impact of “Bruner’s constructivist theory “on Algerian first-year middle school pupils. It also seeks to implement this theory relying on an experimental design so as to evaluate its impact in enhancing pupils’ overall foreign language acquisition and school achievement. This study differs from the actual teaching methods that have been carried out, which, typically feature a teacher-centered approach where educators convey information to students in a structured, sequential manner, emphasizing memorization and standardized assessments. In contrast, the discovery learning theory adopts a student-centered perspective, encouraging active student engagement through exploration, experimentation, and problem-solving. In this approach, teachers act as facilitators, guiding learners to construct their own knowledge while fostering critical thinking and autonomy. Discovery learning prioritizes a deeper understanding of concepts, often in a non-linear, and assesses students through project-based assessments, aiming for broader educational goals

beyond rote memorization. So, the choice between these approaches depends on the educational context and goals.

In contrast to the actual methods mentioned above, Bruner's constructivist theory places a strong emphasis on active, discovery-based learning, the role of culture and social context, scaffolding, and the importance of narrative and language in the learning process. These elements distinguish it from other educational theories and inform his approach to teaching and learning. When discussing the differences in our study, we can highlight how our research aligns with or expands upon these key principles of Bruner's constructivist theory.

Moreover, this research tries to inspect the effect of the discovery learning method on young learners, namely Middle School Pupils. This study is also an attempt to highlight the impact and the effectiveness of “ the Constructivist Theory “ in fostering English as a foreign language learning , more specifically, for Algerian Middle school (MS) pupils . It draws a picture of the implementation of learner-centeredness and the teaching of foreign languages. It contributes to a better understanding of the effectiveness of Bruner’s constructivist theory namely Discovery Learning Method in learning vocabulary, this will be carried out by providing the first middle school pupils with a valuable process of learning. Furthermore, this study attempts to familiarize the Algerian teachers of English with the different existing models, techniques and strategies of teaching, afford them with new insights of classroom applications, and more importantly to empower and encourage them to implement “the constructivist theory” as a regular classroom method in their foreign language classes.

- **Research Question and Hypotheses**

This experimental study seeks to explore the effectiveness of Bruner's constructivist theory on the Middle School pupils, as well as its impact on the acquisition of vocabulary in English. It addresses the following research questions:

Q1 -What are the major problems that learners face when the learning process is based on the traditional methods?

Q2- Are EFL learners autonomous and therefore, ready to handle their learning process as required by constructivism?

Q3 -Does Bruner's discovery learning method help to increase learning growth in the acquisition of English vocabulary?

To answer the above research questions, we adopt an experimental study to get answers to our questions and hypothesis.

- ✓ **Hp1-** The implementation of the discovery learning method will result in improved vocabulary acquisition compared to actual instructional methods.
- ✓ **Hp2-** The provision of autonomy within the vocabulary acquisition process through the implementation of the discovery learning method will lead to enhanced long-term retention and transfer of vocabulary knowledge compared to actual teacher-directed instructional approaches.
- ✓ **Hp3-** The implementation of the discovery learning method in vocabulary acquisition will result in a higher level of cognitive engagement and critical thinking skills.

- **Research Techniques and Methodology**

In order to get answers to the questions and hypotheses, we adopted an experimental study. We started by a pre- test which consist of a series of activities including statement to complete, choosing the right answer, color the right animals, writing numbers by letters, and writing an e-mail to a friend that we gave to both the participants of the control and experimental group to know more about their competencies and their background in English. Accordingly, the constructivist theory will be used during twelve weeks. The classroom sample that is divided into two groups, the first is the control group (CNR), and the second being the experimental group (EXP). In addition, we designed a questionnaire to the pupils and an unstructured interview to the teachers. After the treatment, a post test is done. In fact, the test contains the same activities as the pre-test ones to confirm or refute our hypotheses. After one month, both the participants from (EXP) and (CNR) groups took the memorization test; it covers the last part of the quasi-experimental study. In fact, the results were analyzed, then transformed into percentages using the rule of three.

- **Structure of The Dissertation**

The current dissertation adheres to the traditional model. It has four chapters, as well as a general introduction and a general conclusion. The first chapter analyzes the key ideas in the literature and outlines the major theoretical stances. The sample and study participants, as well as the instruments used for data collection and analysis, are all addressed in the methodology chapter. The third chapter includes the data collection findings of the experiment. The fourth chapter contrasts the pre- and post-test results and analyses them in relation to the theoretical framework and literature review.



Chapter one
The Review of The
literature



Introduction

The present chapter is theoretical; it contains the review of the literature that turns around the topic investigated in this study. As its title indicates, the present study is about the implementation of Bruner's theory in EFL classes namely first year middle school pupils. The first section deals with the definition of vocabulary, its types, importance and following with a brief explanation of the difficulties that learners face. The second section deals with constructivism. The final part is dedicated to discovery learning, scaffolding and the advantages of using the discovery learning theory that adopted in the research.

1 -1 Definition of Vocabulary

Vocabulary is a part of language, it is regarded as a decisive aspect in learning a second or foreign language (Derbouche&Hamadouche2016).As Thornbury said "without grammar very little can be conveyed, without vocabulary, nothing can be conveyed"(2002,p.13). This is why teachers place a strong emphasis on teaching vocabulary using a variety of methods and materials, such as graphics, and video games... (Tennant, n.d.).According to Hornby (2010) vocabulary refers "to all words that a person knows or uses".(p,1722).Heibert and Kamil (2005) defined it as "the knowledge of meaning of words "(p.2);this knowledge of words refers to the information that a person knows about words, such as definition of morphology,besides words 'appropriateness(Vocabulary knowledge,2021).Moreover, according to Nation (2001) vocabulary knowledge is highly important and must be taught while introducing new words in the foreign language.

People use language differently and creatively as Chomsky claimed, "even the interpretation and the use of words involve a process of free creation"(The Linguistic Theory of Noam Chomsky,2021,para.4) .

The Review of the literature

Furthermore, it was assumed that vocabulary is flexible, its developments depend on time and language exposure (Derbouche, 2016). Therefore, the number of words mastered will determine the success and comprehension of messages.

1-2 The Process of Learning a New Word

Vocabulary is linked to three concepts: lexicon, word, and lexis. We can demonstrate the difference between these three key terms. Firstly, Kiparsky explained lexicon as “a kind of appendix to the grammar, whose function is to list what is unpredictable and irregular about the words of a language” (1982, para.1). In other words, the lexicon refers to the word changes and exceptions. Also, he explained that these concepts cannot stand alone in a sentence such as inflection, affixes, etc... The second concept is word. According to Oxford dictionary, words refers to “free standing items of language that have meaning” (Oxford dictionary, 2010, p. 1775). So, it is a small unit that represents an object, feeling, etc... Thirdly, the last concept related to vocabulary is lexis. According to Carter (2012), it is also called full words or content words; he claimed that lexical items “carry a higher information content and, as we have seen, are syntactically structured by the grammatical words” (p. 24); Lexis then, refers to nouns, adjectives, verbs, and adverbs.

For a learner, the mastery of a new word, its meaning, spelling, and pronunciation are not sufficient. There are three other aspects that contribute to learning new vocabulary items (Carroll, 2013). First grammatical patterns, a learner must know the grammatical changes of a given word for instance whether the verb is regular or not, etc. (Perry & MacDonal, 2001) Second, introducing new words accompanied with their appropriate use in different contexts is very important because it facilitates storing them in the long term memory (Stemberg, 1978). Finally, collocations; some words are combined or co-occurred with some other

specific items (Cowan, 1989). To sum up, it is necessary to have knowledge about a given word in order to learn and memorize it easily.

1-3 Types of Vocabulary

3.1 Productive and Receptive Vocabulary

Gairns and Redman (1986) explained that Receptive vocabulary means words that are understood in context for example while reading, listening, etc... Or the words that are known but are not used productively; however, productive vocabulary refers to all the words that a person uses or appeals in both writing and speaking skills. Gairns and Redman assumed that receptive vocabulary is larger than the productive one saying that, “native speakers” receptive vocabulary exceeds productive one; they are able to understand forty-five thousand to sixty thousands of words.” (1986, p. 64). A Chinese study was done on EFL college learners to measure their productive and receptive vocabulary size. They found that the mean of receptive vocabulary (23.444) is higher than the one of productive vocabulary (10.604) (Zhou, 2010)

Consciousness can make a distinction between implicit and explicit vocabulary. Human long term memory incorporates two types, implicit and explicit memory. According to Cherry (2019) the implicit one refers to all information that are memorized or retained unconsciously. Strobach and Natalia, 2012.p.2) said that implicit memory “has been conceptualized as the unintentional (Chapter One: Theoretical background the influence of prior learning on cognitive performance (p. 2).In contrast , explicit memory stores all what have been learnt consciously (McDermott, 2002).

According to Ramadhan (2017 .p5), “vocabulary is essential for successful second language use” because with poor vocabulary, foreign language learners are unable to make neither

The Review of the literature

statements nor use them appropriately while writing or speaking. For instance, when learners are writing a text, sometimes they either have a meaning of a word or its equivalent in their mother tongue, but not the appropriate word in English; and this may cause gaps in their writing. It is also similar that learners are not able to communicate fluently because of the lack of vocabulary. In the same way As a result, the flow breaks and meanings is not clearly stated. Thus, learning a foreign language requires knowing its vocabulary items that has a significant role in the mastery of the four skills namely speaking, listening, writing, and reading (Alqahtani, 2015).

2- The Role of Vocabulary in The Language Skills

2.1. Vocabulary and The Writing Skill

Vocabulary and writing skills are fundamental to effective written communication. A wide-ranging vocabulary allows writers to express their ideas clearly, precisely, and with depth. It provides them with tools to choose the most appropriate words, maintain variety, and explore complex concepts. Therefore , writing skills encompass organization, grammar, syntax, cohesion, coherence, and revision. These skills enable writers to structure their ideas logically, convey the right tone, and engage their intended audience. Together, vocabulary and writing skills enhance the clarity, impact, and overall quality of written expression.

2.2. Vocabulary and the Reading Skill

Seifert (2017) claimed that vocabulary is an important aspect that improves reading comprehension.Vocabulary knowledge is highly related to reading comprehension (Mebarki,2011).In other words; knowing the meaning of words facilitates the understanding of the hidden meaning.

2.3 Vocabulary and The Listening Skill

The Review of the literature

Listening is regarded as a complex process that most learners fear (Graham, 2006) because a listener is constantly decoding what a speaker is saying. A sufficient amount of vocabulary knowledge is required to avoid misunderstanding. In this context, it is stated that “learners with larger vocabulary size might go on to acquire more words from aural input because they comprehend more of the input in the first place” (Zhang & Graham, 2020, p. 1019). It means that, children when listening to the language used by people surrounding them they acquire vocabulary and knowledge of words while they are exposed to the target language. To sum up, those who have a bigger vocabulary may acquire more words from aural information because they initially understood the material more.

2.4. Vocabulary and Speaking Skill

Words are small components that are classified systematically to create larger units called clauses and sentences. These structures contain ideas and meanings that are expressed verbally when speaking. It is crucial to remember that a “person’s speaking skill is very dependent on the quality and quantity of her/ his vocabulary” (Suryanto et al, 2021, p. 11). In other words, individuals who have great body language, words, and knowledge are going to speak fluently; constructing with others who lack such knowledge would struggle in order to express their ideas and communicate effectively. To sum up, the quality and quantity of a person’s vocabulary has a significant impact on his ability to communicate.

2-1 The Importance of Vocabulary in Foreign Language Teaching and Learning

Nation (2015, 2001) confirms the importance and centrality of vocabulary learning to communication and understanding each other. Lewis states that ‘Lexis is the core or heart of language’ (1993:89). In addition, Wilkins (1972) makes a brief comparison between

The Review of the literature

vocabulary and grammar to highlight the importance of lexical skills. He points out that if little meaning can be conveyed without grammar, no meaning at all can be conveyed without vocabulary.

From this, we can define vocabulary as the key to communicate effectively. Vocabulary is the means that increases language comprehension and makes learners communicatively competent. Vocabulary is considered as an essential aspect of language learning as well as its use (Alharbi, 2015). At the same time, vocabulary is regarded as a major source of problems for second and foreign language learning because lack of vocabulary hinders language proficiency and communication (Afzal, 2019). Moreover, vocabulary is regarded as a complex language aspect since words are arbitrary and do not follow rules to be constructed in contrast to Grammar (Is English Grammar and Vocabulary Hard to Learn? 2017). According to Ramadan (2017), “vocabulary is essential for successful second language use” (p.5); because foreign language learners who have limited vocabulary will be unable to properly construct sentences or employ the theme in their writing or speaking. An example of this situation is when learners are producing a text, sometimes they either have the meaning of a word or its equivalent in their home tongue, but not the right word in English; and this may cause gaps in their writing. It is also similar while speaking; learners are unable to communicate effectively due to the lack of vocabulary.

2-2 Difficulties in Learning Vocabulary

Swan and Walter (1984) state that “vocabulary acquisition is the largest and most important task facing the language learner” (cited in Thornbury, 2002, p. 14). It means that acquiring a vocabulary is the most challenging and crucial task that a language student must complete. However, foreign language learners struggle to retain and recall the target language

The Review of the literature

words. Many studies (Surmanov 2020, Rahmatillah 2014, Bjork 2015 and Susanto 2021) were conducted in order to identify the difficulties in learning vocabulary

The researchers identified some reasons that EFL face in learning vocabulary. First, choosing the appropriate words is challenging for foreign language learners (Kao& Reynolds, 2020) .While learning new things, especially words with several meanings, Alqahtani(2015) argued that the emphasis should be on the meaning because providing a clear explanation and their different usage boosts the retention of words (Vocabulary, n.d).A study conducted on Saudi Arabian EFL learners showed that most learners face difficulties to discover the exact meaning of words. Consequently, they rapidly forget the newly introduced vocabulary items (Afzal, 2019).

