People's Democratic Republic of Algeria

Ministry of Higher Education and Scientific Research

University of Abbes Laghrour- Khenchela

Faculty of Letters and Languages

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The Effect of Group Investigation Cooperative Learning Model on EFL Learners' Project Oral Presentations.

Case Study of Second Year Pupils at Elhachemi Bouzidi Secondary School, Khenchela.

Thesis submitted for the fulfillment of the requirements of the Degree of a Doctorate LMD System in Didactics of the English Language

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Academic Year : 2021-2022

Dedication

To the soul of my Father AbdelAli who taught me how to stand strong against my fiercest fears,

To my mother, who has sacrificed a lot for us,

To my dear Husband Zoubir for his love, patience, encouragement and support,

To the light of my life Mohamed and Adam,

To all my family for their support,

To the ones who truly love me.

AKNOWLEDGEMENT

All thanks to Allah, the Almighty the Merciful, for giving me the strength to finish this work.

Dr. Sabrina Baghzou, my supervisor, deserves my heartfelt gratitude. Her advice, assistance, and guidance were really helpful in completing this thesis. Her unending patience and support meant a lot to me.

I would like to express my sincere gratitude and appreciation to my committee members Pr. Darbouche Nadia, Dr. Ounis Salim, Dr. Messerhi Mahbouba, Pr. Chelli Saliha, and Dr. Houaijli Ahmed Chaouki, for accepting to serve on the board of examiners and for their thoughtful, well-targeted, and constructive remarks, and recommendations, which will greatly benefit this research.

I would like to extend my sincere thanks to Inspector Hadid Mohamed Elkamel for his help and support, and to my colleagues, and dearest pupils at Elhachemi Bouzidi Shcool, for their love, support and collaboration.

Abstract

This research study aimed to investigate the effectiveness of Group Investigation Cooperative learning model on developing secondary school pupils' project oral performances and achievements. Furthermore, it measured the effect of the Group Investigation Technique on the pupils' attitudes towards English projects. We hypothesize that using Group Investigation model when teaching projects to EFL pupils will have a positive effect on their project oral presentations. The researcher adopted a mixed-method, quasi-experimental and descriptive research to answer the study questions. Two groups of second-year scientific stream pupils from Elhachemi Bouzidi Secondary School were chosen. Both groups (CG and Exp. G) consisted of twenty-one (21) pupils. Group Investigation was used in teaching the experimental group, while the traditional method was used with the control one during the first and second terms of the school year (2019-2020). The tools included pre-post achievement tests, teachers' and pupils' questionnaires, an interview with the inspector of National Education, and an attitude scale to determine the pupils' attitudes towards the Group Investigation model. The data gathered were statistically analyzed using the Statistical Package for Social Science (SPSS). The researcher also used Cronbach's Alpha and Split-half (Spearman-Brown and Guttman) techniques to measure the reliability of the project oral presentation assessment rubric and the pupils' attitude scale, independent samples T-test, Paired Sample T-test, and One sample T-test to analyze the gathered data. The study results revealed statistically significant differences in the mean scores of the pupils' project oral presentation pre-post tests in favor of the experimental group. Such findings were attributed to the use of the Group Investigation model in teaching English projects. Considering the positive impact that the results showed, we recommend using Group Investigation Cooperative Learning Model to develop English language different skills and areas, especially at the university level. Moreover, we recommend using the same strategy to improve the teaching/ learning of other school subjects.

- **C:** Criteria
- **CBA:** Competency-Based Approach
- **CG**: Control Group
- **CL:** Cooperative Learning
- **EFL**: English as a Foreign Language
- **Exp. G**: Experimental Group
- **N:** Number
- **PBL:** Project-Based Learning
- **PW:** Project Work
- **Q:** Question
- **SPSS:** Statistical Package for Social Sciences
- **vs.**: Versus

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General Introduction

1-Background of the Study

Today's world, with its rapid changes and growing complexity, presents new problems and places new demands on our educational system (Bar-Yam et al., 2002). More focus is given to communicative approaches where learners have to utilize world languages and be engaged in real-world communication. Since English has become the world's common tongue, teaching this language has never been more dynamic or inventive than it is today. Learning English has become a means of keeping pace with the world's fast change, and it is becoming an integral part of all school curricula.

Unfortunately, learning English in Algerian classrooms is restricted because the target language is acquired as a subject only and often is not used beyond the school as a communication medium. Lightbown and Spada (1999) pointed out this problem by stating that the teachers of English aim to make sure that students learn the vocabulary and grammar rules of the language they are studying; however, their learners' aim is often to take an examination instead of using the language for communication purposes. Therefore, there is a great tension between what students learn in the classroom and what they really need in reality when they leave schools (Kramsch, 2014). Algerian EFL teachers are not sure what they are supposed to teach or what real-world circumstances they should prepare their students for.

Significant attempts have been made in Algerian schools to address the need for more innovative English language teaching and learning in order to educate students for the changing demands of the twenty-first century. Clearly, no single methodology can be used with the expectation of significant system gains; however, Project-Based Learning appears to be following the world's demands, especially the benefits of practical language learning where students have opportunities to be responsible and use creative ways to solve real-life problems (Solomon, 2003).

According to John Dewey (1944), the world is always changing, and students must be active learners involved in the learning process. Traditional schooling, in his perspective, generated the incorrect kind of experience to foster learning (as cited in Cervantes, 2013). In his theory “learning by doing”, Dewey proposed that we learn best when we are genuinely engaged with what we do. He believed that the most effective approach to accomplish this was to develop a realistic curriculum that was relevant to students' lives and experiences. Dewey's concept, which is nearly a century old, is resurfacing now, and learning through projects has become more and more popular. It is a broad approach to classroom teaching and learning

that involves students in the exploration of real-world problems and the creation of authentic projects (Blumenfeld et al., 1991).

PBL is a student-centered creative teaching approach that motivates learners to practice what they have learned in language class in their real life situations. It is an effective strategy for creating academic achievement gains based on evidence acquired over the years (Markham et al., 2003).

Since Project-based Learning (PBL) occupies a prominent place in language curricula today, the Algerian Ministry of National Education has implemented it as a reform to be part of the curriculum under Competency-Based Approach (CBA). Their main aim is to ameliorate the status of English in Algerian schools and to increase learners' autonomy and self-development by asserting the need to redefine the roles of both learner and instructor (Mohamed, 2005). In fact, PBL can be considered an integral part of CBA. This is clearly stated in the teacher's book AT THE CROSSROADS "One of the most distinctive features of the Competency-Based Approach is its integration of project work as part and parcel of learning strategy." The authors also stated that "…, it is only through carrying out project work that we and our learners can live up to the basic principles of the Competency-Based Approach..." (Riche et al., 2011, pp. 26-27). Accordingly**,** the Ministry of National Education applied a project-based design, and it became popular, especially in EFL classrooms. This method is distinguished by the application of what students have learned in school to real-life situations. It improves their problem-solving abilities and encourages social learning. PBL may be able to fill in the gaps where standard teaching methods fall short. It can meet the needs for a suitable technique that allows learners to develop meaningful, authentic language that creates enduring connections in various contexts.

This shift from teacher-centered to learner-centered methods required the integration of cooperative learning into the reform, where students can work on their projects in pairs or groups depending on the nature of the topic. When students are trained to cooperate and given adequate help, they learn the most (Johnson, Johnson, & Holubec, 1994). Therefore, the Ministry in charge linked cooperation and project-based learning to help learners deepen their understanding of new information by providing them with a variety of engaging opportunities to build automaticity and develop their knowledge and abilities and the required attitudes (De Florio, 2016).

Unfortunately, the researcher's short experience as a teacher helped her notice that many teachers still use passive traditional ways to teach projects in what is supposed to be a learner-centered classroom. Although most teachers encourage their students to work in groups when

doing their project work, they still lack the necessary knowledge on PBL and cooperative learning implementation, models, and techniques. This result in students' difficulties in preparing the work assigned appropriately.

Recent studies on the integration of PBL in EFL classrooms in Algerian schools show that the project work is not given the importance it needs.

A study on Project-based learning in the Algerian secondary school syllabuses and textbooks in 2011 by Aimeur shows that neither directions for project work in the classroom nor information regarding the different sorts of projects to include in the textbooks are provided in the English textbooks. The findings reveal that the initial implementation of the Project-Based Approach may be challenging due to the fact that both students and instructors are accustomed to the traditional teacher-centered instruction. In addition, the study shows that teachers lack appropriate guidance on how to implement the PBL pedagogy in their classrooms, which affects the success of PBL in Algerian schools.

Another study by Baghoussi & El Ouchdi (2019) on implementing the project-based learning approach in the Algerian EFL context studied the obstacles teachers face when dealing with the projects of the textbooks in an Algerian Secondary school. The findings of the study report that the application of PBL in secondary schools in Algeria is a significant problem today. The study reveals two evident obstacles: the lack of comprehensive guidance for implementing the various types of projects in the classroom and the absence of PBL training for instructors. Additionally, the results show that the program length, the class size, and the requirements of the baccalaureate examination restrict the implementation of PBL in the classroom.

Bessai and Djaffar (2021) investigated the implementation of Project Work in the Teaching of English Language at Algerian Middle Schools. The findings reveal that implementing project work into the EFL curriculum at the Algerian Middle School is still challenging. The results demonstrate that teachers have difficulty putting project work principles into practice. They think that it is better to teach students the language fundamentals prior to assigning them projects. It also revealed that the ineffectiveness of project work could be ascribed to teachers' lack of awareness of the significance of PW non-fostering learners' autonomy, critical thinking, and collaborative learning.

However, it is worth noting that most of the above findings regarding the implementation of PBL focused on just one side, either teachers or learners. The research literature on the subject of PBL and its' implementation and challenges is for this reason limited. As a result, this study is an attempt to fill this gap by investigating both students' and teachers' perceptions

toward the use of Project-based Learning in EFL classes to better pinpoint and examine the obstacles, and find concrete solutions eventually.

Thus, the present study is one of the few empirical studies that provide an in-depth examination of the implementation of project-based learning in Algerian secondary schools. It studies teachers' and learners' perceptions, challenges, and difficulties concerning the PBL pedagogy. It also sheds light on the inspectors' opinion on PW and teachers' practices. Furthermore, PBL pedagogy has been combined with cooperative learning in both the implementation of the study and the analysis of data. It offers a solution for teachers and curriculum designers through applying one of the strategies (GI model) that would help them assist their learners in developing PW, communication skills, and learner autonomy. Thus, the study makes a unique contribution to the literature on PBL in Algerian secondary schools.

2-Statement of the Problem

In Algerian secondary EFL classes, learners have project works to present at the end of each teaching unit. Those projects are supposed to motivate pupils and improve the way they learn the language. Learners work to make a final product that includes written and oral forms. However, there is a serious problem concerning implementing this approach in EFL classrooms, affecting its success in Algerian schools. Based on the author's observation as a secondary school teacher for ten years, the project work is not dealt with correctly either by teachers or learners. Most secondary school teachers are not knowledgeable enough about its implementation, and most of them consider it a tiresome and time-consuming activity. Besides, they have limited knowledge on cooperative learning models and techniques, and they find difficulties when planning projects around cooperative learning.

On the other hand, pupils are not interested in doing English projects, and most of them prepare their work a few days before their presentation even though they have a period of almost a month or more to do so. They come to class and barely read the findings they have copied from the internet. This gap is due to the lack of guidance and appropriate teaching materials and methods.

Since cooperative learning and project work are said to be worthy of classroom exploration, we attempted to suggest a solution for teachers to apply one of the teaching strategies and assist students in developing their English project work and communication abilities. This study's new cooperative technique is based on the Shlomo and Yael Sharan (1992) model "Group Investigation." It is one of the most effective learning methods (Sharan & Sharan, 1992), in

which students get involved in long-term interaction and cooperate to do a final project and each group functions as a small part of a bigger group. Hence, we think integrating the Group Investigation Model when teaching pupils to make and present school projects would improve their oral presentations.

3-Aim of the Study

This study's main aim is to investigate the effectiveness of using Group Investigation Cooperative Learning Model to improve pupils' project oral performances. We also aim to achieve the following objectives:

1. To check the cause/effect relationship between the use of GI and the development of pupils' project oral presentations.

2. To identify the teachers' perceptions and the challenges they face when implementing PBL in their EFL classes.

3. To identify the pupils' views and shed light on their difficulties when doing English projects.

4. To identify the inspector's perspective and recommendations concerning English projects.

5 To determine the pupils' attitudes towards the new teaching method (GI).

4-Research Questions

The present study is carried out to answer the following research questions:

-To what extent is Group Investigation cooperative learning model effective in developing the pupils' project oral presentation?

- What are the teachers' and pupils' perceptions towards project work?

- What are the challenges that teachers face and the difficulties that pupils encounter when dealing with English projects?

- What are the inspector's perspectives towards project work and teachers' practices?

-What are the pupils' attitudes towards the new cooperative technique?

5-Research Hypotheses

To accomplish the purpose of this study and attempt to answer this research question, the following research hypotheses were formulated:

-H0: Using group investigation model in teaching pupils to conduct short research projects has no effect on their oral presentations when compared to the control group.

-H1: The use of Group Investigation model when teaching short research projects to EFL pupils can improve their project oral presentation skills and the way they perform.

6-Research Methodology

To test our first hypothesis and investigate the effects of the independent variable (Group Investigation) on the dependent variable (pupils' project oral presentations), a quasi-experimental research design is applied. Two second-year scientific stream classes were involved in this study. An experimental group would be trained in English projects through the GI model, and a control group would have traditional teaching lectures. The administration assigned these two classes based on non-random factors. Each group comprises twenty-one (21) pupils who study at Elhachemi Bouzidi Secondary School during the academic year (2019-2020). A pre-test is used to see the pupils' proficiency levels. Then, the treatment period (eight weeks) is used to train individuals in the experimental group on project workshops using the GI cooperative learning model. After that, a post-test is used to check the impact of the GI model. In addition, we also opt for the descriptive method to analyze and interpret the participants' answers to the questionnaires and the interview. Thus, the main instruments we opt for to collect the data needed are pre-test, post-test, teachers' questionnaire, pupil's questionnaire, inspector's interview, and pupils' attitude scale.

7-Significance of the Study

This research has favorable implications for EFL teachers and pupils in Algerian schools. First, it directly impacted both educators and pupils at Elhachemi Bouzidi Secondary School, and they benefited from its implementation, analysis, and results. The participants were exposed to a new cooperative learning strategy. This exposure allows them to determine whether this strategy improves the quality of project work in Algerian schools or whether revisions are needed to solve the PBL challenges. In any case, the subjects of the study gained greater experience with a new language teaching method.

Although some studies of Project-Based Learning and EFL students in underdeveloped countries have been published, there is still a scarcity of data, especially in Algeria. Thus, the study adds to the body of knowledge on this topic and may be helpful to future teachers and researchers.

Furthermore, Algerian EFL teachers and students encounter an increasing number of obstacles each year; as a result, research in this subject may alleviate some of the challenges these teachers and students face and provide data to improve the efficacy of project teaching in secondary schools.

In addition, the results of this study are expected to guide instructors in developing and implementing project-based learning in secondary schools to increase students' motivation and interest. It will undoubtedly change their ways of dealing with projects since it clarifies the causes behind the failure of the approach, which will significantly help them overcome the challenges they find when implementing PBL and the difficulties they face with their learners' projects. The research may also pique inspectors' interest in holding regular training sessions for their teachers to improve the use of project-based learning in Algerian EFL classrooms.

Finally, the study's findings may provide a suggestion to syllabus designers about the importance of enhancing project-based learning topics and activities in English language curricula.

8-Structure of the Thesis

This study addresses the use of Group investigation model in English projects as a technique to improve students' project oral presentation. It consists of five chapters. The first chapter discusses Project-Based Learning. We start with defining PBL and speaking about its history and origins. Then, we will try to identify the importance of this approach, its types, benefits, and issues.

Chapter Two includes the essence of cooperative learning. We will try to highlight the theoretical perspectives underlying cooperative learning, its basic elements, techniques and models. We will also identify the benefits as well as the issues of cooperative learning. Then, we will shed light on the study's model "Group Investigation."

Chapter Three deals with oral presentation. It explores the different types of presentations, their benefits, the techniques to arrange them, and the various ways to assess presentations in the EFL classroom.

Chapter Four covers the research design and methodology. This chapter provides a comprehensive overview of the instruction, identifying the many steps in the study design process. It discusses the methodology, how the sample was chosen, how the research experiment was carried out, and what statistical tools were utilized to analyze the data.

The fifth chapter provides a detailed analysis and interpretation of the teachers' and learners' questionnaires as well as the inspector's interview.

The last chapter represents the results of the experiment based on the data collected. It includes the findings, the analysis, and interpretation of the pre/post-tests and the students' attitude scale after the treatment. This part ends with a general conclusion and suggestions on the use of GI in teaching project workshops and the implementation of PBL in EFL classes.

Chapter I

Project-Based Learning

I.1-Introduction

Teacher-centered pedagogy has long been used as the more conventional approach in which learners depend solely on the teacher. Collaboration, which is vital in school and life, is thoroughly discouraged in this methodology. Educators have been considered excellent sources of knowledge and target language exporters who speak, explain, monitor, and evaluate student language learning. However, researchers have proven that this learning method hinders learners' opportunity to reach communication objectives, autonomy, and critical thinking skills. It fails to provide pupils with a lasting and meaningful education. Thus, professionals in the education sector are now focusing on producing knowledgeable and skilled pupils and on the benefits of allowing them to be active participants in their learning. Therefore, a clear shift to learner-centered learning and teaching has changed educational roles and goals. One of the best methodologies that focuses on the learner is project-Based Learning. It offers an in-depth study of a topic rather than employing a rigid lesson plan that steers a learner down a predefined route of learning outcomes or objectives (Harris & Katz, 2001). Furthermore, what makes PBL famous is that learners often have greater control over what they study, which keeps them interested and encourages them to take more responsibility for their Learning.

According to Thomas (2000), PBL "seems to be equivalent or slightly better than other models of instruction for producing gains in general academic achievement and for developing lower-level cognitive skills in traditional subject matter areas" (p. 34). Simpson (2011) sees that traditional teaching approaches may not be as practical and fruitful as project-based Learning. To put it another way, successful learning necessitates the active participation and involvement of individuals, and it is through Project-Based Learning, the concepts of learner–centeredness are embodied.

Therefore, this chapter addresses project-based learning definitions, importance, types, issues, benefits, and theories that underpin this learning method.

I.2-Defining Project-Based Learning (PBL)

As an operational definition, a project is a task in which learners with different abilities work together and make a plan to solve a problem based on authentic situations and produce a final product using the target language. It needs a lot of practice for both parts learners and educators.

Many researchers have given various definitions of PBL. According to Beckett (2002), the project is:

> *"a long term (several weeks) activity that involves a variety of individual or cooperative tasks such as developing a research plan and questions, and implementing the plan through empirical or document research that includes collecting, analyzing and reporting data orally and/or in writing" (p.3*

PBL shifts learning from teacher-centered to learner-centered and allows learners to interpret, analyze and make judgments, so it requires accurate understanding, and it promotes real-world inquiries (Harun, 2006). For Wrigley (1998), Project-Based Learning entails a group of students tackling a problem that they care about, developing a solution, and presenting the results to a larger audience. So, PBL allows learners to investigate a topic of their interest to find solutions and share the results and experiences with others. PBL is conducting an in-depth investigation that goes through several steps where the educator prepares research-based tasks related to the learners' interests and preferences; it necessitates time, effort, and cooperation (Diffily, 2001; Kavlu, 2017). It gives more control to the students who are supposed to direct their learning. Put differently, it is an educational approach where learners are responsible for acquiring knowledge by analyzing what they learn and applying it to new settings (Simpson, 2011). This approach is expected to motivate learners to develop various skills, work in groups to ask questions, and solve problems to present a final product that reflects on their learning. In this regard, Thomas (2000) points out that PBL is based on learning through projects. It is based on preparing complex tasks with challenging questions that pave the way for learners to develop autonomy by solving real-life problems and investigating real issues over an extended period to get a final product using the target language. As a matter of fact, PBL integrates the teaching-learning requirements of both learners and educators; It proves to have fruitful results in 21st-century education.

The primary purpose behind implementing Project-Based Learning in EFL classrooms is "to provide opportunities for language learners to receive comprehensible input and produce comprehensible output" (Beckett & Miller, 2006, p. 4). The authors state that project-based learning allows learners to use the skills and knowledge learned in the classroom in real-life contexts.

Based on what has been stated above, we can say that PBL is an in-depth inquiry-based approach in which pupils have to be involved in a long-term activity that necessitates a set of complex tasks and skills that require planning, preparing, analyzing, revising, sharing, and evaluating.

I.3-Origins of PBL

Project-Based Learning is not a new educational practice (Simpson,2011); it has an extensive history. According to Railsback (2002), Project-based learning methodologies have their roots in the constructivist approach, which encompasses Dewey's philosophy, Piaget's cognitive theory, and Vygotsky's theory of social constructivism (Nassir, 2014).

I.3.1-Early History of PBL

First, PBL dates back to the 16th century, according to Larmer, Mergendoller & Boss (2015), where architects, sculptors, and other artisans needed to get their skills refined and be more professional, so they attended schools where special lectures were provided. Still, they needed to practice what they learn in schools in real life, and they were given the assignment to work on churches, palaces, etc. These missions were called "progetti," which means "project" in Italian. This was the first time when the word "project" was used (Larmer, Mergendoller & Boss,2015).

a-John Dewey’s Pragmatic Theory

John Dewey (1859-1952), an American philosopher of education, was the real founder of the project approach in his theory of active learning and "learning by doing" (Ayaz & Söylemez, 2015). He produced an essay called "Democracy and Education" in 1916, in which he emphasized the importance of experience and problem solving, saying that school must reflect real life and be as important as the life learners live at home or in the neighborhood (Lípová, 2008). He sees education as a means of finding solutions to the challenges that learners face in real life (ROUSOVÁ, 2008). However, in his article " The Project Method," his student William Heard Kilpatrick" explored PBL for the first time.

In the 1918's, Kilpatrick was the first to talk about the idea of project work in education, describing it as a "hearty purposeful act." Kilpatrick (1918) states that a person is doing a project when he or she has a purpose in mind and heart willing to accomplish a task that needs to go through steps. He further explained that projects reflect people's different purposes. Since this purposeful act is a significant element of a person's life, it should also

be an essential element of school operations, and integrating it into educational matters is a must (Kilpatrck,1918).

Children's capacities are being wasted in schools as we force them to learn, which results in self-centered learners and aimless Learning (Kilpatrck,1918). Kilpatrick states that if the project work becomes a part of our educational systems, it will highly ensure learners' capacities integration, of course, under the supervision of their teacher. Kilpatrick did not emphasize collaboration in project work; however, his main interest was the experience and knowledge gained from it. No matter what the final product is or will be, learners create their own knowledge while working in groups, learning from one another on topics that interest them(Wrigley,1998)

During the 20th century, John Dewey's pupil highlighted the significance of engaging and motivating students to become more independent, allowing them to choose the purposes they want to study or follow, which he called the "purposeful act." Kilpatrick insisted on giving learners freedom of voice and choice so as to prepare them to be active prolific citizens (Larmer et al.,2015); however, John Dewey's thought that Kilpatrick's idea of giving learners absolute freedom of choice was erroneous/fallacious (Larmer, Mergendoller & Boss,2015). Instead, Dewey focused on the "act of thinking" where learners plan and find solutions to real problems (Knoll, as cited in Larmer et al.,2015)

According to John Dewey, the teacher should expose learners to this kind of obstacles by carrying out the project through a "common enterprise" where he accompanies his learners and guides them to become independent children able to discover new things in their field (Dewey, as cited in Larmer et al.,2015). So, Dewey gave paramount importance to the teacher's guidance, judgment, and interaction.

b-Piaget’s Cognitive Theory

PBL is also seen in Jean Piaget's ideas when he discovered, according to Perkins (1991) that learners learn by building one logical structure after another while moving through stages of equilibrium and disequilibrium. They begin in a position of equilibrium with their own thoughts, but as a result of interacting with the outside world, the learners are compelled to deal with other viewpoints and get disequilibrated. At this point, they either assimilate the new thinking by adding it into an existing model or adjusting it by reorganizing the already existing mental model (Nassir, 2014). Alternatively, the learner may reject the new idea if no viable conceptualization can be made to the existing mental model.

c-Vygotsky's Theory

PBL ideas can be rooted in Vygotsky's theory of social interaction (Wrigley, 1998), highlighting its importance in learning. His concept is based on the learners' interactions with the world around them (Topciu & Myftiu, 2015). These purposeful interactions with community, peers and teachers can help learners with lower abilities face the challenges they find in Learning (Wrigley, 1998). Lev Vygotsky believes that language, culture, cooperation, and interaction are essential in the process of learning. Learners can progress from the level of handling problems individually to their maximum potential within the community of social growth, which he called the Zone of Proximal Development (ZPD). Learners can reach the full ZPD when helped and guided by their teachers or peers. (Nassir, 2014).

Vygotsky emphasized the importance of collaboration in learning and its effects on learners' development (Lantolf & Thorne). Vygotsky (1978, as cited in Topciu & Myftiu, 2015) states that parents initially use language to guide their children's actions during the first years of their life; they learn through interactions between their teachers and peers, and these interactions have a great influence on their cognitive development. Then, they add their personal values to these social interactions (Topciu & Myftiu, 2015).

So based on Vygotsky's sociocultural theory, we can say that children's ability to perform new tasks on their own is based on their previous experiences in carrying out similar functions with the help of others. Moreover, that a child learns by adding their values and experiences to the knowledge gained through their social interactions.

I.4-Project Based Learning VS Project Work

Mayer (2018) has identified the differences between doing school projects and following a project-based learning (PBL) approach. According to the author, students can do projects at home without the help and guidance of their teachers or mates. These projects have the same objectives and are repeated every year the same way; they center on making a final product. They neither resemble real-world activities nor focus on what is relevant to students' lives and interests, so they cannot be used to tackle or solve real-world problems. Therefore, learners do not have numerous opportunities to make accurate decisions while doing the projects. Only after the project is completed, the teachers' work begins. They grade students based on their opinions, and learners do not have the opportunity to experience self or peer evaluation. Finally, presentations are not necessary.

Project-Based Learning, however, should be done in the classroom under the teachers' guidance and requires cooperative work. Tasks are complex, so students need time to plan and organize the work. The teacher should select driving questions, adapt and plan for projects before the project begins. Within the pre-approved guidelines, learners make the majority of the decisions during the assignment. The teacher is frequently startled, if not ecstatic, by their selections. Projects are founded on driving questions that cover all aspects of the learning to be throughout the unit and establish the need to know. Teachers, with the help of learners, should prepare clear rubrics with defined criteria. Furthermore, these projects should reflect learners' lives as well as the world around them. Thus, most work is based on real-world situations and tasks where learners could find real solutions. Learners can also make deliberate use of the real world's technology, tools, and practices; they select tools based on their intended use. Finally, project presentation is essential and should be done before an audience that may include persons beyond the classroom.

1.5-Elements of PBL

Larmer and Mergendoller (2010) state that a project has to be related to learners' interests and accomplish educational objectives. They proposed seven essential elements of PBL:

- A need to know.
- A driving question.
- Student voice and choice.
- 21st-century skills.
- Inquiry and innovation.
- Feedback and revision.
- A publically presented project.

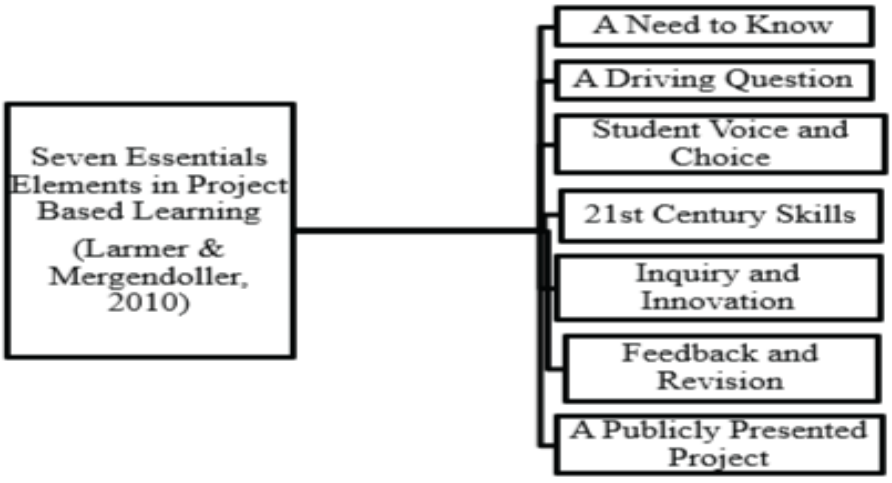

Figure 1.1: Elements of PBL (Larmer & Mergendoller, 2010)

The teacher should first plan the project based on standards. The topic should be of great importance and related to learners' real life and interests. Educators have to creatively preface the project using videos, trips, discussions to engage learners and change the old-fashioned concept of learning.

A good project should start with a challenging problem or question that helps learners use the knowledge that they have gained. This allows learners to go deeply into the problem, think, analyze and evaluate (Larmer &Mergendoller, 2012; Larmer, Mergendoller & Boss, 2015). A good question is the core of project work. It should capture learners' attention and give them a sort of challenge and purpose to learn.

Next, when designing the project, teachers have to permit learners to choose the topic that interests them and fits their preferences by asking a driving question, extract and limit the subtopics. Students have to voice their ideas and make their choice. They should make decisions and judgments that allow them to think critically and solve problems. Students' voice and choice should be guided in a way that ensures benefit and success. They need to be free (with some limitations) to reflect on their learning and actions. Reflection helps teachers and learners keep the project in the right direction. It allows learners to assess the appropriateness of their methods to solve the problem (Lamer et al., 2015).

The project has to launch a genuine inquiry that does not necessitate copying and pasting information from the net (Lamer & Mergendoller, 2012). Instead, learners have to raise their questions, look for answers using real resources and draw conclusions. Sustained inquiry requires learners to ask some questions to get answers, but this does not mean copying information from the web or a book. Learners have to conduct a study done in the field, like interviewing resource persons or carrying out an experiment (Lamer et al., 2015). All of the work should be guided by the educator, and it should be sustained, i.e., it may take time and effort to think and manage it.

Teachers need to focus on various skills (Larmer & Mergendoller, 2012), including collaboration, critical thinking, communication, problem-solving, and technology use. These skills have to be carefully taught and assessed.

The authors emphasized the significance of feedback and revision in project work. They state that teachers have to give learners feedback during project work to learn that first attempts are not necessarily successful and that in the real world, we generally need to revise what we have done to have successful outcomes. They further added that educators have to set up checkpoints and give learners feedback on their work. Formative assessment permits learners to evaluate the quality of their work and gives them opportunities to revise, analyze

and develop the work. Teachers should encourage self and peer evaluation by providing rubrics with easy criteria for learners to assess. Summative assessment is also essential. Teachers should evaluate content awareness and conceptual understanding of student work and the employment of a variety of skills (Larmer et al., 2015).

Lastly, learners will present their final product publically. They become highly motivated and creative when they think that they will contribute to an audience that does not only include their teacher and classmates (Larmer & Mergnedoller, 2012; Larmer et al., 2015). Thus, teachers should encourage external public attendance. They may ask other teachers, parents, the headmaster, or the inspector to attend presentation sessions as this inspires and encourages learners to prepare well and be at their best.

Another researcher, Thomas (2000), has spoken about the elements that make PBL successful, and he lists five key components: "centrality, driving question, constructive investigations, autonomy, and realism" (Thomas, 2000, p. 3).

- **Centrality:** The term "centrality" refers to the importance of projects in the curriculum. Projects must essentially comprise the curriculum. Both the curriculum and the project must have shared goals that support one another. Authentic projects help students meet educational objectives.
- **Driving Question:** The driving question is critical to the project's success since it motivates students to meet project objectives. The purpose is to gain information or to find an answer to the central topic. As a result, the project is centered on the projects' general question. In PBL, the driving question is the starting point for all components of the project.
- **Constructive Investigations:** The types of activities and procedures that are engaged in PBL are detailed in a productive investigation. The project must include an active investigation where learners can employ previously unknown skills to meet project objectives. It should also be regarded as challenging for them. As a result, students are pushed by the assignment and gain new knowledge while working on it.
- **Autonomy:** PBL requires students to be autonomous. Since PBL is a student-centered approach, learners bear a large portion of the responsibility for determining which paths to take in order to attain project goals and outcomes. Besides, teachers do not predetermine the ways that are taken to accomplish the results. The initiative is led by the students' independent choices and decisions.
- **Realism:** Projects must be grounded in reality, with real-world challenges and questions. This criterion assists students in developing abilities for life outside of the

classroom. Authenticity also contributes to the project's legitimacy. Because projects are based on real-life situations, students are more likely to remain engaged in working on and achieving project objectives.

I.6-Project-Based Learning in Algerian Secondary EFL Curricula

Project-based learning (PBL) develops as a methodology for effectively teaching and learning a foreign language that fits the needs of both teachers and learners. It organizes teaching and learning around skills, involves students in the learning process, and encourages and develops creativity (Thuan, 2018). Therefore, the Ministry of National Education have designed Project Based Curricula in secondary EFL coursebooks to achieve the desired outcomes.

I.6.1.At the Crossroads

At the Crossroads is for students aged 15 to 16 who have already completed four years of English instruction at the Middle School level. It is divided into five units, each of which will be covered in around twenty hours of instruction. The overall goal of At the Crossroads is to consolidate and expand the skills learned in Middle School. Each unit consists of five sequences, and the project workshop section is placed at the end of the unit; however, the project work links all the work done in the sequences. This section assigns the project that the students must complete. It also includes a project layout and a checklist of directions to follow to complete it.

> *"One of the most distinctive features of the Competency-Based Approach is its integration of project work as part and parcel of learning strategy. Over all, if the Competency-Based Approach expands on communicative approaches, it is in the sense that it seeks to make the attainment of objectives visible, i.e., concrete, through the realisation of projects in selected domains of instruction. It is all good to fix specific learning objectives (cf. SE1 syllabus), but this statement of objectives related to competencies will remain just a pious wish (as is the case in the traditional objective-based approaches) if the outcome is not visible and measurable." (Riche et al., 2005, p 17).*

At the Crossroads follows a systematic process when assigning project work. Learning becomes more meaningful when students engage in projects. It also makes cooperative learning a reality and offers new action, engagement, and knowledge-building channels.

Both educators and learners can only live up to the essential principles of the Competency-Based Approach by engaging in project work (Riche et al., 2005).

Even though the project's layout is at the end of the unit, project work is assumed to follow the progression of the courses. The teacher should remind their pupils about the project. At this point, they should also let them choose their groups, elect a (group) delegate, and write down the names of the students who make up each group. When teachers introduce the unit, they have to launch the project workshop and refer the learners to its part. They have to remind them as often as possible of the project tasks they must complete.

The competency-based approach is built on the principle of interaction, and this project effort adheres to that principle. It is not obligatory to follow the coursebook project topics, and it is preferable to adapt up-to-date issues that go with the unit's themes as well as the pupils' interests and needs as it is clearly stated below:

> *"**At the Crossroads** offers the possibility for the teachers and learners to undertake other projects than those suggested in the textbook as long as the projects are well devised and keyed to the skills, functions and language forms covered in the rest of the unit. This is even recommended because it allows the teacher to escape the routine of assigning/doing the same project year after year. We further suggest that you make project work an opportunity for your learners to work with other learners from around Algeria or the world using the Internet." (Riche et al., 2005, p 20).*

Overall, Including project work in At the Crossroads helps in applying the critical principles of CBA to become more visible and measurable (Riche et al., 2005). Learner-centered project work allows learners to utilize their cognitive skills inside and outside the classroom.

I.6.2-Getting Through

In this coursebook, there are eight units, four units for each stream. Each unit contains three main rubrics and focuses on a certain topic that the curriculum authors have suggested. Learners will have numerous opportunities to develop the three skills of interaction, interpretation, and production in each unit, as the authors have developed various tasks and activities that will eventually lead to the project's construction. The final section, the project, is addressed under the "Putting All Together" rubric, in which learners put together all the language elements learned during the lesson. The authors of the year two coursebook clearly defined project work as:

> *"It is a written product but should be presented orally to the rest of the class. It will then bring into relief all the resources developed by the learners, notably in terms of language, communication and methodology. Furthermore, it is prepared by many hands, and therefore will exhibit the advantages of doing collaborative work in terms of sharing know-how and information in a group" (Riche et al., 2006, p.6).*

The project is the final section as indicated above and the most difficult in terms of cognitive complexity. It necessitates cognitive skills, and the textbook provides many opportunities for students to achieve the project's goals.

Getting Through encourages students to work together to learn (Riche et al., 2006). The authors state that the textbook contains tasks and activities that enable the student to engage with one or more partners to develop new knowledge inside or outside the classroom, following the Vygotskyan idea of constructive social learning. The project is included to improve learning skills and assist students in developing social skills such as creating an action plan, gathering data, and sharing data. The project work can be broken down into a few simple tasks that eventually lead to a completed and finished product (Riche et al., 2006).

Since learning has become student-centered, educators should be fully dedicated and give the required direction for the learner's successful completion of the tasks and activities. This is a requirement for the project, which is the last task in the unit.

In this book, the authors related the texts to authentic circumstances, whether in Algeria or elsewhere globally, to encourage learners to contribute to their linguistic development by using their abilities and interests. This is especially true for developing their projects, which the students' interests will most likely inspire. Then they will get the chance to assess their progress in terms of vocabulary and specialized language structures (Riche et al., 2006). The students' social skills necessary to accomplish active roles in the future will also be highlighted during the preparation and the presentation of the project.

I.6.3-New Prospects

New Prospects is the last coursebook designed for EFL teaching to secondary school students. Thus, all the steps and procedures are similar to those in the first two books. Students are allowed to comprehend knowledge that is relevant to their lives and experiences, as well as to improve their fluency and accuracy.

This coursebook consists of four units for each stream, and each unit contains four sequences. The project design process takes place parallel to the unit's unfolding. “It is the visible and assessable manifestation of the student's competencies, i.e., the end result of their command of language and of the skills and strategies they have acquired throughout the unit” (Arab et al., 2007, p18). The project is mentioned seven times in the unit: one time at the top of the first page, five times during the course, and a seventh time – in greater depth, near the end of the unit. These flashpoints are designed to track the students' progress in shaping and coordinating their projects. This charting helps teachers to monitor project progress sessions (twenty minutes at the end of a class meeting), during which the students discuss and sort out the various methods and means available to them for their project. The students are expected to follow up between sessions as a group outside of the classroom. (Arab et al., 2007).

The authors identified five steps to the making of the project: brainstorming, fact-finding, organizing, writing up, and presenting and assessing.

The teacher will serve as a guide and a facilitator for the first of these sessions. The goal is to get the students to think about and agree on the tasks that will be involved, as well as the various sources of information and the format and substance of the final project. Learners can meet outside the classroom to collect data and find solutions to the problems. They should decide on the project resources as well as the equipment they may require and the locations they may be required to visit. Then, students should be divided into small groups of five members each. They have to assign roles and appoint a spokesperson who will prepare a final report at the end of each step of the project. After that, teachers can devote a whole session to the writing of the project. The teacher here plays the role of the monitor moving from one group to another, giving advice whenever needed. Finally, students can present their work, and each group's work is evaluated by a board of assessors (one from each group) chaired by the teacher or by a student chosen by his peers.

I.7-Characteristics of Project-Based Learning

According to Tom Hutchinson (1992), there exist four features of Project-Based Learning: hard work, creativity, uniqueness, and adaptability. He believes that working on a project is not an easy task because each one results from a great deal of effort. While working on their projects, learners gather material on their topic and then assemble all pieces into a cohesive presentation. Thus, they develop creativity in both language and content because

each project will be a uniquely personal piece of work, and learners put a lot of effort and personal touch into it. Finally, the author sees that a project should be adaptable in the sense that it can be done with learners of all ages and at all levels of language proficiency. The number of activities available is not limited, and each topic can be tailored to the needs of a particular group of students.

Stoller (1997) identified six distinct features of project work:

- Project work is based on real-world topics and issues of interest to students, rather than specific language aims.
- Even though PBL is student-centered, the teacher's role is of significant importance. Educators should provide assistance and guidance whenever is necessary.
- Students are free to work individually or in groups to do their projects; however, they should focus on real cooperation by sharing ideas, opinions, knowledge, experience rather than competition.
- Students will gain an authentic experience when using various real-world resources and materials.
- Both the project process final the product and are equally important, and learners can share their final work in the form of an oral presentation, a report, a poster, etc.
- Projects should motivate the learners and challenge them to become confident, autonomous members who develop various language skills and cognitive abilities.

Stoller (1997) believes that projects should produce more independent and autonomous learners as they seek to find answers and solutions to the problem they work on in their projects. As a result, teachers should collaborate with students to choose a topic or issue relevant to real life. To achieve the desired results, students need to work together to complete the assignment, first in the classroom and then at home.

Michael Legutke and Howard Thomas (1991) discuss the different features of project work in modern pedagogies. They state that the topics of the project should be taken from real-world needs rather than mandated curricular elements, and that good topics do not necessarily result in good projects. Only when learners become engaged in the topic, do experiments, participate in numerous activities and discussions, and reflect on their work after the process can they learn. In addition, projects entail extensive planning, identifying problem areas, and projecting results; yet, the process's direction and tangible steps of

realization might alter due to new circumstances or changing learner interests. Furthermore, the authors see that Project-Based Learning should carry out an investigation, so students can pick their topic of interest and learn about their own abilities, strengths, and weaknesses for various activities. Students can also work cooperatively, with the teacher being their guide. Of course, there should be a balance between the project process and its final product, and students should be evaluated on both.

I.8-Types of Projects

Henry (1994) states that there are different types of projects. Some let students to choose the topic of investigation that interests them using the material needed to complete the work. In other projects, however, the topic is restricted and a great deal of material is offered by their teacher to finish the assignment. The author proposed three types of projects, which may vary depending on the degree to which the teacher and the learners decide the kind and sequence of projects.

I.8.1-Unstructured Projects

In this type of projects, student plan, control, analyze, and share their results on a topic of their choice utilizing information that they have found. This means that the students do most of the work by themselves.

I.8.2-Structured Projects

Structured projects are ones in which the teacher determines the themes and topics (though they may still have some options) as well as the process and the method for gathering and analyzing the data. Teachers can also propose different topics from which students pick out the one that interests them.

I.8.3-Semi-structured Projects

Even though the topic of the project as well as the methodology are specified by the teacher, students still have a lot of work and take the full responsibility to finish the assignment. Therefore, we can say that these projects are arranged by both teachers and learners.

According to Stoller (1997) projects can vary based on the method of data collection and the sources from which students get information. They can also differ depending on the way students report their findings. Stoller identified the following:

I.8.4-Encounter Projects

Students need to have direct contact with natives in order to communicate and gather the data needed. Face-to-face communication is needed in this type.

I.8.5-Text Projects

This type also necessitates direct contact but with texts written by native speakers such, coursebooks, newspapers, magazines, Literature which provide real-world language input.

I.8.6-Correspondence Projects

Students have to interact and communicate with others through phone calls, emails, letters, etc.

I.8.7-Survey Projects

Students decide on the type of instrument they use in their survey such as a questionnaire, interview, and then go out to gather data for analysis and interpretation.

I.8.8-Production Projects

Students produce written reports, letters posters, etc. The final product is always a written production.

I.8.9-Performance Projects

Students present their results in a form of oral presentations, interviews, dialogues, debates, theatre, etc.

I.8.10-Organizational Projects

Planning and organizing a club, chat table, or partner program are examples of organizational tasks.

I.9-Benefits of PBL

Using PBL in EFL classrooms has many benefits (Markham et al., 2003). The most noticeable benefit of PBL is that it makes learning more like the real world. Unlike traditional teaching, PBL allows learners to include what they know in real-life situations. It helps them develop flexible skills to cope with the rapid technological change. Being passive learners who pay attention, receive the information, and repeat it is no more acceptable (Harun, 2006). Now learners are requested to use what they learn in class to solve real-life problems. They are supposed to direct their own learning guided by well-trained educators.