Second, most learners find difficulties to pronounce and spell words correctly (Rohmatillah, 2014).Mispronunciation and spelling errors according to Karakas' argument (2020) are directly related to the influence of the learners 'mother tongue. This shows that students have difficulty pronouncing and writing correctly due to the negative transfer between their mother tongue and the foreign language. Hence, Nation (2015; 2001) confirms the importance and centrality of vocabulary learning to Communication and understanding each other. In addition, Wilkins (1972) makes a brief comparison between vocabulary and grammar to highlight the importance of lexical skills. He points out that if little meaning can be conveyed without grammar, no meaning at all can be conveyed without vocabulary.

Vocabulary is the means that increases language comprehension and makes learners communicatively competent. Vocabulary is considered an essential aspect of language learning as well as its use (Alharbi, 2015). At the same time, vocabulary is regarded as a major source of problems for second and foreign language learning because a lack of vocabulary hinders language proficiency and communication (Afzal, 2019). Moreover, vocabulary is regarded as a complex language aspect since words are arbitrary and do not follow rules to be constructed in

The Review of the literature

contrast to grammar (Is English Grammar and Vocabulary Hard to Learn? 2017). According to Ramadan (2017), “vocabulary is essential for successful second language use” (p.5); because foreign language learners who have limited vocabulary will be unable to properly construct sentences or employ the theme in their writing or speaking. An example of this situation is when learners are producing a text, sometimes they either have the meaning of a word or its equivalent in their home tongue, but not the right word in English; and this may cause gaps in their writings. It is also similar while speaking; learners are unable to communicate effectively due to the lack of vocabulary.

Last but not least, knowing a word is not limited to its meaning, spelling and pronunciation, rather, it depends on a variety of factors that make learning and recalling a particular term easier (Carroll, 2013). Learning new words involves several different factors, such as grammatical structure, appropriateness, and collocations (Perry & Mac Donald, 2001). To put it another way in order to remember a word and use it effectively, a student needs to be familiar with its definition, spelling, and pronunciation, in addition to some knowledge of the grammatical characteristics, such as word class, next, and the right usage of words in certain contexts. A word collocation which is a combination of two or more words that are frequently used together (Daniel vicienne, 2012). Above all, learning a word entails much more than simply understanding its definition, which is why some students struggle to update vocabulary terms.

To conclude, there are many factors that contribute to acquiring vocabulary. Negative transfer from the learner's mother tongue to their target language, word knowledge, and the features of words that must be present are all options. Foreign language students must possess in order to learn new vocabulary words and effectively utilize the theme.

2- Constructivism

2.1. What is Constructivism?

The Review of the literature

Immanuel Kant (1724–1804) developed the philosophical idea of constructivism, which is essential in the pursuit of knowledge primarily through societal constructs. To put it another way, this theory of knowledge asserts that people create knowledge and meaning through the interplay of their ideas and experiences. According to Hein (2007), “constructivism is a theory that claims that a learner creates his or her own personal and socially constructed meaning as they acquire information. As a result, engagement with the subject matter rather than imitation and repetition is how information is acquired” .Through their own investigation, research, and inquiry, learners retrieve information. They consequently improve their capacity for critical thinking. According to Sharma (2006), “constructivism does not emphasize knowledge memorization and regurgitation.” Despite the fact that we receive knowledge, it doesn't imply that we have understood it. By tying new knowledge to previously known information, new learning is integrated into the learner's conceptual model. It is difficult for learners to comprehend new knowledge that does not fit into their mental model. The new knowledge must be connected to prior knowledge in order to have meaning. This calls for introspection"self-reflection ", probing"asking questions", assessment"evaluating ", and exploration of the known"seeking new knowledge ". Additionally, reports claim that in a classroom that practices true constructivism, students will be more likely to remember and put knowledge to use.

2.2 Constructivism and Education

The most crucial invention made by man for his own advancement is education. Therefore, it should come as no surprise that all dynamic and forward-thinking countries demand an educational system that will assume leadership in guiding and managing a future that guarantees a better living for everyone. Because it appears to address the criticisms of current educational practices and promises to deliver higher levels of literacy, multiple forms of literacy, self-reliance, cooperation, problem-solving skills, and school **satisfaction**,

The Review of the literature

constructivism has emerged as an appealing alternative to traditional process-product educational practices in this context. To be clear, constructivism was a direct result of interest gradually shifting away from behaviorism and information processing theories, as stated by Mayer (1996). On the one hand, behaviorism has drawn criticism for being a theory that places too much emphasis on the instructor and treats students like passive recipients of knowledge. (Braungart and Braun art, 2007). On the other hand, Green has questioned the tenets of cognitivist and information processing theories. (1989, in Schunk, 2012). Yet, It is cited that:

Constructivism implies a new kind of pedagogy where the emphasis will be more on what students do than what teachers do, and where there will be performance assessment of learning rather than standardized achievement testing (Elmore, 1991b; Resnick and Klopfer, 1989; Weinberg, 1989).

This demonstrates that constructivism is more concerned with preparing students for real-world problems and situations rather than it is with them memorizing knowledge. Unlike, the primary teaching methodology used in the traditional classroom is direct instruction, which entails that students must directly assimilate the knowledge that the instructor presents to them. As a result, the student's job is to accept and comply. Contrarily, constructivism recognizes the fundamental idea that learning is a process of knowledge construction requiring the learner's active participation and engagement, while the teacher's primary responsibility is not only to disseminate factual knowledge but also to foster an environment that is conducive to learning. Having said that, constructivism became increasingly popular as a paradigm for human learning in the 1980s and 1990s. As attention gradually shifted away from behaviorism and information processing theories.

2.3 Dimensions of Constructivism

The Review of the literature

It is difficult to limit the scope of constructivism to only two dimensions-cognitive and social constructivism- with one having in mind that there are other significant dimensions which have been formulated by researchers in this area of inquiry. Cognitive constructivism and social constructivism are discussed here gradually.

2.3.1 Cognitive Constructivism

Psychological constructivism, individual constructivism and cognitive constructivism are some terms used conversely to refer to the view which draws greatly on the work of the French researcher and psychologist Jean Piaget (1896-1980), who is often regarded as the father of constructivist thought (Jordan et al., 2008). When learning the term "frustrated," for instance, pupils connect it to their own instances of feeling this way, which helps them retain the word and reinforce their grasp of it. The emphasis on the learner's active engagement in creating meaning and understanding is an essential component of cognitive constructivism. Piaget believes that children use unique mental structures to reason about and make sense of the world. In his theory of knowledge development, Piaget (1954) characterizes the child as a young scientist developing his own sense of self and understanding of the universe. According to Oxford (1997), Piaget further asserts that human beings are, from early childhood, active, independent meaning-makers who construct knowledge rather than receive it." (qtd. in Moore, 2000: 7). Piaget (1969) developed constructivism even further by contending that interaction between the child's previous cognitive structures and new experience Results in cognitive development. The latter is grounded initially in four components which are: "maturation, physical experience, social interaction, and a general progression towards equilibrium"(Piaget, 1954). Due to his research background, many constructivists consider Jean Piaget to be a key character. "There are no innate or a priori cognitive structures in man", as stated in his work "The Psychogenesis of Knowledge and its Epistemological Significance". "The organization

The Review of the literature

of subsequent actions taken on objects is what allows intelligence to operate independently and create structures" (Piaget, 1954).

According to Piaget's constructivism theory, experience is the basis on which people create information and assign it meaning. The concept of progressive stages, in which children grow cognitively in a set order, is essential to Piaget's overall theory of development. Children will "be able to handle progressively more complex concepts in progressively more complex ways" throughout these stages. (Moore, 2000: 9). He also notes that Moving from one level or stage to another is characterized by essential and qualitative Change in the child's perception of the world, in his or her processing and response to information, and how they develop ideas and concepts or simply how they learn (Moore, 2000).

The four developmental stages that Piaget identified as supporting his theory can be used to describe this. They include: sensorimotor, preoperational, concrete operational, and formal operational "The Psychology of Intelligence," originally published in French as "La psychologie de l'intelligence" in 1947. In fact, Piaget made the assumption that all kids had to go through these stages in order to reach the next stage of cognitive growth and that children exhibit fresh intellectual process and a progressively more sophisticated understanding of the universe at each stage. Phases cannot be skipped because intellectual growth always occurs in this order. Additionally, the typical ages at which children move through the phases vary depending on the environment and background of each child.

The sensorimotor period is the initial one. Children's impulsive behavior and their readiness to comprehend the outside world and make meaning of it are characteristics of this stage. Infants begin to develop mental structures at this stage with an underlying desire or drive. However, it is claimed that these schemas are constrained because only current activities are

The Review of the literature

connected to meanings; for instance, a bottle is for sucking. (Schunk, 2012) The child will be able to use language to link objects and meanings in the following stage, known as preoperational. In fact, this period is characterized by rapid language development. According to Schunk (2012), once a child reaches the concrete operational stage, his abstract reasoning will develop, his language will become more social and receptive to other points of view, and his or her ideas will become less egocentric, but the child will still be thinking in concrete terms. Being at the formal operational stage will allow children to think in a more abstract way. It is the period in which children's focus stretches to concepts and ideas rather than events and objects. They will be able, also, to use logical reasoning and hypothesizing to solve problems and generate their personal views and understandings (Moore, 2000). Despite the fact that the main concern of cognitive constructivism is the child's interaction with his external world, its first emphasis is the mental structures of the individual and how it develops. The role of social and cultural settings in shaping human knowledge is highly acknowledged by social constructivism.

2.4.2 Social Constructivism

This theory of knowledge acquisition, now more widely known as social constructivism, is credited to the Russian psychologist and philosopher Lev Vygotsky (1889–1934). This view sees knowledge as a product of social interaction, with words and ideas deriving meaning from those created and negotiated by people in particular contexts (Kapur, 2018).

According to this definition provided by Kapur (2018), social constructivists see knowledge as a social process in which people interact with their surroundings and one another to assimilate information and give it meaning. Thus, it is demonstrated that

The Review of the literature

knowledge in social constructivism is inextricably linked to and cannot be separated from the social context in which it is created.

Additionally, social constructivism emphasizes debate, interaction, and the sharing of knowledge and ideas among students as a major component of its educational philosophy. According to the social constructivism theory, which defines knowledge as being socially produced, built, and transmitted through language, language and culture play an important role in human intellectual development and perceptions. (Akpan et al, 2020). Likewise, according to Dagar&Yadav (2016), the social constructivist paradigm emphasizes inter-psychological activities "among people" as well as intra-psychological activities "within ourselves" as the means by which knowledge dissipates. According to the social constructivist perspective, knowledge structures first develop interpsychologically "between people" before becoming internally assimilated and intra-psychological.

The social constructivist viewpoint continues to have broad consequences for education. The emphasis should be on learning, not performance. Learners should be treated as co-constructors of knowledge. An effective teacher-student relationship should be built on guidance, not instruction. Learners need to be engaged in tasks that ignite their creativity and have them use their critical thinking skills. These are just a few of the useful principles that Brau (2016) and Powell and Kalina (2009) outlined for teachers to ensure meaningful learning.

3. The Constructivist Learner

3.1 Role and Characteristics

According to Gray (1997), a learner-centered classroom is one in which the students is seen as the central figure leading the learning process. Indeed, as will be described in the following sections, learners in learner-centered environments are expected to have

The Review of the literature

characteristics and play roles that are noticeably distinct from those seen in other paradigms and learning contexts. As opposed to other epistemologies and learning theories, constructivism transmitted to their minds, but they dynamically seek meaning and understanding (Can, 2009) holds that: Learners are not empty vessels waiting for bulks or pieces of knowledge to be.

In making this statement, the author makes explains that constructivism views students as active participants in the learning process rather than as passive agents who wait while seated at their desks for their instructor or another source to transform information for them. As they are "checking new information against old rules and then revising the rules when the rules no longer work," they are more involved in conducting research, looking for new meanings, developing hypotheses, and considering their own findings and conclusions. (Salvin, 2006: 243). Furthermore, according to a study by Erben et al. (2009), constructivists are steadfast in their conviction that these learners bring with them expertise and knowledge they have gained from prior experiences, which will undoubtedly influence how they perceive the new experience and how new knowledge will be constructed based on the new situation and the prior ones. As a result, the students are receptive to criticism and praise because they see input as something that will aid in their learning.

4. Constructivist Teachers

4.1 Role and Characteristics

It takes a significant shift in thinking about teachers' responsibilities in the classroom to move from a traditional instructive model to practices that are informed by constructivism. The instructor is frequently referred to as "the sage on the stage" or "the fountain of knowledge," holding all of the wisdom, and standing in front of rows of students who are seated at desks and waiting for knowledge to be poured into their empty cans. In conventional settings, the

The Review of the literature

teacher's responsibilities include transmitting knowledge, supervising learning activities and content, being an authority on the topic, and keeping track of students' progress. (Murray and Christison, 2011). Furthermore, Marlowe and Page (1998) believe that a successful constructivist teacher is one who can give his students the chance to think and act like scientists, storytellers, mathematicians, and historians rather than forcing them to memorize facts about these subjects or topics. Additionally, they contend that "doing and reflecting, more doing and reflecting, and then more doing and reflecting" is a method for achieving this type of constructivist practice. (Marlowe and Page, 1998:27). Thus, the constructivist teacher is invited: to adhere to the methods of a flexible coach, facilitator, researcher, learner, interior designer, evaluator, professional and team player. Constructivist teachers will need to move from teaching in a one dimensional, simplistic and flannel graphed format to a multi-mediated, complex and learner focused forum. (Cey, 2001: 16)

This quotation actually emphasizes the idea that constructivists prefer to use words like encouraging instead of teaching because they firmly believe that learning is something that students do for themselves and should not be forced upon them by a teacher or anyone else. Therefore, throughout the learning process, the instructor should support students in problem solving and decision making. As a result, he faces the task of imparting to them a variety of techniques that encourage them to solve issues, gauge their progress, and manage their feelings and anxieties.