I.9.1-Building Knowledge

PBL aims to build knowledge that is not only used in tests and exams but once it is learned, it can be used in different contexts and situations in everyday life (Larmer et al., 2015). It allows learners to express themselves, work in teams to complete authentic assignments, and this, in turn, engages learners and increases their motivation to learn.

I.9.2-Creativity and Critical Thinking

In PBL, students learn to be more responsible, more creative. They develop critical thinking, make their own decisions, and know well how to use technology, when, and what for (Harun, 2006). Technology and learning go hand in hand to encourage students to be more creative, independent critical thinkers. Students can work independently to develop their abilities and skills within the group (Harun, 2006).

I.9.3-Motivation

Beckett (2002) states that PBL is one of the best ways to improve students' motivation to learn the target language, encourage problem-solving skills, and promote learner-centered pedagogy through cooperation.

Secondary school students prefer to work together as a team rather than studying in a class where the teacher uses old teaching methods. They become highly motivated when they help each other answer a question or overcome a problem (Kavlu, 2017). Thus, PBL gives them an excellent opportunity to present good work, especially to those less talented students. This, in turn, will accelerate their improvement.

A study conducted by Yazzi-Mintz (2010 as cited in Larmer et al., 2015) reveals that most of the informants (high school students) complain about getting bored in class due to uninteresting, irrelevant, and student-teacher apathetic, dull relationships. When asked about other alternatives that may motivate in class, the majority preferred group projects, then

classroom discussions, then the use of technology in their learning. Therefore, PBL is one of the best ways to engage learners through motivating and challenging topics. It improves the teacher-learner relationship. It sets the scene for more discussion through planning and presentations.

I.9.4-Academic Achievements

PBL is an efficacious method that motivates learners, prepares them for the future, improves their skills, and ameliorates their school achievements (Larmer, Mergendoller & Boss, 2015). learners tend to get high scores (Markham et al., 2003) as this method facilitates educators' teaching and blazes a trail for better teacher-parent relations and communications (Larmer et al., 2015)

When students care, they do (Larmer et al., 2015). If learners work on a topic of their interest, this will highly increase their school results. They become more and more inquisitive about getting the answers they need and solve their problems (Wrigley, 1998). Therefore, teachers should carefully select and plan engaging topics so that even lazy learners can be actively involved and do the work for themselves.

I.9.5-Future Achievements

PBL prepares learners for college, future careers, and life in general (Larmer et al., 2015). Once in college, students will face more research-based courses. Thus, using PBL in secondary schools is the perfect way to accustom those kids to the skills needed for such practices as problem-solving, critical thinking, decision making …etc. They become responsible citizens able to reflect on their learning as this approach refines and enhances their skills and prepares them to be future researchers. Furthermore, learners taught under PBL techniques will become independent, active citizens able to discuss and negotiate their needs, communicate and evaluate the world around them. They will have to work with other people to find solutions to the obstacles they may face in the world. (Larmer et al., 2015). As everything in life needs planning, thinking, and evaluating, PBL helps learners manage their school and college learning and equips them with worldly skills to face the barriers in their future life.

I.9.6-Developing Awareness

In PBL, learners can develop awareness by designing their projects based on their individual preferences and differences. They link both prior and new knowledge to apply it in new settings (Simpson, 2011).

I.9.7-Serving the Curriculum

Thomas (2000) highlighted the importance of project work to the curriculum, saying it is essential and not circumferential. The students have to learn the central concept via the project work. The author also states that projects that do not serve the curriculum should not be examples of PBL, no matter how creative or engaging.

I.9.8-Improving the Target Language

In PBL, learners get in touch with their peers to solve a problem or do a task; while doing the work, they can use the target language in authentic contexts and participate in discussions and debates that necessitate actual language use (Kavlu, 2017). PBL connects real-life language use with the one used in the classroom. It allows learners to use the target language in real-life contexts and talk about their lives and culture (Simpson, 2011). Thus, they develop communicative skills and become confident speakers of the target language, able to explore their needs and preferences

I.9.9-Learning in the Here and Now

Hutchinson (1992) thinks if students become true language users, they must understand that English is not simply used to discuss things British and American, but also about their world. Learning in the here and now is one of the significant benefits of PBL (Legutke & Thomas, 1991).

To accomplish the work, students must progress through numerous stages of the project. They will have to interact with others, write emails or text messages, make phone calls or even talk to people using the target language. Therefore, they will learn new phrases, expressions, and skills, which they need to use in real life soon (Lípová, 2008).

Students may do most of the work outside the classroom, so they have to conduct interviews with natives or tourists or visit different English-speaking places. Teachers frequently regard this period as the pinnacle event where "learning in the here and now" occurs. Learners use what they learn from projects inside and outside the classroom in authentic contexts and real life.

I.10-Maximizing the Benefits of Project-Based Learning

Alan and Stoller (2005) proposed multiple steps that help augment the benefits of project work. First, both educators and students have to agree on the project's theme, and learners have to feel in control over what they learn. Second, the authors proposed that learners and teachers set the project's outcome, whether oral or written presentation, debate or multimedia presentation; they also have to negotiate with their audience. Next, teachers and learners

have to construct the project's details. At this level, learners set roles and responsibilities and decide on the deadline of their project. Allan and Stoller highlighted the importance of providing learners with pedagogical activities, resources, material, skills, and strategies depending on the task they will carry out. Then, students gather the information they need using different methods. Here, educators should prepare learners to collect and analyze data. Finally, learners have to collect and analyze data, submit their project to be evaluated by both learners and educators.

I.11-Issues with PBL

Students actively participate in decision-making in effective project-based learning (PBL) experiences. They should become confident enough to be able to manage their team's shared accountability, and produce high-quality products and presentations. Many schools are successful in this area, while others struggle. When a PBL unit fails to produce the expected results, the teacher, especially if this is their first attempt at PBL, will abandon it in favor of another approach that appears to be less demanding. Thus, teachers need to learn about the different problems that they may face, and try to find concrete solutions before implementing the approach.

I.11.1-Cooperation

One of the problems that most EFL teachers encounter when implementing project work is cooperation. Most educators do not teach their kids how to work cooperatively (Krajciket al., 1998). If the method is new, learners have to be taught group work techniques and how to solve team problems. Thus, teachers have to be well trained. They should be aware of the different cooperative learning techniques and models to be able to manage their classes when using cooperative learning (Krajciket al., 1998). They have to plan, prepare, and collaborate as often as possible with other teachers to achieve a satisfying result in their children's projects.

I.11.2-Noisy Uncontrollable Classrooms

Many teachers anticipate that the project work will be a very noisy activity. According to Hutchinson (1992), the real problem lies in the lack of teachers' control over their learners' noise while working on their projects. They find it difficult to manage their learners within large classrooms during PBL, where pupils tend to be noisy and uncontrollable. The author claims that this is a normal part of the learning process, and since the class is student-

centered, they have to learn how to control their learning environment. Educators should teach students to take full responsibility and work quietly.

I.11.3-Motivation

Teachers often integrate project work into their teaching where learners have to investigate a given problem which necessitates processes and skills such as problem-solving and decision-making. Learners sometimes complete the tasks ostensibly, and sometimes the project serves just as an entertaining tool where learners focus on structure rather than content (Alan & Stoller, 2005). In other circumstances, the teacher takes full control, which results in students' restriction to improve their skills and capacities, and no feedback is provided. If the project's activities are not challenging and are only based on already learned information, then this project is considered a simple task and will not be part of PBL (Thomson, 2000). Some teachers even incorporate the same project into future classes with no additions or changes, which generates lazy, irresponsible, and unmotivated learners incapable of taking control over their learning and life in general. Thus, EFL teachers have to provide students with curriculum-based tasks carefully, but they ought to add creative and challenging material to fit within the context of PBL. Therefore, teachers have to refrain from being in control most of the time. They ought to allow their learners to express themselves and be more responsible. Once learners take the lead, teachers can see outstanding outcomes; however, teachers have to provide appropriate guidance and feedback.

I.11.4-Lack of Training and Guidance

Teachers are either more experienced or debutant, which means that both need more training and guidance on the implementation of PBL (Erdogan & Bozeman, 2015). Experienced teachers may need more training for management skills to engage students in creative projects, discovery, and design. It takes a lot of work and time to train teachers for PBL fundamentals properly; thus, researchers highly recommend collaboration between secondary school teachers and inspectors. More pedagogical meetings and seminars are needed to overcome these issues and succeed in implementing this approach in EFL Algerian classrooms.

I.11.5-Mother Tongue Use

Teachers believe that students will quickly switch to their mother tongue use while working in groups. Hutchinson (1992) thinks that it is normal when students spend some time speaking in their first language, and he advises teachers to view it positively as long as the final product is In English. Here, using the mother tongue is only a means to an end goal of using English. The author sees that using one's mother tongue is sometimes helpful and desirable as it helps students develop some new skills in translation.

I.11.6-Mixed Ability Class

Students in EFL classes do not have the same level of English proficiency. Some teachers avoid project work because they are afraid that low achievers will find it difficult to adjust. Researchers, however, discovered that students of all abilities benefit from collaboration and discussion while working on projects (Slavin, Hurley, & Chamberlain, 2003). Some low achievers would almost never interrupt a teacher to ask for clarification or to go over something again. Nonetheless, when working with peers on their projects, these students would easily ask their peers to go slowly or repeat the information many times until it was understood. Furthermore, high achievers would find it easy to work alone without the teachers' supervision, which allows educators to devote more time to those who need it (Lípová, 2008).

I.12-Learners' Autonomy

During the 1980s, learners' autonomy revolved around learners doing things on their own; now, however, it does not necessarily mean that. Instead, it emphasizes the idea that learners have to do something for themselves. Learner autonomy is defined as "the ability to take charge of one's own learning" (Little, 2007, p14).

> *"To parents, even babies seem to have a will of their own; they are hardly passive creatures to be easily moulded by the actions of others. From their earliest years, boys and girls make their active presence, their wilful agency, their demands and protests, very vividly felt. In every household that has children, negotiations must be made with young family members; their personal agendas have somehow to be accommodated. These are not the helpless, dependent beings that supposedly define childhood" (Salmon 1998, p. 24)*

As mentioned in the statement above, babies and children are naturally born to be independent and to take control. Therefore, it is up to parents and teachers to either

strengthen this feature, which was slightly usurped through exposing learners to traditional "drill and skill" methods, or simply let it fade away. However, PBL encourages learners to be creative, active members who rely on themselves and act freely with a sense of contravention and choice.

Simpson (2011) described learner autonomy as the ability for learners to control their own learning process. The author further added that PBL encourages learners to be more autonomous and that teachers have to let go of authority and control by giving their learners the chance to explore and command their learning.

Littlewood (1999) depicts learner autonomy as being proactive or reactive. The former is when learners are responsible for selecting the methods and evaluating the work; they take full control of their education. The latter, however, is when learners are able to arrange the resources they have to attain their learning goals.

Teachers can have their learners develop autonomy by encouraging them "to determine the objectives, to define the contents and progressions, to select methods and techniques to be used, to monitor the procedures of acquisition and to evaluate what has been acquired" (Holec, 1981, p.3)

Since learners have to be responsible for their own learning, they are supposed to do all the work that includes planning, monitoring, organizing, and assessing; thus, autonomy has been successfully formed (Shen, 2011). The author added that promoting autonomy necessitates learners to both willingness and capability. They may want to take responsibility for their learning by setting learning goals, choosing the methods, and evaluating the processes. They should also be capable of reflecting on their own learning through developing a set of skills.

I.13-Teacher's Role

In Algerian secondary education, learners had become passive participants due to the traditional educational approaches and teachers' over-control. However, the new educational reform (CBA) frees learners and gives them more control over their learning. The teacher, therefore, becomes a facilitator rather than an instruction person who just directs and controls students' learning. Although learners control and direct their learning, the role of the teacher still is of great importance.

In Project-Based Learning, the teacher's role is pivotal; it changes from an educator who transmits knowledge, commands, and directs learners to the one who guides and facilitates

learning (Wrigley, 1998). So educators become facilitators and advisors who expedite students' learning by assisting them in acquiring new knowledge through problem-solving and engaging activities. And when learners encounter difficulties, it's the teacher's role to guide and support them to overcome the problems and get fruitful results (Simpson, 2011). Learners must be encouraged and supported by their teacher to become confident, active participants.

John Dewey was not the father of PBL; however, his thoughts highly influenced educators who use this approach in their classrooms. For Dewey, the teacher's role is crucial as teachers create appropriate learning contexts for their pupils; design creative projects with engaging topics, scaffold materials, assess the progress of learners, and preside the process of learning (Larmer et al., 2015)

According to Diffily (2001), there are several ways that the teacher can use to facilitate students' learning. (1) teachers guide students selections of the topic, (2) gather learners to survey the work, (3) raise questions, (4) support children's decisions, (5) guide their work, (6) circulates among children for help, (7) help them reflect on their work and plan what should happen next.

For Larmer et al. (2015), the teacher in PBL has to (1) design and plan a project,(2) align the project to standards, (3) build cultures, (4) manage project activities, (5) scaffold student learning and (6) engage and coach their performance. Teachers have to create a project structure and make it work for their pupils in the context. Students' final product will require the information and skills set out in the curriculum, so aligning the project to the curriculum standards is extremely important. Learners are also allowed to give their ideas about the project, and they should know that there are different creative ways to do the work. Teachers have to organize tasks, timetables, and checkpoints to guide the whole project from the beginning to the end. They can provide methods and strategies that help learners move smoothly and reflect on their learning. They can even organize debates and discussions to encourage target language use during project work. Educators have to get to know their kids more to be aware of their differences, interests, and preferences. They ought to respect individual distinctions and diversities. They should coach learners and engage them to perform well.

Furthermore, when learners perform their work, the teacher must provide feedback by accepting correct information and refusing the false ones (Wrigley,1998). Teachers need to

create assessment tools that help learners comprehend what is requested. These tools, such as rubrics, are essential in learning, as they make it straightforward for learners to set objectives and draw the final image of the product.

We can say that teachers' and learners' roles are interrelated. While the teacher guides, learners become active members able to use the target language, and they become embroiled in the process of education.

I.14-Project-Based Learning and Cooperation

Projects can be presented individually in pairs or in groups. However, producing an outstanding end-product is a difficult task that frequently necessitates responsible group work when all members are vested in the task's success (Nassir, 2014). The fact that different groups can handle different aspects of the project is a huge benefit, and then cooperation is an essential component. Teachers should encourage students to work in groups as often as possible, and there should be groups where the brighter students assist the weaker ones.

I.15-The project Cycle

Each project reflects the personality, knowledge, and skills of the person or group presenting it. This means that each project is unique. However, each project should go through a series of stages and development.

I.15.1-Topic Selection

Diana (1986) suggests that the opening stage of any project should include Stimulus, the definition of the project objective, and practice of language skills. Teachers should first start discussing the project's topic and concept with learners focusing mainly on listening and speaking skills. Then, they should set clear the project's main objective and decide on the projects' final product. Here students listen to the teacher, discuss using the target language, and take notes. Finally, they should discuss the main vocabulary that they will need when presenting their project.

Students present their results in the form of oral presentations, which are considered a type of assessment that requires students to express their knowledge and understanding of a topic through the spoken word. It allows students to present their research and a variety of cognitive, verbal, nonverbal, and other social and s skills.

I.15.2-Topic Orientation

Teachers can prepare videos, documentaries or invite guests to motivate learners and provide them with maximum information about the topic to be investigated (Legutke &Thomas, 1993).

I.15.3-Investigation

This is usually the most time-consuming stage of a project. It entails both planning and carrying out the research. According to Legutke and Thomas (1993), this stage's main objective is to identify the scope and nature of project tasks, learn how to investigate and collect data to complete the assignment. Students can work alone, in pairs, or in groups, both inside and outside the classroom (Diana, 1986).

I.15.4-Preparation

Students organize, analyze and interpret the information they gathered to make the final product or presentation after the research is completed. Thus, group or class discussions are necessary to help learners explain the target language's data (Diana, 1986).

I.15.5-Presentation

After hard work, students present their projects before their classmates or a bigger audience, including teachers, friends, parents, etc. They may use projectors, tablets, speakers, or other material to help them in their presentations. Although students have limited time to share their findings compared to the different stages, this stage is important (Lípová, 2008). It provides students with concrete opportunities to present before an audience and valuable future experiences. After their presentation, students will overcome stress, shyness and be more confident in future productions.

I.15.6-Assessment

Assessment is the process of gathering, analyzing, and applying data about learners' performances (Palomba & Banta, 1999). It is an essential part of teaching that is used to improve teaching as well as learners' outcomes. Assessment has various types; however, it is vital for educators to know them all and distinguish between them. This will help them gain a better understanding of the problems they face become successful assessors.

Unlike assessment in traditional learning, assessment in PBL is considered challenging, as it renders a number of advantages, including building confidence, establishing learning skills, and increasing motivation (Gardner, 2000).

I.15.6.1-Types of Assessment

a-Formative and Summative Assessment

Hughes (2002) explains that formative assessment shapes both the teaching and learning components of the educational process. It helps and guides both teachers in their preparation and planning and students in tracking and adjusting their learning progress. On the other hand, summative assessment summarizes what learners have grasped throughout the course of a unit, semester, or year; it also assesses how successful students were in achieving the unit, semester, or year's objectives (Hughes, 2002).

b-Formal and Informal Assessment

Brown (2004) divides assessment into two basic categories: formal and informal. The former is an orderly, well-structured technique constructed by educators to provide them and their learners with school achievements. The latter, however, deals with teachers' feedback, including gestures, words of encouragement, or pieces of advice.

c-Direct and Indirect Assessment

The term "direct assessment," according to the Council of Europe (2001), refers to evaluating the candidate's real actions. For instance, while a group of learners is debating something, the teacher observes, compares their performances to a criteria grid, and gives grades. However, teachers in indirect assessment use a test on paper to assess learners' skills and performances. Teachers often use these two types for evaluating oral skills and competencies.

d-Performance Assessment and Knowledge Assessment

A direct test demands the learner to deliver a sample of language in speech or writing as part of the performance assessment. And to offer evidence of the level of their language knowledge and control, learners must answer questions that can be of a variety of distinct item categories, which can be defined as knowledge assessment (Council of Europe, 2001). Unfortunately, competencies can never be directly tested. All one has to rely on is a collection of performances from which one attempts to draw broad conclusions about competence.

I.15.6.2-Assessing Oral Presentations

Students can present their results in the form of oral presentations that are considered a type of assessment that requires them to express their knowledge and understanding of a topic through speaking the target language. One of the presentations' main goals is to assist students in developing and improving their communication skills. In everyday life, students must be able to communicate technical or numerical data; they have to explain and describe statistical methods and results, which is a skill rarely assessed in school curricula. It allows students to present their research and a variety of cognitive, verbal, nonverbal, and other social skills. In addition, oral presentations provide students with valuable opportunities to practice skills they will need in the future. Students can show their knowledge and ability to explain information and interact with an audience (Dryden, Hyder & Jethwa, 2003).

According to Race and Brown (1998), Assessors should be explicit about the goals of student presentations. For example, the main goal could be to improve students' presentation skills or to motivate them to conduct research and reading to increase their topic knowledge; several of these elements may be present simultaneously.

In project-based learning, both the learning process and the final product are assessed. Thus, teachers should use both formative and summative assessments. They have to assess their learners' work during the whole process of constructing the project and after presenting the final product (Greenstein, 2012).

Assessing students' oral proficiency is considered a complex task because, according to Brown (2001), speaking has more language features than other skills. As a result, grading those aspects on a single sheet of a rubric is challenging for the teacher. The criteria of the student's ability in each language feature in speaking skills should be detailed in the rubric. The criteria's purpose is to make everything clear for both students and teachers. Students are able to understand what the teachers expect of them in terms of their English speaking abilities. The criteria are also beneficial to teachers because they outline the aspects that should be graded.

I.15.6.4-Rubrics

Rubrics are used extensively in the grading of PBL artifacts. They are grading tools that specify product or performance standards (Bender, 2012). They must be sufficiently detailed for students to understand what is expected of them once they have investigated a topic or

solved a problem. It is also critical to collaborate with other teachers and even learners to prepare for the rubric before starting the project (Bender, 2012). Rubrics simplify and allow teachers to assess students objectively, and they should include criteria for both individual and group grades (Clark, 2017).

I.16-Designing Criteria for Oral Presentations

According to recent research, teachers should construct a set of criteria to be addressed during the assessment process. In general, the higher the number of criteria from which to choose, the more likely the assessment will be objective and precise. One way to achieve this is to break down oral performance skills into sub-skills that need to be evaluated and discuss them one at a time (Brown, 2004). So, when teachers make a list of criteria, they can ensure objectivity.

Brown et al. (1997) go over the several types of criteria that can be used to evaluate oral presentations. The following are some examples of criteria:

- Format of the presentation
- The presentation's clarity
- Presenters' enthusiasm
- The presentation's appeal

Teachers also provide examples of extended checklists. Each scale assesses both performance factors such as fluency and audience involvement, as well as content, focusing on argument clarity and evidence utilization (Dryden et al., 2003). Brown (2004) also emphasizes the necessity of discussing the criteria with students prior to the presentation's preparation and the importance of providing performance feedback rather than just a grade. They suggest that this allows students to feel safe enough to take chances and hence improve their performance in future presentations.

Researchers have developed a variety of criterion lists; however, Knight's list (1992) is the most extensive yet accessible. Teachers can choose the criteria based on the objectives of the assessment. The author included language skills such as grammar, vocabulary, pronunciation, and fluency; content and conversational skills; sociolinguistic skills; and non-verbal skills.

I.17-Peer Assessment

Teachers do not always see everything that happens in a group. Sometimes when friends work within the same group, peer assessment cannot be reliable. Peer assessment, according

to Bender (2012), does not have to be done at the end of a project; it can also be helpful if done throughout the process, allowing teachers to respond with individuals or the team as needed in order to reduce the friend effect.

Peers can evaluate presentations on both content and delivery. Peer response helps each student to know how well they communicated with their target audience. Students can also benefit from one another's presentation abilities; thus, they become good listeners (Hall, 2007).

Hall (2007) advises teachers to make ground rules for peer answers as a class. Student participation creates a collaborative approach in which students feel comfortable giving and receiving critiques. They should also set time limitations as well and make enforcement a group effort. The author suggests that students should be asked to take notes on the content and delivery of each presentation and use them during the class discussion after the presentations. And when students present orally, teachers should integrate peer answers in the evaluation to provide each learner with a better picture of how well they communicated with their audience. Those answers can also assist students in learning from one another's public speaking abilities and encourage the entire class to participate in active listening.

I.18-Self-Assessment and Reflection

It can be difficult to have a student determine their own grade on a numerical scale (Bender 2012). However, Self- assessment is crucial because it allows students to self-adjust their learning. As a result, they can give teachers an idea of how they feel about their own participation. This type of assessment should also be done during and at the end of a project (Bender 2012). Allowing students to reflect on various aspects of the PBL project can aid in developing questions and creating a more clear vision. Students can, for example, reflect on the driving question or how their planning sessions went, providing teachers with a sense of where the group is headed (Bender, 2012).

I.19-Valid and Reliable Assessment

When it comes to assessment, there are two terms that need to be defined more thoroughly, validity and reliability. First, Brown (2004) describes validity as an effective test's most difficult and crucial condition. The author explains that a valid test performs the function for which it was created or intended. If, for example, teachers want to assess students' speaking skills, they should focus on that speaking rather than others.

Another important part of an effective assessment is reliability, which is defined as a level of consistency. In other words, a test is considered reliable when it delivers consistent results when used multiple times (Brown, 2004).

Conclusion

This chapter assembles literature that contained relevant and noteworthy outcomes for the study's topic, Project-Based Learning. It is an instructional strategy that allows students to gain knowledge and skills by completing engaging projects that are based on real-world difficulties and problems. PBL is a mainly favorable, effective, and likable methodology for teaching English, according to the literature. Educators, on the other hand, encounter difficulties. Many of these issues are teamwork problems, overcrowded mixed ability classrooms, unmotivated learners, use of mother tongue, and lack of training and guidance. It can be difficult to come up with an effective project-based learning session. We want it to be creative, incorporate 21st-century learning skills, and be so memorable that our children will proudly recall every aspect for the remainder of the year. Thus, educators should connect their project-based learning sessions to the outside world. They ought to encourage students to work in small groups creatively in order to learn from one another, strengthen their self- confidence and self-esteem, and enhance engagement and class connection by allowing them to speak their perspectives and experience new ideas. It is important for teachers to revisit their initial questions to the problem to ensure motivation. Finally, it is important to let students experience leadership and autonomy by asking them to evaluate their own and their mates' work.

Chapter II

Cooperative Learning

II.1-Introduction

Recently, there has been a noticeable trend away from teacher-centered toward learner-centered classrooms. Teachers are no longer considered the experts in charge of transmitting knowledge to their learners, often described as "empty vessels", who just listen and absorb their teachers' lectures or direct instructions. Student-centeredness focuses on students understanding their role, constructing and exploring information thus taking responsibility for their learning. This approach proved its effectiveness as it boosts students' academic performances and empowers lifelong learning, making it more fun. And since learning focuses on developing learners' social interests to expand their curiosity in their world, schools worldwide should consider the learners' interests in their social environment. In this regard, they should foster the child's social interactions and communications via group involvement. Therefore, one of the ways to create a student-centered classroom is through a cooperative learning strategy, which is increasingly being encouraged in education in all countries of the world. For that reason, this chapter is devoted to the exploration of the cooperative learning approach. It presents an overview of its history and models. The core of this chapter centers on a cooperative learning model " Group investigation". Then some light is shed on the benefits of the cooperative learning approach, its advantages as well as its limitations. Finally, some focus is put on the relationship between cooperative learning and project-based learning, and how the former can be implemented in an EFL classroom when introducing projects to EFL learners.

II.2-Defining Cooperative Learning

> *"Without the cooperation of its members society cannot survive, and the society of man has survived because the cooperativeness of its members made survival possible.... It was not an advantageous individual here and there who did so, but the group. In human societies the individuals who are most likely to survive are those who are best enabled to do so by their group" (Ashley Montagu, 1965, as cited in Roger& Johnson, 1994, p. 1).*

Many modern teaching methods, such as communicative language teaching and interactive learning, all rely on cooperative learning. (Ning, 2010).

Researchers and educators have provided different definitions that can be used interchangeably in the literature. Vygotsky (1978, as cited in Cohen, 1994) sees that pupils

learn better when placed together; they can expand their knowledge and learn from their more skilled peers. Richards and Rodgers (2014) state that CL focuses on social interactions when learningthe language as it encourages communication and language practice between learners.

Cohen (1994) explains that (CL) is gaining traction in classrooms all around the world as a strategy for improving learning, developing higher-order thinking, prosocial behavior, interracial acceptance, and managing academic heterogeneity in classrooms with a wide range of basic skills achievement.

Simply put, Cooperation means working together to achieve shared goals (Johnson & Johnson,1987, 1989; Johnson, Johnson., & Holubec,1990). cooperative learning, also known as group work learning, team instruction, peer learning, and collaborative learning, is, therefore, the work of learners together in small groups to support each other and improve their own and others' learning to accomplish a common goal (Slavin, 1980; Jolliffe, 2007). It is a set of instructional strategies in which students are encouraged to collaborate on academic activities (Johnson, Johnson, & Smith, 1998, 2014). As for McKeachie (1994) cooperative learning is "a method that builds on the best of peer tutoring and the benefits of trying to teach something to someone else" (p, 269).

According to Farmer (1999), C.L refers to a group of learners who have certain learning tasks to achieve together. So, C.L doesn't simply mean grouping individuals together but ensuring that those learners know exactly what to do and how to investigate, interact, interpret, and socialize. In this context, Johnson and Johnson (2002) emphasize the importance of social skills which is one of the principles of cooperative learning. They state that educators should make their learners believe that every member is important for the group to make cooperative learning groups effective. Yassin, Razak & Maasum (2018) also highlight the importance of all group members to the whole group. According to the authors, students within the same group should have equal opportunities, and this is what makes cooperative learning different from group work learning as in the latter some students might carry out the tasks without other group members' participation. In addition, Cohen (1994) defines cooperative learning as "students working together in a group small enough that everyone can participate on a collective task that has been clearly assigned" (p, 3).

Dirlikli, Aydın & Akgün(2016) see that cooperative learning is a form of teamwork that aims at maximizing the learners' educational skills within a group for shared goals using various methods and techniques.

To sum up, cooperative learning is one of the most popular methods in the field of education and research that aims to make learning more student-centered rather than teacher-centered. In other words, we can say that cooperative learning is a teaching /learning approach in which learners are taken seriously as active participants who share equal chances within their group rather than passive recipients of knowledge; they work in small groups on a specific activity to optimize each other's learning and achieve common objectives.

II.3-Theoretical perspectives underlying cooperative learning

Cooperative learning is not a new idea (Johnson, Johnson, & Holubec, 1990). Research on cooperation have been guided by the five main theories : social interdependence, cognitive-developmental perspective, motivational theory, behavioral learning, and humanistic psychology (Ning, 2010).

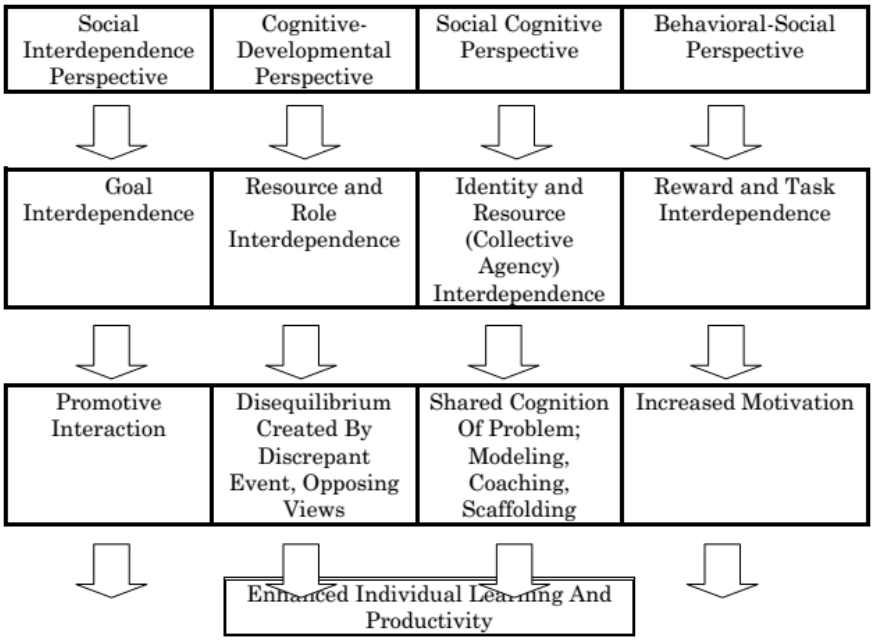

Figure 2.1: Cooperative Learning Theories (Johnson & Johnson,1989)

II.3.1-Social interdependence theory

The first is social interdependence. In the early 20th century, Kurt Koffka suggested that groups were dynamic wholes with varying interdependence among members (Johnson & Johnson, 2018). Kurt Lewin (1930, ac cited in Johnson & Johnson, 2018) stated that the

interdependence that is created by shared goals among members is the core of the group. The authors added that goal interdependence is to bring members together into a "dynamic whole", where changes in one member's or subgroup's state affect the state of other members or subgroups, of course, more than one person or entity must be involved for interdependence to occur, but those persons or entities must have a dynamic influence on each other.

When each individual's aims are achieved under the influence of others' actions, the social interdependence theory is then relevant (Johnson & Johnson, 2018). This perspective holds that learners cooperate to learn because they care about the group and its members (Slavin, 2011).

Morton Deutsch, Lewin's graduate student, extended his teacher's idea about interdependence and studied the relationship between the goals of two or mor individuals, then he proposed a theory of cooperation and competition (Johnson & Johnson, 2018). According to Deutsch (1949, as cited in Tran, 2013), there are three types of social interdependence, and Each type results in specific psychological processes:

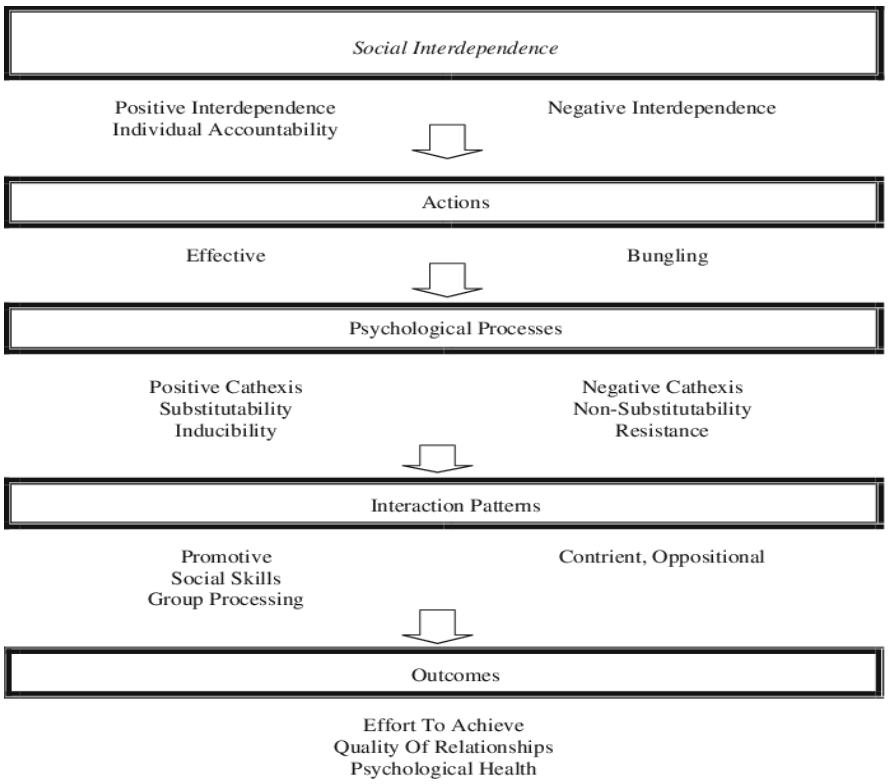

Figure 2.2: Social Interdependence Theory (Johnson, Johnson & Smith, 2007)

a-Positive goal interdependence: Real cooperation creates Positive interdependence that exists when individuals perceive that they are all linked with other group members and that they cannot succeed in achieving their learning goals unless their group mates do believe in the saying " we sink or swim together" (Smith, Sheppard, Johnson & Johnson, 2005, p.8). The group here is united around a common goal, which will result in promotive interaction that happens when group members help, assist, trust, encourage, support, and facilitate each other's effort to complete assignments and achieve their shared goals. In this type, the psychological processes associate with substitutability, inducibility, and positive cathexis.

b-Negative goal interdependence: it is created by competition and happens when members compete to attain the goals. Individuals within the group perceive that can achieve their objectives only if other group members fail to do so, which will result in oppositional interaction that makes individuals discourage and obstruct each other's effort to reach their goals through tactics of threats and coercion, misleading communication, and distrust. In these situations, non-substitutability, negative cathexis, and resistance to being influenced by others are highlighted.

c-No goal interdependence: Individuals think that reaching their goals is independent and has nothing to do with others' attaining their goals, which will result in an absence of interaction which happens when each member acts independently to accomplish their goals focusing only on their own productivity. It separates an individual from others, thus creating non-substitutability, cathexis only to an individual's own actions, and no inducibility, or resistance to complete common goals.

The principle of social interdependence serves as a foundation for cooperative learning, which involves individuals constructing knowledge and skills through mutual interaction. Therefore, interactive assignments and cooperative lessons should be planned and implemented in the classrooms as part of the cooperative learning process to assist students to work and learn together to reach shared goals.

II.3.2-Cognitive Developmental perspective

Cognitive developmental theory is based on the theories of both Jean Piaget and Lev Vygotsky (Ning, 2010). Children's reciprocal interaction around appropriate academic objectives leads to improvement in concept understanding and critical abilities (Slavin, 2011).

According to the Piagetian tradition, Cooperation is defined as working toward a common objective while relating one's own feelings and perspectives with an awareness of the feelings and perspectives of others (Johnson & Johnson, 2015). This leads to the belief that when people work together, it creates socio-cognitive conflict, which causes cognitive disequilibrium that encourages perspective-taking and cognitive development (Johnson& Johnson, 2015). Cooperation, for Piaget, aims to improve a person's intellectual growth by requiring him or her to achieve an agreement with others who hold conflicting viewpoints on the solution to a problem. Piaget claims that knowledge, values, laws, morals, and symbol systems can only be gained properly through interaction between individuals (Tran, 2013).

Lev Semenovich Vygotsky (1978, as cited in (Johnson & Johnson, 2015) states that In interpersonal relationships, human mental processes and accomplishments are socially produced. Knowledge is a social phenomenon that emerges from cooperation to learn, comprehension, and problem-solving. Vygotsky highlights the importance of The zone of proximal development (ZPD), which he defines as "The distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978, p.86). It is the area between what a person can do on his/her own and what they can achieve while working with adults or more capable peers, to learning (Johnson& Johnson, 2015). Vygotsky believes that People will not advance intellectually unless they cooperate; he stresses the significance of cooperative activities that promote growth among children (Slavin, 2011). Vygotsky stresses the importance of cooperative activities and argues that the development of children is promoted by cooperative activities. In his view, cooperative activities among children promote growth because children of similar age work in one another's Zone of Proximal Development and this is more efficient than working individually (Slavin, 2011). Therefore, time spent working alone should be reduced to assure learning and development. While Vygotsky's theory holds that learning and its outcomes are the result of social interaction and that all forms of social interaction contribute to cognitive development, Piaget's theory holds that cognitive development is the result of social interaction and that all forms of social interaction contribute to learning and its outcomes (Tran, 2013).

II.3.3-Social Cognitive Theory

Albert Bandura first proposed the social cognitive theory in 1971, bridging behavioral and cognitive learning theories by considering how cognitive components such as attention, recall, production, and motivation affect imitable behaviors (Tran, 2013).

Bandura demonstrated succinctly that much learning takes place through observation, modeling, and imitation of models, and that by seeing and modeling the desired behaviors, attitudes, and emotions of others, learners can enhance their knowledge and retention and that human thought processes are fundamental to understanding personality (Schunk, 2007 as cited in Tran, 2013). According to this learning theory, the majority of learning occurs in a social environment, where learners gain knowledge, rules, abilities, tactics, beliefs, and attitudes from the observation of others (Tran, 2013). Since this theory states that people learn through observation and the imitation of others, it then has a strong connection with cooperative learning.

II.3.4- Behavioural-Learning Theory

According to Behavioural learning theorists, group external reinforcers and extrinsic rewards are of significant importance in motivating desired behaviors. They assume that individuals will work hard on tasks for which they receive a reward and will fail to work on activities for which they receive no reward or yield punishment (Johnson & Johnson, 2015).

Because it is often expected that individuals will not naturally help their peers work toward a common objective, cooperative learning is designed to create incentives for group members to join in a collective effort (Johnson & Johnson, 2015). If learners' work is followed by extrinsic rewards and positive feedback, it is more likely to be repeated and improved (Ning, 2010). That's why educators should reward their learners and give feedback right after their performances to make them aware of which behaviours to change or adjust for better results. A central part of this theory is group contingencies (Slavin, 1987, 2000), which means groups of learners are rewarded based on the behaviour of all of the group.

II.4-Types of Cooperative Learning

Johnson, Johnson & Holubec (1998) identified three major types of cooperative learning:

II.4.1-Formal Cooperative Learning

Students in this type work together for one period to several weeks in order to achieve common goals and complete their assignments such as report writing, survey conducting, problem-solving, or vocabulary learning. The instructors can use it to teach any type of subject, but they should explain the principles of cooperative learning, and set clear objectives for the students to achieve. The learning group contains from 3 to 5 students. Teachers, in informal cooperative learning, set clear objectives for the lesson and decide on the group size, defines the assignment, teach concepts and strategies, monitor and intervene within the groups, and assess students' learning.

II.4.2- Informal Cooperative Learning

In Informal Cooperative learning, students work together to reach a common goal in temporary groups that can last from a few minutes to a single class period during direct teaching through lectures, demonstrations, or videos (Johnson, Johnson, & Holubec, 1998a; Johnson, Johnson, & Smith, 1998). This type is an efficacious method as it helps learners focus on the material to be learned. It also helps teachers ensure that their learners cognitively process the material being taught.

II.4.3- Cooperative Base Groups

They are heterogeneous, long-term (preferably a year or more) groups with a durable membership whose major goal is for members to provide each other with the support, help, encouragement, and assistance by attending classes and completing the assignments to advance academically. It develops both learning quantity and quality. This type is extremely necessary especially with large classrooms or schools, as well as when the subject matter is difficult and complicated for the learners.

These three types of cooperative learning combine to create a complete teaching structure. A typical class session can start with a basic group gathering, then move on to a short lecture that incorporates informal cooperative learning. later, a formal cooperative learning lesson is presented, followed by an informal cooperative learning lecture at the end of the class session.

II.5-Basic Elements of Cooperative Learning

Johnson & Johnson (2008) state that "There is a major difference between just having students work in a group and structuring cooperative learning" (p,1). This leads us to the understading that not all group work can be considered cooperative. Positive interdependence, individual and group accountability, group processing, small group and interpersonal skills, and face-to-face promotive interaction, are five fundamental factors that must be properly constructed into the scenario for the group to attain its maximum potential (Johnson & Johnson, 1989, 2005). These five elements are essential and are known by the acronym 'PIGS F'.

II.5.1-Positive Interdependence

"The heart of cooperative learning is positive interdependence. Students must believe they are linked with others in a way that one cannot succeed unless the other members of the group succeed and vice versa" (Smith, Sheppard, Johnson & Johnson, 2005, p.8). The authors highlight the importance of working together as a cohesive group to achieve common learning goals. Learners have to take full responsibility for their learning and for the success of other group members' learning (Slavin, 2011). In other words, students have to make sure that the other members of their group complete the assignments and meet the academic goals. If individuals within the same group are not dependent on each other and fail to share a common interest in working together to accomplish the tasks, the success of the group will minimize (Ballantine & Larres, 2007). So, if one member of the group fails to finish his or her learning assignment, the effects of that member's poor presentation will negatively affect other group members.

According to Roger & Johnson (1994), positive interdependence allows students to make sure that their work benefits group members and their group members' work benefits them; they are required to work together in small groups to improve the learning of all members by sharing resources and provide support and encouragement.

II.5.2-Face-to-face promotive interaction

Promotive interaction means that group members should sit close to one another to encourage and facilitate each other's efforts to complete tasks, produce and achieve shared

objectives (Johnson & Johnson,1999). Group members promote each other's success through assisting, supporting, encouraging, and honoring one other's efforts. When students get active in encouraging each other's learning, certain cognitive activities and interpersonal interactions occur. As part of the cooperative learning condition, learners must interact verbally with one another on learning assignments (Johnson & Johnson, 2008), share ideas and exchange points of view, explain concepts, and teach others (Ballantine & Larres, 2007). Of course, group interactions depend on the group size, the academic level of all members in the group, and the learning environment (Johnson & Johnson, 1989; Slavin, 2011). Hence, it is important to limit group members especially when learners start cooperating. In addition, educators should identify the group members' learning abilities and establish a positive learning environment to help learners cooperate for effective learning.

II.5.3-Individual Accountability/Personal Responsibility

" What children can do together today, they can do alone tomorrow." (Lev Vygotsky1962, as cited in Johnson & Johnson, 1999). Individual accountability is the third essential element of cooperative learning. It necessitates that every group member is accountable for finishing a specific task, so, students must understand that their contributions to teamwork may be tracked and evaluated separately (Ning, 2010). Individual accountability necessitates a group member completing his/ her part of the work and facilitating the work of other members (Johnson & Johnson, 2018). The teacher should then give the results back to the individual and the group to ensure who needs more guidance, encouragement, and support among the participants in the learning assignment so as to make each member a stronger individual (Johnson & Johnson, 1999). The authors suggest that teachers should first observe learners' work as a whole as well as each member's contribution to the group, then give an individual test to each member.

II.5.4-Interpersonal and social skills

Johnson & Johnson (1991) assert that if socially inept students are grouped, they will be unable to work efficiently. Cooperative social skills including, listening to one another, asking questions cooperatively, handle debates respectfully, manage the group, and solve group conflicts, should be taught so that to ensure effective group learning (Sharan, 1990). Thus, educators need to teach their learners social skills and provide feedback on the use of these skills to promote higher achievement and productivity among individuals in a group.