Studies on the characteristics of constructivist teachers have focused on their roles, with particular attention paid to the teacher's main responsibility for setting up suitable, safe, and trusting environments and conditions for learning to occur. (McLellan, 2008). Understanding the traits of the constructivist learning/teaching environment, which is the subject of the following part, is crucial.

5. Teaching Methods in The Constructivist Environment

Learner-centered methods and strategies aim to create profound changes in the mental, cognitive, social, and emotional aspects of the learner in order to foster cooperative and independent learning, as opposed to traditional teaching methods and strategies, which are designed to make students memorize and then recall a significant amount of sequenced information. Learner-centered education has been conceptualized in the field of educational psychology and has recently risen to the top of academic organizations' "and policy makers'" objectives across the globe. (Attard et al., 2008). However, learner-centeredness is distinct from teacher-centeredness in that the former involves students in decisions about curriculum material, when to teach it, how to teach it, and how to assess it. (Nunan, 1995).

Additionally, a teacher may use constructivist techniques in a learner-centered setting, including Project-Based Methods, Discovery-Based Learning, Problem-Based Learning and Resource-Based Learning. Although these techniques and types can be used separately, there are parallels between them and their underlying principles may converge. "These teaching strategies encourage students to ask questions, conduct study, look into things, think critically, come to conclusions, and resolve actual issues or problems" (Westwood, 2008).

One of the methods that gained popularity in recent years and which is broadly used in educational institutions is Project-Based Methodology (PBM henceforth). Asan and Haliloglu (2005, qtd. in Erben et al., 2009: 61) claim that:

Project-Based Learning is a model for classroom activity that shifts away from the classroom teaching practices of short, isolated, teacher-centered lessons and instead emphasizes learning activities that are long-term, interdisciplinary, student-centered, and integrated with real world issues and practices.

The Review of the literature

According to the definition above, project-based learning is supported for a number of factors. It presents real-world issues and problems that can enable students to draw significant connections between new and prior knowledge and experiences and, as a result, deepen their understanding of the issue or subject being tackled. As such, it has a great deal of potential to be used in most curricular areas. Additionally, it strengthens learners' collaborative skills while also encouraging self-directedness and drive by placing responsibility in their hands. Additionally, it gives students the chance to collaborate with one another and access various points of view and depictions. Learners will eventually be able to develop a collection of abilities for gathering and analyzing data while using higher-order and critical thinking skills. Despite the benefits of project-based learning, the author neglects to note the numerous implementation flaws that can hinder its effectiveness, particularly when using project-based learning strategies in a large class. To explain, this theory can raise students' motivation, but numerous studies have shown that when PBL is used in large classes, teachers have trouble raising students' motivation, getting them to focus on their work, assisting them in making connections between new material and what they already know, and effectively carrying out cooperative learning activities. The following are additional drawbacks related to the application of PBL. First, because they take center stage in traditional classrooms, many instructors are at ease there.

This is a challenging transition, particularly for teachers who have little to no technology authority. Students who struggle with experimentation and data collection will likely struggle because it is clear that almost all effective project-based learning examples build on the success of cooperative or collaborative learning. Last but not least, PBL requires a lot of time to solve complex problems, which will prevent enough time from being accessible for the material and content. The idea that learning is an active process in which students generate

new ideas or concepts based on their prior or present knowledge .The students choose and modify information ,create hypotheses, and make decisions using a cognitive structure.

6. The Main Concept of Bruner's Theory

The idea that learning is an active process in which students generate new ideas or concepts based on their prior or present knowledge .The students choose and modify information ,create hypotheses, and make decisions using a cognitive structure.

6.1. Discovery Learning Theory

It was developed by Jerome Bruner (1960). This approach encourages students to build on prior experiences and knowledge, apply their intuition, imagination, and creativity, and explore for new information in order to uncover facts. Discovery learning contends that students shouldn't be given the subject matter in its finished form, but rather should be asked to arrange it themselves and determine the connections between different pieces of information. Bruner argued that learning a coding system by experience rather than being informed by teachers is the most effective way to do it. The pupils are always engaged in tasks, looking for patterns, or solving puzzles in this active type of learning.

The role of the teacher should be to support the learning process rather than to rote teaching students facts. This means that a skilled teacher will create lessons that assist pupils in learning how various pieces of knowledge are related to one another. According to Vygotsky(1978), the role of educators is to actively facilitate learners' learning and create connections between different areas of knowledge rather than merely imparting information. This method acknowledges the value of instructor assistance and social interaction in helping students comprehend how different pieces of knowledge link to one another.

The Review of the literature

However, according to Bruner, a child understanding of this concept would be far more authentic if they were to experience the difference first hand, such as by playing a game in which they had to fairly divide different numbers of beads between themselves and a friend.

Discovery learning is significant learning outcome in and of itself, not just a teaching strategy; schools should support students in developing their own capacity to recognize recurring patterns in their environment.

6.2 Scaffolding

Bruner's emphasis on the student discovering the subject material for themselves initially appears to relieve the teacher of a lot of effort. Yet in reality, his model calls for teachers to be actively involved in courses, providing cognitive scaffolding that will help students learn. On the one hand, this involves the creation and design of suitable stimulus items and activities which the student can understand and complete, however Bruner also suggests that "the teacher should circulate the classroom and work with individual students, performing six core "functions" (Wood, Bruner and Ross: 1976):

- **“Recruitment:** ensuring that the student is interested in the task, and understands what is required of them.”
- **Reducing Degrees of Freedom:** helping the student make sense of the material by removing irrelevant instructions and thus “trial and error” is reduced in the aspect of learning.
- **Direction Maintenance:** breaking the ultimate aim of the task into “sub-aims” which are more readily understood and achieved in order to ensure that the learner is on task.
- **Marking Critical Features:** discussing errors and mentioning relevant concepts.

- **Frustration Control:** preventing students from completing the task.

7. Advantages of The Discovery Learning Theory

Jerome Bruner, a psychologist, created the cognitive theory of discovery learning, which contends that people learn best when they actively seek out information for themselves. The following are a few advantages of the discovery learning theory:

First, it promotes active involvement since students get more involved in their learning and use critical and creative thinking to fully comprehend a concept. Second, it improves comprehension by allowing students the freedom to research topics on their own and develop deeper understanding of the material. Students' willingness to learn is also increased when they can relate new content to their existing knowledge and experiences. As students solve problems on their own, exploration learning also fosters the development of problem-solving abilities. Because students actively participate in the learning process and deepen their understanding, this method also enhances long-term memory retention.


Overall, the discovery learning theory of Bruner stresses how crucial it is to give students the freedom to actively explore and solve problems as they come up with new knowledge and skills.

Conclusion


The main theoretical frameworks and works relevant to the subject and goals of the current investigation which aims to demonstrate the value of the Discovery Learning theory in promoting English vocabulary acquisition were reviewed and condensed in this chapter. The chapter gave concise definitions and explanations of the crucial terminology. It also demonstrates how vocabulary plays a part in language proficiency. Additionally, it outlined

The Review of the literature

constructivism's three main dimensions and the teaching and learning environment that it promotes. The fundamental ideas of Bruner's theory were finally elucidated.



Chapter two
Research Design and
Methodology



Introduction

This chapter is methodological; it deals with the description of the research techniques used to ‘investigate the implementation of Bruner’s constructivist theory to promote learners’ vocabulary acquisition at “Brothers kerkache” middle school in Tizi-Ouzou. It provides the reader with the main research instruments and procedures that have been used to gather the necessary data. The first part deals with the description of the procedures of data collection; the second part presents the procedures of the experiment, followed by the description of the questionnaire. The third part is about the data analysis tools used to analyze the findings of this research. Finally, this chapter provides an example of the technique used to calculate the rate improvement achieved by the (CNR) group and the (EXP) group in the post-test compared to the pre-test.

1 .Procedure of The Experiment

This study takes place in “Brothers kerkache” middle school of Tizi-Ouzou. More precisely, first year middle school (1MS7) of the academic year (2022-2023).76 students from each of the control (CNR) and experimental (EXP) groups, which were each chosen as a sample for our study .In fact, the difference between a quasi-experimental and real experimental is that the participants of the former are not randomly selected. In contrast, the latter is randomly selected. The pupils were provided with lessons based on The Discovery learning method using before taking the post test. Whereas the (CNR) group only asked to be thought with the actual method.

2. Procedures of Data Collection

A quasi –experimental design is adopted to answer the research questions in the present study. In fact, this design appears to be the appropriate method for achieving the objectives of

the current study. According to Gay, I, R (1992) the only research methodology that can effectively test hypotheses relating to cause and effect interaction is the experiment approach. It stands for the most valid approach addressing both practical and methodological issues in education as well as the advancement of education as a science. (Gay, I, R; 1992: 298). In addition, another research tool which consists of an interview is employed to collect data about the attitudes of the teachers towards the constructivist theory namely “Discovery learning method” and the problems that they encounter when teaching with the actual method. This study adopts a mixed method research design by collecting and analyzing both quantitative and qualitative data. A quantitative method is used for the collection and analysis of the data which consist of seventy six (76) collected papers submitted by the two groups. The participants have been asked to answer some precise questions. Indeed, some of them have been taken from their program constraints and the others have been proposed by us. Next, in order to determine whether the implementation of the Constructivist Theory led to any improvements or acquisition in the vocabulary performance of the pupils, the results of the pre and post tests are compared.

3. Instruments

3.1 The Questionnaire

The questionnaire is considered as the most common tool for gathering data about a certain topic, Brown, (2001, p. 6) defines a questionnaire as: Any written instrument that presents participants with a series of questions or statements to which they should react either by selecting from existing possibilities or writing out their answers. Questionnaires are particularly effective for collecting information on a large scale, we used it as a second data source to gather information about one of the main objectives of our study, which was to

determine how first-year middle school students experienced about adopting Bruner's constructivist theory to encourage vocabulary learning.

Consequently, the questionnaire contains questions about the profiles of the learners and their background knowledge, the views of the participants about the English vocabulary, and questions about the means that they prefer to use to learn English vocabulary. Indeed, the questions vary between yes or no questions and multiple choice questions. This questionnaire has been administered at the end of the first trimester in order to get their feedback on the effectiveness of using the constructivist theory to enhance their vocabulary acquisition.

2. Piloting TheStudy

A pilot study in data analysis can be a valuable tool for testing the feasibility of a research project and identifying any issues or challenges that may arise when collecting or analyzing data. By conducting a pilot study, researchers can make adjustments to the research design, data collection methods, or analysis techniques to improve the quality and effectiveness of the main study.

A pilot study is conducted at the beginning of data collection phase in the 15th January, 2023. We have designed and piloted the learners' pre-test. Indeed, six (6) copies have been distributed randomly to the first year pupils of the (CNR) and (EXP) groups with the aim of checking the clarity and the comprehension of the different activities. Accordingly, this piloting study allowed us to revise and modify several items to make it more comprehensible and easy to answer by the participants. Eventually, the results were positive they reveal that the tasks were clear. However, some of the participants claim that they did not understand fully the questions. Therefore, one week after we distributed 76 copies of the pre-test to all the participants.

3. The Pre-test

A pre-test has been administered to the pupils of both (EXP) and (CNR) group under the same conditions during the second trimester on January 28th, 2023 before introducing the constructivist theory. The design of the test is in the form of seven vocabulary activities, the pupils been asked to match each season to its image ,to write the missing letters of this school things, to complete statements ,re-ordering the words to get statements and writing an e-mail to James in saying what they do at the weekend. Indeed, this activity has been proposed by their teacher since it is included in their program in the first semester. The pre-test has been designed to measure the previous knowledge of the learners in English, to know the pupils performance in English vocabulary i.e. to evaluate their vocabulary and to find out whether the two groups are relatively homogenous.(see appendix 2)

4. The Treatment

After the pre-test, the participants of the EXP group have been given the treatment that took place from the 5th February, 2023 to 18thApril, 2023. The (EXP) group and (CNR) have been taught in two different methods; the (EXP) group was exposed to Discovery learning method using some resources to enhance the learning process like: dictionaries, images, educational games. However, the (CNR) group followed the actual method of learning used by their teacher. While, we are supposed just to observe and make comparisons.

4. The Post-test

For the experimental study, both the pre-test and post test are crucial tools for comparing the control and experimental group and measuring the degree of change occurring as a result of the treatments as well. In this study, after that the participants of the (EXP) group have been provided with constructivist theory sessions, both (CNR) and (EXP) groups have

undertaken a post test on 24th April, 2023 which is the same as the pre- test. The participants have been required to answer the same activities distributed in January 28th, 2023. The aim of this test was to check the effectiveness of this method on vocabulary acquisition. The results of the test in the two groups were compared using the rule of three.

5. Memorization Test

One month later, the participants from the control and experimental group undertook the memorization test. It is the last part of the quasi-experimental study. The test includes one filling gap activity, the pupils are asked to match words with their synonyms; they were given scrambled words which they had to fill in different sentences. This test aims at evaluating the abilities of the pupils in retaining English vocabulary; indeed, it covers terms related to body parts, vegetables and fruits, family and school as well.