II.5.5-Group Processing

Group processing happens when group members examine the effectiveness of the process they use to augment their own and other's learning and achievement (Johnson, Johnson & Holubec, 1998). It is a kind of reflection on group sessions to see how well group members are achieving their objectives and managing relationships. This reflection helps in identifying group strengths and objectives (Jolliffe, 2007). It helps students be aware of the effectiveness of each member's actions and decide about what actions to carry on or change (Johnson & Johnson, 1999). Learners in group processing assess the quality of the final product as well as each member's contribution to the whole work. Such processing helps learners maintain good relationships, encourages social skills learning, ensures feedback to learners, and strengthens the positive behavior of group members(Roger & Johnson, 1994). So when students face difficulties in relating to each other, they should be encouraged to engage in group processing to learn how to identify and solve the problems they encounter when working together.

II.6-Cooperative Learning Outcomes

Nowadays, cooperative learning has been considered as one ofthe "best practices" in education (Cohen, Brody & Sapon-Shevin, 2004). Thus, using cooperative learning in teaching and learning has many benefits. Whether it is used informally or formally, it can transform lectures into interactive, fun sessions where learners are fully involved in their learning (Jolliffe, 2007). The outcomes of cooperative learning are numerous and can greatly improve learners' academic, interpersonal and psychological achievements (Kagan, 1994;).

II.6.1-Academic Achievements

a-Critical Thinking

Many researchers agree on the importance of CL to the development of learners' high-level thinking, which is an essential element of a lifelong learning process (Tan, Gallo, Jacobs & Lee,1999). Cooperative learning promotes critical thinking development through group discussions, sharing and clarifying ideas, and evaluating one's and others' reasons (Qin, Johnson & Johnson, 1995). The authors see that working in groups allows students to talk about their ideas, and explain and defend their reasoning. This will provide opportunities

to see how their team members think through interactions with their group members, thus they will be free to generate more ideas and try new ways of thinking. This in turn will help them restructure their ideas which leads to cognitive restructuring (Qin, Johnson & Johnson,1995). They can experience both being a teacher and a student because they can explain things to each other and learn from one another. So, Cooperation results in more generation of ideas and, more higher-level thinking, and greater transfer of what is learned((Johnson & Johnson, 2018).

b-Increased Retention

When group members explain and teach each other new concepts, retention of these concepts will certainly improve (Hartman, 2001). So when students teach each other, they will strengthen their own learning. That's why it is said that cooperative methods help learners retain knowledge and improve problem-solving skills (Slavin, 1995).

c-Promoting school achievement and Success

Cooperative learning can make learners more interested in the learning process. It improves learners' achievements at schools (Gull & Shehzad, 2015). In cooperative learning, the teacher assists learners and believes in their abilities; this which will help them have positive attitudes towards schools in general and learning in particular, which will result in improved school attendance and low dropout rates(Richards & Rodger, 2001).

d-Improving Language Skills

Interaction is a key element in Cooperative learning as it gives the students more opportunities to listen to each other, talk, discuss, and express their views which will improve the students' language skills (Crandall 1999; Richards & Rodgers 2014). Since students' self-esteem and self-confidence are high when working in groups, anxiety is reduced and motivation arises. This will also increase class participation which, in turn, will help learners improve their language skills. Jacob et al. (1996) agree on the fact that cooperative learning influences the students' language skills and has a positive effect on their academic achievement. They can listen to each other and learn from the pronunciation of their group members (Yassin, Razak & Maasum, 2018). So the more they listen, talk and discuss, the better they use the language in the future.

II.6.2-Social Outcomes

a-Positive Interrelationships and social skills

Several studies have been conducted to see the impact of cooperative experiences on interpersonal attraction (Johnson & Johnson, 1989). These studies indicate that cooperative experiences promote greater interpersonal attraction than do competitive or individualistic ones. They improve students' relationships even when group members hate each other or are different from each other. cooperative learning helps maintain their friendship and makes it stronger. They even prove to like each other more than what is found in competitive and individualistic situations (Johnson & Johnson, 1999). So we can say that cooperation boosts peer liking and social support.

b-Interaction

Interaction is necessary for language learning to take place as it allows learners to see things through the eyes of others and instills in them a sense of accountability for their own and their classmates' development (Webb, 1982). It is through cooperation that learners interact with group members and learn how to socialize. These interactions help them explore inadequate reasoning and promote higher-level thinking (Slavin, 1995).

c-Equal Participation

The main goal of cooperative learning is to make all group members involved in the learning process. Each participant is responsible for his/ her own understanding as well as the understanding of others, so they all share equal chances and equal responsibilities (Yassin, Razak & Maasum, 2018). Learners in this case are considered active participants who can greatly benefit others. They all participate to learn and celebrate their success in achieving the assigned objective.

II.6.3-Psychological Health

According to Johnson &Johnson(1989), Cooperative learning results in greater psychological outcomes among learners than does working individually.

a-Higher Self-Esteem

Self-esteem has a significant impact on the learning process; It can improve learners' achievements. A study by Roger & Johnson (1994) indicates that cooperation resulted in higher levels of self-esteem than did competitive and individualistic learning. The authors explain that in cooperative situations, students interact and thus form multifaceted impressions of each other's abilities and knowledge, which will promote an acceptance of oneself as a competent person. Slavin (1995) sees that cooperation helps learners feel that they are accepted and liked by their peers and that they are advancing academically. This in turn will improve the way they see themselves as individuals.

b-Improving Self Confidence

When group members interact and assist each other, they become confident and able to take risks to perform before a bigger audience. Competition in cooperative learning is intergroup, which makes learners share a sense of belonging to the other members, and which may raise their self-confidence (Johnson & Johnson 1994). Thus, cooperative learning maximizes students' confidence (Hartman, 2001), and improves their academic results.

c-Lowering Anxiety

In traditional teaching, competition between students within the classroom increases anxiety and nervousness. Therefore, cooperative learning techniques help lower the students' anxiety (Johnson & Johnson 1994) because when they work in groups, they discuss the answers and practice what to share with the class. So cooperative learning is the perfect remedy for anxiety and nervousness.

d-Increasing Motivation

One of the concepts of cooperative learning is that it helps members of the group in understanding the materials and achieving the group's common goals. In the cooperative learning techniques, each student is responsible not only for his or her own comprehension but also for the comprehension of the other members of the group. Students' support for one another helps them overcome demotivating characteristics such as shyness and insecurity, and their motivation levels rise (Dörnyei, 1997; Crandall, 1999). In addition, some models of cooperative learning encourage rewarding the winning teams; this extrinsic motivation

fosters group learning and achievement for future assignments (Crandall 1999). The author further adds that cooperation changes the class atmosphere and makes learning more fun which motivates learners to participate in class activities (Crandall 1999).

II.7-Issues in Cooperative Learning

Success in implementing cooperative learning methods and techniques depends highly on how well educators perceive and deal with the challenges they encounter in their classrooms. Ning (2010) identified five key issues that most teachers face when integrating cooperative learning methods in their teaching, which include grouping students, Group functioning, CL methods selection, and assessment.

II.7.1-Grouping Students

Since Groups are essential in cooperative learning, teachers must be careful when group learners and have to consider three important factors: group size, group duration, and group duration (Kagan, 1994; Johnson et al., 1998). Therefore, students with different levels of language proficiency should be appropriately grouped. It is preferable to start with pair work when students are new to CL as it is easier to introduce and manage (Kagan, 1994). Later, teachers can group four students, as a foursome is usually recommended by researchers (Ning, 010). But learning groups should not exceed five members to make CL effective. It is generally recommended that an effective learning group should consist of no more than four members (Johnson & Johnson, 1994; Kagan, 1994) because most functioning problems occur when groups consist of six or more students (Jolliffe, 2007; Kagan, 1994; Slavin, 1995). Furthermore, when teachers determine how long groups should work together, they have to consider three things: the type of group work being used (formal-informal - base groups), the techniques or activities used, and the extent to which learners are well-acquainted with CL teamwork (Kagan, 1994).

In addition, selecting students to groups can be random, student-selected, or teacher-selected (Brown & Thomson, 2000). Random selection is only effective if the task necessitates a low level of academic challenge, student-selected may create homogeneous groups which may not lead to a wider range of social skills, Teacher selection, however, is the most recommended because it can lead to a maximum level of between-group homogeneity and within-group heterogeneity (Johnson et al., 1998; Kagan, 1994; Slavin, 1995).

Slavin (1995) states that teachers often face difficulties in assigning mixed abilities students together. However, other researchers like (Johnson et al., 1998; Kagan, 1994) assert that both high achievers and low achievers can benefit from working together because high achievers explain and rehearse, which will deepen their own understanding.

II.7.2-Group Functioning

Once teachers form the groups, they should think of the different strategies that they can employ to make groups work effectively. They have to focus on developing both students' positive interpersonal relationships and appropriate social skills (Ning, 2010). Researchers advise teachers to design activities that could help learners become acquainted with each other and develop feelings of trust and team identity, right at the first stage of cooperative learnings (Kagan, 1994; Slavin, 1995; Johnson et al., 1998; Brown & Thomson, 2000; Jacobs & Goh, 2007; Jolliffe, 2007). Besides, educators should devote some time to teach students cooperative learning skills as they help in creating a smoother and positive learning atmosphere. (Jacobs & Goh, 2007; Johnson et al., 1998; Jolliffe, 2007; Kagan, 1994; Slavin, 1995). Students, on the other hand, should evaluate how well the group functioned, analyze what they have worked and decided on what could have been done to make it better, and finally set new goals for a future group functioning; it is called group reflection (Kagan, 1994; Slavin, 1995; Johnson et al., 1998; Jacobs & Goh, 2007; Jolliffe, 2007; Ning; 2010).

II.7.3-Selecting Methods and Techniques

CL methods include various techniques and strategies, that's why most teachers find it difficult to select an appropriate method or structure for a specific teaching context (Ning, 2010). Teachers, first, should base their selection on their teaching aim and value (Sharan, 2002). Then, selection should be based on the length of time devoted to CL activities because Cl methods and techniques involve particular steps of different lengths of time (Ning, 2010). Teachers should also take into consideration the students' age and social skills when selecting, and their selection should also depend on the existing curricula and textbooks because not all CL methods fit every curriculum content. Finally, It is important to note that teachers' lesson planning can be a combination of different methods, and there's no such thing as a "typical method". So it is up to the teacher to select, adapt and modify the existing CL methods to go with their teaching contexts (Kagan, 1994; Sharan, 2002).

II.8-Cooperative learning Assessment

Group work Assessment is a fundamental part of the CL process. It is often described by teachers as intricate and challenging. Assessment can be formative or summative (Harmer, 2007). In formative assessment, The learner receives feedback and comments from his/ her teacher and peers to help him/her get an insight into how to improve the performance (Falsgraf, 2009). Summative assessment, on the other hand, usually takes the form of one-off measurements. It can be through a large-scale public, a standardized examination, or a term quiz (Harmer, 2007). In summative assessment, learners are assessed on their learning outcomes, and specific grades or scores are provided to indicate the learners' proficiency or levels of achievement. Most educators use a combination of formative and summative assessments when dealing with cooperative learning (Kagan, 1994; Johnson et al., 1998; McCafferty et al., 2006; Jacobs, 2007), and the final performance is graded by both teacher and peers. This assessment, generally, starts with assigning students into groups, preparing for the product, then students' performances are assessed by giving grades and clarifying the weaknesses, and provide remedial activities (Slavin, 1995; Johnson et al., 1998; Jacobs & Goh, 2007; Jolliffe, 2007; Ning, 2010).

Researchers have identified two ways of grading group work: norm-referenced and criterion-referenced (Ning, 2010). The former refers to the idea that learners are measured against each other (Jacobs & Goh, 2007), which may encourage competition among group members simply because helping other members score higher may result in reducing their own results (Jacobs & Goh, 2007, p. 36). The latter, however, means that one student's grade has no bearing on the grades of others because it measures people along a continuum of achievement against defined criteria (Bracey, 2006). To put it another way, students are judged purely on their own performance against a set of criteria, and they compete against themselves rather than against others. As a result, pupils are less hesitant to assist others, which considerably enhances cooperation and productive interaction in group work. That's why researchers worldwide agree that a criterion-referenced grading system should be used when assessing groups' final products in CL (Kagan, 1994; Slavin, 1995; Johnson et al., 1998; McCafferty et al., 2006; Jacobs & Goh, 2007; Jollife, 2007).

In addition, several studies have confirmed that preparing clear and accessible grading criteria enhances the quality of the group performance (Ning, 2010). Even though most CL researchers agree on the use of group grades, there are some concerns that group grades may

not be a reliable or fair reflection of students' work; this means that if a group consists of two high achieving students, they are likely to get better scores than other groups (Slavin, 1995). Thus, CL groups should be formed based on both within-group heterogeneity and between-group homogeneity, that is the group academic levels should be equal at the very beginning (Jacobs & Goh, 2007; Johnson et al., 1998; Jollife, 2007; Kagan, 1994; McCafferty et al., 2006; Slavin, 1995). Then, teachers should use non-grade rewards such as certificates for excellent group work (Jacobs & Goh, 2007).

In traditional methods, learners are passive recipients of evaluation. However, the integration of peer and self-evaluation is a crucial aspect of CL. Students can participate in assessing their work, and they will have a sense of control over their learning, which will increase their motivation to learn (Jacobs & Goh, 2007). Therefore, teachers need to include peer and self-evaluation into the course's formal evaluation. This will greatly improve learning outcomes measurement, encourage students to take peer evaluation procedures seriously, boost learners' intrinsic motivation, and create a more engaged and productive learning environment.

II.9-Cooperative Learning Models

In recent years, there has been an increase in the number of CL studies aimed at improving classroom teaching and learning. Cooperative learning models are planned, methodical educational tactics that can be employed in most educational disciplines and at any grade level. All of these models require the teacher to divide the children into four to six learning groups made up of high-, average-, and low-achieving learners. Most of the models are based on social psychological theory and research, some of which date back to the early 1900s; however, they have been modified to some extent to fit the practical needs of classrooms and to overcome difficulties that have arisen as a result of the usage of cooperation (Hertz-Lazarowitz et al., 2013). Different CL approaches have similarities but differ in terms of their components, techniques, and suitability for different topic areas, school levels, and educational environments. This section presents some of the most commonly used cooperative learning models including the learning together method (LT), Student Team Achievement Divisions (STAD), Team-Games-Tournaments (TGT), jigsaw, and, group investigation (GI).

II.9.1-Learning Together

The Learning Together modal (LT), which was developed and advocated by David Johnson and Roger Johnson in 1975 (Jolliffe, 2007), is one of the best contributions to education both in theory and in practice. Students are supposed to work in small heterogeneous groups to complete a single worksheet and receive praise and recognition based on their final product (Hertz-Lazarowitz et al., 2013). The authors state that the LT model "emphasizes (1) training students to be good group members and (2) continuous evaluation of group functioning by the group members" (p.8). In this model, the three types of cooperative learning(formal, informal, base groups), should be included (Jolliffe, 2007). Moreover, each cooperative lesson must include the five basic elements of cooperative learning (PIGS F) (Slavin, 1985, 1995). Using the LT model in the classroom helps develop students' self-esteem and improve their interpersonal relationships.

II.9.2-Student Team Achievement Divisions (STAD)

Student Team Achievement Divisions **(**STAD) is a cooperative learning model which was developed by Robert Slavin in 1978 as part of a student-centered learning program (Balfakih, 2003). In STAD, teams usually consist of four or five members who are mixed in gender, ability and ethnicity (Jolliffe, 2007). According to Slavin (1983), the teacher should first present the lesson, and students should study what their teacher has presented to ensure that all members have mastered it. Next, students take individual tests on the studied material, and team scores are computed based on the degree to which each student improved over his/ her own past scores. Scores are then combined to create team scores. Members of the winning team are rewarded for meeting specific criteria and a weekly one-page class newsletter recognizes the teams with the highest scores.

II.9.3-Team-Games-Tournaments (TGT)

Team Games Tournaments TGT, which was first developed by DeVries and Slavin in 1978 (Slavin, 1983), is one the easiest cooperative models to apply. It is similar to the previous model (STAD), except that the learners play games as representatives of their teams instead of taking tests.; they participate in games with others of the same skill level to ensure that everyone has an equal chance of succeeding, and the points earned will be added to their team's total scores. (Slavin, 1983). According to the author, the topic is first presented to the entire class by the teacher. Then s/he divides the class into four heterogeneous groups

of four students to study the content cooperatively by explaining, discussing, and assisting one another. Following that, these groups are divided up for a while, and students are placed into homogeneous ability groups of three or four people (for example, putting the three strongest students together) to compete against one another in games based on the content already learned. A game sheet with a set of numbered questions numbered cards with the same numbers as the questions, and a numbered answer sheet is prepared by the teacher for each group. The game begins when students at each table choose up a number card that corresponds to the number of the question to be answered at random. The person who drew the highest number gets to read the question first. Then he or she delivers an answer. The winners keep each card they win and return it to their original team (the heterogeneous one). Teams' scores are calculated, and the teacher announces the final results.

TGT focuses on constructing students' knowledge, communication skills, critical thinking and, responsibility (Juwita, Sari, & Septianingrum, 2017). It also increases students' motivation and learning outcomes (Juwita et al., 2017).

II.9.4-Jigsaw

The Jigsaw is one of the earliest cooperative learning methods, which was developed by Elliott Aronson in 1978 (Hertz-Lazarowitz et al., 2013). The authors state that there are two groups in this method: homegroup and expert group. Each student in a five- to six-member group receives unique information about a topic that the entire group is learning about. Students then work on their topics with other members who have the same topic from the (expert group) and then return to their home group to teach them about what they have learned. All the students may take an exam for individual scores at the end.

In 1980, Slavin designed "Jigsaw II" to combine the original Jigsaw with other Student Group Leaming methods and to make the teacher's preparations for using the approach easier. Hertz-Lazarowitz et al. (2013) identified the difference between Jigsaw and Jigsaw II. They explain that Jigsaw II divides students into four to five-member teams, who read narrative materials such as short stories, biographies,…etc, and each team member is assigned a certain topic to master. The students, later, meet in "expert groups" to debate their themes, then return to teach their colleagues what they've learned. Finally, the students take a test on the material, and the results are utilized to create individual and team scores, much like in STAD. Glasgow and Hicks (2003) report that Jigsaw group members who worked

under the jigsaw model have developed independence, social skills, self-control, self-management, ambition, and the ability to draw conclusions.

II.9.5-Group Investigation (GI)

II.9.5.1-Origins of Group Investigation

Group Investigation arises from the main educational goals and principles formulated by John Dewey (1859-1952), whose work has a profound and lasting effect on educational thought world wide (Sharan & Sharan, 1992). Many educators and psychologists have given their views and contributions over the last few decades to expand on Dewey's core approach. Their work makes us appreciate Dewey's understanding of the possibilities for human development embedded in the educational process all the more. They also present us with a diverse range of potential processes for implementing Dewey's ideas in today's schools. These educators and psychologists have made significant contributions to the general approach to school learning contained in the Group Investigation method including Kurt Lewin, Herbert Thelen, Richard DeCharms, Edward Deci and Sharan and Sharan who developed the group investigation model in 1976 (Sharan & Sharan, 1992).

II.9.5.2-Definition of Group Investigation

Group Investigation is a method for classroom instruction in which students work collaboratively in small groups to examine, experience, and understand their topic of study. Group Investigation is designed to appeal to all facets of the students' abilities and experience relevant to the process of learning, not just to the cognitive or social domains. It provides educators with an approach to the conduct of teaching and learning in school that differs significantly from traditional instruction (Sharan & Sharan, 1992, p.1).

According to Sharan & Sharan(1990), students in group investigation are active participants who plan what and how they will study by forming cooperative groups based on a common interest in a topic. Then, they divide the work among the members so that each one carries out his or her part of the investigation, and finally, the group arranges and summarizes its work and shares it with the class.

II.9.5.3-Critical components of Group Investigation

Sharan and Sharan (1992) identified four basic components of classroom learning that typify the GI cooperative learning model by following in Dewey's footsteps. These four components can be used to determine if we are adopting the Group Investigation method in accordance with its essential ideas and goals, or if we have only made superficial modifications to the way classroom teaching and learning is conducted. The four components we consider to be the primary indicators of the GI method appear in Figure 3 below, which are: Investigation, interaction, interpretation, and intrinsic motivation. These four elements are interrelated and fall together to ensure the full implementation of the method (Sharan & Sharan,1992).

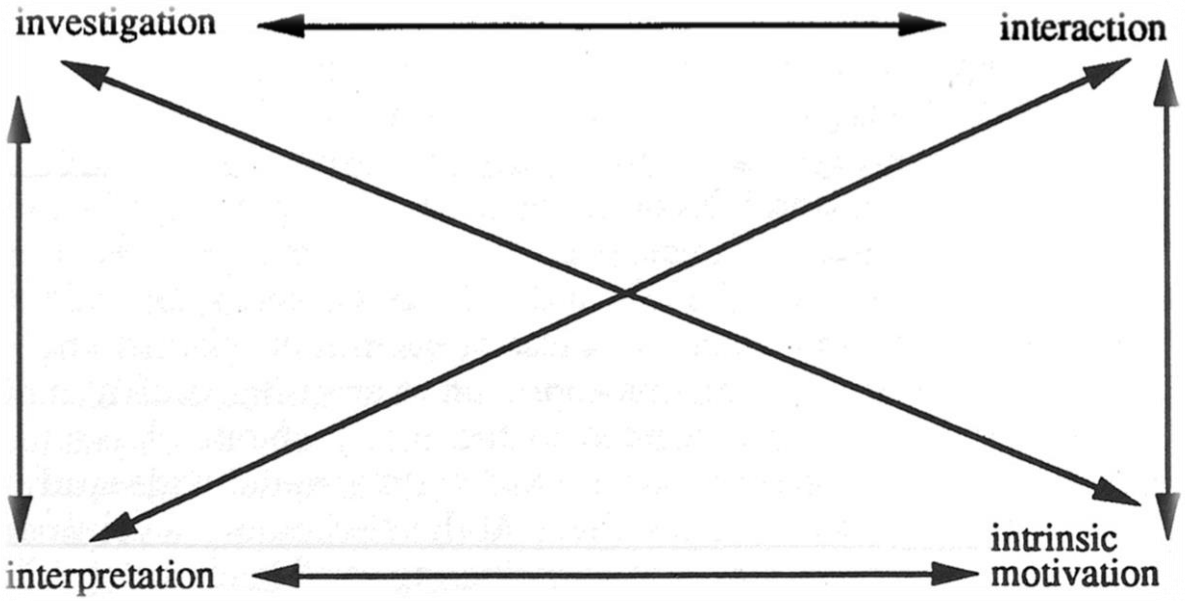

Figure 2.3: Critical Components of Group Investigation from (Sharan & Sharan, 1992)

Sharan and Sharan (1992) define the four components as follow:

- Investigation: is conducting an inquiry to find solutions to a problem. The classroom becomes an "Inquiring unity", and each student is an investigator of a problem. The main aim is to identify the teacher's and students' orientation that will make it possible for the other components to happen.
- Interaction: Students communicate and interact in small groups in the classroom throughout the stages of the investigation.

- Interpretation happens at the interpersonal as well as the individual cognitive level. While interacting, students make an individual effort to give meaning to the data they have gathered through their investigation. Individuals' interpretation of the data improves their comprehension of the topic under study.
- Intrinsic motivation: Students should become emotionally invested in the subject they are studying and the knowledge they aim to obtain. They should develop a personal interest in obtaining the information they require to comprehend the topic of investigation.

II.9.5.4-Stages of Implementing Group Investigation

According to Sharan and Sharan (1990), when implementing Group Investigation model, students go through six different but interrelated stages. Depending on the issue's complexity under examination and the students' and teacher's skillfulness, the stages can be completed in a week or two or over several weeks or even months. The authors explained the six stages as follow:

- **Identifying the Topic to be Investigated and Organising Students into Research Groups.**

In this stage, the teacher presents a broad topic to the entire class in a form of a question. The problem to be investigated should be multifaceted in order to elicit a range of responses from the pupils. Students can be asked to search a range of sources, such as films, texts, pictures, books, magazines, articles, and so on. This exploratory step may take from two to three sessions. The pupils are now ready to formulate and choose several sub-topics to investigate through collaborative planning. Next, the teacher makes all of the learners' suggestions available to the entire class by writing them on the board or copying them and giving each student a copy. The teacher now has to classify every student’s questions into categories which will present the subtopics for the groups to investigate. At the end of this stage, each student chooses the group based on his or her subtopic of interest.

- **Planning the Investigation in Groups**

After choosing their groups, the students now focus on the sub-topic to be investigated. Members of the group decide which element of the subtopics they will research individually or in pairs. They must assign roles, select how they will proceed, and find the resources they

will need to complete their investigation. The teacher can provide help and prepare a worksheet that would help learners organize the processes of this preparation stage. Then, Group numbers examine the extent of their investigation through discussions. Each group's worksheet should be displayed on a pinboard. The entire class functions as a "group of groups." Each student contributes to the investigation of the small group, and each group contributes to the bigger topic's study by the entire class.

- **Carrying out the Investigation**

In stage three, members of the group collect, analyze, and evaluate data, and draw conclusions. At this point, each class period begins with the teacher reviewing with each group what they have planned for the day. The members of each group talk about their work and assist one another. They continue to share information, but now compare and contrast their discoveries in order to find a way to apply them to the research problem.

- **Preparing a Final Report**

This stage serves as a transition from data collection and clarification to data presentation. It comprises such intellectual activities as abstracting the group's project's fundamental idea, bringing all the pieces together into a cohesive whole, and arranging a presentation that is both informative and appealing. Group members have been constantly sharing their work and discussing what they did and did not grasp; they have been tutoring each other throughout the process, so they take a new role as teachers. But now they have to think about how to transmit what they have learned to the whole class. And when the teacher sees that the groups' investigations are almost done, he takes notes of what special materials they might in their presentation and coordinates the final schedule.

- **Presenting the Final Report**

The groups are now getting ready to give their final presentations to the class. At this point, all of the groups come together to re-establish the class as a social unit. The presentation schedule is posted, and each group knows how much time it has to speak. Following each group's turn, the "audience" expresses their reactions to what they see and hear

- **Evaluation**

Students are constantly evaluated by both their peers and the teacher throughout the whole process of investigation. Students' grasp of their topic and work is obvious at all times thanks to interactions and debates among group members at every step of their work, as well as sessions with their teacher. Throughout the investigation, the teacher will have numerous opportunities to make trustworthy judgments based on regular conversations and observations of each student's academic and social activities.

II.10-The Teacher's Role

Recently, The teacher's role is changing dramatically. While they were considered as "the sage on the stage" in traditional teaching, now they are gradually becoming partners with their students in learning, known as the "guide on the side" (Hertz-Lazarowitz, 2008). Teachers are becoming facilitators who delegate authority to their learners by helping them make decisions and take responsibility for their learning (Johnson et al., 1998). This doesn't mean that their role is becoming less important. In CL, they even need to be more active in the classroom (Jacobs & Goh, 2007).

Through a sequence of procedures in a cooperative lesson, teachers play a vital role as facilitators in helping groups work properly. They set learning objectives, arrange learning materials, group students and assign roles, explain CL tasks and procedures, monitor and intervene as needed, and evaluate the group work (Brown & Thomson, 2000; Johnson et al., 1998). Now, the teacher is not just the transmitter of knowledge; he or she must be competent enough to be able to play several challenging roles simultaneously. Ning (2010) identified those roles that include:

- **Controller and Instructor**: In CL classrooms, teachers are not supposed to give up control of their class, instead they should exercise control in order to ensure successful group functioning.
- **Technique Selector, Method Modifier, Task Designer:** Teachers must choose appropriate techniques or alter existing methods so that the techniques or procedures used are appropriate for their specific educational situations. Along with this, the teacher should design suitable CL tasks that can engage the learners and be tailored to the students' level and interests.

- **Organizer, Guide, Encourager:** Teachers explain learning objectives, CL tasks, individual accountability, and criteria for group success, among other things, as they prepare and conduct cooperative classes. They guide the groups, and encourage and inspire learners to interact, as many studies show that interaction in CL fosters students' motivation to learn.
- **Observer, Monitor, Intervener:** Observing and monitoring student groups allow the teacher to see what they're doing with their work and how well they're working together. Teachers can also intervene when necessary and provide additional assistance as needed to promote group work learning.
- **Assessor And Reflector:** Teachers and learners can work together to assess and evaluate the learners' performances and progress. They can offer helpful suggestions and feedback on how to enhance future team activities and collaboration, and reflect on their work in promoting students' learning.

II.11-Cooperative Project-Based Learning

In the early 20th century, John Dewey was credited for pioneering the development of democratic learning in communities; he recognized the intimate link between democracy and education. Most of us use the phrase learning by doing, which Dewey used to emphasize the value of experience in all learning, not just in school but also in private and professional settings (De Florio, 2016). Cooperative and project-based learning are inextricably linked to this educational philosophy. Dewey's concept of experience-based action is referred to by not only progressive education advocates but also scientists who use quantitative approaches.

The goal of integrating cooperation and project-based learning is to deepen the new learning information; they provide learners with a variety of engaging chances to help them develop automaticity in their knowledge and abilities, as well as the desired attitudes(De Florio, 2016).

We have seen in the previous Chapter that PBL is student-centered, where learning occurs in small groups, and the teacher is a facilitator or guide who presents authentic problems, and new information is acquired through self-directed learning. These same characteristics are also present in one way or another in all forms of cooperative learning, so they are appropriate for learning projects, too (Hattie, 2009).

There are numerous similarities and only a few distinctions between cooperative and project-based learning. They both are usually done in small groups with a variety of people. Each member of the group will be assigned an individual task to complete. To tackle real-world challenges, group members cooperate and rely on one another; they will either sink or swim as a unit in the end. The most significant distinction between these two theories; however, is that project-based learning always ends with a written or spoken product. Furthermore, students in project-based activities have the choice to work alone on occasions when they want to research a topic that other groups are not interested in. Despite their differences, both theories are widely regarded as best practices in the educational profession.

Students learn best when they are taught to cooperate and provided with proper support. Academic accomplishment, critical thinking, and the development of social skills are all linked to cooperative and project-based learning, hence it should be incorporated into the instructional design (Johnson, Johnson, & Holubec, 1994). It is through cooperative and project-based learning that these students contribute to one another's learning; thus educators should include both notions into their classrooms because when put together, they can help produce creative independent thinkers able to solve future problems, think critically and achieve higher academic results.

Conclusion

Cooperative learning is an effective method that enables students to learn and develop the necessary skills with the help of others. The aim of using cooperative learning is for students to work in small groups to achieve a common goal. Social interdependence, cognitive-developmental perspective, social cognitive, and behavioural learning are major theories that have greatly influenced cooperative learning, which focuses on demonstrating the benefits of interdependence while emphasizing the importance of personal accountability. This occurs naturally in cooperative learning because students work together on a task or explain an idea, yet they each have a different task or concept to explain. In addition, learners will be social while participating in cooperative learning, so it helps students learn how to interact to learn from others. Equally important, students in cooperative learning develop critical thinking development, helps learners retain knowledge and improve problem-solving skills, improves learners' achievements at schools, influences the students' language skills, develops learners' self-esteem, self-confidence, lowers anxiety, and increases motivation. In addition, incorporating project-based learning and cooperative

learning is the best way to make students achieve maximum results. They both are closely related, so they can easily be intertwined into one assignment. In doing so, students will work in a pleasant, emotive learning environment. Cooperative learning has a lot of benefits; however, it's necessary to be aware of its limitations so that we can get the most out of it in terms of student accomplishment and social learning.

Chapter III

Oral Presentation

III.1-Introduction

During the 21st century, there has been a clear shift from traditional teaching approaches, where learners were regarded as passive recipients of knowledge, to learner-centered teaching and learning methods. The need for social integration has changed the way educators, curriculum designers, and even learners think. In order to be active and effective participants, learners need to develop communication skills. Thus, more focus is given to Communicative Language Teaching (CLT), which is an implicit teaching method that dates back to the 1970s. It is the catalyst for dramatic changes in language teaching and learning. EFL teachers are now more than ever trying to encourage student-led learning and make their learners reflect beyond the textbook required to use language in a creative, intentional, and engaging manner. However, the majority of EFL learners find it challenging to communicate their ideas using the target language. This is mainly due to the lack of communication either inside or outside the classroom. It makes them incapable of practicing the language in real situations. Thus, educators in CLT had to design a one of a kind syllabus that was compatible with the concept of communicative competence, identify and analyze learners' needs and interests, and plan classroom activities based on cooperation task-based learning, games, and oral presentations (Elamaran & Muthuraman, 2020). Therefore, educators are now using class oral presentations to strengthen the students' language oral proficiency. These are becoming the focal point of EFL classroom activities in various regions of the world today (Al-issa & Al-Qubtan, 2010).

This chapter presents an overview of oral presentations in the EFL context. It explores the different types of presentations, their benefits, techniques to arrange them, and the various ways to assess presentations in the EFL classroom.

III.2- Defining Oral Presentations

An oral presentation, according to Craig (2012), is an integral part of a language classroom where learners think critically, plan, prepare and present their findings orally before an audience. Language teachers worldwide consider it an effective language class activity that promotes learners' oral language proficiency (King, 2002). To put it another way, an oral presentation is a teaching activity that allows students to practice and improve their speaking skills while studying a foreign language.

Oral presentations are also known as public speaking, where the presenter addresses a particular topic orally to an audience. It is aimed at educating, informing, entertaining, or

discussing an issue. It is often regarded as an assessment tool that enables the teacher to evaluate learners' ability to transmit information orally in a compelling manner.

Barrett and Liu (2019) see that oral presentations are a popular approach in many academic fields in which students are evaluated and socialized in a particular academic speech where results are presented to the teacher and peers.

Ian (2011) defines oral presentations as activities that "involve giving a pre-prepared speech in English to an audience, usually with a time limit" (p.143). Speakers or presenters should prepare a speech in which they explain an organized topic of choice to peers or other external audiences. Speakers should also maintain eye contact with their audience and try to answer their questions, considering the time limit that the teacher predefines.

According to Baker (2000), an oral presentation is similar to formal talks; most people find it easy to start a conversation with others; however, they find it challenging to give an oral presentation in front of the same group. The author further stated that the main aim of making students perform orally is to develop proficient oral communication skills. And if it is well-directed and well-prepared, it will provide students with a valuable learning opportunity and various skills that would help them in their education and future careers (Meloni & Thompson, 1980).

Based on the above definitions, this study defines oral presentation as a class activity where learners plan, prepare, organize, practice, discuss, and present information of a particular topic orally to an internal or external audience.

III.3-Reasons for EFL students' Oral Presentations

Students, individually or in groups, are often asked to present a topic orally to an academic audience or other invited members. They are required to deliver presentations for a variety of reasons, which will influence the presentations 'style, content, and organization. So, for better preparation and delivery, students need to understand the purpose of their presentation. By understanding these purposes, they can gain a better understanding of the style and content that will be required. Chivers and Shoolbred (2007) identified five purposes of students' presentations.

- **Persuasion:** In this type of presentation, students will have to encourage the audience members to take some action or make a choice. They should deliver pertinent factual

content in a simple, concise, persuasive and confident manner. Students will also have to deal with the audience's comments properly, and limit any unpleasant reactions.

- **Training:** These presentations contain instances of students demonstrating their training and teaching skills such as training someone to use a software package, training students to use a digital equipment, practice interview or presentation techniques, etc. Immediate feedback can be an important aspect of this type of presentation, especially if no official evaluation is given. The teacher may pause the session to clarify anything or suggest a change that can be practiced multiple times until the learner gains confidence. Members in the audience are encouraged to offer suggestions for improvement.
- **Teaching and learning:** This presentation's content is usually centered on a topic related to the course or module being studied. This could entail new study and information that goes beyond what the teachers have previously taught on the subject. It could also entail repackaging previously learned material or further investigation of the subject from several angles. The teacher may ask a group of students to speak on the topic of climate change for example from different perspectives. These types of student presentations are sometimes utilized to delve deeper into parts of the curriculum than have been covered in lectures. This allows the speakers to gain a better understanding of the subject and the audience to gain a broader awareness of the issue.
- **Informing:** This might be compared to teaching; however, the goal of this sort of presentation is to convey as much knowledge as possible in the time allotted. At important stages of a project for example, students are expected to report on their progress. It serves as proof of continuous work and can be used as a subtle form of control, with individuals working to achieve the deadlines set for these progress reports' submission dates.
- **Assessment:** Student presentations are often evaluated, and they may receive a percentage of the marks that go toward the total module grade and credits. For students, giving a presentation provides an opportunity to receive higher grades than they might get on the written test. They may be more effective communicators and presenters when using speech, pictures, or technology rather than writing.

III.4-Essential Elements of Oral Presentation

Siddons (2006) states that any oral presentation must include three important elements, presenter, presentation, and the audience.

- **The presenter:** The presenter (s) must be there in front of an audience. They have to be aware of their body language. Nonverbal communication strengthens connections with the audience encourages trust and participation. Presenters should focus on their audience, and maintain eye contact while addressing them. They have to take care of their body position and keep their heads high.
- **The presentation:** A good oral presentation includes only the most relevant facts, and the desired information for delivering the message. In order to captivate the audience's attention and interest, information should sound fresh. Oral presentations can have varied degrees of formality, but they should not sound scripted.
- **The Audience:** is the two or more individuals who come to listen to the presenter. Students have to consider the type of audience when preparing for their presentation. The words, tone and the audience determines all images of the presentation. If the audience is academic or professional, the language should be more formal and sophisticated. A good presenter should read the audience and adjust their presentation accordingly.

III.5-Types of Oral Presentations

Al-Issa and Al-Qubtan (2010) identified three types of oral presentations, controlled, guided, and free. These three types are based on the learners' competence level, the amount of time spent on the work, and the topic selected by the teachers and students.

- **Controlled Presentations**

In this type, students are typically young (6–12 years old), and their language skills range from beginner to elementary. Teachers must limit the themes to either those found in the textbook or those that he or she believes the pupils can deliver efficiently. The same may be said for grammar and vocabulary. These students have little or no experience of

computers and technology use. As a result, the teacher might ask learners to write down their short oral presentations and read them to their peers. This type aims to give young pupils opportunities to be confident when speaking the target language in the classroom.

- **Guided Presentations**

The pupils of this type, aged (12-16), have an intermediate proficiency level of the target language. As a result, their teachers can direct them toward themes that are appropriate for their language level. At this point, they should not be expected to use complicated structural and lexical items. They should be directed to the proper grammatical and lexical items. Furthermore, students in this type can be guided to prepare their work using PowerPoint slides and other technologies. Besides, students can memorize their oral speech as it helps them combine the four skills to use the target language appropriately and confidently (Oanh & Hien, 2006).

- **Free Presentations**

At this level, students are 16-22 years old. They have an upper-intermediate or advanced level. Therefore, teachers can allow them to choose the topic of their interest and plan it the way they see appropriate. Students can utilize complicated language skills and can be given longer presenting durations than their lower-level competitors. After completing their presentation, students can answer questions about the topic by the audience.

III.6-Characteristics of an Effective Oral Presentation

Effective presentations benefit all participants, teachers and audience members. They must be engaging, pleasurable, beneficial, and memorable. Learners might recall more of their classmates' presentations than the content of a lesson presented by their teacher. They might also remember every detail of their presentations more vividly than the material of lectures they have attended. This could be due to the high levels of anxiety connected with presentations and the amount of preparation and practice time required to generate the content.

III.6.1-Good planning

Planning and preparation typically entail some research and the selection or rejection of appropriate content. Oral presentations necessitate a great deal of preparation (Al-issab & Al-Qubtan, 2010). According to experts, over half of all issues in students' oral presentations originate during the planning stage (or rather, lack of a planning stage). Oral presentations require a deep understanding of the objective and the audience, gathering relevant information, and adjusting the speech to the occasion and audience.

III.6.2-Managing time

Although managing time causes anxiety and stress for students, it is essential for planning and delivering effective presentations. Learners have to manage time during their planning and throughout the time given for delivering the presentation (Brooks & Wilson, 2014). They need time to gain a better comprehension of the subject. Besides, being able to deliver, explain, or teach that knowledge to someone else in the audience necessitates even greater levels of comprehension, which will likely consume a significant amount of students' preparation time. That is why group members need to schedule meetings to carefully plan, prepare, rehearse and practice their work to be presented effectively (Hovane, 2009). Students should also take into consideration the time allotted for delivering their presentations. They should deliver less content at a moderate pace rather than too much content at a faster pace, leaving the audience feeling overwhelmed and confused.

III.6.3- Pertinent and Engaging Content

There is always more content in different subject areas, so students should make a list of what they want to include and what they want to leave out. They will need to carefully choose pertinent content and ensure it is accurate and engaging for the target audience (Chivers & Shoolbred, 2007). They will also have to consider using examples in the presentation and where they should go in the content's structure. The presentation should be engaging enough to hold the audience's attention and interest.

III.6.4-Clear structure

Setting a clear framework helps the audience to quickly comprehend the presentation's steps and gives them a clear summary or overview so they can see how the topic progresses and how it fits into the bigger picture (Chivers & Shoolbred, 2007). By establishing the different goals and objectives at the outset, students get a clear picture of what they anticipate the audience to comprehend by the end of the presentation. Each oral presentation should consist of an introduction, a body and a conclusion. The authors insist that students should provide a succinct yet concise overview of the subject, and divide the material to be covered into sections that are relevant to the knowledge but also provide chances for reflection and revision of key points. They have to connect the various sections, and then wrap up the presentation. Recent studies suggest that we retain and recall more material from the beginning and conclusion of presentations and lectures than from the middle (Otoshi & Heffernen, 2008). Thus, students have to make sure the beginning and ending of their work are clear and engaging.

III.6.5-Effective Language Skills

The students' presentation must be perfectly understandable and interesting to the audience in order to be effective. To this end, students will need a combination of relevant material, as well as solid presenting and communication skills. Verbal and nonverbal skills are two essential factors that determine how well we communicate and be understood by the audience.

III.6.5.1-Nonverbal Skills

It takes more than just words to communicate. The way students use their voice, facial expression, and body language has an impact on the messages they are trying to convey (Way, 2011). Students are not always conscious that the way they stand or approach another individual says a lot about them. Teachers can help students become critically aware of the nonverbal behaviors that will enable them to express themselves effectively by raising awareness of the expressive nature of how a person uses their body and voice.

- **Body Language**

When preparing for an oral presentation, most students often focus solely on the topic content and frequently neglect body language. However, for their presentation to be

effective, it should include effective content, tone, and body language. One of the most significant things students can do to improve their communication abilities is to improve their nonverbal communication skills. Nonverbal communication can be anything that communicates an idea from one person to another without using words. It is heavily influenced by cultural norms (Çakir, 2008).

Body language is a term that is frequently used while discussing nonverbal communication. Body movement, gestures, and posture are examples of body language used to transmit oral messages. When body language does not match what is being spoken, knowing how to read it can be helpful in establishing what another person truly wants or requires.

- **Eye Contact**

According to Çakir (2008), eye contact plays a significant role in an effective presentation. If someone pays attention to what is being said, they will make more significant eye contact with the speaker. The author states that too much eye contact, on the other hand, indicates that the listener is confrontational or suspicious. Too little eye contact indicates that the listener is either uninterested or has a negative attitude toward what is being conveyed.

- **Posture**

Students should decide whether to stand or sit while presenting. Besides, they should avoid moving around as this may distract the audience (Çakir, 2008). When speaking, students tend to flap their hands, which may also be distracting. They should keep their hands still and should avoid crossing their arms. That is why they should also rehearse with their peers and control their body language for an effective oral presentation.

- **Volume**

The students' volume is also important, and is determined by the situation, purpose, and target audience (Way, 2011). Loud voices are required at times, such as in a play or at an assembly. When presenting, the students' voice should, in general, be loud enough for the target audience to hear and understand the message being delivered

III.6.5.2- Verbal Skills

Using words to address messages to others is often known as verbal communication, which incorporates speaking skills (Ming, 2005). The choice of words students use, the way they are heard and interpreted are all essential parts of the verbal elements of communication.