6. The Interview

An interview is a research tool used to collect data from the participants. It involves asking a series of questions to gather information about a specific topic of interest. Interviews can be structured, semi-structured, or unstructured, depending on the research goals and type of data that needs to be collected.

In our case, we opted for an unstructured interview with seven (7) first year English teachers of “Brothers Kerkache” middle school in Tizi -Ouzou. The questions we asked were related to the implementation of the Discovery learning method in EFL classes namely first year middle school.

In fact, in an unstructured interview, the questions are open –ended and do not follow a specific format or order. The interviewer allows the conversation to flow naturally, and the questions are based on the responses provided by the interviewee. Consequently, the purpose

of this interview was to know what the teachers think about the discovery learning method in relation to the teaching learning environment.

6. Classroom Observation

Classroom observation is a data collection tool designed to collect data from the natural setting and to observe and interpret the behavior of both teacher and learners. Mason (1996: 60) emphasizes that observations are methods of data collection that entail the researcher immersing himself or herself in the research environment and methodically observing aspects of that environment, interactions, connections, actions, occurrences, and so forth.

In our research, we observed both the control group and the experimental group. In fact, we observed the control group outside of the treatment sessions in order to examine the teacher's objectives, the materials used, and the attitudes of the pupils about the actual method used.

Meanwhile, the observations we made for the experimental group were during the lectures we instructed, we tried to identify the reactions of the pupils, their engagement in the learning process and especially the way they answer and participate, we tried to find out to what extent they can be autonomous. Thus, this helped us to compare between the control group and the experimental one in terms of interaction, and participation while acquiring new words in the target language.

Moreover, a non-participant observation is done only with the control group; it consists of a checklist of 13 items to be examined during the sessions. This observation was done at the same period of the treatment. (see appendix 6)

7. Procedures of Data Analysis

Data analysis is a critical component of research that involves organizing, interpreting, and presenting data in a meaningful way. By using appropriate statistical techniques and data

visualization tools, researchers can gain insights into their data and draw meaningful conclusions. Hence, data analysis summarizes collected data gathered through the use of analytical and logical reasoning.

This study adopts a mixed method design in analyzing the collected data. To analyze the collected papers from the participants' questionnaire; that is to say, it is sub-divided into two parts: the first part concerns participants' profile and general information, while the second one covers the ways that help in acquiring English vocabulary like: ludic games, shapes, cartoons and flashcards, as well as the interview responses. As far as the research design relies on both quantitative and qualitative content analysis (QCA) to determine whether the vocabulary performance of the pupils has been improved through the implementation of Bruner's constructivist theory, we analyzed six (6) themes that are essential to prove the effectiveness of the Discovery Learning method including language production, vocabulary, fluency, comprehensibility, role plays and interaction.

7.1. Quantitative Data Analysis

A quantitative data analysis is an essential component of many research studies across a range of disciplines, including social sciences, business, and natural sciences. It involves using spastically methods to analyze numerical data, with the goal of identifying patterns, relationships. Simply put, this technique uses mathematical and statistical modeling, measurement and research.

In our research, we adopted the first type of the quantitative data analysis called "**inferential statistics**". In fact, this type allowed us to compare the numerical results of the pre-test and post-test composed of seven activities. Moreover, the results are shown on pie-charts and bare graphs. Each diagram has a description and explanation of the results presented. They are then classified into six (6) categories including: vocabulary acquisition,

language production (oral and written), role plays, fluency, comprehensibility and interaction.

We used the rule of three to transform the results from numerical to percentages as follow

$$X = Z \times 100 / y$$

X stands for the calculated percentages; Z is the value of the answers and Y is the total number of respondents. You multiple the value of the answers by 100 and then you divide it by the total number of the participants to get the percentage.

7.2. Qualitative Data Analysis

A qualitative data analysis is a process of examining and interpreting **non –numerical** data such as text, images, audio, and videos, to identify themes, patterns, and relationships. This type of analysis is often used in social sciences, humanities to gain a deeper understanding of human experiences, behaviors, and attitudes.

Qualitative content analysis has been adopted for the analysis of the non-numerical results gathered from the questionnaire that have been administered to the experimental group and the interview done with the seven (7) English teachers.

In summary, we chose qualitative content analysis because it uses a methodical process to examine the collected textual material and provide answers to our study questions. To make sure that our conclusions are legitimate and reliable, thorough planning, data collecting, coding, analysis, and interpretation are necessary.

Conclusion

To sum up, this chapter has given a broad overview of the methodology behind our study. It has first started by introducing the data collection procedures and tools. Indeed, this part has explained and justified the data collection tools and data analysis procedures that are

appropriate to get answers to the questions of the study. Then, it has described the procedure of the experiment. It is a description of the data analysis methods used to analyze the collected data.



Chapter three
Presentation of the
findings



Introduction:

This chapter deals with the presentation of the findings from the various tools that we have used in our investigation, specifically the questionnaire that was given to first year pupils and the experimental study that was carried out with two groups of first year middle school at “Brothers Kerkache” in Tizi Ouzou”. Diagrams (Pie charts and bare graphs) are used to present the research findings. There are two parts comprising this chapter .The first one is devoted to the presenting the results of pupils questionnaire and teachers interview. The second one displays the results of the experimental investigation (pre and post tests).

I. Part One: Results of the pupils’ Questionnaire 1.

1. Section One: General Information about the Participants

Q1: How old are you?

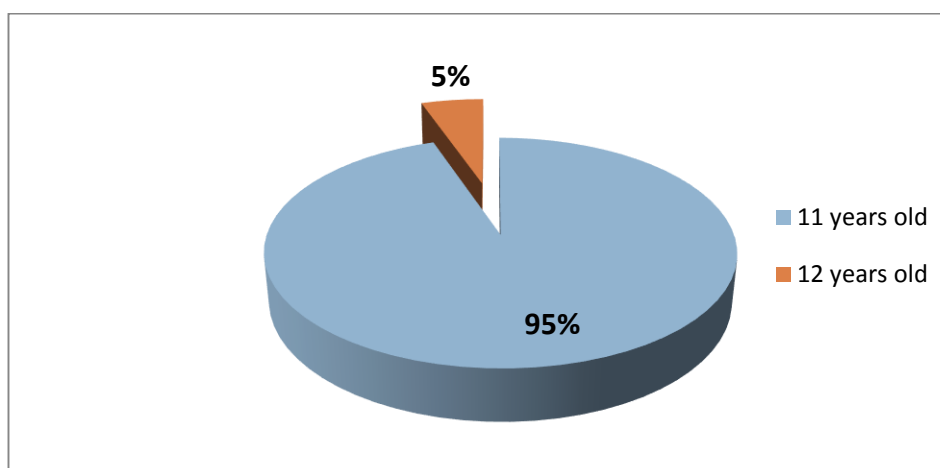


Diagram (1): the participants’ age.

Diagram (1) shows the pupils age .Ninety four percent (95%) of the participant have 11 years old which means that they didn’t repeat the year .While others five percent (5%) have a twelve years, they repeated the year.

Q2: Did you study English before?

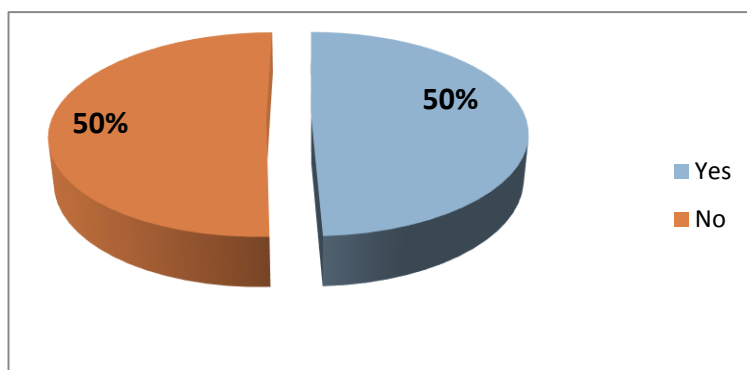


Diagram (2): the participants' English background.

As the pie chart (2) presents the participants English background. We notice that fifty percent (50%) have studied English before which means that they have a certain knowledge in English language. While fifty of the participant (50%) have not studied English and they did not learn English in their primary school.

Q3: you watch cartoons in: Arabic, English and French?

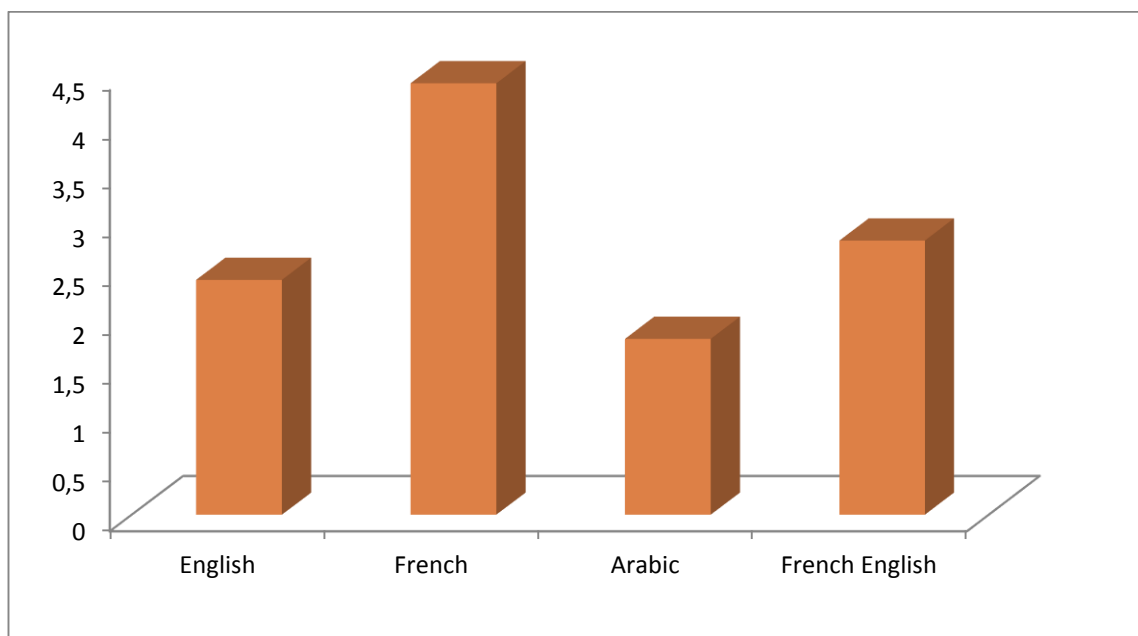


Diagram (3): the language used by the participants to watch cartoons.

Diagram (3) indicates the language used by the participant to watch cartoons. Most of the participant prefer or find the French language useful to watch the cartoons because it was their second (L2) language studied and learned after their mother tongue(L1) .Then , both French

and English language are used by the participant to watch their favorite cartoons. In addition, we find that English is often used, which means that it is not neglected. Finally, little attention is given to Arabic language; few of them see cartoons in Arabic language.

Q4: Do you like English language?

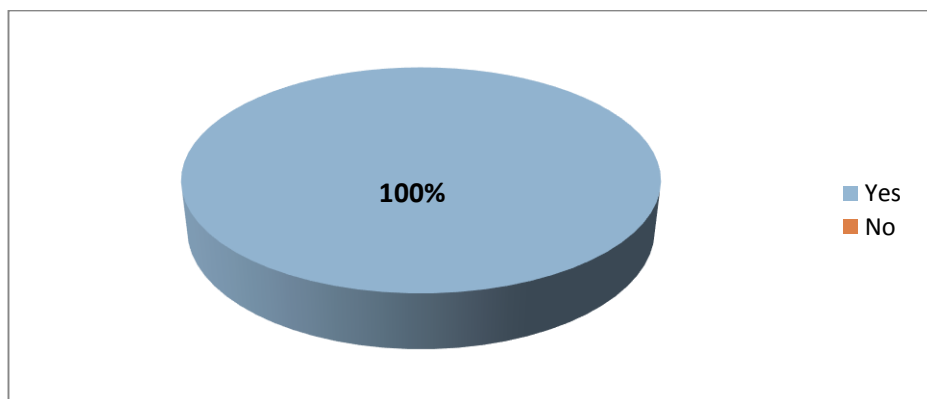


Diagram (4): The percentage of participants 'love for the English language.

Diagram (4) shows the percentage of participants 'love for the English language. We can clearly remark that the pupils enjoy learning the English language at one hundred percent (100%).

Q5: How do you learn new words?

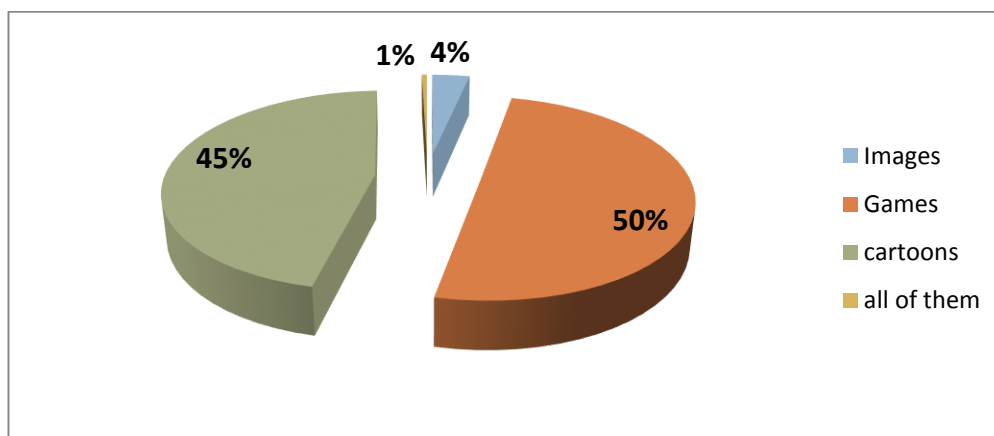


Diagram (5): The means of learning new words by the participants.