- **Speaking:**

Speaking is one of the four skills that confirms the students' capacity to communicate in the target language. According to Hedge (2003), speaking is verbal communication that involves understanding and addressing information; it refers to the act of verbally conveying one's ideas and opinions. It is the act of communicating with others through speech, dialogue, discussions, where students listen to others, interact, participate and give their views (Bygate, 1987). Speaking, according to Hammad and Abu Ghali (2015), is a constructive oral process that necessitates the use of appropriate grammar rules, a wide range of vocabulary and phonological norms to communicate one's thoughts and feelings in speech.

Mastery of a language is demonstrated by the ability to understand what others are saying and respond in the target language. Learning to speak is critical for students as this ability will keep them involved in actual English communication and allows them to convey ideas and thoughts.

Teachers assess a student's mastery of a language by determining whether they can communicate it orally. Speaking instruction should prepare pupils to utilize the language verbally in real-life situations. Harmer (2001) contends that teachers should encourage their students to use all and any language available by assigning speaking activities such as oral presentations. These assignments encourage students to improve how they use English in and out of class, to motivate them and boost their confidence.

- **Grammatical Range and Accuracy:**

Grammatical competence is a component of communicative competence, and people should pay attention to grammar in order to communicate effectively (Terrell, 1991). Thus, we can say that the foundation for efficient communication is laid by grammar. Incorrect grammar can detract from the meaning and clarity of communication.

Grammar is crucial since it contributes to correctness. As a result, grammatical rules can assist learners in developing a habit of thinking rationally and clearly and improving their language accuracy. Using correct grammar while presenting is a display of respect for both

speakers and listeners. According to Terrell (1991), proper use of language ensures audience understanding and attention.

- **Vocabulary**

Vocabulary is the set of words in a language used by learners in the four skills (Way, 2011). Students tend to neglect it as they often forget to think about word choice when delivering a speech. However, the students' language reveals a lot about them. Proper vocabulary use in oral presentations strengthens the students' oral performance (Schwertly, 2012).

Kamil and Hiebert (2005) state that the students' word choice can impact the mood or tone of their presentation. It dramatically influences both content relevance and clarity. Appropriate vocabulary use during an oral presentation affects how the audience perceives the delivered speech (Chivers & Shoolbred, 2007). When they use standard terms and phrases, the audience will quickly get the message. Yet, students can use new terminology and give brief explanations with examples, which extends the audience's understanding. Therefore, students should carefully choose the words and phrases that suit both the topic of their presentation and their audience.

- **Pronunciation**

Learning a foreign language is challenging because students must consider complex grammar rules, new vocabulary and difficult pronunciation. They are most of the time worried about speaking and pronouncing new words with friends and teachers. However, if students improve their pronunciation, they will feel less anxious and more at ease with learning and speaking the language. Pronunciation refers to the way words are said. Some younger pupils may have difficulty pronouncing specific sounds in words and will benefit from hearing those words in context. Murphy (1991) states that students must check their pronunciation when presenting their reports orally as this may help the audience quickly understand what is being offered. The audience can easily comprehend what the students are trying to communicate if they use the correct sounds when speaking. If students have excellent grammar and a vast vocabulary, effective pronunciation will complete the package and help them hear and understand the presentation more effectively (Hall, 1997). Good and clear pronunciation boosts the presenters’ self-confidence, as they will be able to speak clearly and fluently.

III.6.6-Use of Visual Aids

Visual aids are important for the effective delivery of oral reports; they are used to enhance the presentation (Macwan, 2015). It provides accurate information to the audience's mind. Most people are more attracted to photographs, graphs, videos, slides, etc. So, using visual aids in the students' presentations increases audience engagement (Macwan, 2015). Those tools can greatly support what the presenters say. Thus, students should avoid using visual aids that make the audience spend time reading or understanding rather than listening to the speakers.

According to recent research, oral presentations with images, video clips, audio or slides are more convincing, entertaining, and effective (Daniel, (n.d.). They aid in the comprehension of the students' ideas and key points. If used appropriately, they can make or break the oral presentation.

III.7-Suggestions for Successful Oral Presentations

Students in Algerian Secondary schools are required to work on projects and present their final work orally. Their teachers frequently encourage them to give a presentation but are given little or no instruction on how to do so effectively due to time constraints or perhaps the teachers' lack of prepared material (Belmekki & Baghzou, 2021). In addition to this, students feel unsecured when speaking in front of an audience, and they are unsure what constitutes their projects' effective presentation.

Hanzevack and McKean (1991) suggest some tips for an organized and effective oral presentation:

- **Organizing a Talk**

A well-organized presentation is usually always the key to a good performance. A common problem that most students face is time management. Students think that the best presentations are usually the ones that are too long. However, these reports seem disjointed and endless. Students need to organize their work by creating an informative, relevant, clear, and engaging program. They should also consider what they can reasonably do in the time allowed and tailor their materials to fit the project. In addition, outlining is an essential element of planning a good presentation. Students should summarize their work. They should begin with the large picture (overall concepts) and then go on to the most important details for understanding their work.

- **Targeting and Involving the Audience**

Presenters are more knowledgeable about their subject than the rest of the audience; what they see evident may not be so to others. Therefore, students need to target their audience by adjusting their talk according to the people listening to them. They should consider the type of audience, their familiarity with the issue, their attitudes, and their informational demands. Presenters need to connect with their audience and work on engaging them to conduct a two-way conversation. Using visual aids is the best way to engage the audience and help them understand the presentation's content. Students should make sure that their visual aids are engaging, relevant, and easy to understand.

- **Openings and Closings**

Presenters should think about their opening and ending lines more carefully as they are the most remembered. The presenters' grasp of the material, objectives and organizational plan should be evident in the openings. Closings should be appropriate and conclusive; thus, students should come up with a catchy conclusion line.

- **Presenting the Talk**

Generally, students are not allowed to read their presentations. In fact, teachers urge them not to bring the entire written talk. Before starting, students should remain calm, take a deep breath, make eye contact with the audience, and start on a firm, clear note.

- **Overcoming Nervousness**

Once one stage, students get nervous; it is called stage fright. This may be due to poor preparation, physical appearance, fear of the teacher or audience, or fear of making mistakes. Students need to know that this feeling is normal, and it happens to everyone. They should keep in mind that the audience is made up of real people, just like them, who have come to watch and listen to the presentation. Thus, students should speak clearly and feel confident, which may be reflected in their voice and performance.

- **Grading and Offering Feedback**

Offering students feedback quickly after their presentation is just as crucial as giving them advice and tips prior to their presentation. Students should take it seriously because the oral presentation accounts for 10% of the semester's grade. Teachers should evaluate the students' topic organization, presentation, visual aids use, and answers to the different questions.

III.8-Benefits of Oral Presentations in EFL Classrooms

The most crucial goal of communicative language teaching is to produce good communicators. It is about being able to interact in real-world situations. Students need opportunities to practice their language skills in situations where they can express their ideas, needs, and opinions. Oral presentations have proven to be particularly effective in enhancing EFL students' skills and boosting their abilities to learn the language (Brooks & Wilson, 2014). In general, oral presentations effectively promote corporate success and advancement in a language class (Hedge, 2000).

III.8.1- Interaction and Class Participation

According to Girard, Pinar and Trapp (2011), oral presentations in the classroom result in enhanced class interaction and participation, increased learning motivation, and noteworthy improvements in the students' communication and presentation skills. King (2002) states that oral presentations help students bridge the gap between language study and language use. They encourage students to use the four language skills in a language class in a natural integrated manner; thus, they become active participants and autonomous learners.

III.8.2- Target Language Use

One of the advantages of having oral presentations in the classroom is that they allow students to utilize the target language to communicate with others in a natural way (Brooks, & Wilson, 2014). Participating in an oral presentation can give students with a delightful learning experience that lets them to engage with others using solely English if the activity is appropriately scaffolded. This is because presentations demand presenters to communicate an idea to one or more interlocutors using only English. One of the most essential purposes of communicative language instruction is this form of communication. Furthermore, oral presentations, particularly group presentations, provide students with an opportunity to work together on a cooperative task that requires them to use English to clarify their ideas and interpret information with a larger community of language learners while arranging and exercising their presentations (Kaur & Ali, 2017).

III.8.3- Increased Autonomy

Using presentations in EFL, classrooms foster students' control of target language learning (Apple & Kikuchi, 2007). The authors state that when teachers encourage students to prepare for an oral presentation, this gives them the chance to have complete control over both the language content and the classroom flow (Hovane, 2009). Simply because the students giving the presentation are free to choose the topic they want to discuss, the language elements they want to use to discuss that topic, and how they will explain it to their peers. This activity helps the students to decide on the materials, planning, and preparation for a class presentation. It gives learners the chance to be teachers, allowing them to complete tasks without teacher intervention. Thus, the practice of oral presentations improves learners' autonomy via the development of collaborative and interpersonal skills (King, 2002).

III.8.4- Integrating the Four Skills

According to McDonough and Shaw (1993), preparing students to give a short oral presentation to the rest of the class is an excellent strategy to integrate the four skills in the language classroom. Students must employ both receptive and productive skills while preparing for their oral presentations. Once they start planning and preparing for their research, they are obliged to read articles, books, etc. they will also have to take notes and write the gathered information, so they get good opportunities to develop their writing skills (Baskara, 2015). Students find themselves obliged to check the meaning of some difficult words, thus, improving their language. Finally, students can improve their listening skills by acting as audience members for the other groups' presentations. When the students present their work, they listen to each other, and they speak in turns. Therefore, oral presentations can motivate students to integrate the language four skills smoothly.

III.8.5- Increased Motivation

Oral presentations increase students' motivation to learn the target language. They allow students to practice their language skills and assume the role of the teacher as they try to teach their classmates (Brooks, & Wilson, 2014). The author further state that students work independently of their instructor, which allows them to see the result of their hard work as they deliver the oral report. As they do so, they develop self-confidence and self-esteem.

They also learn how to be responsible, independent and autonomous. So, they become more motivated to learn the language.

III.8.6- Improved Teamwork relations

Recent studies confirm that oral presentations improve cooperation in the classroom (Kaur & Ali, 2017). A survey conducted by Chou in 2011 shows that all the participants developed stronger teamwork relations while working on their oral presentations, enhancing their motivation to learn the language. Another study by Yang (2010) claims that the majority of the participants who worked on their oral presentations spent more time together as a team before the presentation rehearsing and discussing matters.

When working on their oral presentations, students need to go through different steps together. By planning, preparing, sharing ideas, negotiating matters, explaining to each other and supporting one another to achieve team goals, they learn how to be careful listeners and confident speakers. They interact with their peers, so they develop essential social skills. Students can learn not only from their own and other students' studies but also from observing the strengths and faults of other speakers in order to improve their communication and presentation skills. These cooperative steps build trust and care among members and minimize competition; thus, strengthen their relationships.

III.8.7- Good College Achievements and Future Carrier opportunities

Živković (2014) claims that oral presentations increase students' abilities to perform well in college and may help them find better jobs in the future. Once in college, students are more likely to be requested to present their research in front of an audience (Bruce, 2011). Therefore, they must be proficient in oral communication and presentation skills to perform effectively in the professional setting (Živković & Stojković, 2011). Furthermore, developing good oral presentation skills improves students' higher academic achievements and employability as they engage in discussions and prolonged reasoning (Morley, 2001). They allow students to actively participate in their college learning, demonstrate their communication skills, and help them develop competencies in a field relevant to their future employment (Živković, 2014).

Because many possible future job opportunities place a high value on students' communication skills in a presentation class, oral presentations can be useful to

students' future careers. Employers nowadays are searching for people who can give formal presentations and are capable of presenting their ideas and needs using the English language. Thus, students can practice skills that are required for the workplace by giving oral presentations.

III.9- Issues with Using Oral Presentations in EFL classrooms

Despite the various advantages of employing oral presentations in the language classroom, educators and students see it as one of the most difficult academic assignments. There might be some drawbacks, particularly if the presentations are not implemented appropriately in the classroom. Several studies have documented the difficulties students encounter when presenting oral presentations (Otoshi and Heffernen, 2008; Bankowski, 2010; Kaur and Ali, 2017).

III.9.1- Language Deficiency

In oral presentations, language deficiency is one of the most challenging element for EFL learners. Once they think that their presentation is going to be in English, low achievers get anxious and terrified. For sure, innate ability plays a role in performing a good presentation; yet, the more the presenter works, the better the speaker becomes. Lack of linguistic competence, according to Weisseberg (1993), is one of the obstacles that students face when presenting their work orally. Huang (2006) states that most of the participants switched to their mother tongue when explaining their work to the class due low level in the language, which affected their presentation. If the assigned work is beyond the students' English language abilities, they will not be successful in their presentations.

III.9.2-Anxiety

Another problem that EFL students face when delivering an oral presentation is anxiety. Most students suffer from nerves prior to performing in front of an audience. While some Shake and shiver, others experience butterflies in the stomach, dry mouth, quick heartbeat, and a squeaky voice once they are on the stage. All of these are common symptoms of speech anxiety. This may result from students' self-perceptions of inadequate English language proficiency (Radzuan & Kaur, 2011). Their poor knowledge of the topic and low linguistic competence make them feel unprepared or uncomfortable when asked to give a presentation,

which raises their anxiety level. Besides, lack of academic and research preparation among students contributes to increased anxiety in oral presentations (Otoshi & Heffernen, 2008).

III.9.3-Lack of Confidence

Most EFL students lack confidence when performing a speech in English on stage. They start to panic and lose control, which will negatively affect the result. They feel insecure about speaking in front of a live audience. They are afraid of being questioned and cannot find immediate answers to their questions. According to studies, students find it challenging to engage in debates with the audience; they feel under tremendous pressure and stress because of the presence of experts (Kaur and Ali, 2017). Furthermore, some learners fear making pronunciation errors when presenting their work. This may be due to the difference in sound systems between their mother tongue and the English language or the influence of their first language on the target language (Bankowski, 2010).

Due to a lack of Confidence, the presenters may choose to read from papers, slides or rely too heavily on their notes. For the audience, the presenters seem OK; however, it may not always be clear from the outside that they have confidence issues.

III.10-Assessing Oral Presentations

Students can present their results in the form of oral presentations that are considered a type of assessment that requires them to express their knowledge and understanding of a topic through speaking the target language. One of the presentations' main goals is to assist students in developing and improving their communication skills. In everyday life, students must be able to communicate technical or numerical data; they have to explain and describe statistical methods and results, which is a skill rarely assessed in school curricula. It allows students to present their research and a variety of cognitive, verbal, nonverbal, and other social skills. In addition, oral presentations provide students with valuable opportunities to practice skills they will need in the future. Students can show their knowledge and ability to explain information and interact with an audience (Dryden, Hyder & Jethwa, 2003).

According to Race and Brown (1998), Assessors should be explicit about the goals of student presentations. For example, the main goal could be to improve students' presentation skills or to motivate them to conduct research and reading to increase their topic knowledge; several of these elements may be present simultaneously.

Assessing students' oral proficiency is considered a complex task because, according to Brown (2001), speaking has more language features than other skills. As a result, grading those aspects on a single sheet of a rubric is challenging for the teacher. The criteria of the student's ability in each language feature in speaking skills should be detailed in the rubric. The criteria's purpose is to make everything clear for both students and teachers. Students are able to understand what the teachers expect of them in terms of their English speaking abilities. The criteria are also beneficial to teachers because they outline the aspects that should be graded.

III.10.1-Rubrics

Rubrics have long been used to help students and academics evaluate each other's work. Brookhart (2003) defined rubrics as descriptive scoring scales with clear explanations of the success criteria. They have been employed in situations when it is required to make judgments on the quality of the job performed.

Rubrics are grading tools that specify product or performance standards (Bender, 2012). They must be sufficiently detailed for students to understand what is expected of them once they have investigated a topic or solved a problem. It is also critical to collaborate with other teachers and even learners to prepare for the rubric before starting the project (Bender, 2012). Rubrics simplify and allow teachers to assess students objectively, and they should include criteria for both individual and group grades (Clark, 2017).

III.10.2-Designing Criteria for Oral Presentations

According to recent research, teachers should construct a set of criteria to be addressed during the assessment process. In general, the higher the number of criteria from which to choose, the more likely the assessment will be objective and precise. One way to achieve this is to break down oral performance skills into sub-skills that need to be evaluated and discuss them one at a time (Brown, 2004). So, when teachers make a list of criteria, they can ensure objectivity.

Brown et al. (1997) go over the several types of criteria that can be used to evaluate oral presentations. The following are some examples of criteria:

- Format of the presentation
- The presentation's clarity
- Presenters’ enthusiasm
- The presentation's appeal

Teachers also provide examples of extended checklists. Each scale assesses both performance factors such as fluency and audience involvement, as well as content, focusing on argument clarity and evidence utilization (Dryden et al., 2003). Brown (2004) also emphasizes the necessity of discussing the criteria with students prior to the presentation's preparation and the importance of providing performance feedback rather than just a grade. They suggest that this allows students to feel safe enough to take chances and hence improve their performance in future presentations.

Researchers have developed a variety of criterion lists; however, Knight's list (1992) is the most extensive yet accessible. Teachers can choose the criteria based on the objectives of the assessment. The author included language skills such as grammar, vocabulary, pronunciation, and fluency; content and conversational skills; sociolinguistic skills; and non-verbal skills.

III.10.3-Peer Assessment

Peer assessment adds another advantage to oral presentations. It is supposed to empower students and contribute to deeper learning and self-reflection when it is appropriately implemented (Langan et al., 2005). It also helps students to take an active role in their own learning and improves the development of students' higher-order cognitive skills (Hristova, 2014).

Teachers do not always see everything that happens in a group. Peer assessment, according to Bender (2012), does not have to be done at the end of a project; it can also be helpful if done throughout the process, allowing teachers to respond with individuals or the team as needed in order to reduce the friend effect.

An oral presentation's formative peer assessment offers presenters with rapid feedback. While this form of assessment may not be as accurate as comments from an experienced academic, it allows both the presenter and other students to build a sense of what constitutes a good presentation, which may be used to contrast with their own work if given immediately after the presentation (Gibbs & Simpson, 2005). The gap in grades between students and academics can be narrowed if students are given precise and clear standards to assess. If peer evaluation is to be used in addition to teacher assessment, it should be formative in character, at least until it becomes a routine component of the curriculum at all institutions and students are fully trained in how to engage in the process (Falchikov & Goldfinch, 2000).

Peers can evaluate presentations on both content and delivery. Peer response helps each student to know how well he or she communicated with his or her target audience. Students

can also benefit from one another's presentation abilities; thus, they become good listeners (Hall, 2007).

Hall (2007) advises teachers to make ground rules for peer answers as a class. Student participation creates a collaborative approach in which students feel comfortable giving and receiving critiques. They should also set time limitations as well and make enforcement a group effort. The author suggests that students should be asked to take notes on the content and delivery of each presentation and use them during the class discussion after the presentations. And when students present orally, teachers should integrate peer answers in the evaluation to provide each learner with a better picture of how well they communicated with their audience. Those answers can also assist students in learning from one another's public speaking abilities and encourage the entire class to participate in active listening.

III.10.4-Self-Assessment and Reflection

It can be difficult to have a student determine his or her own grade on a numerical scale (Bender 2012). However, self- assessment is crucial because it allows students to self-adjust their learning. As a result, they can give teachers an idea of how they feel about their own participation. This type of assessment should also be done during and at the end of a project (Bender 2012). Allowing students to reflect on various aspects of the PBL project can aid in developing questions and creating a more clear vision. Students, for example, can reflect on the driving question or how their planning sessions went, providing teachers with a sense of where the group is headed (Bender, 2012).

III.10.4-Valid and Reliable Assessment

When it comes to assessment, two terms need to be defined more thoroughly, validity and reliability. First, Brown (2004) describes validity as an effective test's most difficult and crucial condition. The author explains that a valid test performs the function for which it was created or intended. If, for example, teachers want to assess students' speaking skills, they should focus on that speaking rather than others.

Another important part of an effective assessment is reliability, which is defined as a level of consistency. In other words, a test is considered reliable when it delivers consistent results when used multiple times (Brown, 2004).

Conclusion

EFL teachers worldwide are trying to make their lessons more communicative. This is accomplished by encouraging students to think beyond the compulsory textbook and use language creatively, meaningfully, and interactively. One technique to improve EFL students' speaking ability is to give an oral presentation. Oral presentations are student-centred, meaningful activities intended to improve students speaking skills and make them active participants in learning the foreign language. They are a type of assessment that requires students to demonstrate their knowledge and understanding of a given subject through the spoken word. It permits the students' research as well as a variety of cognitive and transferrable skills to be captured. However, Most EFL teachers and learners find it challenging to incorporate oral presentations into their classrooms because they necessitate a large amount of class time and organization. Despite the challenges of employing presentations in the language classroom, we believe they may be beneficial activities in helping students enhance their language four skills, develop creativity and confidence, and make them responsible, independent and autonomous individuals. Thus, student presentations play a critical role in providing pleasant learning experiences in 21st-century language classrooms. Therefore, instructors must appropriately introduce and teach the numerous macro and micro-level skills required in giving a successful oral presentation.

Chapter IV

Research Design and Methodology

IV.1-Introduction

Most secondary school learners seem to have difficulties in doing their school English projects. They have a severe problem, especially with presenting projects orally. Most of them choose to copy information from one site, read it and hand it to the teacher. As a result, they perform poorly and get low scores.

This experimental study has been carried out to investigate the effects of GI on the learners' oral project performances, and to develop remedial techniques and improve the pupils'academic achievements. Simply put, this study investigates the effectiveness of a cooperative teaching modal suggested to the experimental group during project work sessions, while the control group is taught the same content in groups but following the traditional way.

We will try to answer the following question using this new modal: Is it true that GI improves pupils' oral project performances? This chapter is a complete account of the instruction identifying the different steps of the research design. It describes the methodology, explains the selection of the sample, describes the procedures used in the research experiment, and explains the statistical methods used to analyze the data.

IV.2-Methodology

For most researchers, selecting an acceptable study methodology is one of the most challenging and perplexing things they encounter. There are various methods and designs for conducting research. The researcher can use various research methodologies, including experiment, survey, case study, action research, and grounded theory based on the research questions, research objectives, available time and resources, sample, and the philosophical underpinnings of the researcher (Ahmed, Opoku, & Aziz, 2016).

Our research's primary goal is to evaluate and verify our hypothesis, which looks into the efficiency of the Group Investigation cooperative learning model in improving pupils' project oral presentations at Elhachemi Bouzidi Secondary School, Khenchela. Shadish, Cook, and Campbell (2002) define an experiment as "a study in which an intervention is deliberately introduced to observe its effects" (Shadish, Cook & Campbell, 2002, p. 12). Like a true experiment, a quasi-experimental design tries to prove a cause-and-effect link between an independent and dependent variable; however, it does not rely on random assignment. Subjects are instead divided into groups depending on non-random factors. In our case, since the administration assigns the groups, we say that the groups are not random.

They may differ in other ways; they are nonequivalent groups. So a quasi-experimental design is used to gather data to illustrate the effects of one variable on another and show the cause and effect relationship of these variables.

Moreover, we decided to incorporate the ideas and viewpoints of our subjects (teachers, pupils, and the Inspector of National Education) through the use of teachers' and pupils' questionnaires and the Inspector's interview into the inquiry. This can be accomplished more effectively by conducting a descriptive study to learn about the current teaching/learning of project work in secondary schools. At the end of the treatment, we wanted to determine the pupils' attitudes towards the new method using an attitude scale. Therefore, we can conclude that our study necessitates using two methods: descriptive and quasi-experimental.

IV.3-Population and Sampling

According to Ahmed, Opoku and Aziz (2016), the population is "the total number of members of the group that the researcher is interested in studying " and a sample is "a subset of the population that is usually chosen to serve as a representation of the views of the population." (p,36-37). Due to time, money, and other resource constraints, it is impossible to examine the entire population.

The experimental study took place at Bouzidi Elhachemi Secondary School, Khenchela.The entire population consisted of (102) pupils, but only two groups of second-year pupils (scientific stream) were involved during the academic year 2019/2020. The sample is a total of 42 pupils. Both the Control and the Experimental Group consist of twenty-one (21) pupils. Their age range varies between 16 and 18. The main reason for the choice of second-year students was based on the fact that they are neither beginners nor advanced learners, and they have already been introduced to both project work pedagogy and cooperative learning in their first year.

Moreover, there are only two classes of second-year scientific stream in the researcher's school, one class Gestion Economic and another class in Literature and philosophy. We opted to work with scientific classes as we cannot compare students' performances in different streams. The experimental group receives the experimental intervention of interest, whereas the control group does not.

The teachers' and pupils' questionnaires were constructed using Google Forms. We placed a link to the teachers' questionnaire on a social media network so that it can be shared,

and to attract a wide range of respondents from all over Algeria. For the pupils' survey, a link to the author's school website was placed, with a simple invitation for pupils to fill it in. Fifty (50) teachers answered our questionnaire from nine (9) different cities, Annaba (5), Biskra (8), Chlef (5), Guelma (2), Khenchela (15), Oum Elbouaghi (7), Skikda (3), Tlemcen (4), and Ain Mlila(1). The second questionnaire included fourty four (44) pupils of different levels: 1st year (13), 2nd year (25), and 3rd year (06) who study at Elhachemi Bouzidi Secondary School, Khenchela.

Due to social distancing procedures, we have conducted a virtual interview with our Inspector of National Education Mr. Hadid Med Elkamel using Zoom Platform.

IV.4-Research Variables

In a cause and effect study, the variables are called Dependent and Independent.
The independent variable (I.V) is the cause or the specific study "intervention" or prediction variable (Shadish & et al., 2002). It is thought to impact the dependent variable. The dependent variable (D.V), however, is the primary research "outcome" or result that is being measured (Ahmed & et al., 2016).

In the present study, the independent variable is Group Investigation cooperative learning model, and the dependent variable is pupils' project oral presentations.

IV.5-Data Collection Techniques

Data collection techniques are tools used to gather and measure information on variables of interest that allows the researcher to answer the research questions, test the research hypotheses, and evaluate the research results. There are various research data collection methods available for research design, including interviews, focus groups, discussions, observation, photography and video, surveys, and questionnaires (Naoum, 2012).

In this study, We used various data gathering tools due to the subject under inquiry and mixed research methods (descriptive and experimental designs). Being an English teacher in the participants' secondary schools allows us to maintain constant and easy contact with the target population. For the descriptive study, we designed two questionnaires for EFL secondary school teachers and pupils ,and we conducted an interview with Inspector Hadid.

We used learners' project oral presentations scores before and after the treatment to gather data about their progress. We also used a pre-test for both groups before the experimental treatment under the same conditions, then a post-test after exposing the

(Exp.G) to the treatment. A T-test was used to get evidence for the treatment's effectiveness and thus to test our hypothesis.

Finally, an attitude scale was used to determine the attited of the experimental group's participants towards Group Investigation Model.

IV.5.1-Pilot Questionnaires

In order to identify and emphasize unclear questions or instructions, it is essential to test or pilot any questionnaire on a small sample of the intended population before distributing it (Oppenhein,1992). Therefore, prior to distribution, both teachers' and pupils' questionnaires were piloted with the help of five English teachers from two different secondary schools in Khenchela and the inspector to determine the readability of the questions. As a result of this pilot study, some questions were adjusted, and others were clarified by adding additional brief explanations to aid teachers and pupils in comprehending each part.

IV.5.2-Photography and Video

The researcher used photographs and recordings of the pupils' project oral performances, which necessitated a camera. Photography and video have many advantages; they let the researcher record behavior in its context, allow for reflection, informants, coding, and the presentation of the action or scenario (Basil, 2011). Thus, Each group of students was to be recorded by the researcher. The researcher took photos and video recordings from the pre-test until the post-test as they were crucial as evidence and to support the data. The data gathered was utilized to analyze and reflect on the study outcomes.

IV.5.3-Project Oral Presentation Assessment Rubric

To determine how well our pupils' project oral presentations have improved after being treated with the Group Investigation model, we employ a rating rubric that aims to determine how well our subjects accurately deliver their messages using a good posture and straight eye contact, proper grammar structure, pronunciation, and vocabulary. We also want to know how well they can employ visual aids in their presentations and how easy it is for them to cooperate with their peers. As a result, we employ the scoring rubric below, which focuses on the following five scopes: Nonverbal skills, Language Use, Content, Visual aids, and contribution to the groupFive aspects should be assessed: non-verbal skills, language use,

content, visuals, and contribution to the group. Each element has its criteria. We selected twenty (20) criteria to be evaluated and graded from (0 not achieved to 1 achieved). The rubric immensely helped the teacher effectively monitor and assess the pupils' learning acheivements.

a-Non verbal skills

The ability to use appropriate movements, eye contact, posture and voice volume when presenting the findings.

b-Language Use

The ability to use correct grammar structures, vocabulary, pronunciation. It also deals with the pupils' fluency and speech coherence.

c-Content

The ability to share organised knowledge about a given topic, using different resource materials and finally answer questions on the topic under investigation.

d-Visual aids

The ability to use pictures, data show, tablets, mobile phones, slides, etc when presenting the findings.

e-Contribution to the group

The ability to interact within the group, interpret the findings in a friendly, respectful manner, and solve the problems during the cooperation.

Table 4.1: Project Oral Presentation Rubric Developed by the Researcher

Evaluation Criteria (C)		Achieved (1)	Not Achieved (0)
Non Verbal Skills	Body Movement/Gestures	Movement seemed fluid and helped the audience visualize	Very little /no movement or descriptive gestures
	Eye Contact	- Holds the attention of the entire audience with the use of direct eye contact	Minimal/No eye contact with the teacher or the audience
	Posture	- Maintains a good posture, stands straight with shoulders back, arms open, relaxed	Head is pushed forwards, arms crossed or put in the pockets, tension
	Poise	- Displays a relaxed, self-confident nature, nature about self with no mistakes.	Tension and nervousness is obvious/ has trouble recovering from mistakes
	Voice/Volume	- Uses a clear audible voice. -use of fluid speech and inflection -maintains the interest of the audience	- Displays some level of inflection/ consistently uses a monotone voice
Language Use	Grammatical Range and Accuracy	-Produces a majority of error-free sentences with only very occasional inappropriacies or basic/ non-systematic error.	Multiple grammar errors/ cannot produce basic sentence forms
	Lexical Resource	- Uses appropriate vocabulary for the purpose and the audience	Use of inappropriate vocabulary
	Pronunciation	- Uses correct pronunciation	Mispronunciations are frequent/ speech is often unintelligible
	Fluency	- Speaks fluently with only a few repetition or self-correction	- Pauses lengthily/ little communication possible.
	Coherence	-Speaks coherently and uses a range of connectives and discourse markers appropriately.	-Has limited ability to link simple sentences/ frequently unable to convey the message.
Content	Subject Knowledge	-Shows knowledge in areas related to their chosen topic	-Poor, limited knowledge in areas related to the topic
	Organization of the Topic	- Presents information in a logical interesting sequence with a beginning middle and end.	- Jumps around and the audience cannot understand because there is no sequence.
	Sources and Relevance of Material	-An appropriate amount of material is prepared, and it is relevant to the overall purpose	-Irrelevant source /material for the speech topic
	Response to Questions	- Answers all the teacher's and their peers' questions correctly - appears eager to answer questions	-Does not really answer the questions.One individual answers all questions ignoring other team members in responses.
Visual Aids	Data Show-Slides-Videos-Pictures	- Uses visual aids that are well prepared, informative, effective, and not distracting/	- Uses no visuals the learner spoke to the audience
Contribution to the Group	Participation in Investigation	- Participates with other team members in the inquiry to find solutions to the problem	- does not participate in the investigation with his/her peers - Depends on other team members to do the inquiry.
	Interaction and balance in the Team	-Interacts well with his /her peers -understands his/ her responsibilities and takes his/her role in the team	- has communication/ interaction problems with his/her peers -Does not take the assigned responsibility within the team/ no role is performed.
	Interpretation	-Makes effort to give meaning to the data gathered by him/her or peers to improve his/her comprehension of the topic under study.	-Does not make effort to interpret the data collected. -Depends on other team members
	Preparation/Rehearsal	-Prepares/practices/rehearses continually and repeatedly with his/her peers	- seems unprepared -No contact with his peers prior to the presentation
	social skills	- Communicates effectively with group members, friendly, respectful, active listener, manages to solve problems within the group	-Has difficulties socializing –has problems in communicating and accepting others' ideas and viewpoints

IV.6-Statistical Analysis Procedures

The researcher adopted the experimental design. She employed a variety of statistical approaches that were appropriate for the study's nature. The research data were collected, coded, entered into the computer, and analyzed using the Statistical Package for Social Sciences (SPSS). The researcher also used the following:

1. Cronbach's Alpha and Split-half (Spearman-Brown and Guttman) techniques to measure the reliability of the rubric as well as the pupils' Likert scale.

2. T. Test independent samples to measure the statistical difference in means between the Experimental and control groups' achievements in pre and post-tests.

3. T-test Paired Sample to measure the differences in developing learners' project oral presentations between the pre-and post-tests of the experimental group and the control group.

4. T-test One sample to measure the pupils attitudes towards the new methodology.

IV.7-Pilot study: Research Validity and Reliability

The project oral presentation rubric was applied on a random sample of (10) second-year pupils Literary stream from the same secondary school who have the same characteristics as the study sample and who experienced and learned the same target skills through the traditional method. The results were recorded and statistically analyzed to measure the rubric validity and reliability. The items of the test were modified in light of the statistical results.

IV.7.1-The Validity of the Test

Any test that measures exactly what it is designed to measure is valid (Al Agha, 1996). The researcher used content validity and construct validity.

a-Content Validity

The content validity determines if the test accurately reflects all construct facets (Izard, 2005). Hence, the content of any test or measurement technique must include all relevant parts of the subject it wants to measure, and the validity is threatened if some aspects are missing or are irrelevant.

The primary way for determining if a test has content validity is expert judgment (rather than statistics) (Izard, 2005). Thus, The research rubric was introduced to a jury of experts and experienced teachers in English language and methodology in different Secondary schools in Khenchela as shown in the table below. The researcher modified the items of the test according to their recommendations.

Table 4.2: Referee List

Experts	**Institution**	**Years of Experience**
Inspector Hadid Mohamed Elkamel	Ministry of National Education	32 years
Mrs. Belarbi Latifa	Djbaili Salah Secondary School, Khenchela	30 Years
Miss Ghanem Aicha	Khaldi Mamoun Secondary School, Khenchela	20 Years
Mrs. Benyoucef Samia	Bouzidi Elhachemi Secondary school, Khenchela	20 years
Mr. Lechkhab Salah	Chihani Bachir Secondary School, Khenchela	29 years
Mr. Boulouize Mubarek	Chihani Bachi Secondary School, Khenchela	26 years
Miss Sebaa Wahiba	Bilal Ibn Rabah Secondary school , Chachar, Khenchela	15 years
The researcher	Bouzidi Elhachemi Secondary School, Khenchela	10 years

B-Construct Validity

The construct validity of a measurement tool determines whether it accurately represents the thing we are interested in measuring, and it's crucial for determining a method's overall validity (Herbert et al.,1989).

Table 4.3 shows that all the axes are positively correlated with the overall score of the research rubric and this link has a statistical significance at the level (0.01) for the non Verbal skills, Language use, and Contribution to the Group, where the significance (Sig) of these axes is lower than (0.01).Content and Visual aids are also related to the overall score of the rubric at the level (0.05) where the significance score (Sig) is less than 0.05. Since all axes are related (a positive correlation), the rubric has a high construct validity that allows its use in data collection.

Tabel 4.3: Construct validity of the test

Criteria	Correlations With Project Oral Presentation	Sig	α
Non Verbal Skills	0.813**	0.004	0.01
Language Use	0.969**	0.000	0.01
Content	0.717*	0.020	0.05
Visual Aids	0.706*	0.022	0.05
Contribution to The Group	0.865**	0.001	0.01

IV.7.2-Reliability of the Test

Reliability is the consistency of the instrument (Mackey & Gass, 2015). It makes a learner receive the same high score on a subject test if he retakes it. When a test is reapplied in the same settings and yields the same results, it is reliable. The researcher used Cronbach's Alpha and Spilt-half procedures to assess the test's reliability.

a-Cronbach's Alpha Reliability

The table shows that the value of Cronbach's Alpha is 0.910, which is higher than (0.7), and it, therefore, indicates a high reliability of the test that makes it appropriate for data collection.

Table 4.4: Cronbach's Alpha procedure

Reliability Statistics	
Cronbach's Alpha	**N of Items**
0,910	20

b-Split-half

The reliability of the test was measured by calculating the length correction value using Spearman-Brown and Gutman coefficients**.**

As clearly shown in **Table 4.5**, the length correction value in the Spearman-Brown equation for the split-half coefficient is (0.873), and in the Guttman coefficient is (0.867), which is higher than (0.7). Thus, the rubric is reliable to be applied in the study.

Table 4.5: Split-half coefficient

Reliability Statistics			
Cronbach's Alpha	**Part 1**	**Value**	0,832
		N of Items	10[a]
	Part 2	**Value**	0,855
		N of Items	10[b]
	Total N of Items		20
Correlation Between Forms			0,774
Spearman-Brown Coefficient	**Equal Length**		0,873
	Unequal Length		0,873
Guttman Split-Half Coefficient			0,867

IV.8-Research Procedures/ The Project

In the current study, the researcher used a pre-test and a post-test to measure the learners' performances and improvement in presenting their projects orally.

The pre-test was introduced before any GI CL modal instruction was given, and the participants were not told about the study. They assumed it was just another project presentation session. The purpose of the pre-test is to assess their project work performance. It lasted one hour and took one session of regular English classes.

A complete description of the various stages of the experiment, including the pre-test, the treatment, and the post-test, will be found in this section. We can assume that second-year pupils who are taught project work through GI would improve their oral project presentations.

Thus, to explore the effect of the independent variable, which is "GI" on the dependent variable "learners' project oral presentations," we go through the following stages.

IV.8.1-The pre-test

The English coursebook (Year Two) is organized into eight units. Each unit speaks about a specific topic suggested by the curriculum designers. In each unit, the learners will have to develop competencies through the tasks and activities proposed, which gradually

lead to the building of the project that is going to be the last part of the unit (Riche et al., 2011).

After selecting the sample of the study (Exp. G & CG), the teacher starts introducing the first unit " **Peace and Conflict Resolution: Make Peace"**. The teacher also launches the project of the unit in the same session which is about "**Noble Peace Prize Winners**" and divides learners into small groups of (4-5) pupils each to prepare their projects to be presented at the end of this unit. The teacher uses the same traditional method that she used to follow when teaching projects. On November 3rd, 2019 (after 8 weeks from launching the project), pupils present their work to the class. The teacher then used the project presentation rubric to evaluate learners' presentations and graded them from (0 not achieved to 1 achieved). The scores of both groups are taken as pre-test results.

IV.8.2-The Experimental Group

GI Cooperative Learning Model is incorporated within the regular "project work" course for the experimental group. The teaching materials that the researcher used are according to the Ministry's Program. When implementing GI model in Project work, the groups are constantly guided by the teacher (the researcher) from the beginning till the end of the process. In this study, the application of GI in the experimental group was as follows:

IV.8.3-The Experiment

Before launching the second unit, **" Waste Not Want Not,"** and implementing the GI model in its project to the Exp.G, the teacher has presented short lessons speaking about cooperative learning, explaining GI modal, its essential elements, and the learners' role in their cooperative groups. Moreover, pupils have received a handout that describes cooperative learning (see **Appendix "E).** So, the first two sessions of the experimental design are devoted to training the GI cooperative learning model.

a-Stage One: Class Determines Subtopics and organizes Into Research Groups/ November 6th, 7th, 2019

Once the pupils understand, from the training phase, the nature of working cooperatively using GI model, they progress through six important stages.

The first stage lasted two teaching sessions. The researcher introduced the investigation: "**Waste Not Want Not means** if we use a commodity or resource carefully, and without

extravagance, we will never be in need. This means that we should not miss using the things now that we might need later on."

Waste Not: The teacher also asked pupils to list the things that we are often advised not to waste. Pupils suggested the following: “water, food, plastic, paper, electricity, wood, iron, plants, animals.” After ten minutes of discussion, pupils say, "These are natural resources that should be used with care because we will be in need later on as these natural resources are about to end."

Want Not: The teacher writes the following question on the board: "What are the problems that we might face if we do waste these natural resources?"

Cooperative Planning: The teacher explained that the class would break up into groups, with each group investigating one problem. Before they formed study groups, the learners suggested questions for the investigation. The process began with pairs writing down what they wanted to investigate. Ten minutes later, two pairs exchanged their lists, adding and deleting questions when discussed. Ten minutes later, each foursome read its questions to the class, and the teacher wrote them on the board. By the time the last foursome reported, there were few additions to be made. The final list consisted of six questions:
1-What will happen if we overhunt animals? Many animals will be Extinct

2-What will happen if we cut trees? This creates a deforestation problem

3-What will happen if we use too much electricity? There will be more CO_2 in the air which will lead to pollution.

4-What will happen if we waste food? We will suffer from a food shortage

5-What will happen if we misuse water? We will face a water shortage

6-What will happen if we through/waste plastic and paper? We will have more rubbish which will cause pollution

The teacher then limited the list and wrote the five problems on the board:

- **Overhunting**: What is it? What are its causes and effects? How can we solve the problem?
- -**Deforestation**: what is it? What are its causes and effects? What can we do about it?

- -**Pollution:** What are its types? What are the causes and effects of each type? How can we reduce it?
- -**Food Shortage**: What is food shortage? What are its causes and effects? How can we deal with it?
- -**Water Shortage**: What is water scarcity? What are its main causes and effects? How can we preserve our water resources?

Each pupil was assigned to a study group based on his or her areas of interest. There were four pupils in each group. The teacher led the class in a discussion on where to find appropriate source materials near the end of the course. She informed them of the books in the school library that they may borrow, and asked them to prepare a list of source materials for the next stage.

-The Teacher's Role

The teacher served as both a leader and a facilitator at this stage. The teacher, as the facilitator of this exploratory stage, encouraged pupils to express a variety of interests and points of view. she did not impose suggestions but rather assisted pupils in determining the components of the investigation by inspiring rather than dismissing their questions. As the investigation's facilitator, the teacher could decide and clarify which questions were more relevant to the topic.

The teacher helped pupils become more conscious of what attracted them to the topic and what they wanted to learn more about. The invitation to inquire yielded few questions during the first effort at Group Investigation. At this point, the teacher accepted even the small number of reactions and used them as the foundation for completing all phases; regardless matter how minimal their content was, she was honoring the implied promise to build the inquiry on the pupils' questions.

-Learners' Roles

At this stage, pupils got the opportunity to exhibit their personal interests as well as discuss thoughts and opinions with their peers. Each pupil had the opportunity to learn about what interested him or her the most about the overall issue, as well as what others were interested in. They formulated questions on their own and in groups, organized them into categories, and decided which subtopics would be researched. Finally, pupils selected the subtopic they wanted to research and established groups based on shared interests.

During this stage, pupils interacted with one another to develop their active participation in making judgments and choices that influenced the components of their study. We believe that if two classrooms investigated the same broad issue with adequate time to develop questions, the subtopics would not be identical. Each class would create subtopics that reflected the members' individual interests and preferences.

b-Stage II: Groups Plan Their Investigations: November 10th, 2019

At this stage, pupils reviewed the study questions, brought all the source materials, and planned how to divide the questions and the source materials among team members. They also listed different websites, books, articles and decided what they would investigate together in class and what they would work on individually at home. The teacher provided them with a planning worksheet (see appendix F) to fill in their research topic, group members' names, the role of each member, what do they want to find out, what are their resources. Groups had to choose a coordinator, a recorder, and a member to represent them on the steering committee. The teacher created a messenger group for the pupils of the class. She asked the coordinator of each group to contact her and send the source materials that they want to use in their investigation. By the end of this stage, each group had filled out two copies of the planning form, one for their teacher and one kept by each group's chairperson.

-Teacher's Role

When the teacher was circulating among the groups, she could see whether any groups were having trouble cooperating, and she offered assistance to individuals who require it. One of the groups was dissatisfied with their original strategy. The teacher did not force them to stick to their uninteresting plan. Instead, she debated alternatives and assisted them in refocusing their aim and developing more realistic plans. She also provided assistance in selecting appropriate resources, including books, articles, and websites.

Alternatively, the teacher drew attention to a book or article that group members have neglected. Some groups required more immediate assistance than others. A member of one group was reticent to communicate his interests. The teacher talked to the learner for a few minutes and offered reassurance and support in an attempt to pull him out. The teacher encouraged pupils to prepare a variety of strategies to investigate their subtopics. Some learners did not agree on the scope of the research, and others were not taking part in the debate, so the teacher stepped in and intervened.

-Learners' Roles

Pupils worked together to plan their projects. They decided the features of their subtopic they wished to examine and then devised a strategy for doing so. They selected their resources and determined how the assignments would be distributed. While doing so, they talked about what they think is worth looking into, where they could get information, and how to go about it. They were interacting with and listening to one another, looking for connections between their various views and interests, and decided what each of them could contribute to the group's overall strategy.

Having one member as a resource person and another as a secretary or recorder immensely helped the group arrange their work. The resource person coordinated the search for acceptable material. The recorder served to remind group members of their responsibilities and the deadline for reporting back to the group. The recorder also kept track of everyone's progress. When information was shared, and plans were developed, the coordinator (or chairperson) acted as the group's leader during group conversations. Furthermore, the coordinator invited everyone to join in and contribute to the group's efforts. The Pupils also elected one member to serve on the classwide steering committee as their representative. This committee will often meet with the teacher at the end of stage IV to plan the groups' presentations to the class.

c-Stage III: Groups Carry Out Their Investigations: November 14th, 21st 28th, 2019

Once the groups begin their investigations, the teacher does not leave them alone. She helps them when needed, provides them with source materials, encourages them to work cooperatively as well as guides them to relate both their interests and backgrounds in their work.

The investigation took up one session per week for three weeks. At this point, each class period begins with the teacher reviewing with each group what they have planned for the day. Pupils worked both at home and in school to find out more about the problem under investigation, and to gather as much information as possible from a variety of sources. A member from the steering committee contacts the teacher whenever the group needs an explanation or advice. And instead of waiting until the completion of their search, the teacher

proposed that groups pool their information at the end of each session. The teacher supported the pupils from a distance through messenger, email, and shareable Google docs.

The first group for example presented details about the various causes of water shoratge. In the group studying deforestation, for example, a group member was reading a short paragraph she had written about how the excessive cutting of trees could cause all this harm. Despite the little time provided for the inquiry, the pupils were exposed to a wide range of source materials. The group studying pollution went out to the streets and took pictures of how people throw rubbish everywhere. Another group studying food shortage interviewed people about the reasons that made them waste food especially during the holy month of Ramadhan. Another group investigating animal extinction brought some videos from National Geographic and discussed them in class. Furthermore, each group set aside some time to prepare a few questions for the teacher.

During the last hour of the third session, each group compiled all of the individual members' findings, continued to share information and compared their findings in order to find methods to apply them to the research challenge. They, finally, generated a "passport" for the topic they had researched. The passports were photocopied so that each group member could receive a copy of the answers to the problem being investigated. (see **Appendix G**).

-Teacher's Role

The teacher encouraged the groups' efforts, offered assistance, and checked if the pupils were using the printed material while pupils searched for solutions to their questions. Furthermore, pupils asked for assistance in utilizing other resources.

Different pupils required different levels and types of assistance, but the teacher discovered that most of the class had a problem. So the teacher gathered the entire class and went through the complex skill. Despite the diversity in the groups' subtopics, the teacher determined that the entire class should learn something specific. She then requested that each group include a specific section in its source list.

-Learners Roles

Pupils were investigators at this level, looking for answers to their questions from a range of sources, then organizing and summarizing what they've learned. Instead of learning about issue solving, they solved problems. Members of a group constantly coordinated their activities in order to achieve a common goal. Every learner acted as the expert in the group on a particular component of the group's subtopic, and each expert contributed to the group's knowledge. Pupils engaged in individual research and group research by discussing their results with partners and the entire class.

Their team role compelled them to guide one another and respect one another's interests. Finally, the group compiled a report that incorporated the answers to the questions they set out to research.

d-Stage IV: Groups Plan Their Presentations: December 12th, 19th, 2019

At the beginning of this period, the teacher started by having a class discussion on the many ways the groups could present their findings. She asked them to share what they had learned about the problems that each group has investigated and how to solve them. Then, they have to combine their findings and present them to the rest of the class in the form of a poster.

Each group spent time generating and exchanging ideas for their presentations. They checked grammar mistakes, pronunciation of some difficult words, and each member summarized his or her part. The teacher then met with the steering committee, and each group's representative commented on their plans for presenting their findings to the rest of the class.

Finally, the steering committee with the teacher decided that each group would put together a class poster (see **Appendix H**) in which they summarize the whole work of the group. The posters were hung on the walls of the classroom. Group representatives discussed their posters to the class one by one, and the pupils praised the clarity and appeal of each presentation. The teacher asked group members to prepare their final report during the winter holiday to ensure a better result.

-Teacher's Role

The teacher arranged and coordinated the groups' plans for their presentations at this level of the class's study. When the teacher noticed that the groups are nearing the completion of their projects, the steering committee members were called together. The committee hears each group's report. The teacher kept track of each group's requests for unique materials and kept track of the timetable. The committee members ensured that the presentation ideas are varied and precise and could be carried out with the teacher's help. Thus, the teacher served as a mentor. When needed, she assisted the committee and reminded them that each group's plan should include its members.

-Learners' Roles

The groups took on the role of "teacher" during the planning at this level. Group members shared information about their work and discussed what they did and did not comprehend throughout the process. In that sense, they have been tutoring each other the entire time. They also planned how to present the work to the class in a more orderly manner. They discussed issues of grammar, pronunciation, some complex words. They listened to one another as they organized their presentations and exchanged ideas and information

e-Stage V: The Post Test: Groups Make Their Presentations: January 8th, 9th, 2020

In the Experimental group, the day of the presentations had a festive feel about it. Pupils were so excited to present their projects. The presentation phase was done in two sessions. Two teachers of English from the researcher's school attended the sessions. A post-test was held for both groups control and experimental group, which includes assessing the pupils' project oral presentations based on the rubric developed by the researcher. The researcher also recorded all the groups' presentations, provided each group with an evaluation worksheet, preparing them for the last stage of the work (Evaluation), and asked each group's members to prepare questions based on the class presentations.

-Teacher's Role

At this point, the teacher was the group's presentation coordinator. She also sat back and joined the audience to observe how each group expressed what it thinks to be the substance of its work. The teacher started a brief discussion of the audience's reactions to what they

have seen at the end of each presentation. These observations were based on their responses to the questions that the entire class agreed on. The varied responses provided the presenters with immediate feedback on their efforts. They also showed how much the pupils related what they heard and saw to their own subtopics.

Some pupils were nervous when presenting; others felt uneasy at this point, even if the teacher assisted the groups in preparing their presentations. That is why it was vital to ensure that pupils in the audience voice their reactions while not becoming overly critical. Both pupils and their teacher agreed on these rules before the presentation stage.

-Learners' Roles

In this stage, the pupils played a variety of roles. They were, first and foremost, presenters. They organized and presented their most important findings to their classmates in the most appealing way possible. They also acted as resource people who shared their knowledge with the class.

During this stage, they represented a small group that looked into a specific subtopic. At the same time, they were part of a large group looking into a common problem. Pupils considered how clear, appealing, and relevant other students' work was. They observed how other groups presented their findings and thus expanded their own arsenal of presenting techniques. Finally, as cooperative classroom members, pupils shared their opinions in the most helpful manner possible. The presentations were both a culmination and a beginning action.

f-Stage VI: Teacher and Students Evaluate Their Projects

- **Ongoing Evaluation**

Throughout the first five stages, the teacher could develop an idea of each group's progress and level as she constantly discussed the work with the groups, demonstrating their understanding of the subject. As she circulates from group to group, she had numerous opportunities to establish reliable judgments about the pupils' goals and methods to achieve them. This also allowed her to see how successfully conversations were handled, how well everyone participated, and whether there were obstacles or problems among groups. The teacher could assess how well the pupils were explaining the subtopics they are researching and determining how much they were benefiting from the different resources available to them.

- **Individual Evaluation**

The individual evaluation was based on each pupil's oral presentation

- **Whole-Class Evaluation**

The researcher provided each group with an evaluation worksheet (see **Appendix I**) and asked them to discuss the overall presentation of the other groups. The pupils' evaluation of their peers, and the visitors' comments, served as a welcome kind of evaluation of the pupils' projects. The results were analyzed and interpreted to answer the study's central question: will pupils' project oral presentations be improved after implementing the GI cooperative learning modal (see results section).

-Teacher's Role

In reality, the teacher's job as an assessor does not begin at the end of the process. Throughout the investigation, she constantly assessed what the pupils were learning, how they interacted in groups, and individual strengths and limitations. At each level, formative evaluation takes place.

Although pupils were not graded at each stage of the research, they did not have to wait until the end of the process to know how well they were doing or what issues they were having. The teacher did not abandon the groups after they had begun their job. She was constantly there to recognize pupils' efforts, encourage them to seek solutions to their queries, and assist them as needed. In this approach, the teacher also helped pupils maintain their motivation to follow out their plans. Most importantly, the teacher clearly explained the criteria for evaluation and the means by which she chose to carry them out.

-Learners' Roles

Pupils could refine their awareness of their performance as investigators and group members during the evaluation step. During the brief but frequent evaluation sessions with the teacher, their awareness is further reinforced. They improved their capacity to reflect on how they conducted their investigation and collaborated with their peers to respond to the teacher's inquiries. They achieved this by asking questions about the topic and relevant to their interests, working together with their teammates looking for answers to the questions they set, contributing their ideas and knowledge to the group endeavor, and benefiting from their peers' contributions.

IV.8.4-The Control Group

The Control Group received traditional training in which the teacher/researcher presents the topic of the project and divides pupils into groups but does not check their progress or intervene throughout the process. Furthermore, the group has received the identical instruction (material) as the Experimental Group and worked cooperatively but following the usual teaching of projects. So there was a possibility for collaboration because the pupils were asked to work in groups. Steps in the implementation phase are as follows:

1.The teacher presents the general topic of the project

2. The teacher presents the subtopics of the project.

3. Whole class discussion of the topic.

4. The teacher assigns the groups.

5. The teacher assigns the subtopics by using a lottery system

6. Teacher and pupils discuss presentation ideas and dates.

Conclusion

This chapter has described the various steps that we went through to conduct the current study. It includes detailed descriptions of the implementation of the Group Investigation model and its stages, the pre-test, the experimental group, the control group, the post-test, and the teacher's and learners' roles.

Chapter V
Questionnaires and Interview Analysis and Discussion

Introduction

The present chapter is devoted to the analysis of the teachers' and pupils' questionnaires as well as the interview with the inspector of English. It opens with the first section that presents an examination of the teachers' questionnaire, which lays the way for a reconsideration of the significant challenges that most secondary school teachers face when dealing with student projects and answers some of the questions raised in the general introduction. Then, data scoring and analysis of the pupils' questionnaire are fully provided. Moreover, a full description, analysis and interpretation of the inspector's interview are presented in the third section.

V.1. Section 1. The Teachers' questionnaire: Results, Analysis and Discussion

Aiming to investigate secondary school teachers' perceptions of project work and shed light on their difficulties when implementing the project-based pedagogy, we constructed a web-based questionnaire using Google forms. We also wanted to investigate the different methods and strategies that teachers use for teaching projects, their perspectives on their pupils' projects presentations, how they create their assessments, and the criteria they use to score their learners' projects, as well as the difficulties they encounter when implementing the project-based pedagogy.

We placed a link to the teachers' questionnaire on a social media network to be shared and attract a wide range of respondents from all over Algeria. Teachers from nine cities: Annaba (5), Biskra (8), Chlef (5), Guelma (2), Khenchela (15), Oum Elbouaghi (7), Skikda (3), Tlemcen (4), and Ain Mlila(1) participated in this study.

The questionnaire includes five sections. The first describes teachers' general information, consisting of four items on the general overview of teachers' gender, function, qualifications, and teaching experiences. The second section lists teachers' perceptions of the position of project-based learning in Algerian secondary schools. The third section includes four items about the implementation of PBL and teachers' roles. Section four deals with teacher's challenges with the implementation of PBL, and the last section is about teachers' evaluation of the project work. At the end of the questionnaire, teachers are also invited to add any ideas or other suggestions relevant to this topic that should be explored further. Giving teachers the freedom to speak about the subject under inquiry will lead to fresh insights and raise new questions about the topic.

V.1.1-Analysis of Teachers' Questionnaire

V.1.1.1-General Information

Item 1: Teachers' Gender

The results revealed a female overrepresentation in our sample, as shown in the **table and Figure 5.1** below. We discovered that females make up most of the participants (31 teachers, or 62 percent), while males make up the remaining 38 percent (just 19 teachers).

Table 5.1: Teachers' Gender

Options	N	%
Female	31	62%
Male	19	38%
Total	50	100%

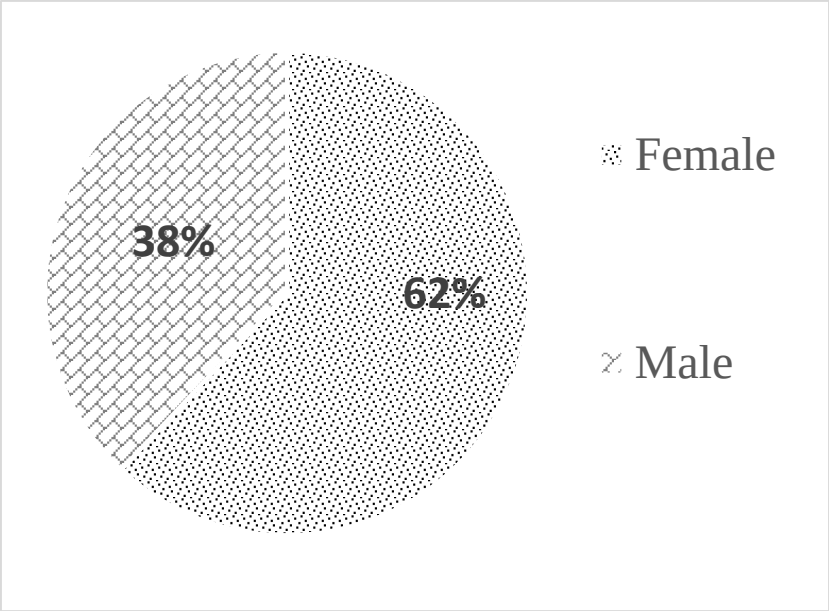

Figure5.1 Teachers' Gender

Item 2: Teachers' Function

From **Table and Figure 5.2**, we notice that (66%) of the participants are full-time confirmed teachers, (22%) are trainees, and only (12%) are substitutes. This indicates that the majority of our participants are experienced teachers who, on average, are more effective in boosting student accomplishment than their less experienced colleagues, thanks to their numerous years of classroom experience.

Table 5.2: Teachers' Function

Options	**N**	**%**
A full time confirmed teacher	33	66%
Trainee	11	22%
Substitute	6	12%
Total	50	100%

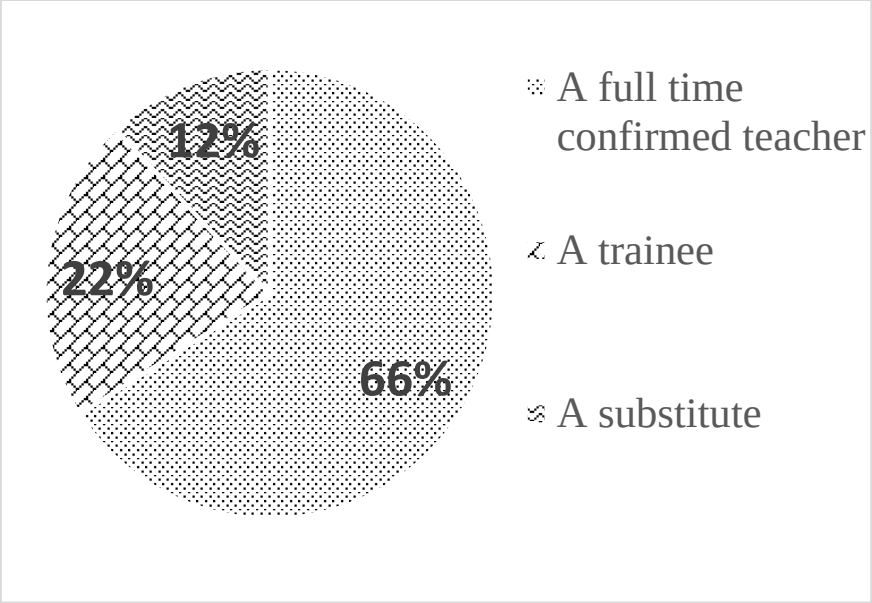

Figure 5.2: Teachers' function

Item 3-Teachers' Qualifications

According to the data shown in **Table** and **Figure 5.3**, seventeen teachers (34 percent) have a "License" degree, fifteen teachers (30 percent) have graduated from the National Superior School, fourteen teachers (28 percent) have a Master degree, while just four(8 percent) has a Doctorate. The fact that the majority of the participants either graduated from ENS or have a master's and a Doctorate suggests that they all have received the required pedagogical training to teach, so they are well-trained teachers who may have encountered new and versatile teaching techniques. This will significantly help us with a variety of viewpoints on the research study we are investigating.

Table 5.3: Teachers' Qualifications

Option	N	%
License	17	34%
ENS	15	30%
Master	14	28%
PhD	4	8%
Total	50	100%

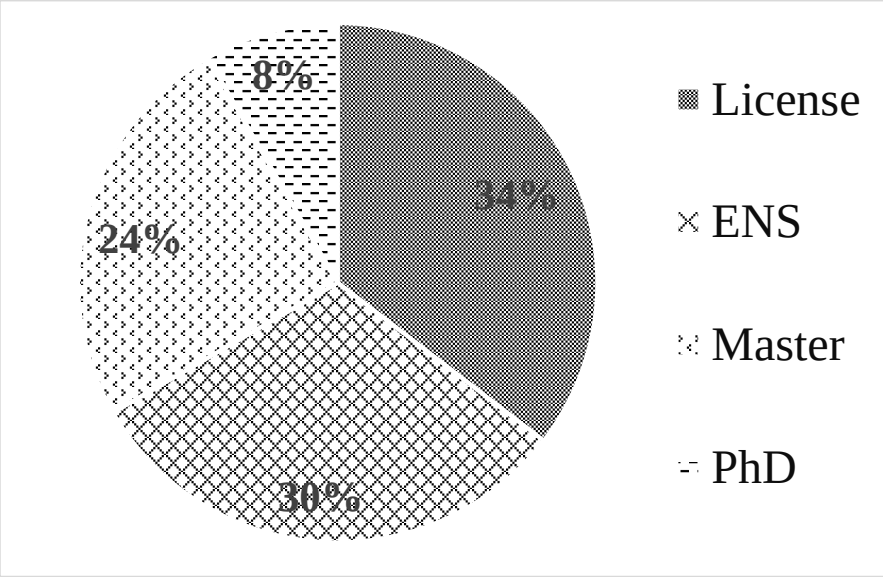

Figure 5.3: Teachers' Qualifications

Item 4: How long have you been teaching English at the secondary school level?

The data in the **Table** and **Figure 5.4** pertain to teachers' teaching experience. According to the findings in the table above, (34%) of the participants have been teaching English at the secondary school for 10 to 15 years, (26%) taught for 5 to 10 years, (24%) of the teachers tend to be newly appointed teachers or trainees. Only 16 % of our informants have been teaching for 15 or more years. These results lead us to think that there are two types of teachers: trainees and experienced. Because of the statistics, we can assume that most participants are knowledgeable, competent, and well-qualified teachers with much experience teaching English at the secondary level.

Table 5.4: Teachers' Teaching Experience

Options	N	%
1-5 years	13	26%
5-10 years	12	24%
10-15 years	17	34%
15-20 and more	8	16%
Total	50	100%

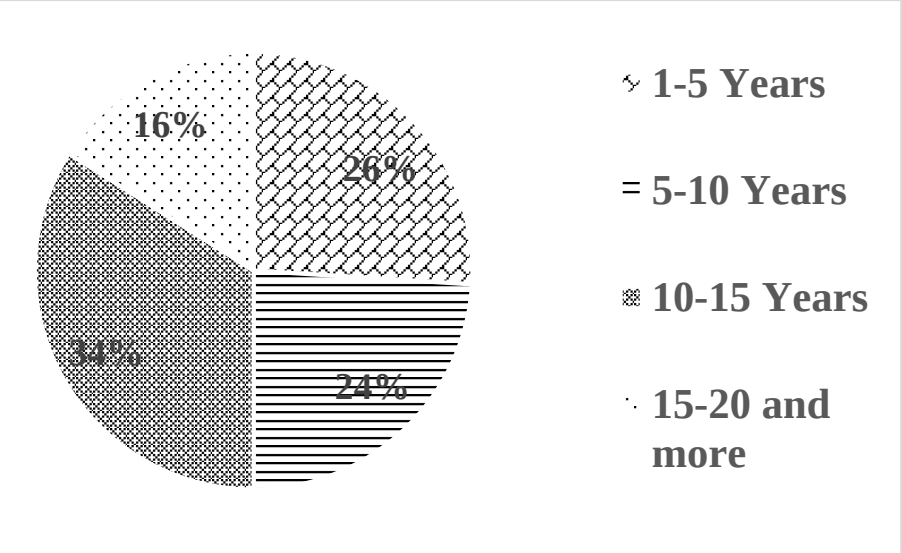

Figure 5.4: Teachers' Teaching Experience

V.1.1.2-Teachers' perceptions of the position of project based learning in Algerian secondary schools

Regarding teachers' perceptions of the position of PBL in Algerian secondary schools, **Table 5.5** Shows that most teachers (90%) agree that PBL is given an essential part in EFL classes under the Competency-based Approach. The majority (88%) say that PBL gives learners more freedom and control over their learning, unlike traditional teaching methods. Furthermore, when we asked them about the teacher-learner relationship, (78%) of the participants agree that PBL helps teachers build strong and positive relationships with their learners. In the same context, most of them (92%) say that PBL also helps learners improve social connections as it fosters interaction and communication between learners and their surroundings. That is why all participants insist on the importance of collaboration in project work, saying that it helps build positive relationships with members, peers and their society.

Most importantly, all informants claim that projects should engage and inspire learners to get in touch with what they are learning and apply it in their real lives. That is to connect academic work with real-life situations. Surprisingly, almost all participants (96%) complain about the topics presented in textbooks saying that they do not motivate and engage learners.

The number of teachers who think there are difficulties in applying the project set in the syllabi makes up (96%). Finally, (96%) of the informants assert that they need guidance on implementing PBL under CBA.

Table 5.5: Teachers' Perceptions of PBL

Item (N=50)	Agree	Disagree	Neutral
1-The new reform, CBA, gives Project-Based Learning (PBL) a significant role in EFL classrooms.	90%(45)	4%(2)	6%(3)
2-PBL gives learners more control over their learning	88%(44)	8%(4)	4%(2)
3-Project based learning improves teacher-learner relationship.	78%(39)	18%(9)	4%(2)
4- PBL helps learners develop social and communication skills.	92%(46)	6%(3)	2%(1)
5- Collaboration in project work is essential as it allows learners to work together.	96%(48)	0%(00)	4%(2)
6- Projects should engage and inspire learners to get in touch with what they are learning, and apply it in their real life.	100%(50)	0%(00)	0%(00)
7- The topics proposed in the textbooks do not give students the opportunity to be creative.	96%(48)	2%(1)	2%(1)
8- There are difficulties in applying the project set in the syllabi.	96%(48)	4%(2)	0%(00)
9- I need more guidance about how to implement PBL under CBA.	96%(48)	2%(1)	2%(1)

V.1.1.3-The implementation of PBL and Teachers' Role

Item 1: Do you prepare a project work for each unit?

The results in **Table 5.6** and **Figure 5.5** Show that Most of the participants, thirty-eight (76%), prepare projects for each unit of teaching. However, (24%) tend to skip this activity as they call it. When we asked them to give their reasons, they suggested the following:

-Because it takes time and strategy, which is not available regarding the number of teaching hours per week (02 teachers).

-Basically, the guidelines of some units are not suitable for PBL, and they must be changed (02 teachers).

-I only do not plan projects for third year students because of the allotted time (05 teachers).

-I am a novice teacher and I have no idea how to deal with projects (01 teacher)

-I do not give my students a project work in every unit because I simply think that most of the projects are useless the way they are given in the syllabus. More than that, students use copy and paste and most of them rely on the most dynamic classmate to do the entire job. (01 teacher)

-It depends on the level I am teaching (01 teacher)

From the teachers' answers, we can say that most of those who skip project work are teachers of exam classes. They believe that Third-year pupils have a full school schedule and private courses outside schools, so there is no time for projects. They also think that practicing some grammar, vocabulary, or writing is essential since pupils will not be tested on projects in the bac exam. Others see that it is useless to deal with school projects because most learners prefer to copy information from the web and read it or just rely on their peers (generally the most active) to do the work for them. We can also see that novice teachers are struggling with how they should implement the projects suggested in the syllabi, and most of the teachers think that these topics must be changed, as they do not motivate learners to be creative and autonomous.

Table 5.6: Teachers' preparation of projects

Options	**N**	**%**
Yes	38	76%
No	12	24%
Total	50	100%

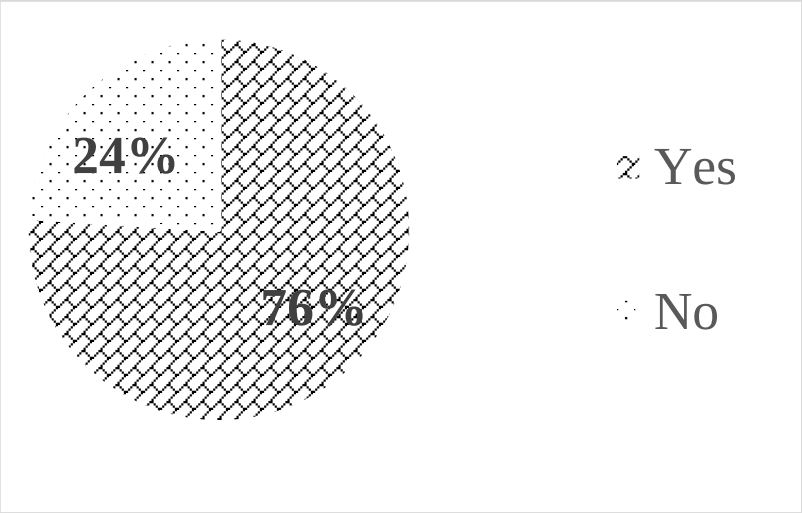

Figure 5.5: Teachers' preparation of projects

Item 2: How do you plan or prepare for English projects?

Teachers provided us with the following answers on how to plan or prepare project work:

-"Above all, I take into consideration learners' needs, preferences as well as interests. I brainstorm the topic with learners; I give them the opportunity to choose how to present it and in what forms, I allow them to choose their peers, I adapt whatever it is important, I keep the theme and give them the freedom to bring out creative and innovative projects." (01 teacher)

-"I put learners in a real-life situation." (03 teachers)

-"Depending on the learners' level." (02 teachers)

-"Provide the general topic and discuss to get subtopics." (03 teachers)

-"I prepare for PBL by: 1/relating the topic of the project with the theme of the unit. 2/ try to choose a topic that is practical to help learners practice all that they will learn in the unit. 3/introduce the topic of the project when introducing the theme of the unit. 4/divide pupils into groups according to their competencies 5/follow the guide and discuss and set a deadline for the presentation." (01 teacher)

-"I try to make learners prepare something that is related more to their real-life issues using different techniques." (01 teacher)

-"I take into consideration learners' needs, interests and preferences; I adapt whenever it is appropriate and let them decide about how to present." (03 teachers)

-"I prepare it at each introductory lesson of the new unit according to the learners' needs taking into account the syllabus content." (01 teacher)

-"İ collaborate with my colleagues to find fresh ideas, avoiding the topics of the textbook." (01 teacher)

- "I use the topics of the textbook" (12 teachers)

-"Adapt the topics of the textbook and bring videos, pictures to the class for illustration." (05 teachers)

-"With first and second-year pupils, I introduce the topic of the project presented in the textbook. Then I ask learners to divide themselves into groups and set a schedule for presentation dates. When we finish the unit, learners come and share their work with the class." (05 teachers)

- "I try each time to look for more vibrant, easy-going and attractive projects in order to involve my students in what is to be intended." (01 teacher)

-"The nicest project is that of the second year about recycling. I tried to bring videos of recycling tutorials." (01 teacher)

-"Select a project based on what we are going to deal with in the new unit taking into consideration my learners' level. Introduce the topic, explain it to my learners, and divide them into groups, then ask them to bring the work after the unit is done." (10 teachers)

These answers lead us to conclude that most secondary school teachers follow the 3Ps plan: presentation, practice, and production. They first introduce the unit's theme, and then present the general topic to the learners, usually the one in the textbook, even though they complain about it being boring and unsuitable. After that, they explain and discuss to get some subtopics. Finally, they divide learners into small groups, assign the subtopics, and set a schedule for the presentation day after the unit is done. It is evident from the teachers' answers that they do not check their learners' work progress, and they do not assign roles for group members. This means that learners spend almost eight weeks without help or guidance, which will negatively affect their final performance.

Item 3: Teachers' way of applying PBL

Table 5.7 shows that most of the participants (70%) never collaborate when they plan for project work. Most of them (66%) rely on the topics available in textbooks; only a minority (24%) sometimes adapt topics and look for creative ways to motivate their learners. Fortunately, all the participants explain well the subject of the project and all its steps to their learners and make sure they know what they will be doing and how.

Specifically, the majority (64%) report that they do not provide learners with materials and guidance to facilitate their work. Moreover, teachers (50%) used to divide pupils into small groups, only a minority (12%) used to give them the chance to choose their peers. Besides, the majority (66%) do not assign group member roles; instead, they let pupils work and divide the work among their team members.

Surprisingly, most participants (66%) never devote sessions for their pupils to do their projects in class or even check their progress due to the shortage of time and the overloaded curriculum. They ask their learners to work in groups, but most do not provide them with key steps to successful cooperative learning. In short, most teachers disregard the critical elements of successful project work, which are planning, creative adaptation, collaboration, guidance, and progress checking, which will negatively affect learners' project performances.

Table 5.7: Teachers' Implementation of PBL

Item (N=50)	Always	Sometimes	Rarely	Never
1-I collaborate with my colleagues when I plan for projects.	4%(2)	8%(4)	18%(9)	70%(35)
2-I rely on the topics presented in the textbooks	66%(33)	24%(12)	4%(2)	6%(3)
3-I adapt the topics of the textbook and I look for creative ways to motivate my pupils.	10%(5)	14%(7)	20%(10)	56%(28)
4-I make sure that my pupils know exactly what they will be doing beforehand.	100%(50)	0%(00)	0%(00)	0%(00)
5-I provide my pupils with materials and guidance for their projects.	10%(5)	6%(3)	20%(10)	64%(32)
6- I give pupils the chance to choose their peers.	12%(6)	14%(7)	24%(12)	50%(25)
7- I assign the role of each member of the group.	4%(2)	8%(4)	22%(11)	66%(33)
8-I devote weekly sessions for pupils to do their projects in the classroom and check their progress.	8%(4)	12%(6)	14%(7)	66%(33)
9-I teach my learners how to work cooperatively and solve problems.	6%(3)	20%(10)	24%(12)	50%(25)

Item 4: According to you, what is the role of the teacher in PBL within CBA?

Results in **Figure 5.6** below show that thirty-eight percent of the participants believe that teachers in PBL guide and encourage their learners to interact, be autonomous, and be responsible for their learning, while others (24%) see that they should facilitate their students' learning. According to twenty-two percent of our sample, the teachers also evaluate their students' learning performances and provide feedback to encourage positive outcomes. Additionally, (10%) of the participants say that they ought to observe pupils on a daily basis giving a plethora of information about their abilities and talents, as well as their learning needs and interests. Finally, only (6%) of the teachers questioned say that teachers are also interveners; they should intervene whenever needed to provide assistance and help.

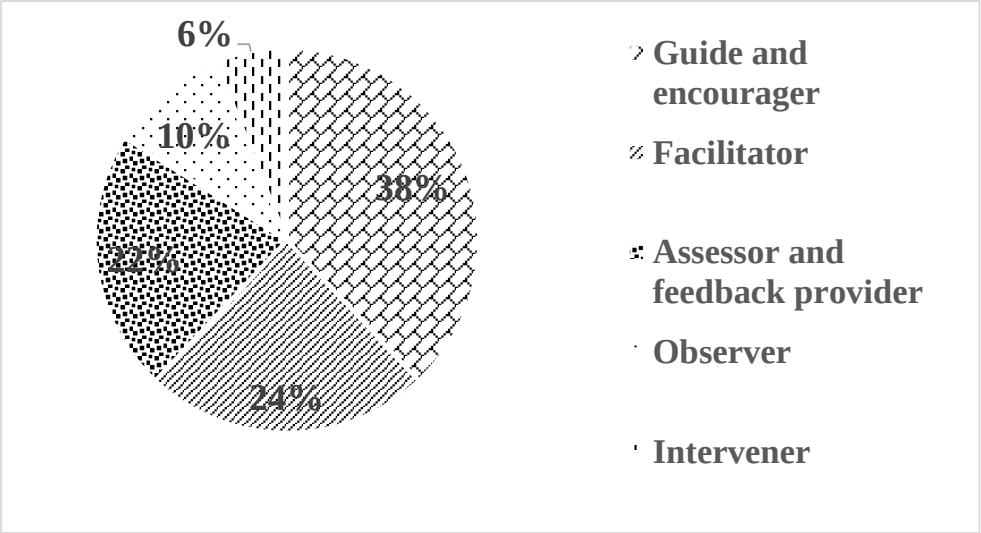

Figure 5.6: Teacher's role in PBL

V.1.1.4-Teacher's challenges with the implementation of PBL

Item 1: Is it challenging to implement PBL in Algerian secondary schools?

Table 5.8 and **Figure 5.7** reveal that most of the teachers who answered the questionnaire (86%) find that implementing PBL in Algerian secondary schools is challenging. Only a minority (14%) find it easy to deal with project work. It can be said that most secondary school teachers are struggling with how to deal with school projects. This finding is surprising because most of our participants are well knowledgeable and experienced.

Table 5.8: Teachers' opinion about the difficulty of implementing PBL

Options	**N**	**%**
Yes	43	86%
No	7	14%
Total	50	100%

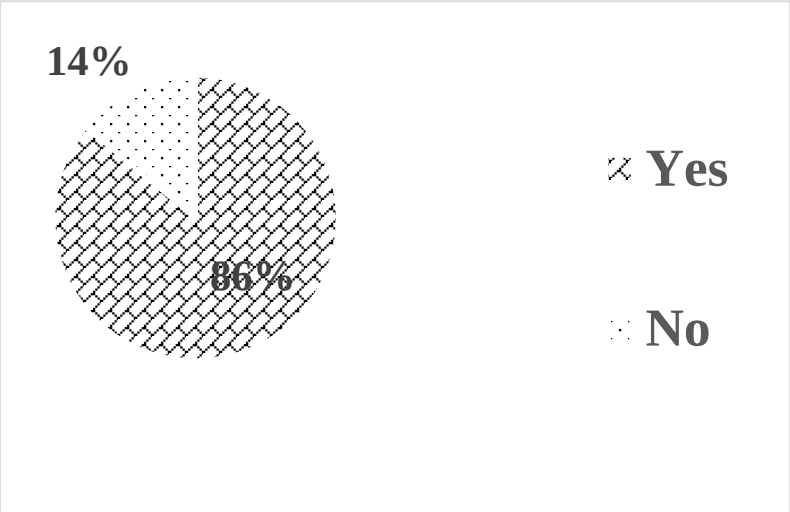

Figure 5.7: Teachers' opinion about the difficulty of implementing PBL

When we asked those who answered "yes" to justify their answer, they suggested that the majority of the respondents (34%) declare that applying English projects is challenging due to the lack of training and guidance on PBL. Some of the informants complain about the poor coordination and collaboration between teachers, while others criticize the topics of the textbooks being boring and unsuitable. Some teachers (10%) mention the incredible lack of teaching materials and resources that would facilitate the application of the approach, and others (8%) say that over crowdedness is a real problem, where teachers have to control up to 40 pupils and manage their work. Finally, (6%) of the participants claim that PBL is an approach that needs time to be appropriately implemented; its application is even more challenging with exam classes due to the extended curriculum and the full, exhaustive timetable (**Figure 5.8**).

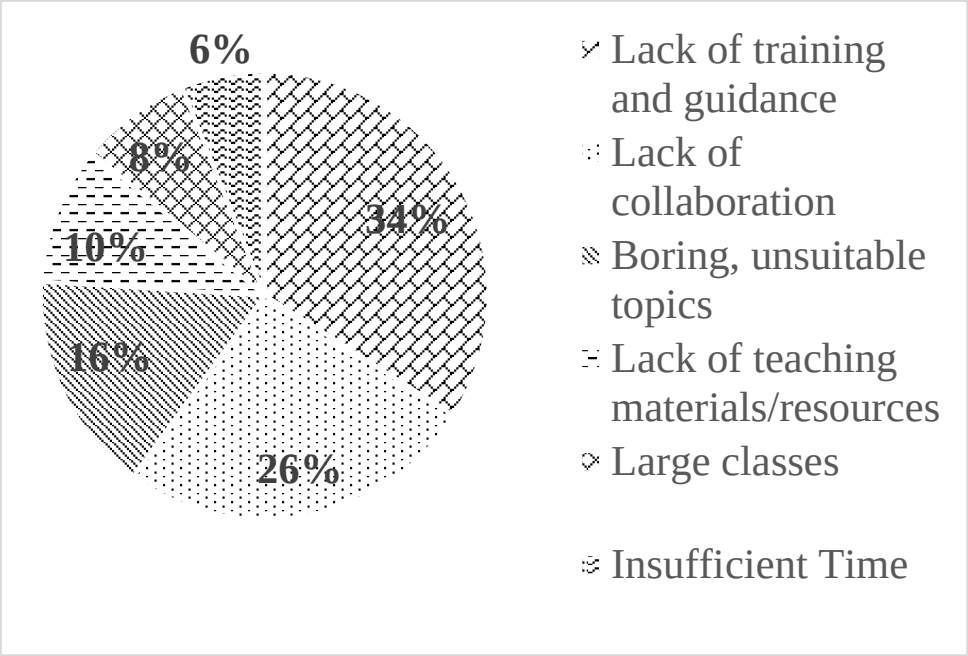

Figure 5.8: Challenges faced by EFL teachers

Item 3: Do you provide students with resources?

As expected from the teachers' answers in the previous sections, **Table** and **Figure 5.9** reveal that they do not provide their learners with resources, including books, magazines, articles, websites, or even videos that might be helpful. All the teachers who answered the questionnaire (100%) launch the project, explain its steps, divide the learners into groups, and do not provide assistance or help. This will undoubtedly affect the learners' outcome since most of them face difficulties with online information searching, so they get confused and cannot decide which information to take or leave out.

Table 5.9: Teachers' assistance and guidance with resources and materials

Options	N	%
Yes	**00**	**00%**
No	**50**	**100%**
Total	**50**	**100%**

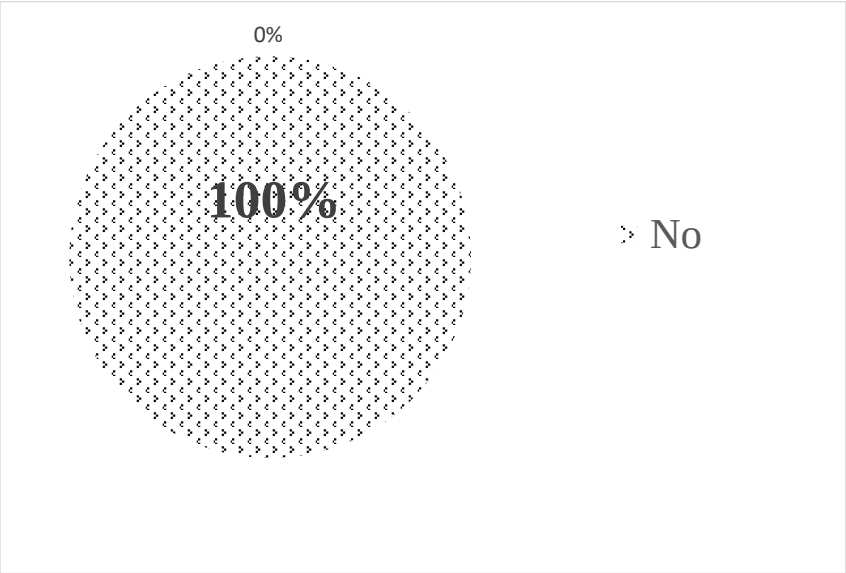

Figure 5.9: Teachers' assistance and guidance with resources and materials

Item4: What are the difficulties that you usually face with your pupils' projects?

The difficulties that teachers encounter with their pupils' projects are shown in **Figure 5.10** below. A large number of respondents (24%) say that their pupils usually present ready-made projects that they copy directly from the internet without any addition or modification. Others (22%) add that their pupils come to class and hardly read their completed work from papers, so it becomes a boring reading session. Another group of respondents complains about their learners' lack of motivation, creativity, critical thinking, and problem-solving skills. In addition to that, teachers (14%) notice repetitive team conflicts and report that the majority of their pupils prepare their projects a day or two before presenting the work.

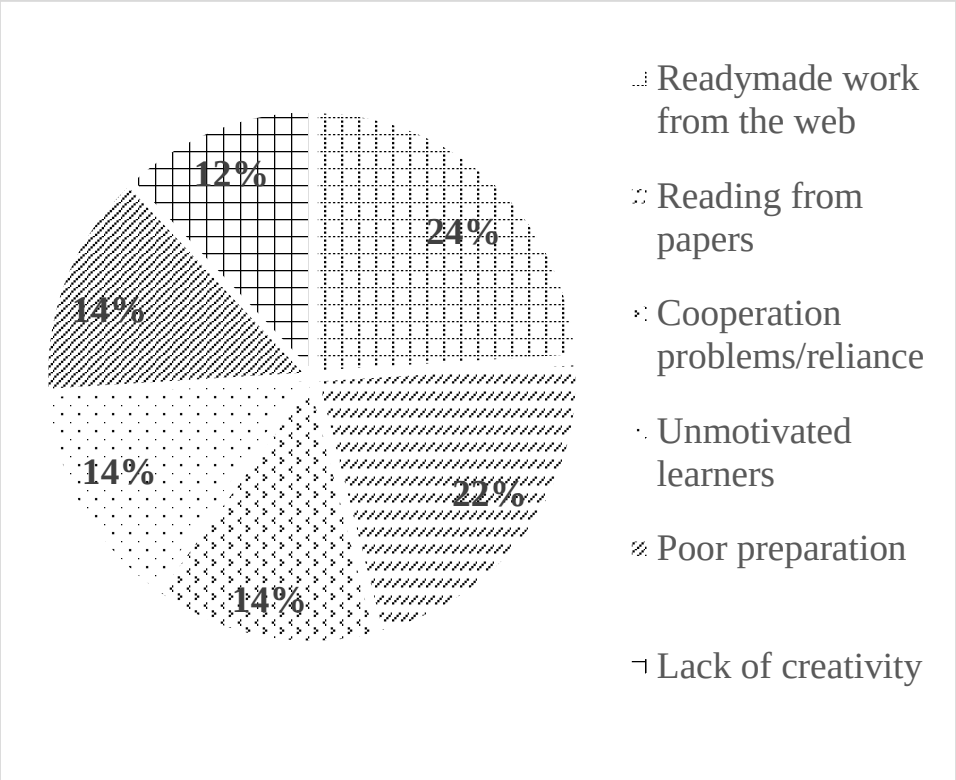

Figure 5.10: Teachers' difficulties with pupils' projects

V.1.1.5-Teachers' evaluation of the project work and suggestions

Item 1: Teacher's Evaluation of the project work

As shown in **Table 5.10** only (30%) of the participants prepare special grading rubrics when assessing pupils' performances. Interestingly, most teachers (62%) do not allow for self/peer evaluation, and they do take into consideration their pupils' class participation, tests, and exams scores when evaluating their completed work. Surprisingly, (74%) of the informants used to give shared group grades to motivate pupils to work together and emphasize the importance of cooperation. Some teachers even want to elude the challenges of individual group member grading and eliminate the difficulty of monitoring who exactly does what. Giving the same mark to all team members is unfair; it reduces motivation and enthusiasm and hinders the positive outcomes of group work.