Diagram (5) illustrates the favorite means of the participants to learn English. We notice (50%) half of participants find games as a useful way for them to learn English. Thirty five percent (45 %) of them find that cartoons help them to acquire new vocabulary in English.

Twenty five percent (4%) find images useful to learn new words. few of them (1%) claimed that they use images, games, cartoons to retain new words.

Q6: How do you find learning English?

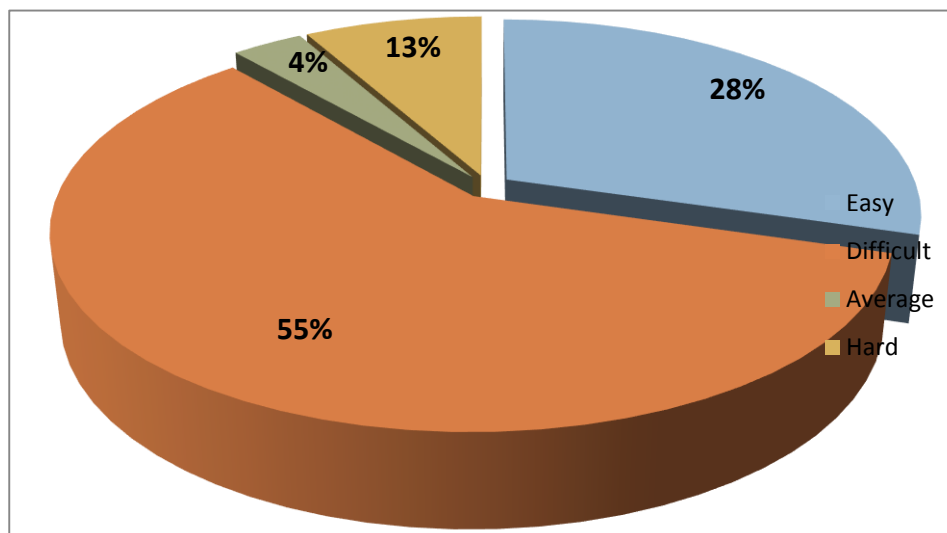


Diagram (6): the frequency of learning English.

Diagram (6) demonstrates the frequency of learning English. Learning English for most of the participants fifty five percent (55%) is difficult. While others (28 %) twenty eight percent claimed that it is easy to learn. Twelve percent (13%) of them suggested that learning is a hard task. Four percent (4%) have an average level when retaining new words.

2. The Results of the classroom observation Sessions:

Classroom observation with the control group (1MS7) analysis is used as the second data collection tool to gather qualitative data about the use of the discovery learning method in the classroom. Through classroom observation checklist with several items, we have observed the attitudes of pupils towards the actual method and the teachers' performance while using their method.

3. Presentation of the teachers' interview:

3.1 Section Two:

The Teachers' Attitudes towards the Use of constructivism:

The second data collection instrument used in this research is unstructured interview. It is conducted with seven (07) EFL teachers in charge of first -year classes (1MS) at “Brothers Kerkache” middle school in Tizi-Ouzou. The interview is considered as a supplementary tool since it helped us to collect in depth data about the teachers' views related to our research topic.

Q1: Does the discovery learning method facilitate the teaching process?

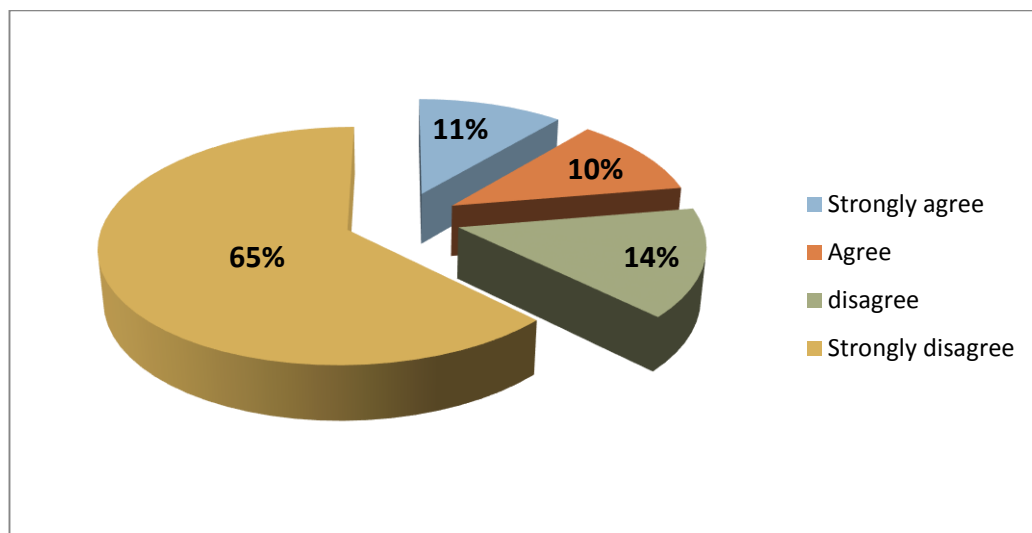


Diagram (7): the discovery learning method as a facilitating method of the Teaching process.

The aim of this question is to discover whether the discovery learning method facilitates the teaching process or not. The graph indicates that (11%) of teachers strongly agree, (10%) agree, and (14%) slightly agree with the fact that the discovery learning method is a useful, fun, and an entertaining method for teachers and learners. In addition, it helps to increase motivation and interactions between learners contrary to (65%) of teachers strongly disagree.

Q2: Does the constructivism build a comfortable atmosphere in the classroom?

According to the information we collected from the respondents, (42.90%) of the EFL teachers strongly agree that the constructivist theory builds a comfortable atmosphere in the

classroom. They claim that it promotes interaction, and it creates motivation between learners. In addition, (28.60%) of them agree and explained that students tend to adopt the delightful study style because they enjoy the learning process when the story matches their interests. In contrast, (35.70%) of teachers disagree on this point of view mentioning that the constructivist theory causes a loss of concentration in the classroom which sometimes leads them to be off topic.

Q3: Does using images, games help pupils to understand what is said in the English language and can develop their vocabulary?

From the data collected, we notice that all teachers agree that images helps to understand what is being said and helps pupils to develop their vocabulary. In which (85.5%) of the teachers strongly agree, and (14.30%) of them slightly agree. There has not been any disagreement on this question.

Q4: How often do learners find difficulties in learning English vocabulary?

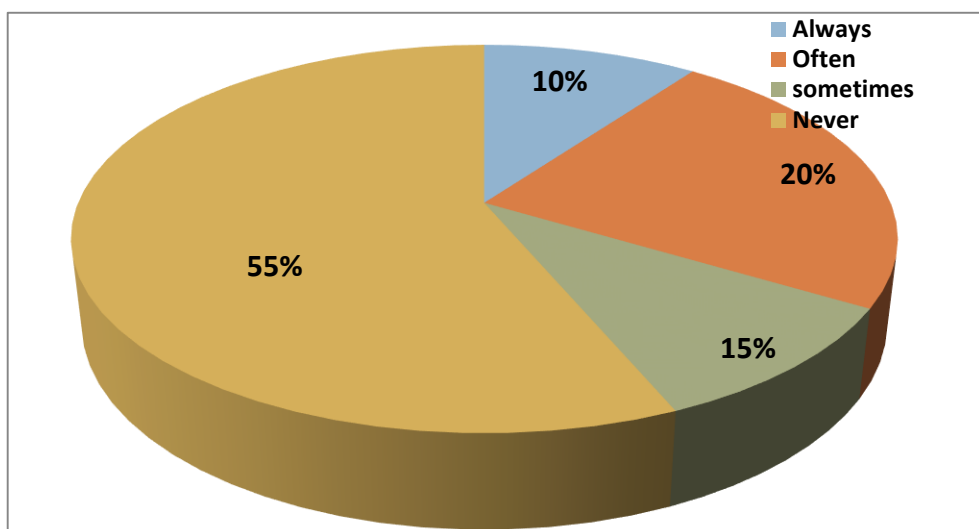


Diagram (8): the frequency of difficulty in learning English vocabulary

Diagram (8) shows students' difficulties with vocabulary learning. Ten percent (10%) always find difficulties when retaining English vocabulary. While twelve percent (20%) of the teachers' state that their students often encounter obstacles when learning, others (15%) state that their learners sometimes struggle, whereas (55%) of the respondents reveal that the students never face any obstacle in learning English vocabulary.

Q5: How often do you encourage your students to develop their English vocabulary through using educational games, cartoons, songs?

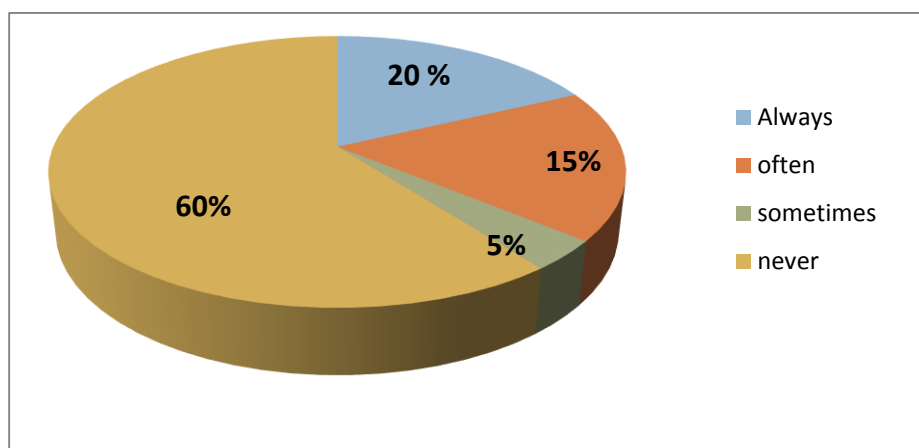


Diagram (9): teacher's frequency of encouraging pupils to learn English vocabulary through games, cartoons and songs.

This question seeks to know whether or not teachers encourage and support their students to develop their vocabulary with the help of educational games, cartoons, songs. The results obtained show that (20%) always, (15%) often and (5%) sometimes encourage their learners to improve their vocabulary. However, (60%) never inspire their students to learn by cartoons, educational games, songs.

Q6: Is it important to introduce a new vocabulary in the target language using visuals and initial situations?

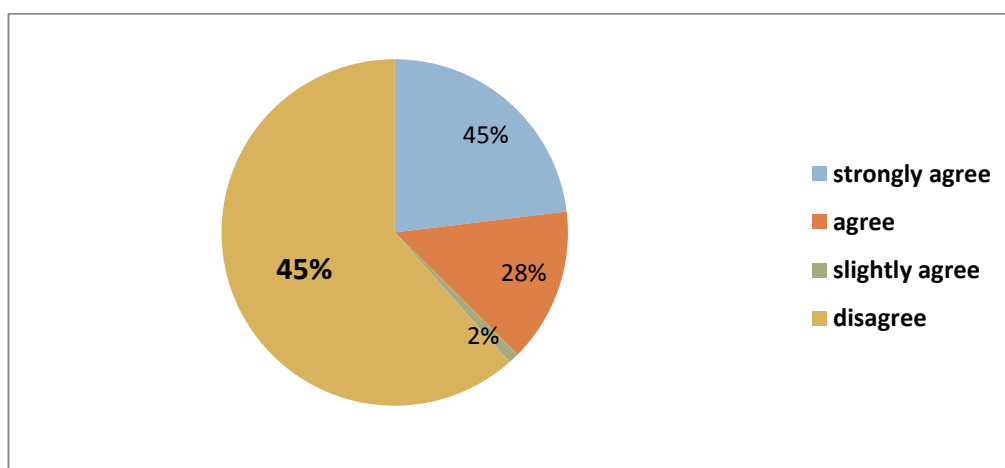


Diagram (10): the importance of using visuals and initial situations in introducing a new vocabulary.

As it is revealed above, the largest numbers of the respondents agree; forty five percent (45%) strongly agree, twenty eight percent (28%) agree and two percent (2%) slightly agree. Whereas, forty five percent (45%) strongly disagree.

Q7: Does the discovery learning method build a comfortable atmosphere in the classroom?

According to the information we collected from the respondents, (42.90%) of the EFL teachers strongly agree that the discovery learning method builds a comfortable atmosphere in the classroom. They claim that it promotes interaction, and it creates motivation between pupils. In addition, (28.60%) of them agree and explained that students tend to adopt the delightful study style. In contrast, (35.70%) of teachers disagree on this point of view mentioning that the discovery learning method causes a loss of concentration in the classroom which sometimes leads them to be off topic.

2. Presentation of the experimental results:

We tested both the experimental and the control groups prior to the start of our analysis. The participants were then given a variety of exercises that had been chosen according to their program. The test is intended to verify that the levels and skills of the two groups are equivalent. As a result, the final outcomes will be genuine and correct.

2.1 Presentation of the pre-test results:

The pre-test consists of a sequence of seven (7) vocabulary-related exercises, as described in the methodological chapter. The activities are, in fact, carefully chosen in light of the Discovery Learning approach. Each activity therefore has a clear objective.

Group “A” is the control group, it consists of 38 participants, and group “B” is the experimental group which consists of 36 participants.