Table 5.10: Teachers' way of evaluating pupils' projects

Item (N=50)	Yes	No
1-I prepare special grading rubrics that help me focus on the skills I am looking for in each project	30%(15)	70%(35)
2-I allow my pupils to conduct self/peer evaluation	38%(19)	62%(31)
3-When I evaluate, I take into consideration my pupils' class participation, test and exam scores	84%(42)	16%(8)
4-I focus on grading pupils individually	26%(13)	74%(37)
5-Members of the same group get the same mark	74%(37)	26%(13)

Item 2: Teachers' suggestions and recommendations

When we asked teachers to add further suggestions about project work in Algerian secondary Education, they proposed the following:

- The Algerian Ministry of Education had better devote more pedagogical meetings, seminars, and training sessions to guide teachers on how to implement the project-based pedagogy effectively. We also insist on collaboration between teachers when planning for pupils' projects.
- Teachers have to devote sessions to let their pupils work on their projects in class, provide them with the necessary materials, sources, guide them and check their progress as frequently as possible. They should also try different cooperative learning models and techniques to engage pupils and raise their motivation to learn.
- Teachers should urge their pupils to share their final work with other classes, friends, or parents. They can organize a special day for project presentations, prepare certificates or small prizes for the best work and ask pupils to record and share online.
- Finally, educators should take advantage of social media services to get in touch with their pupils (the responsible of each group) to frequently check the work of each member and make sure they are in the right direction. Pupils will like it, and it will improve the teacher-learner relationship and build trust.

V.1.2-Discussion and Interpretation

Results of the teachers' questionnaire indicate that secondary school educators are aware of the position and importance of PBL in EFL classrooms under CBA. They approve that the new way of teaching is no more teacher-centered and that it gives learners the steering wheel. However, the current results show that teachers face many challenges while implementing the projects available in English textbooks. This tells us that teachers are not knowledgeable enough about applying this kind of teaching method, which is why they need more help and guidance.

First, teachers' answers highlight the lack of collaboration and coordination between pedagogues when preparing and planning for project workshops. Collaboration plays a significant role in making PBL and any other teaching/learning successful. When planning, teachers have to make sure that teaching through PBL is delightful and challenging.

Second, most teachers often use the topics of the textbooks even though they complain about it being boring and unsuitable, which is what pupils hate the most. They think those topics are old-fashioned, boring, and demotivating. Thus, educators should not only rely on the textbook. They have to adapt and look for creative topics that fit the students' age, interest, and ability to guarantee motivation.

Then, most pupils generally find difficulties when it comes to probing for the required information as they find difficulties in doing their investigation on millions of different websites and sources. Therefore, teachers should provide learners with different resources and materials and guide them through online searching techniques that clarify what search codes to use in search engines, what results to pick, and how to limit, analyze and share the information according to the objective set for the project.

Additionally, most teachers do not devote sessions for pupils to work on their projects in class; nevertheless, they complain about pupils' late preparation, ready-made work, and bad performance. It is the main reason why pupils forget about the assignment and prepare their workdays or hours before handing it in. It is also the main reason why it turns out into a dull reading session. So, keeping a weekly track of the pupil's work progress changes everything.

Furthermore, teachers rarely prepare special grading rubrics when assessing their pupils' work. Rubrics are essential, for they contain criteria that let pupils know what is expected of them. They also enable teachers to monitor and evaluate the performances objectively. Likewise, teachers rarely allow for self or peer evaluation, and their learners still see evaluation as an intricate part of classroom activity. Self/ peer evaluation raises students' autonomy and encourages them to be more responsible. As usual, teachers often take into

consideration pupils' participation, tests, and exam scores when evaluating their pupils' work. This is utterly damaging to those shy learners who do not participate in class but do their best to perform well, or even those less talented pupils who did not get high scores and work well in projects. Correspondingly, educators used to give the same grade to all team members, so pupils see no need to put in extra effort since they all get the same mark.

Finally, cooperation in PBL is compulsory, and educators had better teach their pupils the art of working in groups since cooperation empowers and challenges pupils to use the target language to express their views, share knowledge, and negotiate matters. It is the only way through which pupils use the target language freely.

V.2. Section 2. The Pupils' questionnaire: Results, Analysis and Discussion

The main aim of this study is to detect the various problems and difficulties that secondary school pupils face when dealing with English projects. This section deals with the methodology, participants, procedure of analyzing data and discussion of the questionnaire results.

The web-based surveys were constructed using Google forms. A link to the researcher's school website was placed, with a simple invitation for pupils to fill it in. The administered questionnaire investigates the pupils' attitudes towards project work, and searches the issues that almost all EFL secondary school pupils face when they start working on their projects. The questionnaire included forty-four (44) pupils of different levels, who study at Elhachemi Bouzidi Secondary School, Khenchela.

The questionnaire consists of twenty (20) questions divided into four parts (see **Appendix. C**.). The first part includes the pupils' general information including gender, grade and age. The second is about learners' attitudes towards project work. It consists of nine (9) questions. It seeks information about the pupils' perceptions of English projects. The third part presents pupils' presentation and self-evaluation of their projects. There are eight (8) questions that attempt to describe the way pupils plan, present and evaluate their English projects. The last part discusses the different challenges faced by pupils while doing their project work. It includes only one question. Pupils are asked to mention the challenges and difficulties they encounter when working on their projects.

V.2.1-Analysis of the Questionnaire

V.2.1.1-Background Information

Figure 5.11 presents the pupils' gender. Most of them are females, constituting (68.2%) of the population. Only (31.8%) are males. The sample consists of forty-four pupils (44) aged between sixteen (15) and nineteen (19) years old. All the participants study at Elhachemi Bouzidi Secondary School. Their level varies from 1st year (13 pupils), 2nd year (25 pupils), and 3rd year (06 six).

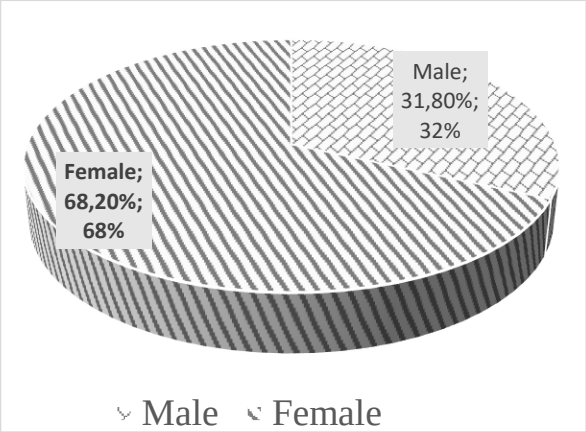

Figure 5.11: Pupils' Gender

V.2.1.2-Learners' attitudes towards project work

Table 5.11 shows that most participants are not interested in doing English projects; this may be due to the nature of topics that teachers select or the way in which teachers launch the project and assign team roles. This can trigger negative feelings like fear, negligence, and boredom when it comes to project presentation. More specifically, more than half of the respondents (65%) are unaware of the benefits that projects may provide because they believe that projects are for assessment purposes only. However, most of the respondents prefer doing their projects in class during school hours under the teacher's supervision and guidance.

Table 5.11: Learners' attitudes towards English projects

Item (N=44)	Yes	No
Projects help me extend my knowledge	15(34%)	29(65.9%)
Projects help me use what I learn in the classroom outside the school.	17(38.6%)	27(61.4%)
Project work helps me have fun while learning	13(29.5%)	31(70.5%)
Projects help me improve my English, and be more responsible	21(47.7%)	23(52.2%)
Projects help me learn how to work with others	11(25%)	33(75%)
Projects make learning more enjoyable in the classroom	16(36.3%)	28(63.6%)
The topics of English projects are fun and motivating	5(11.4%)	39(88.6%)
I like working on my project in class with my peers and teacher	40(90%)	4(10%)
I am interested in doing projects of English	13(29.5%)	31(70.4%)

V.2.1.3-Pupils' presentation and self-evaluation of their projects

1-I prepare for my project presentation

a-daily

b-weekly

c-a week before the presentation

d-a day before the presentation

As illustrated in **Figure 5.12**, half of the participants prepare their project work a day before sharing it with the class, and (47.7%) of the informants prepare their work a week earlier. Only a minority (2.3%) works on a weekly basis.

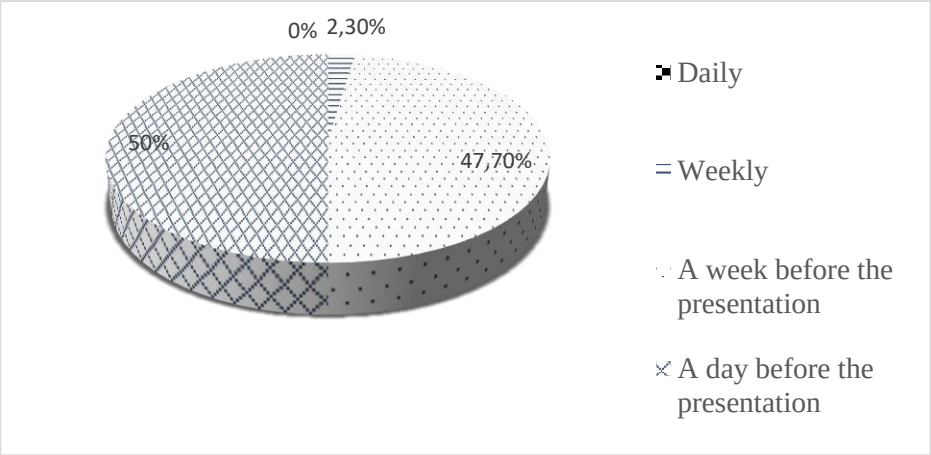

Figure 5.12: Pupils' Preparation of Project Work

2-Pupils' Presentation and Evaluation

Results in **Table 5.12** show that the majority of the informants (86.3%) do not integrate ICT's in their work. Instead, they just copy what is found on the web without any modification. In addition, most of them (86.3%) never meet to rehearse before sharing the findings, and it appears that more than half of them (63.6%) tend to depend on some team members to complete the assignment. As far as self/ peer evaluation is concerned, respondents (65.9%) declare that they are not allowed to evaluate their own or their peers' work.

Table 5.12: Pupils' Presentation and Self/Peer Evaluation

Item (N=44)	**Yes**	**No**
I use power point, videos, and pictures in my projects.	6(13.6%)	38(86.3%)
I copy what I find in the internet.	37(84.0%)	7(15.9%)

I summarize what I find from the net and I add what I learnt in class.	13(29.5%)	31(70.5%)
I rehearse with my peers before presenting the project.	6(13.6%)	38(86.3%)
I depend on some group members to do the work for me.	28(63.6%)	16(36.3%)
I used to evaluate my own and my peers' work	15(34%)	29(66%)
The day of my presentation, I read from the paper	31(70.5%)	13(29.5%)

V.2.1.4-Challenges faced by pupils while doing their project work

The last part presents the difficulties that secondary school pupils encounter while doing their English projects. As shown in **Figure 5.13**, the majority of pupils (27%) struggle to get their projects done on time, for their teachers launch the project and then never check their work progress. Furthermore, many pupils (23%) face difficulties with online information searching, so they get confused and can't decide on which information to take and which to leave out. Some learners (18%) complain that their English projects' topics are old-fashioned and boring; they even say that this type of topic encourages them to bring ready-made information from the web. (16%) of the informants experience conflicts within their teams; they could not decide on team roles, and most of them usually rely on the most active member to complete the assignment. Besides, some of those pupils add that it is difficult for them to meet outside school time. Finally, most third-year pupils complain about insufficient time and full-time tables. So, they prefer to study hard for the baccalaureate exam rather than waste time on project work.

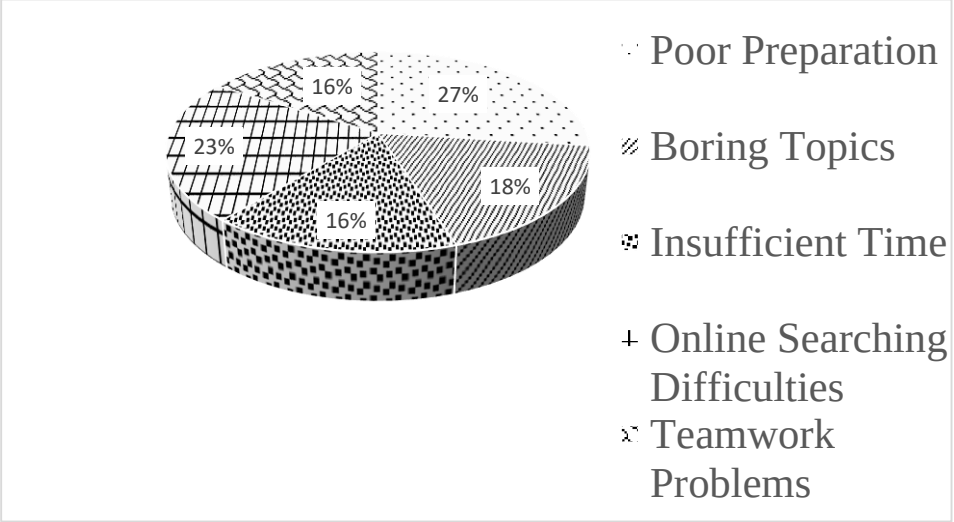

Figure 5.13: Learners' Difficulties with Project Workshops

V.2.2- Discussion and Interpretation of the Results

The pupils' questionnaire results reveal that most secondary school pupils show negative feelings about the project of English, considering it a boring, useless session. They are unaware of its importance and the effects it has. They seem careless, uninterested, and unmotivated when it comes to project workshops. The results also indicate that pupils spend almost a month without guidance or help. Teachers used to launch the project, explain it but never checked their learners' work progress. As a result, pupils forget about the project until the day teachers' remind them of the day of presentation, generally a week before. Therefore, they find difficulties when preparing the project, and they have no idea how to divide the work or assign team roles. As revealed in the analysis, most pupils depend on the most active member in the group to complete the assignment for them. What is left for them is to read the web copied results of their investigation directly from a paper. This makes the project presentation a boring reading session. Furthermore, pupils find it difficult to cooperate. Teachers do not teach them group work techniques or team role basics. That's why most of the participants find it challenging to solve team problems. Finally, Pupils prefer to work on projects in the classroom under the teacher's guidance. Thus, teachers must reconsider how they deal with English projects and start thinking of devoting some weekly sessions for pupils to work on their projects in the classroom because working without the teachers' guidance affects pupils' outcomes.

V.3. Section 3. The Inspector's Interview

This section focuses on the inspector's interview. The inspector was asked to consider how he viewed the Project-Based pedagogy in the Algerian Secondary education. Our interview consisted of 13 questions aimed at gathering information about the inspector's opinion on secondary school project work to find solutions to the problems that most teachers of English encounter when applying the approach. Therefore, it helped us collect data to achieve the research objectives.

V.3.1-Analysis

- **Q1: Could you please present yourself according to your qualification/ your previous teaching experience?**

This question was asked to know more about the inspector's qualification and teaching experience.

> "*My full name is Hadid Mohamed El Kamel, graduated from Mentouri University in 1986. I taught English as a foreign language in different secondary schools for 18 years, and I have been working as an inspector of national education –INE- since 2009. I participated in many national seminars and workshops organized either by our Ministry of National Education or the British Council."*

Inspector Hadid worked as a teacher for eighteen (18) years and as an inspector for twelve (12) years. His experience in the English language will significantly help us find answers to the questions of our research study.

- **Q2: What do you think the purpose of incorporating project work into CBA?**

The inspector was asked to explain the aim behind integrating Project-Based Learning into CBA. We aimed to see his point of view concerning the Implementation of PBL in the Algerian EFL classrooms and its importance in achieving CBA goals.

> "*To create accurate and Engaging Learning Experiences is one of the main purposes of incorporating project work into CBA. Both encourage students to be active participants in their learning, and offer a number of choices for pupils to demonstrate that they have gained the needed knowledge and abilities. Together, CBA and project work are critical components of making education more personal for students by providing them with relevant and meaningful learning opportunities. Both employ a*

student-centered methodology in which pupils are encouraged to actively explore real-world difficulties and problems in order to get a deeper understanding. In fact, CBA and PW complete each other and cannot be separated since they use active learning and inquiry-based learning."

The inspector drew attention to the aims of integrating PW into CBA in EFL classrooms. The first aim was to build engaging learning experiences. The second aim was to encourage learners to be more independent and autonomous, able to find solutions to the problems they face. The inspector agreed that both CBA and PW shifted learning from teacher-centered to learner-centered. He said that PW and CBA are inseparable as they help learners develop an active role in learning. Finally, the inspector stated that PW is essential to making learning more like real life, saying that learners have to experience real issues to get a real learning experience.

- **Q3: Do you think project-based learning is given the importance it needs in Algerian schools?**

"For many years, the typical unit with occasional concluding same projects has been the model for many Algerian Secondary Schools. Students experience a series of lessons, tasks, and assessments that lead them to a personal, group, or class project. PBL, on the other hand, structures the curriculum around a single project in which students use an inquiry-driven learning process to solve complicated issues in different creative ways. I think existing coursebook projects neither really help students attain mastery of core content nor build the skills critical to success in schools, careers, and life. For this reason, immediate steps should be taken to assist teachers, coaches, and administrators in developing the necessary knowledge and abilities to enable the implementation of PBL. Teachers should not ignore project works because, as they always say, "projects have always been ready-made materials or downloadable ones." Teachers ought to stop skipping project works; they should equip themselves with sufficient knowledge and appropriate tools, materials, approaches, topics, means, tasks to carry on project works. Teaching a unit without a project work is like a doctor who is examining a dead person. Here, teachers are killing the soul and spirit of the unit."

The inspector highlighted the importance of adapting creative ideas and topics when presenting PW to learners. He criticized the coursebook projects saying that they deprive pupils

of the opportunity to master the knowledge they get from schools or develop the necessary real-life skills. He also found fault with the way teachers apply the approach in their classrooms. He advised teachers not to skip PW and start thinking of fresh ways that help them achieve successful results. According to him, teachers should look for new topics, materials, and tools that would facilitate the application of the approach. He insisted on taking urgent steps to train, assist, and guide educators in order to facilitate the implementation of PW.

- **Q4: Most secondary school teachers lack sufficient knowledge of how to implement PW; they regard it as a boring, exhausting, and time-consuming activity, some usually skip it. On the other hand, Pupils are uninterested in performing English projects, and the majority prepare their work only a few days before their presentation, despite having nearly a month or more to do so. According to you, sir, what is the root cause of the problem?**

  "Well, to answer this question, we need to distinguish between project work and Project-Based Learning. Most teachers think they are synonymous. Project work is a brief light activity served up after the teacher has covered the content of a unit in the traditional manner, and it never is enough to give deeper learning. PBL, however, serves as the engine that helps learners acquire the needed knowledge and skills. In this case, we can say the project is the curriculum, where students have to collaborate, communicate, think critically to solve real problems. Unfortunately, most teachers use the former, thinking that they are applying the principles of PBL. Simply put, most secondary school teachers neglect projects entirely and think they are just a matter of homework to be done at the end of the unit, while others consider it time-consuming. What makes things worse is that some teachers think projects are meaningless and do not really serve the purpose of teaching, and such a belief is deeply rooted in their minds! So, teachers have to change their idea about project work first. I think that they need more training and guidance on how to apply this approach."

First, the inspector explained the difference between project work and project-based learning. He insisted on the idea that most teachers are doing projects and not PBL. He then confirmed that most teachers used to neglect this vital part of the curriculum, thinking that it is a waste of time, which is not. The inspector stated that teachers need to change their way of thinking in order to achieve better results. He also concluded by saying that they need more supervision on this matter.

- **Q5: Project planning is critical in guiding teachers and learners through the many phases of the project to establish desired goals and produce the agreed outcome. Most teachers use the project topics of the textbook. They introduce the unit, launch the project, and discuss the topic and subtopics with learners. What steps should teachers consider when planning for projects? What practical procedures, if any, do you assign to implement this particular approach?**

  "As with all lessons, Projects necessitate much planning and preparation. Teachers should construct a clear plan that incorporates all the unit content into the project. Teachers are never obliged to follow the coursebook strictly; they can adapt and modify according to their learners' level and interests. What I see in most visits is that teachers follow the coursebook topics. They have to be flexible and up to date. Modern learners need modern ways of teaching. We cannot give a topic about the radio, and we know they can work much better when given another issue about social media. Both are communication means, but the choice of the topic affects the result. I always ask teachers to be creative, to look for "out-of-the-box" topics that pique the students' interest. After selecting the topic, teachers should plan for the general question, which is the problem to be solved by learners—knowing that there would never be one solution only. If you have twenty students in your class, you should expect twenty answers to the same exact problem. This problem should be taken from their surroundings, their real world; the world they see every day. Here, I advise teachers to ask questions like; what is happening in their schools, in their classrooms, with their teachers and mates? What problems are there in their neighborhood? They should pick a relevant up to date question on an issue that students would believe they are helping to solve. It should be engaging that poses a problem that they can solve. Next, as I mentioned earlier, teachers should plan thoroughly for project work. They can even involve their learners in planning. They should also design a schedule for project presentations. Most importantly, they have to keep an eye on the progress of their students' projects."

Inspector Hadid highlighted how crucial planning is for project work or any other type of activity. He said that projects should reflect the whole unit and cover all its elements. He complained about teachers' selection of the topic, saying that they rigorously follow the coursebook. According to him, teachers should choose fresh, engaging, unusual, modern, and authentic topics instead to motivate those uninterested learners. Moreover, the inspector put

emphasis on monitoring the learners' project progress. This step is essential as it helps both teachers to objectively evaluate their pupils' work and pupils to be more responsible and take team roles seriously. This way, they would never depend on other members to do the assignment. This also helps them be creative and avoid copy-paste information.

- **Q6: As mentioned earlier, project-based learning is an integral part of CBA; however, it remains one of the biggest challenges facing teachers and learners. What strategies do you suggest to face such challenges?**

  "Yeah, I agree. It is challenging. To overcome such a challenge, teachers should choose a topic that engages pupils to learn different skills and interact in groups to share ideas and learn from each other. But, they need to consider pupils' learning styles, differences, and preferences. Then, teachers should set clear learning objectives and make sure learners know exactly where they are going and how their final work will look like. Once the objective is set, pupils will have a clear picture of the overall work and start following the projects' goals to achieve the needed result. Right after this, teachers should ask learners to divide each group's subtopics among members and set a schedule to connect all the subtopics for a final presentation. Of course, they should select the materials and resources to be used and try to utilize "class posters" or "group passports" as we call them that would help pupils achieve the goals set at the begging. For sure, learners will face many challenges and difficulties that may change their plans, which is the essence of student-centeredness. Teachers should encourage them to find solutions to each problem they encounter, and once this is successfully done, they will develop skills such as critical thinking and problem-solving, which are the core of project work."

The inspector indicated the major steps that would guide teachers to implement project work successfully. Topic selection is the most important as it motivates them to work. He added that the objectives of the project should be clear right from the start. Learners must know what is expected of them to assign team roles and divide the work. Moreover, the inspector asked teachers to urge their pupils to set a schedule and organize the work. He supported the use of posters and passports as strategies to ensure that each group member knows well about the subtopics of their peers. He added that group plans could be changed, and problems may occur, but what counts is how the pupils manage to find solutions to each obstacle to develop problem-solving and critical thinking skills.

- **Q7: When we asked secondary school teachers about checking the progress of their learners' projects, the majority answered that they did not. They simply launch the project and never check their pupils' work until the presentation day. Do you think teachers must devote some sessions to help and guide their learners and check their project progress?**

  "In fact, teachers launch the idea or topic of the project at the early beginning of the unit, first hour, very briefly and forget about it until the day of presentation- in case of presentation, of course. The spirit of the project is everywhere in the unit; it is integrated in all sessions, in all receptive and productive skills and tasks. It is just a matter of reflection from teachers. So yeah, sure! Checking the pupils' work progress weekly is essential and should be done within school hours."

Based on his visits to teachers, the inspector explained the way that teachers launch the project work. His pessimism was shown plainly in his response. According to him, teachers launch the project briefly and never remind their pupils of the work or check their work plan and percentage. He agreed that checking pupils' work progress is necessary to ensure everyone is involved and doing their part properly. The inspector urged teachers to keep a weekly track of the pupil's work progress, which must be done within school hours.

- **Q8: Most secondary school teachers ask learners to work in groups when doing their projects; however, they never teach them how to cooperate or solve team problems effectively. Do you think that cooperation is essential when doing school projects? Would you suggest some strategies that may help learners build teams and manage conflicts?**

  "Well, I say cooperation is essential in Project-Based Learning as it develops learners' cognitive, social, emotional and academic skills. As we all know, cooperative learning alters the roles of educators and learners in the classroom. Teaching and learning are no longer solely the responsibility of the teacher but rather are shared by groups of learners, who have more chances to actively participate in their learning, to question and motivate one another, to share and discuss their views respectfully. Learners' ability to work with others to achieve a common goal or overcome a hurdle will put them up for future successes. They can benefit from the ideas and experiences of one another. However, group conflict is one of the main

challenges. That is why teachers should make sure to develop ways that would keep a healthy working relationship among teams. They should understand the conflict and listen to every member in a team individually and then in groups. Teachers at this levels act as moderators who encourage pupils to listen to their peers and respect their views."

The inspector stressed the importance of cooperation in project work. He clearly stated the benefits that pupils get when they cooperate to achieve a common goal. He described teachers as moderators, asking them to teach their pupils techniques to manage team conflicts. They should listen and help their learners become good listeners able to exchange and share ideas and experiences respectfully.

- **Q9: According to third-year teachers, projects can never be achieved due to time shortage and the overloaded curriculum. What can you say to those teachers? How can they overcome this problem?**

"In fact, there is neither a time shortage nor an overloaded curriculum. How can you explain such a contradiction; a unit whose time allotted is eighteen or twenty hours to be taught in just ten hours for some teachers and thirty hours for others. It is a matter of both time and classroom management. Teachers can overcome such a challenge if they work collaboratively, share and discuss different ideas, strategies, and topics about projects. They ought to adapt the tasks and topics in the course books and vary the ways of project presentation."

The inspector's answer indicates that it is all about time and classroom management. He clearly stated that teachers who manage their classrooms well and the time allotted to each unit would not face such a problem. He disagreed with those who say that time shortage and overloaded curriculum make them skip project work. Instead, he asked them not to follow the coursebook, adapt the topics and use various presentation techniques.

- **Q10: Teachers rarely prepare special grading rubrics when assessing their pupils' work. They usually give the same mark to all team members. They rarely allow for self or peer evaluation. According to you, sir, how can teachers objectively evaluate their pupils' projects? Do you think that pupils should be part of the evaluation stage? Why/why not?**

"I see that assessment must be authentic, i.e., teachers should base scoring not only on content knowledge but also on other skills like creativity, verbal and nonverbal, communication, problem-solving, and social skills. Evaluation does not take place in the final phase of the project. Teachers should start evaluating their pupils' understanding, content knowledge, preparation, participation, interaction, work quality, cooperation, conflict management, and communication throughout all the project phases; once they start working. It is vital that teachers design grading rubrics that would help them evaluate the work objectively; they can even involve their pupils when designing the rubric. Rubrics should contain detailed criteria, and teachers should focus on the criteria, not the task. They should explain each criterion to pupils and ask them to use the rubric for self or peer assessment.

Concerning involving pupils in evaluation, I urge all teachers to use self or peer assessment as often as possible. In student-centeredness, teachers should often involve their learners in evaluating their work because it motivates them, boosts their self-confidence, and encourages them to be autonomous. Self and peer assessment help learners know about their weaknesses and strengths and focus on the weaknesses to improve their outcome. Teachers should also encourage learners to provide feedback and use the designed rubric to evaluate their own and peers' work."

The inspector's answer to this question indicated that evaluation plays a significant role in motivating pupils to work on projects. He pointed out that teachers should focus on different criteria that facilitate the evaluation phase, starting at the beginning of the first stage of project work. He also highlighted the importance of grading rubrics in evaluation. The inspector agreed that pupils should be included in designing the rubric and evaluating their peers' work to obtain objective results.

- **Q11: What do you think of school project exchange as a way to motivate learners?**

"Selecting, Adapting, Rejecting, Supplementing (SARSing) is a way to motivate learners and encourage them in PBL. However, teachers should be the first to be inspired and no longer be confused in front of learners as we always say, "We don't give what we don't have". Successful entrepreneur Richard Branson said, "You don't learn to walk by following rules. You learn by doing … and by falling over." Besides, teachers should often exchange projects between classes and other schools or invite

colleagues, inspectors, and parents when pupils present their projects. This is a way to encourage learners to improve their future performance and reinforce teamwork."

The inspector proposed a technique called "SARSing" to engage pupils to work on projects. But he asked teachers to get inspired in order to motivate learners to achieve better results. In addition to this, the inspector agreed that exchanging projects helps boost pupils' motivation to do future projects properly. He also proposed to invite a wider audience (parents, colleagues, the inspector, or the pupils' friends) to attend the presentation to encourage them to improve cooperation and performance.

- **Q12: Do you think teachers should coordinate to plan for project work?**

"Planning for project work necessitates teachers' collaboration. When they work together, they improve learning and influence learners' outcomes. They should start by selecting the topic of the project, and then decide on the different steps of planning and selecting appropriate cooperative learning techniques. Teachers can even design common grading rubrics, examine pupils' work and make adjustments later on. They can make use of pedagogical meetings to discuss and exchange ideas and materials. They should have a common goal to improve learning. Not only pupils benefit from teachers' collaboration, but even teachers do, as it strengthens relationships. Together, they can always find proper ways to help learners achieve better academic results."

The inspector's answer indicates that coordination between teachers is essential in project work. He insisted on benefiting from pedagogical days to share experiences and ideas and plan for the units' projects. The inspector pointed out that collaboration improves the pupils' learning outcomes and the teachers' learning experiences. Thus, teachers' coordination is a crucial element in teaching projects in EFL classrooms.

- **Q13: Before we close the interview, you are kindly requested to give further insights and experiences about project work by suggesting solutions to improve this approach in Algerian secondary schools.**

"Project-based learning encompasses much more than school projects. Many researchers expressed it more clearly as "learning by doing." Pupils should explore and investigate an engaging, authentic, and challenging topic. Well, we all know that we live in a modern globalized world that is based on small and bigger projects. And

as the Swiss psychologist Jean Piaget put it, "Knowledge is a consequence of experience," that is why it is vital to educators and learners to solve real-world issues that really matter.

What I see as an inspector is that secondary school teachers use the traditional way to put into practice or realize the project-based methodology. So, education must be modernized in Algerian Secondary schools; as John Dewey says, "If we teach today's students as we taught yesterday's, we rob them of tomorrow." I believe that the training sessions we devoted to teachers about project work were few and not sufficient, and this explains why most teachers are not well trained, which is why they are still struggling with the implementation of the approach. Therefore, we will arrange more training sessions, pedagogical meetings, and seminars to guide teachers on how to deal with both Project-Based Learning and Cooperative Learning as they are interrelated. We understand that there may be a time constraint in schools, materials can be sometimes in short supply and teachers are forced to work with a constrained curriculum map. However, when teachers give their pupils the opportunity to be in charge and trust their decisions, they become active successful learners.

I suggest that teachers have to coordinate and benefit from each other's experiences. They also must set aside time in class to allow pupils to work on their projects, supply them with the required resources, advise them, and monitor their progress as often as feasible.

In short, I say if we want pupils to succeed in life, we have to expose them to a project-based world; their learning will constantly be evolving as long as they stick to the principles of this method."

The inspector's answer shows that not all teachers are well equipped with the appropriate knowledge, experience, and materials to teach project work in EFL classes. He admits that most teachers still use the same old methodologies when dealing with projects and have to change their mindset. He promised to provide more help and guidance through meetings and seminars, where teachers can meet and benefit from one another. He also insisted on collaboration between teachers saying that it is the key to successful preparation, planning, and results. Finally, Inspector Hadid urged teachers to devote class sessions to make pupils work on their projects and check their progress. He finished his answer by emphasizing the importance of applying Project-based learning to motive pupils to be in charge of their learning and develop responsibility, independence, and autonomy.

V.3.2-Discussion

The aim behind interviewing the inspector was to check the ways PBL was understood, implemented, and introduced to teachers in the Algerian English classrooms. The interview analysis showed that the inspector's answers agreed with the teachers' questionnaire results; they expressed the same issues. The inspector shared the same belief with teachers that PBL helps learners adopt a maker mentality; they consider themselves to be inventors. It allows them to take chances to be more innovative. The inspector indicated that pupils would learn to solve problems and think creatively and think outside the box. However, he was not satisfied with the ways teachers are applying PW in their classrooms. He confirms that most teachers consider it time- consuming and some prefer to skip it. He clearly admitted that the training was neither practical nor sufficient, but teachers would do better if they collaborated with colleagues to share ideas and experiences. The inspector also suggested for teachers to be smart and never follow the coursebook as it is. They can omit, add, modify and adapt topics that would serve the unit's theme as well as the pupils' level and interest. He agreed that educators could transform boring project sessions into opportunities for reflection, cooperation, communication, and creativity.

First, he suggested that teachers should launch the project and ask pupils to do it in the classroom under the teachers' guidance. Second, he insisted on checking the pupils' work progress and stated that evaluation starts once the teacher launches the project and not after the presentation. He suggested involving pupils to be part of the evaluation stage as this would improve their vision of learning and success. But, more importantly, they should provide pupils with the materials, resources, and guidance they need to live a creative life, where they can discover that to be different is ok.

Chapter VI

Experiment Results and Discussion

Introduction

In this chapter, we provide the results of the experiment based on the data collected. It reveals the overall findings of the effect of the Group investigation cooperative learning model on the students' oral project performances, and the conclusions of our research are thoroughly analyzed.

Furthermore, by the end of the treatment, learners exposed to the research experiment were questioned about the model employed and the efficacy of group investigation in enhancing the learners' oral project presentations and had given their opinions on both. The learners' attitude scale undoubtedly added consistency, reliability, and validity to the experiment results and a greater understanding of the subject under examination.

VI.1. Section 1. The Experiment Findings and Analysis

VI.1.1-Pre-test Achievements of The Experimental and Control Groups

The scores of both the experimental and control groups are far from ideal, as shown in the two tables below. Pupils' performance is graded below average, according to the findings. The tables below show how pupils in both groups have evident disadvantages in performing their projects better orally. Their results differed from one criterion to the next. After all, they had difficulty with grammar, pronunciation, working cooperatively, socializing and all of the other criteria, including subject knowledge, because some did not understand the language and the information they provided clearly. The data also indicates that learners have flawed project oral abilities, requiring innovative techniques and solutions as soon as possible.

Table 6.13: Pre-test Achievements of the Experimental Group

Evaluation Criteria (C)		Students' Number (S)																				
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Non Verbal Skills	**Body Movement/Gestures**	1	0	1	0	0	1	1	0	0	1	1	0	1	1	1	0	1	0	1	1	0
	Eye Contact	1	1	1	1	1	0	0	1	0	1	1	0	1	1	1	0	1	1	1	0	1
	Posture	0	0	0	0	1	1	1	1	1	1	0	1	1	0	1	1	1	0	1	1	0
	Poise	0	0	0	1	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
	Voice/Volume	1	1	0	0	0	0	0	0	1	1	0	1	1	1	0	1	1	1	0	0	0
Language Use	**Grammatical Range and Accuracy**	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1
	Lexical Resource	1	1	0	0	0	1	1	0	0	1	0	0	0	1	0	0	1	0	1	0	0
	Pronunciation	0	0	0	0	1	0	1	1	0	1	0	0	1	0	0	1	1	0	1	0	0
	Fluency	0	0	1	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0
	Coherence	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0
Content	**Subject Knowledge**	1	1	0	1	1	1	0	0	1	0	0	1	0	1	1	0	1	0	1	0	1
	Organization of the Topic	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
	Sources and Relevance of Material	0	0	0	1	1	0	0	0	1	0	1	0	1	1	1	0	0	0	0	0	0
	Response to Questions	1	0	0	0	0	0	1	1	0	0	0	1	0	1	0	0	0	1	0	0	0
Visual Aids	**Data Show-Slides-Videos-Pictures**	0	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0
Contribution to The Group	**Participation in Investigation**	0	0	0	0	1	0	1	0	1	0	0	0	1	0	0	1	0	0	1	0	0
	Interaction and balance in the Team	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0	1	0
	Interpretation	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1	0	1	1
	Preparation/Rehearsal	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	1	0	1
	Social Skills	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0
Project Oral Presentation: Pupils Total Scores		**6**	**6**	**3**	**4**	**8**	**7**	**8**	**7**	**8**	**9**	**5**	**8**	**10**	**7**	**5**	**6**	**7**	**4**	**10**	**6**	**6**

Table 6.14: Pre-test Achievements of the Control Group

Evaluation Criteria (C)		Students' Number (S)																				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Non Verbal Skills	Body Movement/Gestures	1	0	1	0	1	0	1	1	1	0	1	0	0	1	1	0	1	1	1	0	1
	Eye Contact	1	1	1	1	1	1	1	1	0	1	0	0	1	0	0	1	1	0	0	0	1
	Posture	0	1	0	0	1	0	1	1	1	0	1	1	0	1	1	1	0	0	0	1	0
	Poise	0	0	0	1	0	1	0	0	0	0	0	1	0	1	0	1	0	1	0	0	0
	Voice/Volume	1	1	1	0	1	1	0	1	1	1	1	1	0	1	0	1	1	0	0	1	0
Language Use	Grammatical Range and Accuracy	0	0	0	0	1	1	0	0	1	0	1	0	0	0	1	0	0	1	0	0	1
	Lexical Resource	1	1	0	0	0	1	1	1	1	0	0	0	0	1	1	0	0	0	0	0	1
	Pronunciation	0	0	1	1	1	0	1	1	0	0	0	0	1	0	0	1	1	0	0	1	0
	Fluency	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0
	Coherence	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0
Content	Subject Knowledge	1	1	0	1	1	1	0	0	1	0	0	1	0	1	1	0	1	0	1	0	1
	Organization of the Topic	1	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
	Sources and Relevance of Material	0	0	0	1	1	0	0	1	1	0	1	0	0	1	0	0	0	0	0	0	1
	Response to Questions	1	0	0	1	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0
Visual Aids	Data Show-Slides-Videos-Pictures	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Contribution to The Group	Participation in Investigation	1	0	1	0	1	0	1	0	1	0	1	0	0	0	0	1	0	0	1	0	0
	Interaction and balance in the Team	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0	0	0
	Interpretation	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	1
	Preparation/Rehearsal	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0	1
	Social Skills	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
Project Oral Presentation: Pupils Total Scores		**8**	**7**	**6**	**7**	**12**	**8**	**9**	**11**	**10**	**4**	**6**	**8**	**3**	**7**	**5**	**7**	**5**	**4**	**5**	**6**	**8**

VI.1.2-Homogeneity Test

We used the test of homogeneity to see whether the variances of the two groups (Experimental and Control) are significantly different or not from each other and whether there are statistically significant differences at the significance level (α=0.05), between the mean scores of the pupils of the control and experimental groups in the pre-test

Table 6.15 compares the pretest means and standard deviations of both groups, indicating that the scores are pretty similar. From the descriptive statistics, it is clear that the mean values of the experimental group (M = 6.67, SD = 1.88) and the control group (M = 6.95, SD = 2.31) in the pre-test indicates that there are no statistically significant differences between the two on the various axes of the skills under study including (Non-verbal skills, language use, content, visual aids, and contribution to the groups), which means that both groups are closely equivalent. Despite the minor gap or slight bit difference in the means in favor of the Control group, the means of both the experimental and control groups before getting the treatment are pretty close, as seen in the above tables. The results show that the experimental group performed virtually identically to the control group. This assures that the two groups are equivalent before the study begins. And to confirm this, an Independent Sample t-test was conducted.

Table 6.15: Pre-test achievements of the Experimental and Control groups

Group Statistics				
Evaluation Criteria (C)	**Groups**	**N**	**Mean**	**Std. Deviation**
Non Verbal Skills	Experimental	21	2,5714	0,81064
	Control	21	2,7143	0,90238
Language Use	Experimental	21	1,3333	0,96609
	Control	21	1,5238	0,81358
Content	Experimental	21	1,3810	0,86465
	Control	21	1,4286	1,16496
Visual Aids	Experimental	21	0,1429	0,35857

	Control	21	0,1429	0,35857
Contribution to The Group	Experimental	21	1,2381	1,09109
	Control	21	1,1429	0,79282
Project oral presentation	Experimental	21	6,6667	1,87972
	Control	21	6,9524	2,31249

Table 6.16 indicates that all the values of the degree of significance of the test (Sig) on all axes (Non Verbal Skills (sig= 0.59); Language Use (sig= 0.49); Content (sig= 0.88), Visual Aids (sig= 1.00); Contribution to The Group (sig= 0.74) as well as the total score (sig=0.66) are greater than the significance level (α= 0.05), and therefore there is no statistical significance for the test on all these axes , which confirms that the test is statistically not significant. This means that there are no statistically significant differences between the two groups (experimental and control) and that there is homogeneity between the two groups in pre-test achievements which is clearly demonstrated in figure1 below. Thus, any changes in scoring and subsequent over scoring will be related to the experimental independent variable (GI cooperative learning model).

Table 6.16: Independent Samples Test for pre-test achievements of the Experimental and the Control groups

Independent Samples Test				
Evaluation Criteria (C)	**T-Test For Equality of Means**			
	T	**df**	**Sig. (2-tailed)**	**Test Indication**
Non Verbal Skills	-0,540	40	0,592	**Not Significant**
Language Use	-0,691	40	0,493	**Not Significant**
Content	-0,150	40	0,881	**Not Significant**

Visual Aids	0,000	40	1,000	**Not Significant**
Contribution to The Group	0,324	40	0,748	**Not Significant**
Project oral presentation	-0,439	40	0,663	**Not Significant**

The results of the pupils' pretests provide us with valuable information about their initial level before beginning the treatment. The data shows that our sample of both groups has issues that limit their ability to present their projects orally, as indicated in the graph above. It also implies that they have a demonstrable inability to cooperate while working on their projects. Lack of help and guidance from their teachers could be one explanation for these results. Also, lack of creativity and source material might be another reason. In the teachers' questionnaire, all of these diverse factors will be verified and identified.

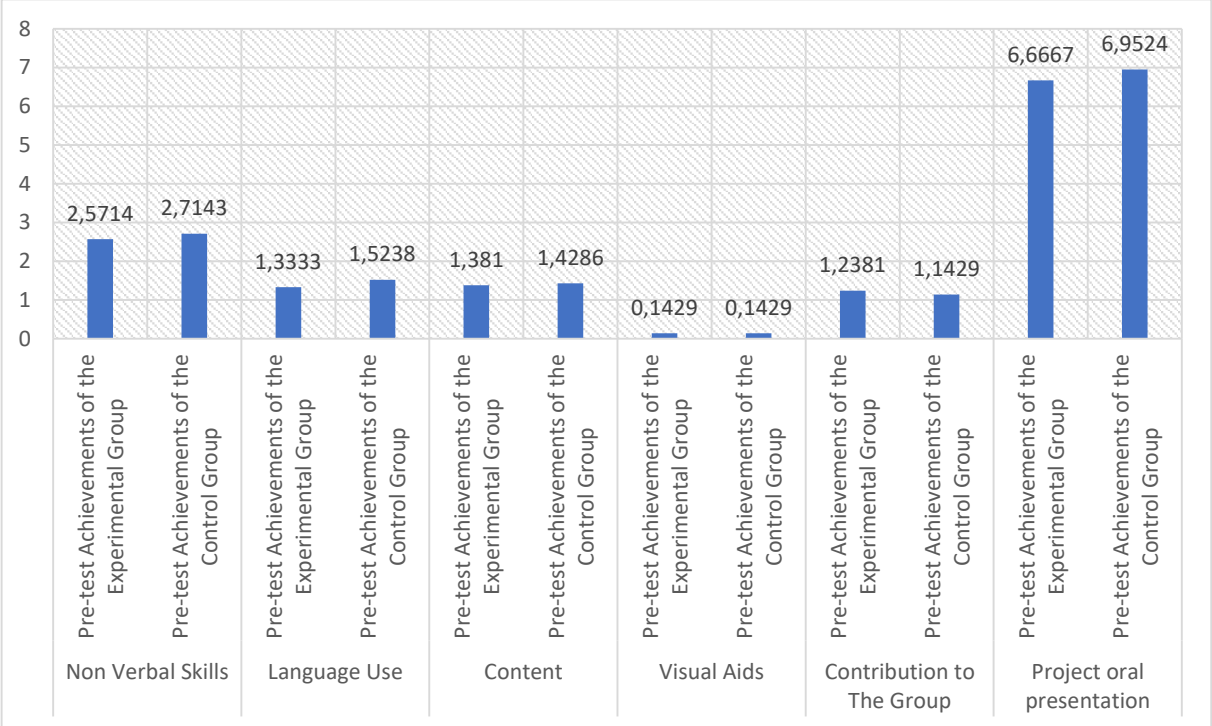

Figure 6.14: Means- pre-test (Experimental group /Control group)

VI.1.3-Experimental Group Comparative Achievements

Table 6.17: Post-test Achievements of the Experimental Group

Evaluation Criteria (C)		Students' Number (S)																				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Non Verbal Skills	Body Movement/Gestures	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1
	Eye Contact	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	0	1
	Posture	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0
	Poise	0	0	1	1	1	1	0	0	0	0	1	1	1	1	0	0	1	0	0	0	1
	Voice/Volume	1	1	1	0	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0
Language Use	Grammatical Range and Accuracy	0	1	1	0	1	1	1	0	0	1	1	0	1	0	1	1	0	0	1	1	1
	Lexical Resource	1	1	1	1	1	1	1	0	1	1	0	1	0	1	0	0	1	1	1	1	0
	Pronunciation	0	0	0	0	1	0	1	1	0	1	0	1	1	0	1	1	1	0	1	0	0
	Fluency	0	1	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0	0	1	0	0
	Coherence	1	1	0	0	0	0	1	1	0	0	1	1	1	1	0	0	1	0	1	1	1
Content	Subject Knowledge	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Organization of the Topic	1	1	0	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1
	Sources and Relevance of Material	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1
	Response to Questions	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Visual Aids	Data Show-Slides-Videos-Pictures	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Contribution to The Group	Participation in Investigation	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Interaction and balance in the Team	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Interpretation	1	1	1	0	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1
	Preparation/Rehearsal	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Social Skills	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	0	1	1	1
Project Oral Presentation: Pupils Total Scores		16	16	16	13	18	16	18	17	16	16	15	16	18	16	16	16	18	13	19	15	15

The results of the Experimental Group in **Table 6.17** above reveal that the pupils' twenty criteria scores distinctively increased. In other words, all the pupils in the group achieved higher scores above average (10/20). These increased results showed that the intervention had a significant effect, which will be confirmed by conducting a paired t-test below.

From **Table 6.18**, we find that the post-test means of the experimental group are greater than those achieved in the pre-test at the level of all axes, as well as the total score (M= 6.66/16.14, SD= 1.88/1.52), which indicates the superiority of the post-test results over the pre-test ones, and we will make sure that these differences have a statistical significance through the application of a Paired Samples t-Test.

Table 6.18: Experimental group pre and post-tests achievements

Paired Samples Statistics				
Evaluation Criteria (C)	**Experimental Group**	**Mean**	**N**	**Std. Deviation**
Non Verbal Skills	**Pre-test**	2,5714	21	0,81064
	Post-test	3,9524	21	0,66904
Language Use	**Pre-test**	1,3333	21	0,96609
	Post-test	2,7619	21	0,99523
Content	**Pre-test**	1,3810	21	0,86465
	Post-test	3,7619	21	0,53896
Visual Aids	**Pre-test**	0,1429	21	0,35857
	Post-test	1,0000	21	0,00000
Contribution to The Group	**Pre-test**	1,2381	21	1,09109
	Post-test	4,6667	21	0,57735
Project oral presentation	**Pre-test Achievements**	6,6667	21	1,87972
	Post-test Achievements	16,1429	21	1,52597

As illustrated in the table above, the analysis of the paired samples test showed that all the degrees of significance are (Sig 2-tailed= 0.000) less than (0.05), which indicates that there is a statistically significant difference of the test at the level of all axes (nonverbal skills, language use, content, visual aids and contribution to the group) as well as the total score. The table also indicates that there are statistically significant differences between the pre and post scores of the experimental group on all axes and the total score of the scale, and when comparing the arithmetic means of the two pre and post scores of the experimental group (as clearly shown in figure 2 below), we see that there is also a difference between our means. The statistics above further confirmed a noteworthy difference in which the means of post-test scores are higher than those of pre-test, which ensures that this change is due to the new method (GI). This substantial variability reveals that pupils exposed to the Group Investigation cooperative learning model increase their oral performances when presenting their projects.

Table 6.19: Experimental Group pre/post-tests Paired Samples Test

	Paired Samples Test			
	t	**df**	**Sig. (2-tailed)**	**Test Indication**
Non Verbal Skills	-7,319	20	0,000	**statistically significant**
Language Use	-8,076	20	0,000	**statistically significant**
Content	-12,619	20	0,000	**statistically significant**
Visual Aids	-10,954	20	0,000	**statistically significant**
Contribution to The Group	-15,281	20	0,000	**statistically significant**
Project oral presentation	-33,685	20	0,000	**statistically significant**

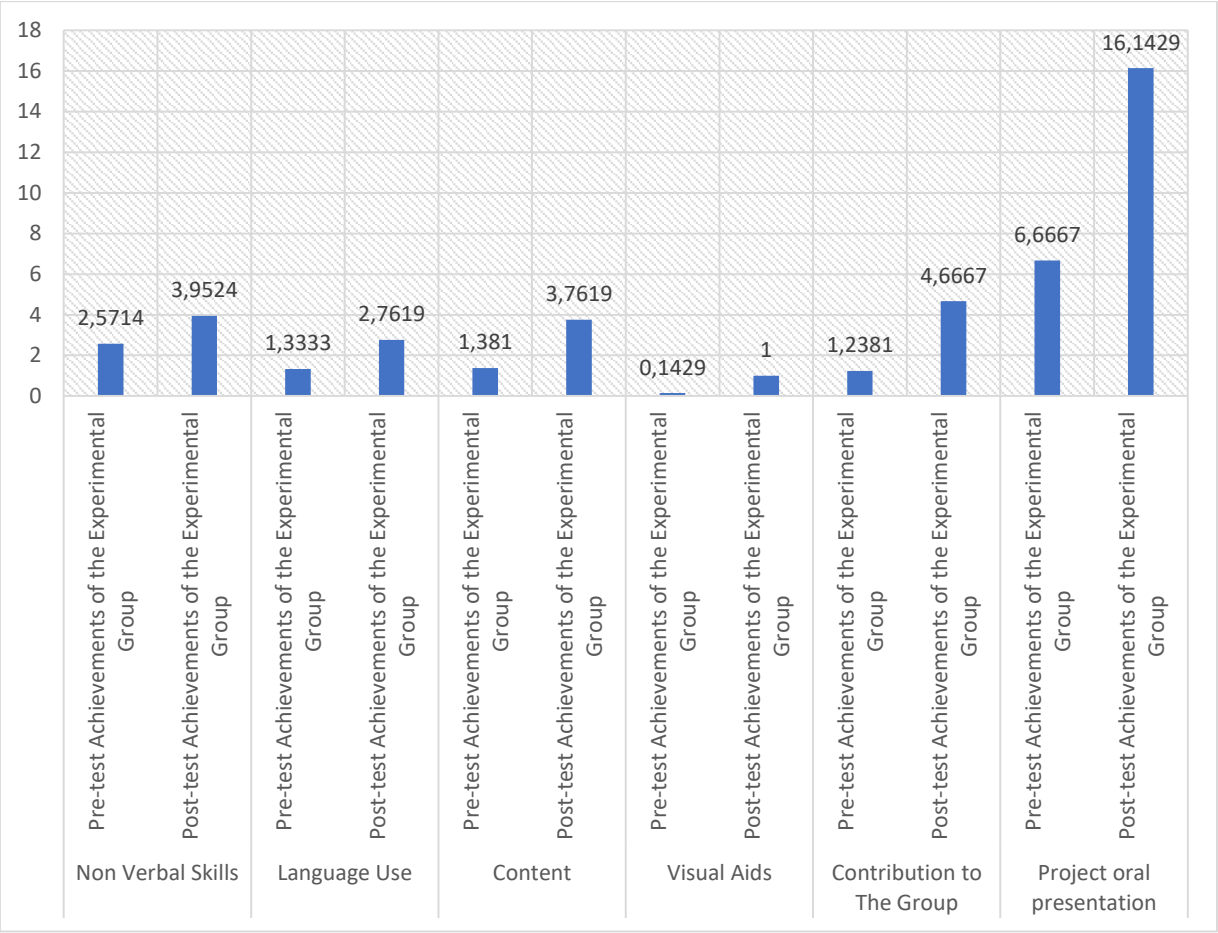

Figure 6.15: Means- Experimental Group Pre-test/Post-test

VI.1.4- Control Group Comparative Achievements

The comparative results of the control group in table 8 below show that only six (06) pupils scored the average out of twenty-one.

Table 6.20: Post-test Achievements of the Control Group

Evaluation Criteria (C)		Students' Number (S)																				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Non Verbal Skills	Body Movement/Gestures	1	1	1	1	1	1	0	1	1	1	0	1	0	1	1	1	1	1	1	1	1
	Eye Contact	1	1	1	1	1	0	1	1	0	0	1	1	1	1	1	1	0	0	1	0	1
	Posture	0	1	0	0	1	1	0	0	1	0	0	0	0	1	1	1	1	0	0	1	0
	Poise	1	1	0	0	1	0	0	1	1	0	0	0	0	1	0	1	0	1	0	1	0
	Voice/Volume	1	1	1	0	1	1	0	1	1	1	1	1	1	1	0	1	1	0	1	1	1
Language Use	Grammatical Range and Accuracy	0	0	1	0	1	0	0	1	1	0	1	0	0	0	0	0	1	1	0	0	1
	Lexical Resource	1	1	0	0	0	1	1	1	1	0	1	0	0	1	1	0	0	0	0	0	1
	Pronunciation	0	0	1	1	1	1	1	1	0	0	1	0	1	0	0	1	1	0	0	0	0
	Fluency	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0
	Coherence	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0
Content	Subject Knowledge	1	1	0	1	1	1	0	0	1	0	0	1	0	1	0	0	1	0	1	1	1
	Organization of the Topic	1	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	Sources and Relevance of Material	0	0	0	1	1	0	0	1	1	0	1	0	0	1	0	0	0	0	0	0	1
	Response to Questions	1	1	0	1	1	0	1	1	0	1	0	1	0	1	0	1	0	0	1	0	1
Visual Aids	Data Show-Slides-Videos-Pictures	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Contribution to The Group	Participation in Investigation	1	1	1	0	1	0	1	0	1	1	1	0	0	0	0	1	0	1	1	0	0
	Interaction and balance in the Team	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0
	Interpretation	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	1
	Preparation/Rehearsal	1	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0	1
	Social Skills	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	1	0
Project Oral Presentation: Pupils Total Scores		**10**	**11**	**7**	**8**	**12**	**8**	**8**	**12**	**11**	**5**	**7**	**8**	**4**	**9**	**4**	**9**	**6**	**6**	**8**	**7**	**10**

From **Table 6.21**, we find that the arithmetic means are close in pre-test and post-test scores of the control group, with a slight superiority of post-test in the nonverbal skills (M=2.71/3.23; SD=0.90/1.17), project content (M= 1.42/1.71; SD= 1.16/1.27) and the total score (M=6.95/ 8.14, SD= 2.31/2.45).

Table 6.21: Control group pre-test and post-test achievements

Paired Samples Statistics				
Evaluation Criteria (C)	**Control Group**	**Mean**	**N**	**Std. Deviation**
Non Verbal Skills	**Pre-test**	2,7143	21	0,90238
	Post-test	3,2381	21	1,17918
Language Use	**Pre-test**	1,5238	21	0,81358
	Post-test	1,619	21	0,97346
Content	**Pre-test**	1,4286	21	1,16496
	Post-test	1,7143	21	1,27055
Visual Aids	**Pre-test**	0,1429	21	0,35857
	Post-test	0,1429	21	0,35857
Contribution to The Group	**Pre-test**	1,1429	21	0,79282
	Post-test	1,4286	21	0,97834
Project oral Presentation	**Pre-test Achievements**	6,9524	21	2,31249
	Post-test Achievements	8,1429	21	2,45531

Table 6.22 shows that the degree of significance (Sig) of the test on the level of Language use (sig=0.49) and Visual aids (sig= 1) is greater than the level of significance (0.05), and therefore there is no statistical significance for the test on these axes, which means that there are no statistically significant differences between the pre and post scores of the control group at the level of these axes.

However, all the degrees of significance (Sig) for the axes Nonverbal skills (sig=0.024), Content (sig=0.03), Contribution to the group (sig =0.03) are less than the significance level (0.05), and therefore there is a statistical significance for the test, and from this, there are statistically significant differences between the pre and post-tests of the Control Group at the level of these axes. Moreover, when comparing the arithmetic means of the pre and post-tests of the control group as shown in figure3 below, we find that the differences are in favor of the post-test (the post-test is superior), but this superiority is very slight through the

differences between the means, and we can refer it to external factors such as time and the critical issue that many sociological and educational research programs face: the inability and unethicality of entirely isolating all of the participants. Both groups (Control and Experimental) attend the same school, so it is logical to anticipate that they will interact outside of class and discuss ideas for sure, potentially contaminating the results. Thus, to ensure that the program has a positive effect, it is necessary to compare the post-test results of both Control and Experimental groups to avoid the influence of those two confounding factors and ensure that the positive effect is as the result of the treatment only.

Table 6.22: Control Group pre/post-tests Paired Samples Test

	Paired Samples Test			
	t	**df**	**Sig. (2-tailed)**	**Test Indication**
Non Verbal Skills	-2,447	20	0,024	**Statistically Significant**
Language Use	-0,698	20	0,493	**Not Significant**
Content	-2,335	20	0,03	**Statistically Significant**
Visual Aids	0	20	1	**Not Significant**
Contribution to The Group	-2,335	20	0,03	**Statistically Significant**
Project oral Presentation	-4,675	20	0.000	**Statistically Significant**

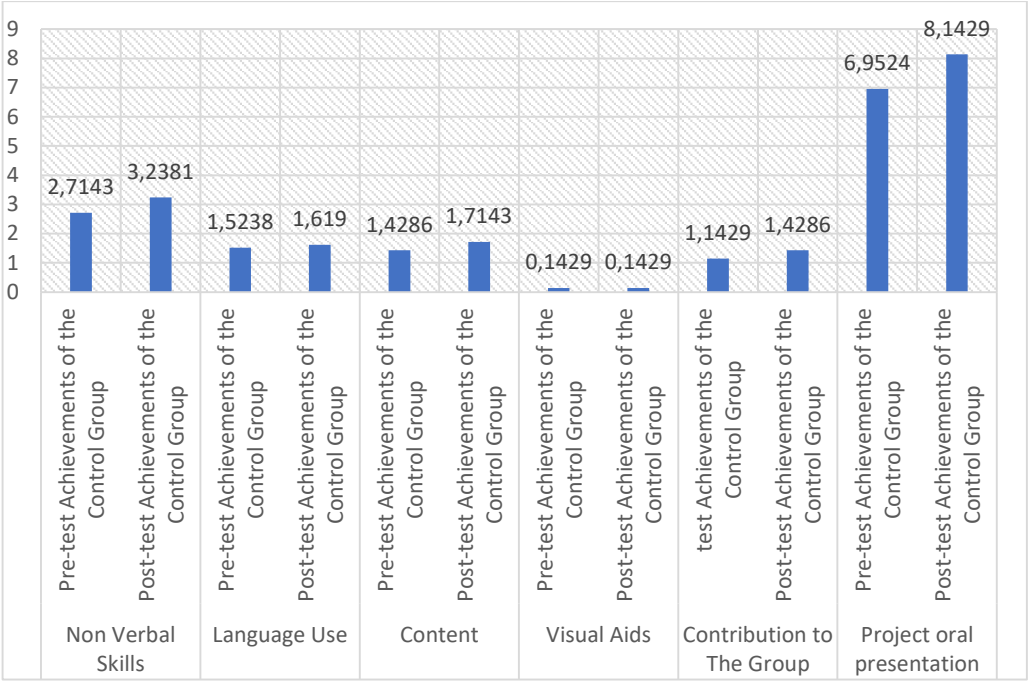

Figure 6.16: Means-Control Group Pre-test/ Post-test

VI.1.5- Experimental and Control Groups Post-test comparative Achievements

From the descriptive statistics in **Table 6.23**, we find that the mean values of the experimental group in the post-test are greater than those of the control group at the level of all axes and the total score of the scale (Experimental Group M= 16.14; Control Group M= 8.14). This indicates that there are statistically significant differences between the two groups. It also indicates the superiority of the experimental group over the control group in the post-test, and we will confirm the existence of this superiority by applying an Independent Samples t-Test.

Table 6.23: Experimental and Control Groups Post-test Achievements

Group Statistics				
Evaluation Criteria (C)	**Groups**	**N**	**Mean**	**Std. Deviation**
Non Verbal Skills	**Experimental**	21	3,9524	0,66904
	Control	21	3,2381	1,17918
Language Use	**Experimental**	21	2,7619	0,99523
	Control	21	1,6190	0,97346

Content	**Experimental**	21	3,7619	0,53896
	Control	21	1,7143	1,27055
Visual Aids	**Experimental**	21	1,0000	0,00000
	Control	21	0,1429	0,35857
Contribution to The Group	**Experimental**	21	4,6667	0,57735
	Control	21	1,4286	0,97834
Project oral presentation	**Experimental**	21	16,1429	1,52597
	Control	21	8,1429	2,45531

From **Table 6.24**, we find that all degrees of significance (Sig2-tailed) for the test at the level of all axes Nonverbal skills (sig=0.020), Language use (sig=0.001), Content (sig=0.000),Visual aids (sig= 0.000), Contribution to the group (sig =0.000), as well as the total score (Project Oral Presentation sig= 0.000) , are less than the level of significance (0.05), and therefore there is a statistical significance of the test. Thus, there are statistically significant differences between the control and experimental groups in the post-test. When comparing the mean values of the control and experimental groups as shown in figure 4, we find that the differences are in favor of the experimental group (the experimental group is superior to the control group in the post-test results), which means that there is a positive effect of the program (GI) on pupils' Oral project presentations.

As all the tables show that the experimental group participants reported significantly more than the other control group. The data reported here appear to support and confirm our hypothesis set at the beginning of the research.

Table 6.24: Experimental and Control Groups post-test Independent Samples Test

Independent Samples Test				
	t-test for Equality of Means			
	t	**df**	**Sig. (2-tailed)**	**Test Indication**
Non Verbal Skills	2,414	40	0,020	**Statistically significant**
Language Use	3,762	40	0,001	**Statistically significant**

Content	6,799	40	0,000	**Statistically significant**
Visual Aids	10,954	40	0,000	**Statistically significant**
Contribution to The Group	13,062	40	0,000	**Statistically significant**
Project oral presentation	12,682	40	0,000	**Statistically significant**

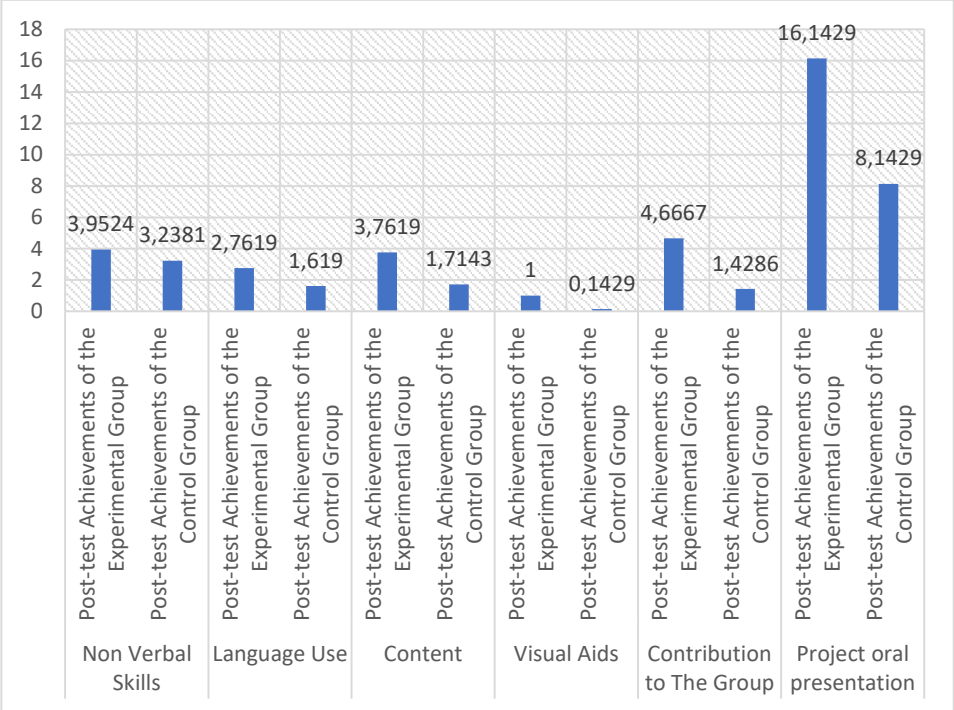

Figure 6.17: Means-Post-Test Experimental Group/Control Group

VI.1.6 Discussion

During a period of eight weeks, the experimental group received a new cooperative learning methodology (Group Investigation) in project work sessions while the control group participants were taught the same themes but using traditional project teaching methods. The post-test findings revealed that the two means are considerably different: (EXP M=16.14. CG M= 8.14). The null hypothesis H0 is then rejected, implying that the

relationship between the dependent variable (D) (project oral presentation scores) and the independent variable "ID" (Group Investigation) is not coincidental. It was because of the importance of GI in helping improve the oral project performance of the experimental group individuals.

Therefore, the findings demonstrated that the control group made little development and did not achieve the same level of improvement as the experimental group, which swiftly acquired nonverbal abilities, linguistic skills, social skills, and knowledge. This suggests that introducing Group Investigation into instructional projects improves students' oral performance.

It can be summed up to say that the new methodology that the experimental group was exposed to (Group Investigation Cooperative Learning Model) had a clear and statistically significant effect on the learners' cognitive and performance fields.

VI.2. Section 2. The Pupils' Attitude Scale

Introduction

The researcher developed an attitude scale to measure pupils' attitudes towards English projects in general and Group Investigation in particular. This scale was utilized for the experimental group after the treatment. (**Appendix L)**

a-Constructing the Scale

Depending on the literature review connected to attitudes to English and the attitudes of project-based learning and cooperative learning methods, the researcher built this scale. We used a simple language with clear short statements to ensure pupils' understanding. We consulted teachers and specialists of the English language, and changes were made based on their comments and suggestions.

b-Describing the scale

The scale consisted of four parts: attitudes towards group investigation in English projects (nine statements) , attitudes towards target language use (five statements) , attitudes towards content knowledge (four statements) , and attitudes towards group work (six statements). The scale items were constructed to measure pupils' answers. Thus, the 5-point Likert scale was employed: strongly disagree (1point), disagree (2points), Neutral (3points), agree (4points), and strongly agree (5points). We asked the pupils to tick the answer that best describes their viewpoints.

VI.2.1-Reliability and Validity of the Scale

VI.2.1.1-Reliability of the Scale

a-Cronbach's Alpha Reliability

To measure the internal consistency of the Likert scale, we applied the Cronbach's Alpha technique, and the results are presented in **Table 6.25** below.

The table below shows that the values of Cronbach's Alpha for all axes (Attitudes towards Group Investigation in English Projects=0.835, Attitudes towards Target Language Use=0.724, Attitudes towards Content Knowledge=0.823, Attitudes towards Group Work= 0.798), as well as the total score (0.945) is greater than (0.7), and therefore it indicates a high degree of reliability of the test, which allows it to be used in data collection.

Table 6.25: Cronbach's Alpha Reliablility coefficient

Reliability Statistics		
	Cronbach's Alpha	N of Items
Attitudes Towards Group Investigation in English Projects	0.835	09
Attitudes Towards Target Language Use	0.724	05
Attitudes Towards Content Knowledge	0.823	04
Attitudes Towards Group Work	0.798	06
Total	0.945	24

VI.2.1.2-Validity of the Scale

a-Construct Validity

Results illustrated in **Table 6.26** show that all the degrees of significance (Sig) for the axes' correlation with the total score are less than (0.01) and this indicates that there is a statistical significance for the correlation, which indicates a high construct validity of the Likert scale.

Table 6.26: The scale's Construct Validity

Axes	Correlation with the total score (R)	Sig
Attitudes Towards Group Investigation in English Projects	0.970**	0.000
Attitudes Towards Target Language Use	0.926**	0.000
Attitudes Towards Content Knowledge	0.941**	0.000
Attitudes Towards Group Work	0.938**	0.000

b-Intrinsic Validity

Intrinsic Validity = $\sqrt{\boldsymbol{Reliability}}$

Table 6.27 shows that the values of validity coefficient for all axes (Attitudes towards Group Investigation in English Projects=0.914, Attitudes towards Target Language Use= 0.851, Attitudes towards Content Knowledge= 0.907, Attitudes towards Group Work = 0.893) as well as the total average (0.972) is greater than (0.8), which are high values that indicate a high validity of the scale that allows it to be used in data collection.

Table 6.27: Intrinsic Validity of the Scale

Axes	Cronbach's Alpha	Intrinsic Validity
Attitudes towards Group Investigation in English Projects	0.835	0.914
Attitudes towards Target Language Use	0.724	0.851
Attitudes towards Content Knowledge	0.823	0.907
Attitudes towards Group Work	0.798	0.893
Total	0.945	0.972

VI.2.2-Analysis and Interpretation of the Scale

VI.2.2.1-Attitudes towards Group Investigation in English Projects

This table shows that the value of the test (T) is (11.787) and the degree of significance of the test is (Sig= 0.000) which is less than the significance level (0.01). Therefore, there is a statistical significance of the test, which indicates that there are statistically significant differences between the arithmetic mean (Mean= 38.0476) and the hypothetical value (Test Value= 27) and when comparing these two, we find that the differences go for the validity of the mean value. This means that the answers of the sample members go in the positive direction (Approval).

Table 6.28: One-sample T-test for attitudes towards GI in PW

One-Sample Test					
	Test Value = 27				
	t	df	Sig. (2-tailed)	Mean	Mean Difference
Attitudes Towards Group Investigation in English Projects	**11,787**	**20**	**0,000**	**38,0476**	**11,04762**

Table 6.29 shows that the majority of respondents (52.4%) enjoy doing projects under the group investigation model. Most of them (81%) think that the model helps them relate what they learn in class to real-life contexts. Almost all of the participants agree that GI helped them think of authentic ideas, thus develop creativity. Furthermore, most (80.9%) of the pupils agree that learning becomes more enjoyable after using GI model, and all of them felt more independent and took over responsibility for their learning. Besides, incorporating technology into their presentations becomes an easy task and a necessity for (80.9%) of

them. More than half of the pupils (76.2) believe that the method made them experience self and peer evaluation, which reduced their anxiety and fear of assessing themselves and others. After dealing with GI, the participants (95.2%) learned how to work independently and at the same time with other individuals within a group. So they developed both individual accountability and positive interdependence. Finally, the majority of the informants feel excited to work on future projects using the same technique. These results indicate that the pupils' attitudes towards GI model were positive. They liked the new methodology, and they benefited a lot from the unique experience.

Table 6.29: Pupils' attitudes towards GI in PW

Items	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
Project work becomes more enjoyable now	6	28.6	11	52.4	3	14.3	1	4.8	00	00	21	100
Now, I can make real-world connection to what I learn	6	28.6	12	57.1	3	14.3	00	00	00	00	21	100
Group Investigation helps me think of new ideas and be more creative	10	47.6	10	47.6	1	4.8	00	00	00	00	21	100
Group Investigation makes learning more interesting	7	33.3	10	47.6	3	14.3	1	4.8	00	00	21	100
Now I feel more independent and responsible	13	61.9	8	38.1	00	00	00	00	00	00	21	100
The method encourages me to incorporate technology into my presentation	7	33.3	10	47.6	4	19.0	00	00	00	00	21	100
I can evaluate myself and others	7	33.3	9	42.9	4	19.0	1	4.8	00	00	21	100
The method's stages are interdependent: I work both independently and together	13	61.9	7	33.3	1	4.8	00	00	00	00	21	100

I feel excited to do future projects	**6**	**28.6**	**9**	**42.9**	**5**	**23.8**	**1**	**4.8**	**00**	**00**	**21**	**100**
Total	**39.67%**		**45.5%**		**12.7%**		**2.13%**		00%		21	100

VI.2.2.2-Attitudes towards Target Language Use

Table 6.30 above indicates that the value of the test (T) is (8.533), and the degree of significance of the test is (Sig=0.000), which is less than the significance level (0.01). Therefore, there is a statistical significance of the test, and from this, we can say that there exist statistically significant differences between the arithmetic mean (Mean= 20.0476) and the hypothetical value (Test Value= 15). In addition, when comparing the two, we find that the differences go for the validity of the arithmetic mean; that is, the answers of the sample members go in the positive direction (Approval).

Table 6.30: One-sample T-test of pupils' attitudes towards Language Use

One-Sample Test					
Attitudes Towards Target Language Use	**Test Value = 15**				
	t	**df**	**Sig. (2-tailed)**	**Mean**	**Mean Difference**
	8,533	**20**	**0,000**	**20,0476**	**5,04762**

Table 6.31 shows that more than half of the pupils (57.1%) believe that the new methodology increased their classroom participation using the target language. It also had a positive impact on their target language use outside the classroom with their friends and family. Now, most of the individuals (85.7) feel relaxed and confident when they speak English. Almost all of them agree that GI encouraged them to read more articles, short stories, and books written in the target language; thus, developing a vast vocabulary, which they can benefit from later. Finally, the majority of the informants (81%) agree that GI helped them improve language skills such as speaking, reading, and writing. To sum up, Group Investigation encouraged learners to listen to each other and interact with one another respectfully. They used to speak all the time and discuss their topic issues using English. This helped in reducing their speaking anxiety and boosted their confidence when using the language.

Table 6.31: Pupils' attitudes towards Target Language Use

Items	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
Now, I can participate in the class using English	4	19.0%	8	38.1%	8	38.1%	1	4.8	00	00	21	100
I can use English outside the classroom better than before	4	19.0%	8	38.1%	9	42.9%	00	00	00	00	21	100
When I speak English now, I feel more relaxed and confident	7	33.3%	11	52.4%	3	14.3%	00	00	00	00	21	100
The method encourages me to learn new words to use later	7	33.3%	12	57.1%	1	4.8%	1	4.8	00	00	21	100
I can speak, read and write better than before	9	42.9%	8	38.1%	3	14.3%	1	4.8%	00	00	21	100
Total	29.5%		44.76 %		22.88 %		2.88 %		00%		21	100

VI.2.2.3-Attitudes towards Content Knowledge

Table 6.32 shows that the value of the test (T) equals (7,737), and the degree of significance (Sig=0.000), which is less than the level of significance (0.01) and therefore there is a statistical significance for the test. We conclude that there are statistically significant differences between the arithmetic mean (Mean= 16, 0476) and the hypothetical Test Value (12). And when comparing them, we find that the differences go for the validity of the arithmetic mean; that is, the answers of the sample members go in a positive direction (Approval).

Table 6.32: One-sample T-test of pupils' attitudes towards Content Knowledge

One-Sample Test					
	Test Value = 12				
	T	df	Sig. (2-tailed)	Mean	Mean Difference
Attitudes Towards Content Knowledge	7,737	20	0,000	16,0476	4,04762

Table 6.33 Indicates that most participants (76.1%) developed investigation skills and searching techniques after experiencing project work under GI. The method made the majority of the class (76.2%) learn how to play the role of the teacher and explain information for themselves and others. They used to look for the data needed, summarize it, and find easy ways to make other members grasp it. So pupils had to understand what they were learning first in order to be able to share it with others. Moreover, (76.1%) of the pupils agree that GI helped them connect background knowledge with newly acquired one so that they could make appropriate results and conclusions. This proved to enhance the way they memorize information. Finally, A significant component of learning is answering questions. Questions to be answered entail having pupils listen carefully to the question, think about it, and understand its meaning. Most importantly, answering questions about a given topic proves the pupils' understanding of what they are doing. Most of the participants (85.7%) were able to easily find answers to their teacher's and peers' questions. Therefore, we can say that GI helped pupils search for information about a particular topic using keywords, understand the topic of the project, explain it to their peers and answer questions about it. This indicates that GI had a great impact on pupils' learning in general.

Table 6.33: Pupils' Attitudes towards Content knowledge

Items	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
Now, I am able to search for useful information and sources about my topic	4	19.0%	12	57.1%	4	19.0%	1	4.8	00	00	21	100

I understand my topic very well, and I can explain it to others	**7**	**33.3%**	**9**	**42.9%**	**5**	**23.8%**	**00**	**00**	**00**	**00**	**21**	**100**
I connect what I am learning to what I already know, which enhances my memory storage	**4**	**19.0%**	**12**	**57.1%**	**3**	**14.3%**	**00**	**00**	**00**	**00**	**21**	**100**
I can easily answer questions about my topic	**6**	**28.6%**	**12**	**57.1%**	**3**	**14.3%**	**1**	**4.8**	**00**	**00**	**21**	**100**
Total	**25.0%**		**53.55 %**		**17.85 %**		**2.4 %**		**00%**		**21**	**100**

VI.2.2.4-Attitudes towards Group Work

In **Table 6.34**, we find that the value of the test (T) is equal to (10.445) and the degree of significance of the test (Sig) is equal to (0.000), which is less than the level of significance (0.01). Therefore, there is a statistical significance of the test; therefore, there are statistically significant differences between the arithmetic mean (Mean= 25.0952) and the hypothetical Value Test (18). When comparing both results, we find that the differences go for the validity of the arithmetic mean; that is, the answers of the sample members go in the positive direction (Approval).

Table 6.34: One-sample T test of Pupils' attitudes towards Group Work

One-Sample Test					
	Test Value = 18				
	t	df	Sig. (2-tailed)	Mean	Mean Difference
Attitudes Towards Group Work	10,445	20	0,000	25,0952	7,09524

Table 6.35 Shows that all the participants enjoyed working in groups under Group Investigation Model. Most of them (76.2%) experienced better ideas exchange as well as teamwork interaction and communication. Almost all of them (95.3%) agree that learning from peers is exciting and fun. According to (76.2) of the informants, GI helped them learn how to trust and respect each other in a team. They discovered that teamwork is like family

work. Thus, GI helped them develop stronger team bonding, which in turn increased both creativity and productivity. The majority (85.7%) now realize the importance of team roles and responsibilities, which is one of the critical elements of GI.

Most importantly, participants (80.9%) agree that GI helped them improve collaborative problem-solving. One of the necessities of cooperative learning is problem-solving. The majority of the participants learned how to bring the right attitude to the group; they became more flexible when dealing with other members. They learned how to maintain eye contact, listen when others speak, and discuss ideas freely. This helped them learn from each other and, most importantly, develop creativity and problem-solving techniques.

Table 6.35: Pupils' Attitudes towards Group Work

Items	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
Working in groups becomes easier and enjoyable	10	47.6	11	52.4	00	00	00	00	00	00	21	100
I exchange ideas and interact better with my teamwork	7	33.3	9	42.9	4	19.0	1	4.8	00	00	21	100
I can learn new interesting things from my peers better than before	11	52.4	9	42.9	1	4.8	00	00	00	00	21	100
I respect and trust my peers; it is like family teamwork	5	23.8	11	52.4	4	19.0	1	4.8	00	00	21	100
I respect team roles and understand my and others' responsibility	7	33.3	11	52.4	2	9.5	1	4.8	00	00	21	100
Now, I can resolve team conflicts	5	23.8	12	57.1	3	14.3	1	4.8	00	00	21	100
Total	35.7%		50.01%		11.1%		14.4%		00%		21	100

VI.2.2.5-Pupils' Attitudes towards the New Teaching Method

Table 6. 36 indicates that the value of the test (T) is equal to (10.531) and the degree of significance of the test (Sig) is equal to (0.000), which is less than the level of significance (0.01). Therefore, there is a statistical significance for the test, which confirms statistically significant differences between the arithmetic mean (Mean=99.2381) and the hypothetical Test Value (72). It is clear that the differences go for the validity of the arithmetic mean; that is, the answers of the sample members at the level of all the scale's sections are in the positive direction (Approval).

Table 6.36: One-Sample T-test of pupils' attitudes towards the methodology

One-Sample Test					
TOTAL	Test Value = 72				
	T	df	Sig. (2-tailed)	Mean	Mean Difference
	10,531	20	0,000	99,2381	27,23810

VI.2.3-Discussion

The pupils' attitude scale results reveal that Group Investigation Model has a positive impact on the pupils' projects, oral performances, attitudes, motivation, target language use, knowledge, and cooperation. When comparing the pupils' questionnaire results about project work, we can confirm that the new technique completely changed the way they perceive and work on English school projects.

The Likert scale results indicate that working on projects becomes an enjoyable and exciting part of the pupils learning, where they can meet as a family to work on the topic that interests each one of them. They become more aware of the importance of projects, and they appreciate the time they spend together in class. It helped teachers create an engaging classroom where learners can freely interact with each other and discuss ideas. Pupils also developed a sense of responsibility. They felt for the first time independent and autonomous as they took control of their learning.

Furthermore, the more educators are aware of peer connections in their classrooms, the more equipped they are to create an environment in which pupils may interact with one another while participating in beneficial instructional activities. As a result, the difficulty is

to provide opportunities for students to engage with one another while also learning in structured environments. This opportunity is Group Investigation. Pupils learned how to employ social interaction to foster and create new information acquired by the group during the investigation.

The Group Investigation Model (GI) is a student-centered approach that helped the researcher develop pupils as information specialists who can share their knowledge with their peers. Therefore, they enjoyed playing the role of the teacher, explaining and giving assignments to others. Because the teacher only interacts with the group when needed. It also helped cultivate the spirit of collaboration in groups in order to promote active, creative, and enjoyable learning.

Finally, Group Investigation proves to build a stronger teacher-learner relationship. It makes pupils more willing to participate in activities that their teachers want them to do because it helps create a trusting relationship with them. This leads to constructive classroom conduct such as helping, cooperating, sharing, being courteous to each other, and engaging in pleasant social exchanges with others.

General Conclusion

General Conclusion

The primary objective of the current research was to investigate the efficiency of integrating the Group Investigation cooperative learning model into project work to develop the pupils' oral presentations. We aimed to test and verify our hypothesis that was already presented in the introduction, which attempted to describe how group investigation is used to help pupils prepare and present their projects appropriately.

We wanted to show how secondary school teachers would successfully use and apply such a cooperative learning technique to enhance learners' projects. We also sought to study whether and how the exposure to a new method affects the commitment and performance of pupils in the field of project work and oral presentation by emphasizing the benefits and considerable influence of this model in the English language classroom.

To this end, we employed a mixed-method, descriptive, and quasi-experimental. This triangulation offered richness and clarity, increased the study findings' credibility and validity, and helped gather the necessary data for more in-depth insights into the subject. The study was carried out during the academic year 2019/2020 with two second-year classes from Bouzidi Elhachemi Secondary School, Khenchela. We designed two web-based questionnaires for both EFL teachers and pupils and interviewed the Inspector of National Education to investigate their perceptions, which allowed us to comprehend the situation more clearly and pinpoint the various challenges and difficulties that teachers and pupils encounter concerning English project workshops.

Throughout the treatment period, the researcher followed the different stages of the GI model with the experimental group to determine whether their oral presentation of the project might be improved. We also attempted to build a healthy family-like atmosphere in which we ensured a real exposure to the model's four essential components: investigation, interaction, intrinsic motivation, and interpretation. Learners were engaged and motivated to investigate a topic of their interest, interact and then interpret the results to their peers. We insisted on ensuring real cooperation and not competition.

The results achieved during each phase of the treatment show that the implementation of Group Investigation had a favorable influence on the improvement of project’s oral presentation of the experimental group's participants, who clearly achieved higher and statistically significant results at the level of all axes as well as the total score of the scale (Experimental Group M= 16.14; Control Group M= 8.14) than those in the control group. Pupils in the Experimental group showed significant progress in the five axes of the assessment rubric,

including non-verbal skills, language use, content knowledge, visual aids, and contribution to the group. They became fond of the new motivating cooperative learning method, as they have compared it to the traditional way of doing projects, and the results support the use of the GI model to improve the pupils' projects.

Of course, not all experimental group pupils were proficient, but all demonstrated a considerable advancement in their oral presentations. In the beginning, they were anxious, thinking that sharing their findings orally in front of an audience was severely complicated and far from realization. Throughout the experiment, however, we noted that they had developed positive social interaction skills and target language use through consistency and practice, which reduced their foreign language speaking anxiety and stage fright.

The teachers' and pupils questionnaires revealed that teachers do not coordinate, and each has his or her own way of teaching project work. Most teachers blindly followed the coursebook's topics without considering learners' age, needs, or interests; forgetting that their profession requires constant change and creativity. Their way of launching the project was a total failure, as many of them introduced the general topic, explained it to learners, and divided them into groups. They neither devoted class sessions to help and guide learners nor used to check their work progress. Consequently, pupils hated the project session and considered it tedious and time-consuming. Some teachers even used to skip the project workshop section and preferred to make pupils work on some grammar activities or practice writing. Most importantly, the results confirmed that EFL teachers lack knowledge about both cooperative learning and project-based learning. Pupils' responses show that they felt lost when it comes to cooperation, information search, and presentation. They got used to entirely depend on their instructor. By asking pupils to work in groups, they thought they were applying the principles of cooperative learning, and by introducing a topic and asking pupils to do it at home, they believed that they were using PBL principles. In fact, they are killing the spirit of both methods. Both reforms were integrated to develop learners' autonomy, responsibility, and creativity. However, the class realization of the two methods led to adverse outcomes.

The interview with the Inspector of National Education confirmed teachers' and learners' answers. He highlighted the importance of cooperation and project-based learning to 21st-century learners. The inspector was disappointed with the teachers' way of dealing with PW. He clearly admitted that the training was neither practical nor sufficient. And he promised to devote more training sessions and guidance to EFL teachers. The inspector also stated that following the coursebook is not a must and asked teachers to creatively adapt engaging topics. As far as timing is concerned, Mr. Hadid noted that it is a matter of time and class management.

In the light of the pupils' attitude scale analysis, the exposure to GI cooperative learning model increased the pupils' motivation to do English projects and present them orally. The model positively influenced the experimental group participants' target language use, content knowledge, motivation, and cooperation. From the pupils' answers, we conclude that they have become more aware of the significance of the project work session and teamwork roles, responsibilities, and relationships. The pupils' answers also indicate that they became autonomous and more responsible and independent. Pupils enjoyed group work sessions under GI, and they benefited a lot from the new experience.

The analysis of both qualitative and quantitative data collected during the various stages of the research study allowed us to validate our hypothesis H1, which indicates that the exposure to the GI model made EFL secondary school pupils improve and develop their way of presenting English projects orally. They learned how to be independent of their teacher, how to be responsible and autonomous. They also improved their confidence and self-esteem and developed creative thinking and problem-solving skills. Involving them in designing the rubric and the evaluation process helped them reflect on their own learning and progress.

The gathered data from the different stages of this study represent only one level (second-year secondary school pupils); we cannot generalize the findings. Thus, we recommend conducting similar studies with different levels, whether at the middle and secondary school levels or the university. Additionally, the study population was relatively small (42) pupils, so similar research should be conducted with a larger population. Finally, the treatment phase took only two months (8 weeks) and covered only one teaching unit (one project) as all schools were shut down due to the Covid-19 pandemic. Therefore, it would be advantageous for teachers and future researchers to cover more teaching units/ projects during a long-term study to assess the long-term consequences of the GI model.