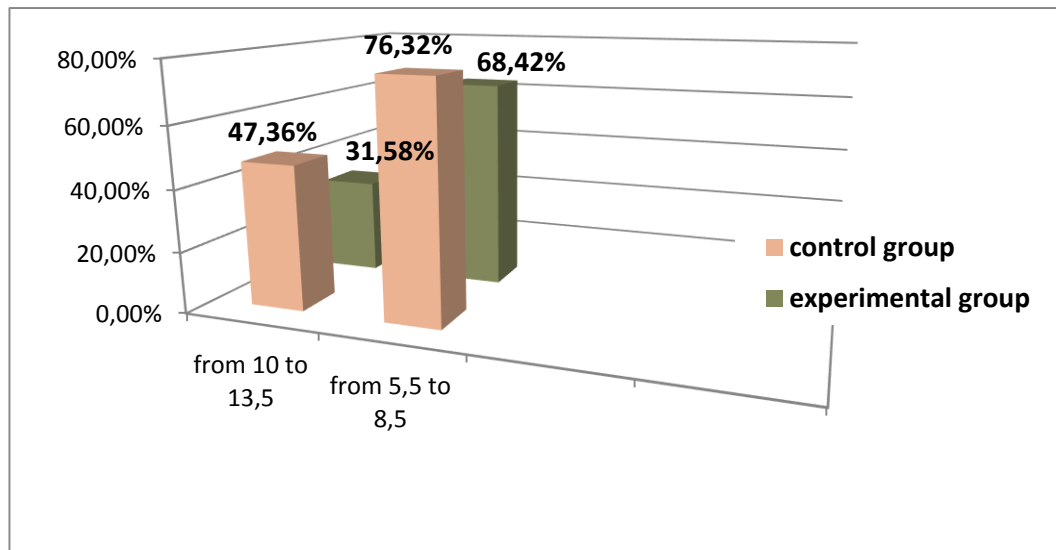


Diagram (11): Pre-test results of the control and experimental group.

The results of the experimental groups are depicted in the diagram above. It exposes the percentages of the pre-test scores obtained and divides them into two parts. The percentages of the scores, which range from 10/20 to 13.5/20, are displayed in the first two bars. As a result, only (15%) of the two groups; differences are significant. Similar to how just three (3) participants in the control group and four (4) in the experimental group each receive (13, 5/20.) Additionally, eight (08) of them receive 10/20 for both the experimental group and the control group. Additionally, with (76, 32%) for the control group and (68, 42%) for the experimental one, it is obvious that these two bars are higher. In fact, the difference is again not significant at (7, 9%). As a result, the findings show that the two groups are average. Therefore, they possess the same skills.

2.2 Presentation of the post test results:

The activities for the post test were, in fact, the same as those for the pre test. To put it another way, we made no changes to it.

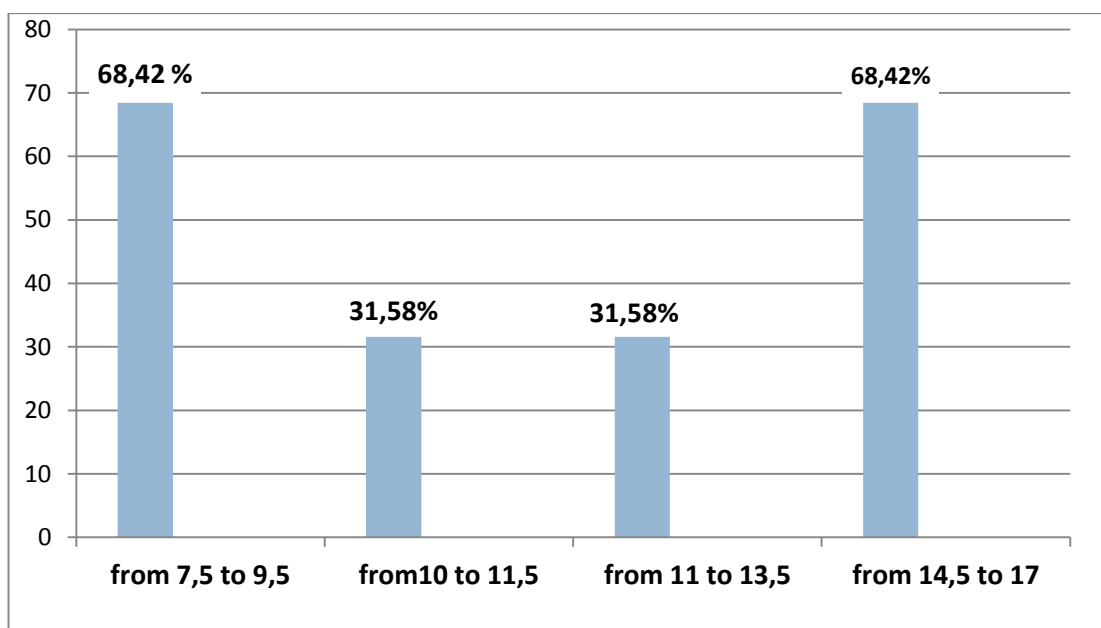



Diagram two (12): The post test results of the control and experimental groups.


The findings of the post test for both the control and experimental groups are shown in the diagram below. As a result, the first thing that stands out is that the experimental group scored higher than the control group. It is apparent that the experimental group scores range from 10/20 to 17/20 whereas those of the control group range from 7, 5/ 20 to 11/20. In fact, significant differences between the experimental group pre- and post-test results serve as an indicator of how much the treatment methodology contributed to beneficial changes. While the control group marks appear to vary significantly

Conclusion:

This chapter has presented the main findings of our research. It provides us with the results obtained from the teachers, pupils' interview and the classroom observation. The findings of the questionnaire and classroom observation were interpreted in the form of pie charts and bare graph. Moreover, we have presented the results obtained from the pre- and post tests together which presented in the form of bare graphs. The aim of this questionnaire is to confirm or refute the hypotheses mentioned in the general introduction (page 4).



Chapter four
Discussion of the
findings



Introduction:

The discussion chapter outlines the key findings from teachers' questionnaires that were given to the first-year English teachers (IMS7) and first year pupils at "Brothers Kerkache" Middle School in Tizi-Ouzou. As well as the results obtained from the pre and post test. The acquired results are interpreted in light of the theory that emphasizes the significance of investigation, experimentation, and active participation in the learning process. There are two major sections that constitute this chapter: the former discusses the results of teachers' questionnaires about their perceptions of the discovery learning method for acquiring English vocabulary and the pupils' questionnaire that give us general information about them. Also, the discussion of the treatment and observation period. While the latter is concerned with the analysis of the information gathered from the pre-test and the post-test.

I-Section one:

1-Discussion of the results obtained from the teacher's questionnaire:

As mentioned in the previous chapter, the current study aims at investigating the constructivist theory on EFL learners to acquire vocabulary. Therefore, to answer the research questions, a questionnaire as a first data collection tool has been distributed to seven Secondary School teachers. The questionnaire concerns "teachers' attitudes towards the use of the discovery learning method". We deduce that the results of the first question "Does the discovery learning method facilitate the teaching process?" the results revealed that (21.40%) of the teachers agree and (21.40%) strongly agree that the discovery learning method is useful. The teachers reported that this method is funny and entertaining for both teachers and learners and it helps to increase motivation and interaction among learners. It draws pupils in by making learning English vocabulary entertaining. Also, it creates an interactive teacher-students classroom. While (28.60%) of the teachers disagree and (7.10%) of them strongly disagree with the fact as it takes much time, and it is not an easy task since it requires big efforts and a familiar relation between teacher-pupils.

Moreover, the outcomes we have collected from the second question "does the discovery learning method create a comfortable atmosphere in the classroom when acquiring a new vocabulary?" they reported that (35.70%) of the teachers disagree with the fact that the discovery learning method builds a comfortable atmosphere by saying that: "the method causes

the loss of concentration in the classroom that lead them to be sometimes out of lesson” also they claimed that “it takes time and pupils does not have a good level to introduce it so it will takes time to familiarize them with this new method of teaching. However, (42.90%) of them did not neglect the comfortability that the discovery learning method creates in the classroom, the teachers justified their answers in a comment saying that “It promotes interaction, and it creates motivation between learners”.

In addition, according to the results obtained from the third question: “Does using images and games help pupils to understand what is said in the English language and can develop their vocabulary?” Most of the teachers (85.5 %) strongly agree, they suggested that “helping with contextualizing the terminology and a more explicit use of images can help learners retain the phonological form of words. Furthermore, they added that:” learners have always been given a passive role in the creation and use of visuals in the classroom”. whereas in this method, the teacher is supposed to teach vocabulary using gestures images , concrete materials and provide opportunities for learners to use and make them remember and memorize the words in the new language, that lead them to read correctly and reach a good understanding. Thus, these results indicate that games, images and visuals can be a useful support for vocabulary instruction in the classroom.

From what have been revealed in the fifth question; how often do you encourage your students to develop the English vocabulary through using educational games, cartoons, songs? The results show that (35.70%) of them always use games in teaching and they proposed to us some effective games that their learners enjoyed ;crossword puzzles , role plays and card games...etc. Similarly, (35.70%) often encourage their students to learn through educational games, cartoons, songs. Accordingly, (7.10 %) of them sometimes encourage their learners to improve their vocabulary by songs and games. They claimed that “it is hard for us to achieve our subsidiary aims, it takes a lot of time and a lot of effort “, “teaching with this technique involve a comfortable atmosphere and a lot of time, three hours per week is insufficient to finish the program” some of them claimed “we disagree, because it lacks concentration, and songs disturb all the class” “I cannot take my time to find songs or games related to the vocabulary sequence “.”It will disturb me to reach my main aims of the lesson, because it creates a lot of movements.”.

Lastly, the sixth question aims to obtain opinions and seen if using visuals and providing initial situations help to assimilate new vocabulary in the target language (TL). It is

revealed that, (50%) of the teachers strongly agree because it develops the visual thinking of students, they suggested that “it is a better learning style to retain in a long term and understand at the same time new words and concepts with images”. Further, “visuals add clarity to the explanations. While (50%) slightly agree .The results obtained see no disagreement.

2. Discussion of the results obtained from the pupils questionnaire:

2.1 General information about the participants:

The results of the first section revealed important facts about the participants. When asked “How old are you?” The aim is to know how long they had been learning English; the majority of the learners (90%) have eleven (11) years; which shows that there is no grade retention. while the others (10%) have twelve (12) years; which means that they have studied English before.

The second question is “Did you study English before this year “. The aim is to know if they have previous knowledge in English language. It helps us to implement this method easily and have a feedback rapidly.

Then, we wanted to know what they think about English language. Surprisingly, (100%) claimed that they like English; this means that all the participants are motivated and interested in learning this foreign language.

The third question is “In which language do you watch cartoons?” the results indicates that most of the participant around (50%) prefer or find French useful to watch cartoons because it is their second language (L2) after their mother tongue and it is the first foreign language studied in primary school. Hence, (L2) is spoken daily. On the other side, English comes in the second position with (35%). Finally, little attention around (15%) is given to Arabic language. To sum up, a big attention is given to foreign languages (French and English) with (85%).

The fifth question that was asked “How do you learn new words?”Our purpose is to uncover their preferred methods of learning English: including images, games, and cartoons on a variety of topics. We noticed that games are the useful way to learn English language .In fact; games enhance learning by making it more remembered and interesting. They also serve as excellent classroom debate, thinking, and language production stimulus. Around forty five

percent (45%) find that cartoons help them to acquire a new vocabulary. Indeed, cartoons are created with the main purpose of teaching children in a fun and easy way how to communicate and learn new words. There is a lot of repetition of words to help fix vocabulary in your mind. Twenty five (25%) prefer games to learn new words. The games make complicated ideas and topics more attractive and meaningful by disguising language lessons in the guise of exciting lessons. Few of them (5%) utilize this entire means to acquire vocabulary.

The last question: "How do you find learning English?" The aim was to know the frequency of learning English. Most of the participants sixty percent (60%) find it difficult. This is due to the actual method that the teacher used when teaching English. Consequently, learners struggle to learn English language. While others (23%) claimed that it is easy to learn. They are the excellent pupils who had English background in the private school. Few of them (5%) find learning English as a hard task; this means that they had a lack of comprehension and difficulties when retaining words.

3. The observation of the experimental group during the treatment:

According to what we observed in the experimental group (1MS7), the constructivist theory changes the classroom atmosphere. It creates a joyful and relaxed environment for exchanging ideas. Additionally, the pupils were excited by the several games, songs and images that were proposed during the sessions, and were motivated and active. This is noticed during the third lecture; they were participating and trying to use the new vocabulary that they have learnt to form sentences then short statements. We adopted for crossword puzzles in ludic activities for instance: in sequence two (Me and my family) we gave them a task which requires supplying the missing letters to get the members of my family. Weisskirch (2006) claims that using crossword puzzles is a desirable learning method as they can make studying more enjoyable. Pupils were excited when seeing the word puzzles. They engaged seriously in solving them; this is what Piaget called "individual constructivism". We noticed as well, that the majority of the pupils were engaged with the lesson, by asking us some interesting questions; such as: How can we greet my friends and my teacher? They discovered that there is a difference in greeting people (formal and informal one). Sometimes they walk around the classroom and talk to each other seeking for answers that are what we call "Mingling".

In the third sequence "My Pets" which is dedicated to animals. In order to put the lesson into practice, we suggested a game called "Jigsaw", in which the pupils were split into

two groups. In the first group, they were asked to name an animal and a second group had to say where it lives. The fact that most learners were eager to play the game and tried their best to provide the solution as well as the fact that they seek out our help less during play indicates that the pupils' capacity for problem solving is improving. Furthermore, we observed that interaction was one of the key elements of this method. Additionally, we observed that the participants readily employ the terms they have learnt whenever the occasion arises. According to what we observed in twelve (12) weeks in which we have investigated, the majority of the pupils were showing interest to this method, since it is new for them. They were always excited about the coming events. We observed that the pupils understood the vocabulary items easily since they were introduced in context within the lesson and performed by us using gestures, images and the different materials.

4. Observation of the control group:

In the control group, we observed that some pupils were not fully engaged; they were not participating and they preferred to keep quiet by showing some facial expressions concerning the lesson development. Because they found difficulties in expressing themselves in the target language. Furthermore, we observed that interaction is not an important component of this method. However, some of the pupils were slow in understanding the meaning of the words since the teacher did not perform well or use translation or any other means to clarify the given items, even the materials are not sufficient to understand the initial situations. The performance of the teacher is motivating while using the actual method but the pupils seems lazy and not motivated to integrate in the lessons. During the ten observation sessions, we noticed that ten (10) out of thirty six (36) pupils were very motivated to be thought with the actual method due to their previous experience and the positive feedback they got from the private school. But, they were not asking questions about the vocabulary items and the teacher did not use constant comprehension checks to ensure that the learners understood. Consequently, most of the pupils did not take part in the performance of the lesson. According to what we observed during the lectures, it was difficult for the teacher to implement the targeted vocabulary because of the lack of interaction and concentration, despite her effort, the instructor found it difficult to develop the tutorials due to the lack of time, and especially the pupils who face difficulties while learning English as a target language. At the beginning of each sequence, as a warm up the teacher always asks some questions to the pupils trying to attract their attention. Indeed, some of them answer, but the others struggle to find the appropriate words to express their ideas.

Overall, we noticed a lack of interaction, participation and positive feedback, due to the fact that the teacher did not keep on motivating and encouraging the learners to get involved in the lessons. Nevertheless, she did not try to support the learners when they had ideas that they wanted to share or develop. In other words, the teacher does not focus heavily on building comprehension

II-Section two:

- **Discussion of the Findings Obtained from the Experimental Research.**

1. An overview of the experimental research :

In this study, the first stage gives a set of activities to thirty-eight (38) pupils in the experimental and control groups as a pre-test to measure their abilities and prior knowledge before receiving the treatment. In other words, the goal of the pretest is to guarantee that the two groups can be compared before the treatment begins. The researchers can ascertain the immediate impact of the treatment on the outcome variables through the post-test. Researchers can identify any observable changes from the pre-test to the post-test in the experimental group that are the outcomes of the experimental treatment by include the control group.

1.1 The pre-test:

The Discovery Learning approach is tested in a quasi-experimental study, which includes pre-and post-tests to support or refute our hypothesis.

As stated in the literature review, this method enables students to build on their existing Knowledge and experiences as well as to use their creativity, imagination, and intuition. On the basis of this hypothesis, we prepared a pre-test of seven activities which covers different things that the pupils studied before. The participants were divided into two groups each one composed of 38 pupils (group A and group B), their ages ranged from 11 to 12 years old, these groups had different specific characteristic. After the test, we have accumulated several results. First, limited confidence, some of the pupils did not answer all the activities because they felt unsure of their responses and were unwilling to take the risk of making a mistake .Accordingly, we noticed a lot of incorrect answers, there are several reasons for that, but the most common one is the fact that memorizing new words is

challenging particularly when the pupils have to memorize a large amount of vocabulary in a passive way. Moreover, information may not be retained in the long term memory without active participation. Third, limited independence, it means that pupils are overly dependent on their teachers for guidance. We witnessed that although we clarified everything before to start the pre-test, they continued to seek our assistance and direction.

Next, we detected that the majority of the pupils did not answer the last activity which required them to write a brief paragraph outlining their weekend activities.

From that we deduced that their transferability is limited. In other words, when learners do not apply what they have learned in new contexts, they may struggle to transfer their knowledge and skills. Another example that might be used is that just (19,12 %) of the participants who were requested to complete a conversation to introduce themselves in the fifth activity of the preceding chapter, received a complete response. Additionally, since almost all of the pupils get the right answers for the first exercise (89%), which asks students to match each season to its name, activities that include images and shapes appear to be easy, attractive and interesting. According to Diagram (), cited in the previous chapter, it indicates that both the control and experimental group are measured in the scale of average pupils. Suitably, the percentage of answers of the control group: (47,36 %) for the scores rating from 10/20 to 13,5/20 and (76,32%) for the scores going from 5,5/20 to 8,5/20. Whereas, the percentages of the treatment group vary from (31,58%) to (68,42%); this indicates that they are nearly at the same level.

In addition, treatment was integrated with the experimental group in which the learners were taught using the Discovery Learning method, while the pupils in the control group continued to receive instructions the same way as before, namely using the actual method. First, we have chosen a variety of resources to use when instructing them, including: dictionaries, slates, games, songs, role plays and some tangible things. Following that, we meticulously planned every lesson, tying it to our theory and attempting to manage time as well. Then, we started administrating the treatment.

1.2 The treatment:

The findings demonstrate that vocabulary learning using the Discovery approach to learning boosts learners; confidence. During the second lecture, we observed how pupils were engaged and not frightened to try to respond. Indeed, the Discovery Learning method points

out that learner feel more assured in their capacity of acquiring and using new vocabulary when given the chance to find new terms on their own.

Discovery learning is a powerful tool for building self-confidence because it allows students to take ownership of their learning and become active participants in the process; - Dr. Howard Gardner, developmental psychologist and education theorist, this quote highlights the potential of the discovery learning method to foster confidence in students by empowering them to take ownership of their learning, explore at their own pace, make mistakes and learn from them, develop a growth mindset , and allows for active engagement.

Next, we noticed that the pupils were more attentive and engaged throughout the sessions; everyone tried to figure out the rule or lesson content by following us and paying attention to what we were saying, showing or doing. It has been demonstrated that when pupils are given the freedom to investigate and acquire new words on their own, they become more immersed in the subject matter and are more likely to remain attentive and interested. Accordingly, learners gain critical thinking and problem-solving skills throughout the learning process, since discovery learning necessitates them to make connections between new concepts and topics they are already familiar with. Another observation we made was that the participants were more eager to work and enjoyed utilizing the dictionaries to look up words. For instance, in the fourth sequence, "Me and My School"; whenever they hear a new word, they set their dictionaries on the table and look it up. Another illustration would be role plays that are relevant to the presentation. For instance, in the second sequence, "Me and My Family"; we choose a group of pupils, and we had them each present a different family member (their father, mother, grandfather, etc.) in a brief presentation.

One more thing that the learners liked was that before the lecture began, we gave them a list of words related to the subject and asked them to pick one. We then made a table and divided the pupils into groups, and each time they provided the right response or brought their dictionaries, slates and their vocabulary journals, they received a point, and at the end, we select the group winner based on the scores. As a case in point, when we dealt with pets, we made a selection of : tigers, lions, deer, etc. Consequently, we witnessed that their retention improved. In fact, learners are more likely to remember new words and be able to use them appropriately in their own writing and speaking when they actively engage with the language.

This is supported by claims made by Swiss psychologist and education theorist Jean Piaget, who states that :

In discovery learning, students are able to actively engage with the material, which helps to improve retention by creating a deeper and more personal connection to the knowledge being learned.

The pre-test objective is to ensure the comparability of the two groups before the intervention, whereas the post-test enables us to assess how much the pupils in the experimental group have learned from the discovery learning method and reveals how much each learner knowledge increased and their level of improvement over the course.

Post-test:

A substantial difference between the pre- and post-experimental group scores resulted from twelve (12) weeks of the discovery learning treatment in the experimental group. The data was collected, processed using the rule of three, and then shown graphically. The experimental group; post-test scores are greater than their pre-test scores, as shown in Diagram (12) in the third chapter, where the findings were determined to have increased to become above average (31,58%) for the score going from 11/20 to 13,5/20 and (68,42%) for those rating from 14,5/20 to 17/20. The research shows that the students were receptive to the lectures offered and were able to understand their goals, which allowed them to succeed in their educational objectives while also being motivated and having fun at the same time. Furthermore, we noticed that practically all of the participants provided an answer to the prompt asking them to talk about their weekend activities, this confirms that this method enhance the creativity and innovation of the learners. Mihaljević Djigunović, J. (2014). Vocabulary learning strategies and foreign language acquisition. Bristol, Buffalo, Toronto: Multilingual Matters. While conducting a study on vocabulary learning strategies and foreign language acquisition using discovery learning approach. They found that students who used certain vocabulary learning strategies, including discovering the meaning of words in context, had better vocabulary acquisition than those who did not use these strategies.

In addition to learning new terms and having a great time in class, participants said they also loved and understood the tasks that were assigned. The following were the pupils; feelings and thoughts: (Second week of the Discovery learning program); Today was enjoyable, we made our school map together, I hope we could study more frequently this way.

After all, learning English is not that difficult (four weeks of Discovery learning treatment). After eight weeks of practicing the Discovery Learning method, the student stated; I am able to understand the teacher explanations easily: Today I wrote a story based on my daily activities; while it may have some errors, but I am proud of me; (The twelve-week of our treatment period) the pupils claim that speaking and using the terms they have learned in context makes them feel more at ease. In addition, Lee, J. H., & Kwon, Y, in their research done in (2016) , they discovered that when students participated in discovery learning activities, they expressed greater pleasure with their educational experiences, which in turn enhanced academic performance.

On top of that, the findings demonstrate that participants retain new information more effectively. Nguyen, T. T. H., & Nguyen, N. T. (2019), conducted a study on how the discovery learning approach influenced the vocabulary learning and retention of Vietnamese learners. The discovery learning method, according to the students, helped them acquire new language more successfully and remember it for longer periods of time. Students also gave favorable feedback on their learning experiences; students who received the discovery learning method reported higher levels of vocabulary acquisition and retention compared to those who received traditional instruction. (Jing & Li, 2018) The statement above implies that the discovery learning method can be a successful strategy for encouraging vocabulary acquisition and retention and that students may give positive feedback on their learning experiences when participating in discovery learning activities for vocabulary acquisition.

Likewise, a similar study done by Guzman & Lope in (2020), who tried to investigate the effectiveness of discovery learning on vocabulary acquisition and retention in English language learning. The obtained data indicate that the experimental group, which received instruction via discovery learning, outperformed the control group in both the post-test and the delayed post-test, which was given four weeks after the research. In comparison to the control group, the experimental group reported higher levels of motivation and involvement in the learning process. In their study, they claim that Discovery learning allows learners to acquire new vocabulary in a meaningful context by enabling them to understand how it is used in real-life situations. Presenting new vocabulary in context helps learners understand and apply it in a range of situations, which can improve communication and language development. In other words, the teacher support of the learners meaningful engagement with the subject is what stimulates their motivation and sense of interest.

Regarding the control group, they underwent no modifications; they continued to receive instruction using the conventional approach. The findings of the control group scores for the pre- and post-test were as anticipated. They hardly changed at all. The pre-test percentages were found to be between (47,36%) for the scores 10/20 and 13,5/20, as shown in Diagram (12) in the preceding chapter. In addition, the percentages revealed in the post-test were (68,42%) for the scores going from 7,5/20 to 9,5/20 and (31,58%) for the marks rating from 10/20 to 11,5/20. Therefore, the key to learners' development in discovery learning method in vocabulary acquisition is their active involvement in the learning process, which promotes deeper understanding, retention, and the development of higher-order thinking skills.

2. Data analysis:

To assess the research, our focus was on four competences:

1. Vocabulary:

A notably developed vocabulary characterizes the experimental group of learners, with only small grammatical errors. It is shown that by using the discovery learning method learners were able to make connections between different words and see how they related to each other, they assert that; we feel like we have a better understanding of the new vocabulary because we had to use it in different contexts during the discovery process". The pupils also enjoyed the process of figuring out meaning of new words on their own, this helps them not only to remember the terms easily but they also build confidence and develop their critical thinking skills as well.

However, the vocabulary of control learners is greatly influenced by their mother tongue, and they are more likely to make mistakes that impede communication. Additionally, because the teaching strategy is teacher-centered, the learners have no possibilities to discover or expand their knowledge by their own. As a result, they lack confidence and struggle to learn and remember new words. To that end, vocabulary development must be taken into account. Guzman ; Lope state in (2021) that vocabulary acquisition is a crucial aspect of language learning, and the discovery learning method has shown promise in helping students acquire and retain new vocabulary in a more meaningful way ; (2021) Guzman and Lope.

2 .Language productions:

Evaluation of language production abilities is a critical component of determining how well the discovery learning approach works for vocabulary acquisition.

2.1 Oral production:

We observed that the experimental group members appear competent when it comes to interpret something orally, such as the creation of brief dialogues using the terminology they have learned through the Discovery Learning method, and they have a good sense of inventiveness. Thus, the learners enjoy acquiring vocabulary, they find it fun and interactive and they feel that they are really engaged in the learning process. The control group participants, however, do not really appreciate the few lectures in which the teacher incorporates oral works since they do not feel comfortable doing so and occasionally do not know exactly what to do and how.

2.2 Written production:

Although they occasionally made grammatical errors, it was clear that the experimental group participants applied their newly learned vocabulary in useful contexts, as well as their ability to use appropriate vocabulary to convey their intended message. The control group participants, however, have some trouble remembering the meaning of the words they learnt and putting them in a meaningful fashion, except the words remembered by heart.

3 .Role plays:

Through role plays, students showed how well they were doing with the new vocabulary they had learned, and it is impressive to see the extent to which they worked to recreate real-life situations in a practical environment by communicating in the target language they had just acquired. Contrarily, the participants in the control group have no exposure to role plays at all.

In general, assessing language production abilities in the discovery learning approach should concentrate on how well the learners are able to apply the vocabulary in context and how successfully they can communicate their message.

4. Fluency:

According to Kormas (2006), speaking fluently is a sophisticated but crucial automatic human activity .The findings of our study indicate that the experimental group’s pupils communicate with a wide variety of expressions and without much effort.

However, the pupils in the control group have to make an effort at times to search for words or expressions, but overall, there are not many inconvenient stops and easy delivery .While looking for the appropriate meaning, the other category in the same group takes extended pauses .Nearly given up trying to make an attempt at times due to its frequent, fragmented, and weak delivery.

5. Comprehensibility:

Pupils in the experimental group found it simple to understand broader meaning of words. Very few clarifications or interruptions were necessary. The majority shows clear focus when performing the lessons.

6. Interaction:

The social constructivism which is developed by Lev Vygotsky is implemented in the experimental group. For example, in task 2 page 58 (Book of English first year middle school), learners are required to prepare a dialogue with their partners, in which they are asked to answer questions about likes and dislikes. In this case, the development of meaning was facilitated by the peer interaction and conversation. This interaction between peers and their discussion lead to the construction of meaning. In addition, there are several exercises that ask students to discuss various topics as well. Thus, the learners can form teams and groups to discuss issues pertaining to meaning from various points of view and ideas and learners can construct knowledge from one another.

The cognitive constructivism developed by Jean Piaget is widely implemented. For example, in vocabulary explorer (page 137 in the fourth sequence), we asked the pupils to find the meaning that “Rights and duties ” express. Learners in this case, use their cognition and intuition to find what they are asked to. In this case, learners create their own knowledge independently when responding to the various question using their existing knowledge and experiences.

Conclusion:

In order to address the study issues outlined in the general introduction, the experimental research and questionnaires that were done with teacher pupils were discussed in this chapter. The findings from the questionnaire were covered in the first section. The second section covered the results of the experimental research. We receive concise responses to the study questions posed in the general introduction; during the discussion of the findings. The premise that teachers have favorable attitudes toward using the Discovery learning technique is confirmed, but only to a certain extent because some of them place little or no value on using Discovery learning as a novel teaching strategy.



General conclusion



The current study has investigated the implementation of Bruner's constructivist theory to examine how it can be applied to acquire English vocabulary. Our research relies on three main objectives. As the first objective, it sought to highlight the impact and the effectiveness of "the constructivist theory" in fostering English as a foreign language learning, more specifically, for Algerian Middle school (MS) pupils. The second objective aims to explore the teachers' attitude towards the use of the Discovery learning method to improve learners' vocabulary. The third objective is to explain the effects of constructivist theory on learners' comprehension, fluency, interaction and language production. Furthermore, to attain the aforementioned purposes, we collected information based on teachers' views towards the use of the discover learning method in the classroom.

In addition, we have carried out an experimental study to determine how pupils' react after adopting this method. We used two data collection tools to support or disapprove the hypothesis presented in the general introduction. The questionnaire as the first data collection tool distributed to seven (07) EFL teachers at "Brothers Kerkache" middle school in Tizi – Ouzou, who was instrumental in enabling us to come to certain conclusions that address our research questions, and an empirical study is conducted with (38) First-Year students at "Brothers Kerkache" to determine whether the strategy meets their needs and aids in language acquisition. The results obtained revealed that almost all the teachers have positive opinions about the Discovery learning method as it is considered as a useful method to aid the learners improve their skills, specifically the speaking one and generally given the opportunity to convey their own ideas in a creative way.

A pre test scheduled according to their program in the first semester. It consists of seven activities related to school vocabulary like: matching each season to its image, filling with the missing letters to get school things, re-order the words to get correct statement. It was distributed to both the control (CNR) and experimental (EXP) group. It was designed to gain information about participant's previous knowledge, lacks, level and need analysis. After one week, we have collected the pre test results and we started the analysis. When analyzing we tried to identify the causes of this errors and how can we classify it. We have identified a lack of confidence; this is noticed when the participants hesitated to write the answer even though it was correct and in the right place. Transferability: they have ideas in their mind but the lack of expressions break down the communication and spoke in brief way to avoid using a lot of expressions. Memorization; as has been said the exercises was given according to

their program .But (30%) did not fill the gaps because they had a problem when retaining words. This pre test was a key to make a comparison between the two groups before the treatment.

After that, it was the treatment period. We have incorporated the experimental group using the discovery learning method. We carried out their program by choosing a variety of resources when instructing them, including: dictionaries, slates, games, role plays and some tangible things. We tried to motivate them to learn by cognitive constructivism. Throughout the twelve weeks of treatment, we noticed that pupils were more attentive and interested. We have increased motivation, interaction in the classroom atmosphere. Accordingly, they gained critical thinking and problem solving skills through the learning process, since it necessitates them to make links between new concepts and topics that are familiar with them.

Finally, the post test determined the substantial difference between the two groups. So we have distributed the same activities as the pre test to have concise results .The data collected was analyzed using the rule of three. In comparing to the control group, we noticed a great development in the vocabulary retention, comprehension and oral production. They reported higher levels of motivation and involvement in the learning process. Through the post test we have proved the effectiveness of The Discovery Learning theory in vocabulary acquisition. In other words, our study supports the effectiveness of Bruner's constructivist theory.

Eventhough the study supports the discovery learning method but there are still some shortcomings. Firstly, there are only seven participants, who might not fully represent all teachers. Secondly, it is possible to gain more understanding of teachers; attitudes about the application of the Discovery Learning approach. We were unable to use it to gather more data due to the little amount of time, because teachers did not have enough time to fully implement the study and gather data; they had to get their pupils ready for tests. Thirdly, resource limitation, our experiment requires additional resources, such as materials and technology, which may not be available or feasible in the classroom setting. As a result, this study outcome might vary if it were carried out in a different setting.

Recommendations:

Overall, teachers willing to integrate this method in their EFL lectures to consider their students' needs and to get a great development in their vocabulary.

In the future, in more extensive studies that we have not yet undertaken due to limited resources and time, this study may still be investigated. Choosing a teaching strategy that works for the students learning styles is crucial for the growth and success of language literacy, therefore teachers should overlook it. The Implementation of Bruner's Constructivist theory in Middle School EFL Classes, and our goal was to inform teachers about the many learning styles that are now in existence interests and level.

References :

- Afzal , N.(2019)A study on vocabulary learning problems encountered by BA English majors at university level of education, Arab world English Journal ,10(3),81-98.<https://doi.org/10.24093/awej/voll0no3.6>
- Alharbi , A.M(2015) Building vocabulary for language learning :Approach for ESL learners to study new vocabulary .journal of international students ,5(4),501-511.<https://files.eric.ed.gov/fulltext/EJ1066315.PDF>
- Alqahtani, M. (2015).The importance of vocabulary in language learning and how to be taught .International journal of teaching and education, 3(3), 21-34.
- Anderson, A.and Lytech, T . (1988)' Listening ' Oxford :Oxford University Press.
- Bauer (1998) Vocabulary published on (March 19, 1998), eds (1), Routledge.
- Bauer,L.(2013).Vocabulary.Taylor and Francis.<https://doi.org/10.4324/9780203026052>
- Benmadani, N. (2003) Improving students 'Listening Skill Through language Laboratory, University of Biskra.
- Bjork ,R,A,&Kroll,J,F,(2015).Desirable difficulties in vocabulary learning .The American journal of psychology,128(2),241-252.
- Braungart and Braun art ,(2007)Materiality and Interior construction
- Brown, J, D.(2001)Using Surveys in Language Programs. Cambridge University Press. Brown, H, (2000).Principles of language learning and teaching. Prentice Hall. New Jersey.
- Bruner,J.S.(1990)Acts of Meaning.Havard University Press
- Bruner,J.S.(1960).The Process of Education.Havard University Press
- Carroll ,S,E.(2013).Introduction to the social issue ; Aspects of word learning on first exposure to a second language Second language research ,29(2),131-144

- Carter, R (2012). Vocabulary: Applied linguistic perspectives. Taylor and Francis. <https://doi.org/10.43224/9780203124659>
- Cherry, K. (2019, October 31). What's the difference between Implicit and explicit long-term memory? Very Well Mind. <https://www.verywellmind.com>
- Cowan, L. (1989, April). Towards a definition of collocation (No.4). National Library of Canada. <https://specturm.library.concordia.ca/id/eprint/5437/1/ML49083.pdf>
- Daniel, L.E (2012). Game console –an overview /science direct topics. Game console. <https://www.science-direct.com/topics/computer-science/game-console>
- Derbouche and Hamadouche (2016). Investigating of online games in developing vocabulary.
- Derbouche, A. (2016) investigating the effectiveness of online games in vocabulary learning. Ds space Oum El Bouaghi. <https://bib.univ-oeb.dz:80880/jspui/bitstream/123456789/3650/1/online%20>
- European Ed Tech Network. (2019, April 19). Vocabulary knowledge (photograph). European EdTech Network. <https://eetn.eu/knowledge/detail/promoting-vocabulary-development-with-edtech>.
- Educational psychology, 13(3), 36-44. <https://www.proquest.com/scholarly-journals/exploring-psycholinguistic-difficulties-learning/deoview/24576049/se-2accountid-202267>
- Grains & Redman, R.S (1986). Working with words a guide to teaching and learning vocabulary (Penny UR ed.) The press syndicate of university of Cambridge.
- Hall, C. (2021, April 2)
- Karakas. (2020). Exploring Psycholinguistics in Difficulties in learning Foreign Language Vocabulary in light of the English Language; 1-Manager's Journal on

- Kiprasky, P. (1982). Word formation and the lexicon. Mid-American Linguistics Conference.
- Mayer, R.E. (2004). Should there be a three strikers rule against our discovery learning? The case for guided methods of instruction. *American Psychologist*, 59(1), 14-19
- Mc Dermontt K.B. (2002, January 1) Memory, Explicit and Implicit. *scienceDirect* ?<https://www.sciencedirect.com/article/pii/B0122272102001758>
- Nation, I.S.P. (2001). *Learning vocabulary in another language* (1st ed). Cambridge university Press
- Nunan, D. (2003). *Practical English Language Teaching*.; New York: McGraw Hill
- Piaget, J. (1952). *The origins of Intelligence in Children*. International Universities Press.
- Piaget, J. (1983) Piaget's Theory. In P. Mussen (ED). *Handbook of child Psychology* (4th ED? Vol.1) John Wiley Son
- Rohmatillah, R (2014). A study on students difficulties in learning vocabulary. *English education : journal tadriss bohassa Ingris*, 6 (1), 75-93
- Ramadhan, H.I. (2017). The effectiveness of hangaroo game for the teaching of English vocabulary. *Leatek*.
- Research Tools 3 ; Questionnaire. (2019, December 25), Canadian Institute For Knowledge Development. <https://cidk.ca/2019/1225/research-tools-3-questionnaire/>
- Seifert, D. (2017, March 6). Top 5 reasons why vocabulary matters. *Infer cabulary*. <https://infercabulary.com/top-5-reasons-why-vocabulary-matters/>.
- Strobach, & Natalia, E. (2012). Implications for transfer appropriate processing and vocabulary learning.

- Surmanov.S,&Azimova,M(2020).Analysis of difficulties in vocabulary acquisition .The journal of lego studies ,6(1),1444-153
- Suryanto,B.T. Imron ,A.A,&prasteyo ,D .A .R(2012).The correlation between student's vocabulary Mastery and speaking skill. International Journal of English education and linguistics <https://doi.org/10.33650/ijoeelv3i1.2042>
- Tennant (n,d).Vocabulary matters. Techniques for teaching and learning .One stop English .<https://www.onestopenglish.com/support-for-teaching-vocabulary/matters/techniques-for-teachning-and-learning/155373>.
- The linguistic theory of Noam Chomsky (2021,March14).Exploring your mind. <https://exploringyourmind-com/thelinguistic-theory-of-noam-chomesky>
- Wilkins, D.(1972).Linguistics in Language Teaching. London: Arnold.
- Vocabulary Knowledge, (2021, November 29) Informed Literacy, <https://informationliteracy.com/vocabulary-knowledge>.
- Vyglotsky, L,S .(1978).Thought and Language. The MIT Press.
- Vyglotsky,L.S. (1978).Mind in Society: The Development of Higher Psychological Processes.Havard University Press.



Appendix



Pupils' questionnaire (2)

• **Answer this questions:**

- 1- How old are you? I'm
- 2- Did you study English before? YES NO
- 3- You watch cartoons in : Arabic English French
- 4- Do you like English language? YES NO
- 5- How do you learn new words? by
Images games cartoons
- 6- Do you easily remember the words you learn? YES NO
- 7- How do you find learning English? difficult easy
- 8- Do you like learning with games? YES NO

Vocabulary pre-test

Activity 1 : match each season to its image.

1- Summer. 2- winter. 3- autumn. 4- spring.



Activity 2: write the missing letters of this school things.

1-penc...l. 2- sh...rpener. 3- schoo... b...g. 4- ...ubber. 5- ...en. 6- co...or
pencils. 7- ...uler. 8- pencil c...se.



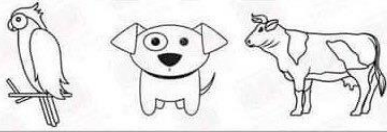
Activity 3: fin the synonyms and color them using the same color.

fast start good slim

nice begin Thin quick

Activity 4: color the correct image.

I see a cow.



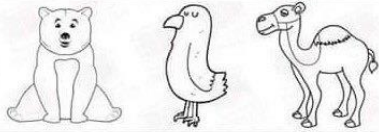
I see a donkey.



I see a horse.



I see a camel.



I see a sheep.