Finally, based on the study findings and discussions, we suggest the following key elements that would help improve the results of project work in Algerian secondary schools and maximize its benefits:

- The Algerian Ministry of Education had better devote more pedagogical meetings, seminars, and training sessions to guide teachers on implementing both project-based learning and cooperative learning effectively.
- Teachers' coordination and collaboration play a significant role in making PBL and other teaching/learning successful. When planning, teachers have to make sure that teaching through PBL is delightful and challenging.

- Teachers have to devote sessions to let their pupils work on their projects in class, provide them with the necessary materials, sources, guide them and check their progress as frequently as possible. They should also try different cooperative learning models and techniques in order to engage pupils and raise their motivation to learn.
- Teachers should design special grading rubrics when assessing pupils' project work. They should also involve their students in this process, as they help them know exactly what is expected of them.
- Teachers should encourage self or peer evaluation because it raises students' autonomy, encourages them to be more responsible, and help them reflect on their own learning.
- Teachers should urge their pupils to share their final work with other classes, friends, or even parents. They can organize a special day for project presentations, prepare certificates or small prizes for the best work and ask pupils to record and share online.
- Finally, educators should take advantage of social media services to get in touch with their pupils (the responsible of each group) to frequently check the work of each member and make sure they are in the right direction. Pupils will like it, and it will improve the teacher-learner relationship and build trust.

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Appendices

Appendix A

Administrative Permission

الجمهورية الجزائرية الديمقراطية الشعبية

وزارة التربية الوطنية

مديرية التربية لولاية خنشلة

المؤسسة ثانوية الهاشمي بوزيدي

خنشلة في 2019/10/01

ترخيص لإجراء تجربة مع التلاميذ من اجل اطروحة الدكتوراه (ل م د)

يرخص السيد مدير ثانوية الهاشمي بوزيدي خنشلة لـــ :

الأستاذة: بلمكي اسماء

المولود(ة) : 1988/04/15 بـ : خنشلة

الوظيفة: أستاذ تعليم ثانوي **الاختصاص:** لغة انجليزية

الصفة : مرسمة

بإجراء تجربة علمية مع تلاميذ السنوات الثانية شعبة علوم وتكنولوجيا و ذلك من اجل تطبيقها فيما يسمح به القانون لاتمام اطروحة الدكتوراه ل م د.

مدير المؤسسة

Appendix B

Teachers' Questionnaire

The Implementation of project based learning in Algerian secondary schools

Dear teachers,

You are kindly requested to fill in this questionnaire, which is about the application of projects based learning in EFL secondary school classrooms.

This questionnaire is going to be used for research purposes only. Remember, there is no one correct answer. **So, please be as objective as possible.**

Thank you in advance for your collaboration

Section One

1-Gender: Male female

2-Are you a…….?

a-A full time confirmed teacher b-a trainee c- a substitute

3- what is your level of instruction?

a-License b- degree master c- ENS d-PhD

4- How many years of experience do you have in teaching English at the secondary school level? …….....

Section Two : Teachers' perceptions of the position of project based learning in Algerian secondary schools

1-The new reform, CBA, gives Project Based Learning (PBL) a significant role in EFL classrooms.

a- Agree b- disagree c-Neutral

2- Project based learning gives learners more control over their learning

a- a- Agree b- disagree c-Neutral

3- Project based learning improves teacher-learner relationship.

a- a- Agree b- disagree c-Neutral

4- PBL helps learners develop social and communication skills.

a- a- Agree b- disagree c-Neutral

5- Collaboration in project work is essential as it allows learners to work together.

a- a- Agree b- disagree c-Neutral

6- Projects should engage and inspire learners to get in touch with what they are learning, and apply it in their real life. That is to connect academic work with real life situations.

a- a- Agree b- disagree c-Neutral

7- The topics proposed in the textbooks do not give students the opportunity to be creative.

a- a- Agree b- disagree c-Neutral

8- There are difficulties in applying the project set in the syllabi.

a- a- Agree b- disagree c-Neutral

9- I need more guidance about how to implement PBL under CBA.

a- a- Agree b- disagree c-Neutral

Section three : The implementation of PBL and teachers' role

1-Do you prepare a project work for each unit? a-Yes b-No

If not, please give your reasons

……..……

……

……..

2-How do you plan or prepare for project based learning?

……

……

……

3- I collaborate with my colleagues when I plan for projects.

a- Always b- Sometimes c- Rarely d-Never

4- I rely on the topics presented in the textbooks

a- Always b- Sometimes c- Rarely d-Never

5-I adapt the topics of the text book and I look for creative ways to motivate my pupils.

a- Always b- Sometimes c- Rarely d-Never

6- I make sure that my pupils know exactly what they will be doing beforehand.

a- Always b- Sometimes c- Rarely d-Never

7-I provide my pupils with materials and guidance for their projects.

a- Always b- Sometimes c- Rarely d-Never

8- I assign the role of each member of the group .

a- Always b- Sometimes c- Rarely d-Never

9-I give pupils the chance to choose their peers.

a- Always b- Sometimes c- Rarely d-Never

10- I devote weekly sessions for pupils to do their projects in the classroom and check their progress.

11-I teach my learners how to work cooperatively and solve problems.

a- Always b- Sometimes c- Rarely d-Never

12- According to you, what is the role of the teacher in PBL within CBA?

……

……

Section four: Teacher's challenges with the implementation of PBL

1- Is it challenging to implement PBL in Algerian secondary schools?

a-Yes b- No

2-If yes, please say why

……

……

3- Do you provide students with resources?

a-Yes b- No

4-What are the difficulties that you usually face with your pupils' projects?

……

……

5-Overall, my pupils' projects were …….

a- A success b- a failure

Section Five: Teachers' evaluation of the project work

1-do you prepare special grading rubrics that help you focus on the skills you are looking for in each project?

a-Yes b- No

2-do you allow your pupils to conduct self/peer evaluation?

a-Yes b- No

3-when you evaluate, do you take into consideration your pupils' class participation ,exam and test scores ?

a-Yes b- No

4- Do you provide learners with feedback on how well they grasped the information and on how they will face their weaknesses?

a-Yes b- No

5-do you focus on grading students individually or just give a shared mark to the group members.

……

6-Please feel free to add something about project work in Algerian secondary schools?

……

……

Thank you very much.

Appendix C

Pupils' Questionnaire

Dear pupils,

You are kindly requested to fill in this questionnaire, which is about project work in English. Your assistance in completing this questionnaire is highly appreciated. You can be sure that this questionnaire is for research purposes only, and that you will not be identified in any discussion of the data. There is no good or bad answer, the best answer is the one that corresponds to your opinion. This questionnaire is anonymous, so you do not have to write your name. It is also confidential, so nobody will see your answers.

Thank you very much for your kind cooperation

Section One: General Information

Gender: Male female

Grade/level:

Age:

Section Two: Learners' attitudes towards project work

1-Projects help me extend my knowledge

a-Yes b- No

2-Projects help me use what I learn in the classroom outside the school.

a-Yes b- No

3- Project work helps me have fun while learning

a-Yes b- No

4-Projects help me improve my English, and be more responsible

a-Yes b- No

5- Projects help me learn how to work with others

a-Yes b- No

6- Projects make learning more enjoyable in the classroom

a-Yes b- No

7-The topics of English projects are fun and motivating

a-Yes b- No

8- I like working on my project in class with my peers and teacher

a-Yes b- No

9- I am interested in doing projects of English

a- Yes b- no

Section Three: Pupils' presentation and self evaluation of their projects.

1-I prepare for my project presentation

a-daily b- weekly c-a week before the presentation d-a day before the presentation

2- I use power point, videos, and pictures in my projects.

a-Yes b- No

3- I copy and paste what I find in the internet.

a-Yes b- No

4-I summarize what I find from the net and I add what I learnt in class.

a-Yes b- No

5- I rehearse with my peers before presenting the project.

a-Yes b- No

6- I depend on some group members to do the work for me.

a-Yes b- No

7- I used to evaluate my own and my peers' work

a-Yes b- No

8- The day of my presentation, I read from the paper

a-Yes b- No

Section Four: Challenges faced by pupils while doing their project work.

1-What are the difficulties you usually encounter while doing your English project?

- **Please, feel free to write as much as you want.**

……

……

Appendix D

Inspector's Interview

I am presently conducting a research on the teaching/ learning of projects in secondary schools in Algeria. I would be very grateful if you could provide your insights and experience.

1-Could you present yourself according to your qualification/ your previous teaching experience?

2-Competency-based Approach (CBA) has been adopted to cope with globalization and develop the education system as well. Since Project-based Learning (PBL) occupies a prominent place in language curricula around the world today, the Algerian Ministry of Education has also adopted it to be part of the curriculum under CBA. PBL can be considered an integral part of CBA, and this is clearly stated in the teacher's book AT THE CROSSROADS "One of the most distinctive features of the Competency-Based Approach is its integration of project work as part and parcel of learning strategy." The authors also stated "…, it is only through carrying out project work that our learners and we can live up to the basic principles of the Competency-Based Approach..." (Riche et al., 2011, pp. 26-27). What do you think the purpose of incorporating project work into CBA?

3-Do you think that project-based learning is given the importance it needs in Algerian schools? (Please justify your answer)

4- There is a significant issue with adopting projects in EFL classrooms. Unfortunately, project work is not handled effectively either by teachers or students. Most secondary school teachers lack sufficient knowledge of how to implement it, and they regard it as a time-consuming, boring and exhausting activity; some usually skip it. On the other hand, Pupils are uninterested in performing English projects, and the majority of them prepare their work only a few days before their presentation, despite having nearly a month or more to do so. -According to you, sir, what are the root causes of the problem?

5- Project planning is critical in guiding teachers and learners through the many phases of the project to establish desired goals and produce the agreed outcome. Most teachers use the project topics of the textbook. They introduce the unit, launch the project, and discuss the topic and subtopics with learners.What are the things/steps that teachers should consider

when planning for projects? What practical procedures, if any, do you assign to implement a particular approach?

6- As mentioned earlier, project-based learning is an integral part of CBA; however, it remains one of the biggest challenges facing teachers and learners. What strategies do you suggest to face such challenges?

7. When we asked secondary school teachers about checking the progress of their learners' projects, the majority answered that they did not. They simply launch the project and never check their pupils' work until the presentation day. Do you think teachers must devote some sessions to help and guide their learners and check their project progress?

8- Most secondary school teachers ask learners to work in groups when doing their projects; however, they never teach them how to cooperate or solve team problems effectively. Do you think that cooperation is essential when doing school projects? Would you suggest some strategies that may help learners build teams and manage conflicts?

9- According to third-year teachers, projects can never be achieved due to time shortage and the overloaded curriculum. What can you say to those teachers? How can they overcome this problem?

10- Teachers rarely prepare special grading rubrics when assessing their pupils' work. They usually give the same mark to all team members. Moreover, they rarely allow for self or peer evaluation. According to you, sir, how can teachers objectively evaluate their pupils' projects? Do you think that pupils should be part of the evaluation stage? Why/why not?

11-What do you think of school project exchange as a way to motivate learners?

12-Do you think teachers should coordinate to plan for project work?

13- Before we close the interview, you are kindly requested to give further insights and experiences about project work by suggesting solutions to improve this approach in Algerian secondary schools.

Thank you Mr. Hadid for your cooperation

Appendix E
Cooperative Learning Handout

Cooperative Learning: It is More than Group Work

«You can't do it alone! »

Don Bennet Amputee Climber

Cooperative Learning is the use of small groups so that pupils work together to maximize their own and each other's learning (Johnson & Johnson, 2000).

Basic Elements of Cooperative Learning

(Johnson & Johnson, Lolubec, 1990

Cooperative learning is more than just “Group Work”. Effective cooperative learning needs the application of five elements (Johnson & Johnson, 2005):

a-Positive Interdependence: Learners are responsible for their learning and others’ learning. They swim or sink together.no room for competition. Everyone should benefit from individual and group efforts.

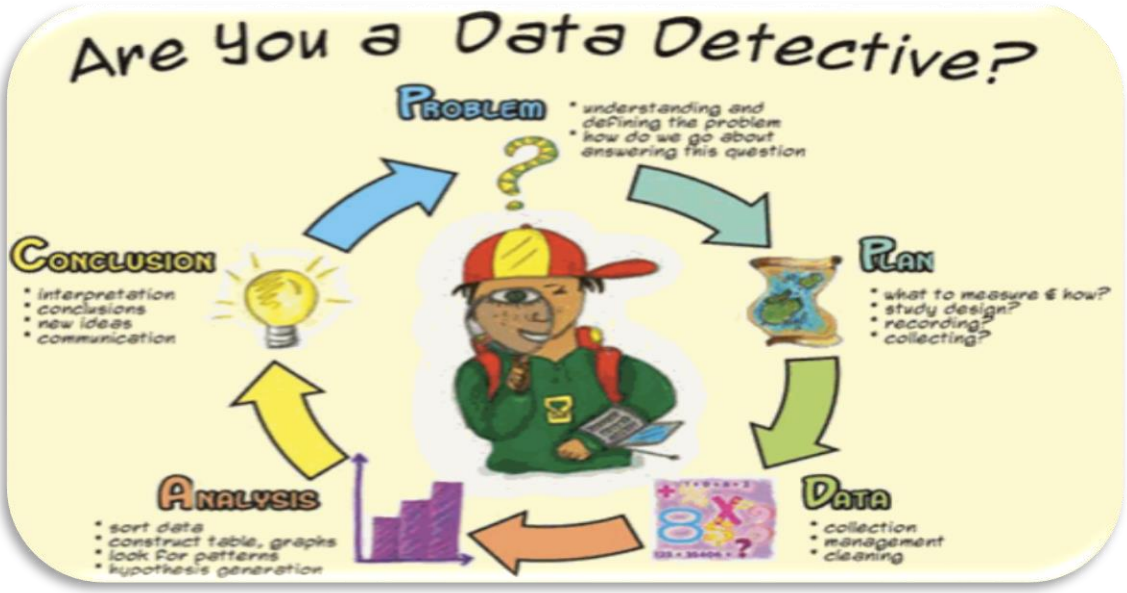
b-Face-to-face Interaction: Learners interact face to face in a group, share information and resources, help, encourage and support each other, and explain matters concerning the topic of research.

c-Individual accountability: The group must be responsible for achieving the objectives, and each member must provide his or her own effort to the Group's objective. Nobody can "hitchhike" others' efforts (each one has an independent work to do). Each individual's performance must be evaluated and the results returned to the group.

d-Social Skills: members of the group must listen carefully to others, communicate, do tasks together, make decisions based on the groups’ views, respect and trust each other and manage group conflicts together.

e-Group Processing: Group members should be free to speak with one other openly in order to raise problems and share achievements. You should discuss how successfully you achieve your goals and maintain effective working relations.

3- Group Investigation Cooperative Learning Model (Sharan & Sharan, 1992)



Group Investigation: is a model of cooperative learning in which pupils work together in small groups of 3 to 6 members to investigate a topic of their interest.

4-Steps of Group Investigation

Step One: Determining subtopics and organizing into subgroups

The teacher identifies a general topic/ problem of concern. Pupils think or generate subtopics that fall under the teacher's topic. Pupils vote on which topic most interests them. So, groups are automatically formed based on the pupils' choice of subtopics.

Step Two: Planning the investigation

Pupils analyze the study questions, bring source materials, and divide the questions and the source materials among team members. They list websites, books, or articles and decided what they investigate together in class and what they work on individually at home.

Step Three: Carrying out the Investigation

Members of each group meet in the class and review with their teacher what they have prepared. They work at home and in class to find more information about the problem.

Step Four: Planning the presentation

Pupils and teacher discuss the different possible ways of presenting the findings. Members of the group meet again to share what they have learned about the problems that. Then, they combine their findings and present them to the rest of the class in the form of a poster.

Step Five: Presenting the Final Work

Each group presents the findings of the investigation to the whole class and the teacher.

Step Six: Evaluating the Presentation

Both teacher and pupils evaluate the final work.

Appendix F

Planning Worksheet

GroupN°..1..

Our Research Topic

food shortage

Group Members

1- benKhlifa Aymen Amar
2- Slimane Imad eddine
3- tobik Sifi
4- Dekhire Abd Al Kadare
5- Ahmed Bouzaher

Roles

Coordinator (leader):	Slimane Imad eddine
Resource persons :	tobik Sifi
steering persons (guide/control) :	Aymen Benkhlifa Amar
Recorder :	Dekire Abd Al Kadere

What do we want to find out ? Main research Questions

1- What is food shortage ?
2- What are the effects of food shortage ?
3- What are the causes of food shortage ?
4- What are the solutions to this problem ?
5-

What are our research resources ?

Sources : https://www.paypervids.com/food-shortage-causes-effects-solutions/
https://blog.winnowsolutions.com/5-tips-to-reduce-food-waste-during-ramadan
https://mises.org/library/cause-food-shortage
https://www.ecomena.org/food-waste-ramadan/
https://www.ukessays.com/essays/environmental-sciences/causes-and-effects-of-food-insecurity-environmental-sciences-essay.php

How are we going to divide the work ?

Full Name	*Work assigned*
Slimane imad eddine	causes
Dekire abd Al Kader	What is food shortage
tobik sifi	causes of food shortage
Bouzaher Ahmed	Effects of food shortage
Benkhlifa Aymen Amar	solutions

GroupN°…2.

Our Research Topic

what is Water Shortage

Group Members

1- Ben Zidane Meriem
2- Mouna Lachkhab
3- Malak Nessighaoui
4- BoukHers IBtihal
5- …

Roles

Coordinator (leader): BenZidane Meriem
Resource persons : IBtihal BoukHers
steering persons (guide/control) : Mouna lachkhab
Recorder : Malak Nessighaoui

What do we want to find out ? Main research Questions

1- what is water shortage ?
2- what are the causes of water shortage ?
3- what are the Effects of water Shortage ?
4- Solution to the problems
5- …

What are our research resources ?

Sources :

https://www.conserve-energy-future.com/causes-effects-solutions-of-water-scarcity.php
https://www.conserve-energy-future.com/causes-effects-solutions-of-water-shortage.php
https://www.sciencedaily.com › terms › water_scarcity

How are we going to divide the work ?

Full Name	Work assigned
Malak Nessighaoui	Definition of water shortage
Mouna lachkHab	the causes of water shortage
BenZidane Meriem	the Effects of water scarcity
BoukHers IBtihal	the Solutions for water scarcity
…	…

GroupN°: 03

Our Research Topic

Our research topic is : Overhunting

Group Members

1- Laouar Samah
2- Chekhab yessmine
3- Bekhouch Nihad
4- bouallage hadil
5- .....

Roles

Coordinator (leader):	Laouar Samah
Resource persons :	Chekhab yessmine
steering persons (guide/control) :	Bekhouch yessmine
Recorder :	bouallge hadil

What do we want to find out ? Main research Questions

1- What is Overhunting
2- What are the causes of overhunting
3- What are the effects of overhunting
4- What are the solutions of overhunting
5- .....

What are our research resources :

- https //www.conserve-energy-future.com/causes-effects-solutions-of-overhunting.php
- https //www.ck12.org/book/cbse biology book class XII/section/13.3
- https //www.conserve-energy-future.com/causes-effects-solutions-for-habitat-loss-and-destruction.php

How are we going to divide the work ?

Full Name	***Work assigned***
bouallage hadil	The Definition
Laouar Samah	The causes
Nihad bekhouch	The effects
Chekhab yessmine	The Solutions
.....	.....

GroupN°.. 4

Our Research Topic

what is Environmental pollution ?

Group Members

1- Archouche chaima
2- Khauloud Belaouaz
3- Warda Hezil
4- Mouna Sid
5-

Roles

Coordinator (leader): Archouche chaima
Resource persons : Khauloud Belaouaz
steering persons (guide/control) : ward Hezil
Recorder : mouna Sid

What do we want to find out ? Main research Questions

1- what is the pollution
2- what are the four types of pollution
3- what are the causes of each type
4- what are the effects of each type
5- Solution to the problem of pollution

What are our research resources ?

Sources :

https://www.slideshare.net/szl/air-watersoundandlandpollution-and-its-remedial-approac
https://www.conservationinstitute.org/land-pollution/
https://www.conserve-energy-future.com/causes-and-effects-of-noise-pollution.php
https://en.wikipedia.org/wiki/Water_pollution
https://www.britannica.com/science/air-pollution

How are we going to divide the work ?

Full Name	Work assigned
Archouche chaima	water pollution
Khauloud Belaouaz	land / soil / earth pollution
warda Hezil	air pollution
Mouna Sid	Noise pollution

GroupN°: 5

Our Research Topic .... our Research Topic is - Deforestation.

Group Members

1- ... Ounissi halla ....
2- ... Hana Zedira ...
3- ... Ranim Djebaili
4- Kawther chanek ....
5- ....

Roles

Coordinator (leader):	halla Ounissi ....
Resource persons :	hana Zedira ....
steering persons (guide/control) :	Ranim Djebaili ....
Recorder :	Kawther chanek .....

What do we want to find out ? Main research Questions

1-.... What is Deforestation?
2-.... What are the causes of Deforestation?
3-.. What are the effects of Deforestation?
4-.. Sollutions to the problem of Deforestation?
5-...

What are our research resources ?

Sources : https://www.indiacelebrating.com/environmental-issues/deforestation/

https://medium.com/@FastTreeRemovalServicesAtlanta/deforestation-causes-effects-solutions-c718cc3ebb5

https://youmatter.world/en/definition/definitions-what-is-definition-deforestation-causes-effects/

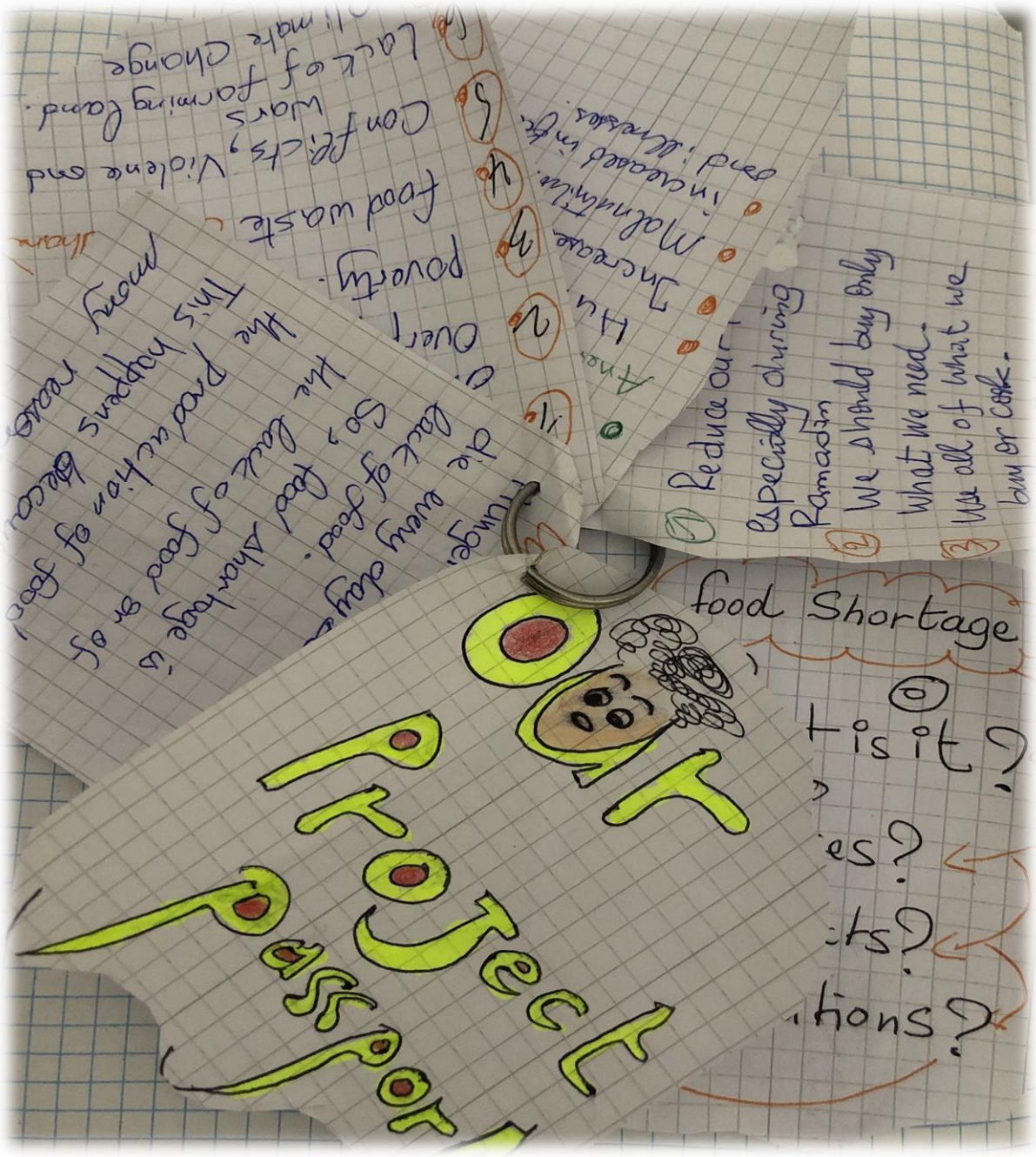
https://www.conserve-energy-future.com/causes-effects-solutions-of-deforestation.php

How are we going to divide the work ?

Full Name	Work assigned
hana Zedira	Definition of Deforestation
Kawther chanek	Sollution to the problems
halla Ounissi	Impact / effects of Deforestation
Ranim Djebaili	Causes of Deforestation
....	....

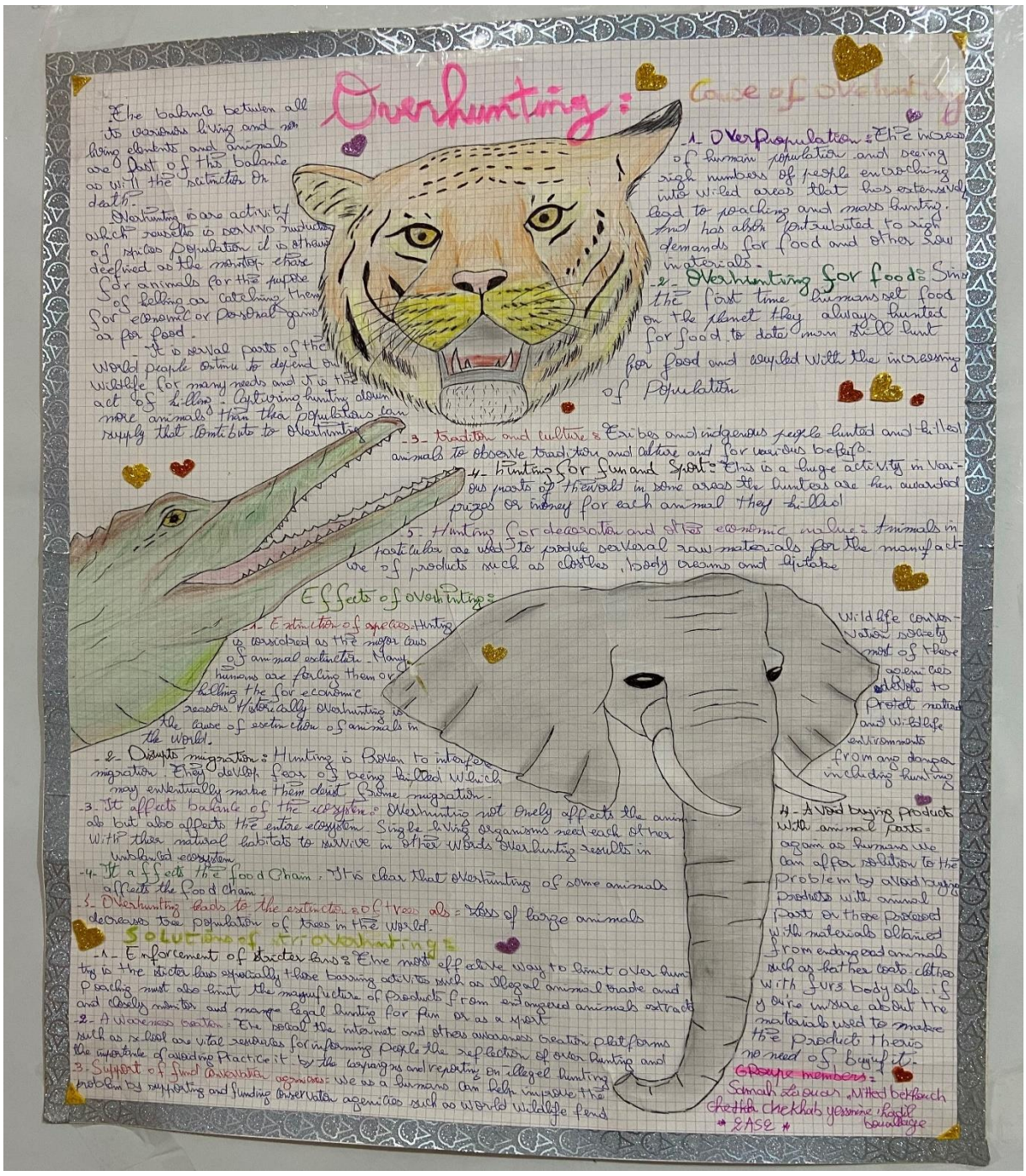
Appendix G

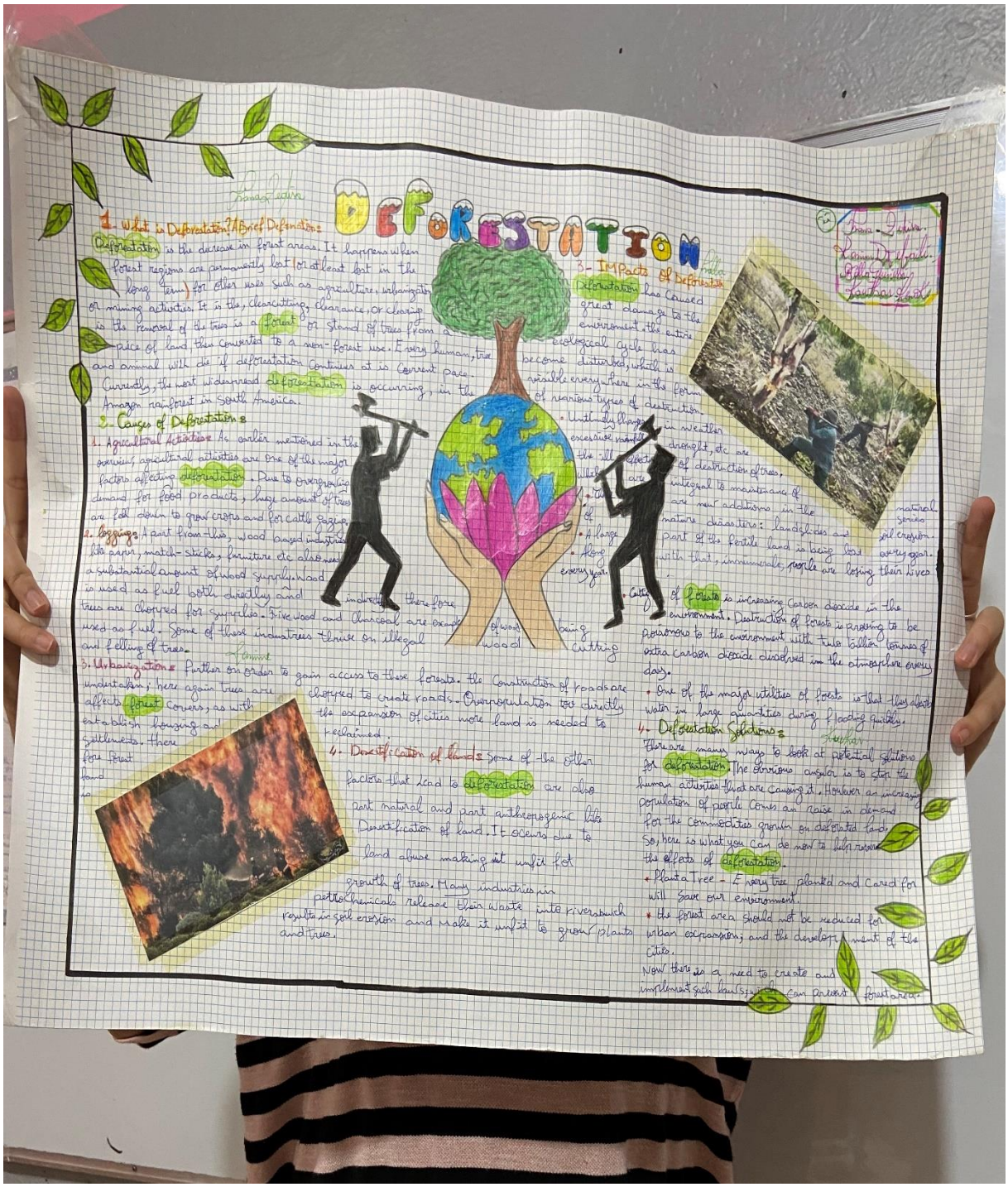
Project Passport

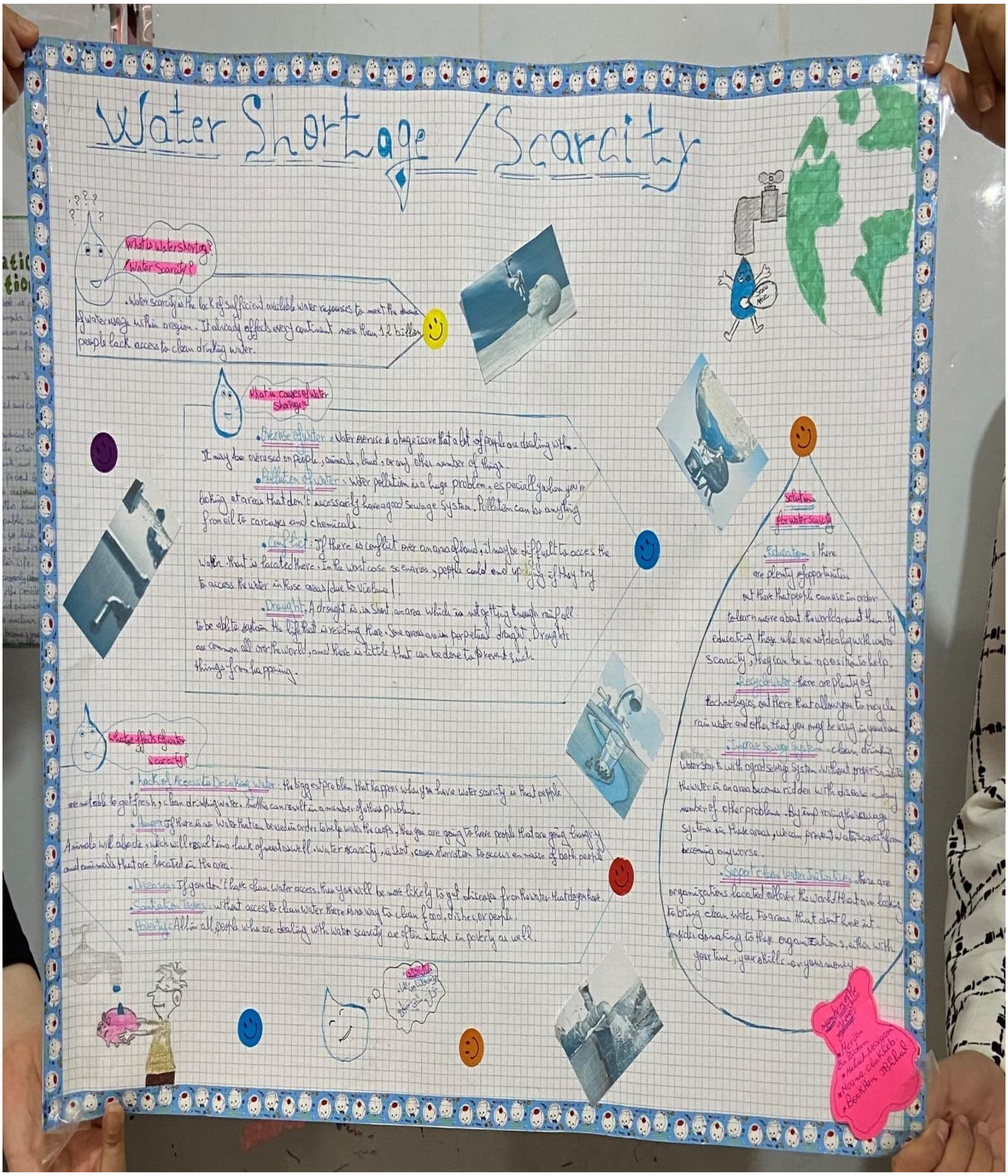


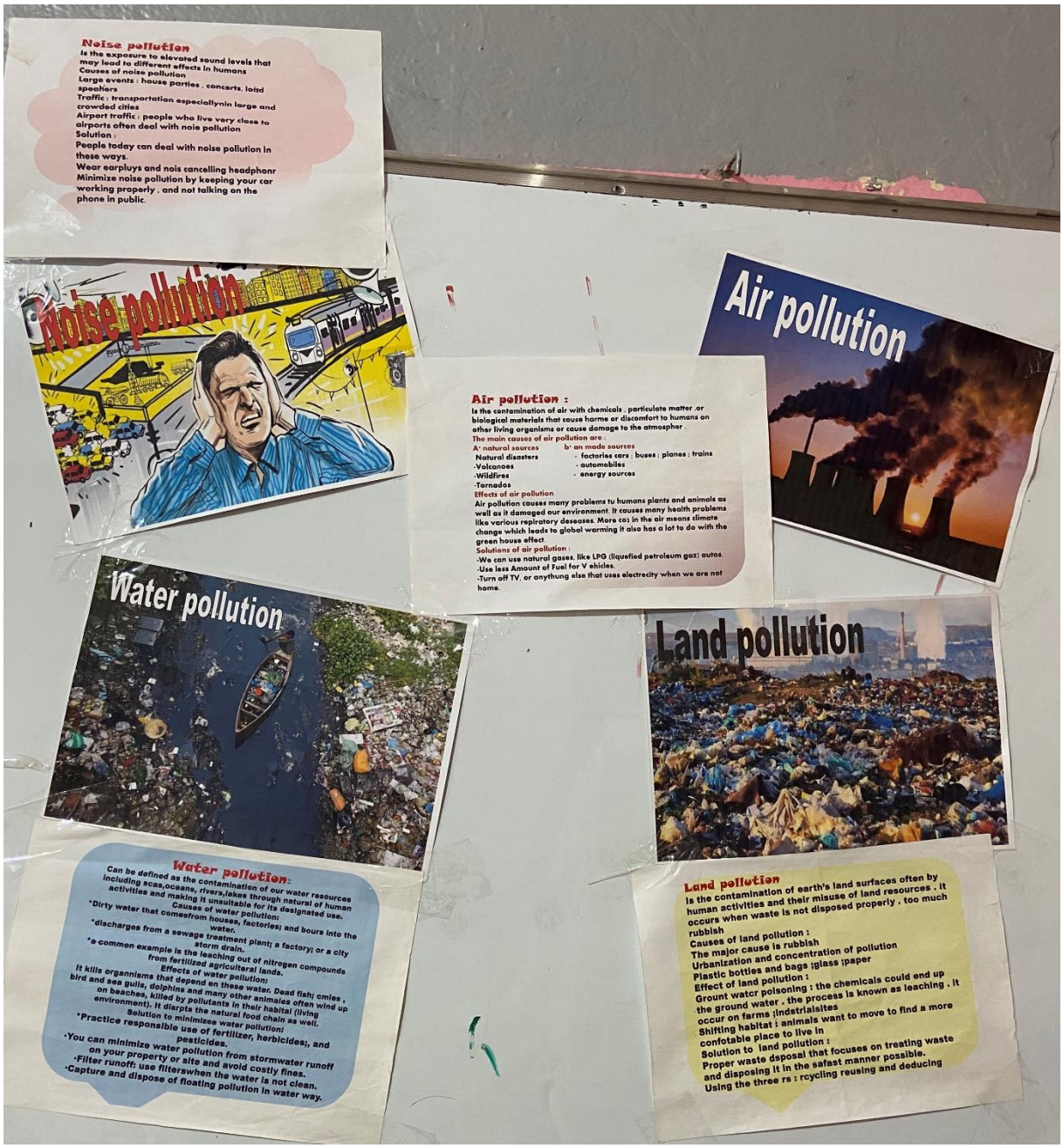
Appendix H

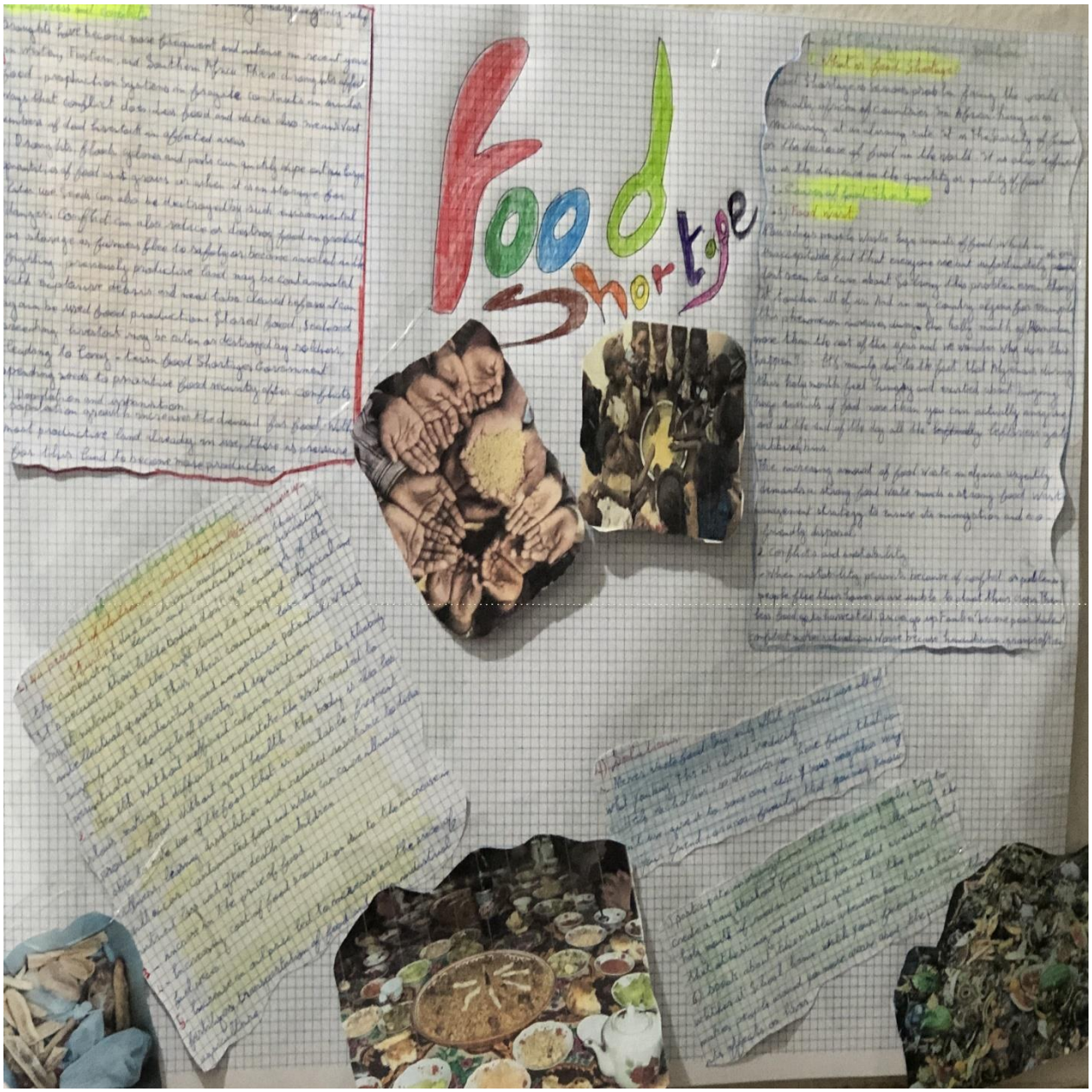
Class Posters




DEFORESTATION
1. What is Deforestation? Brief Definition:
Deforestation is the decrease in forest areas. It happens when forest regions are permanently lost or at least lost in the long term for other uses such as agriculture, urbanization or mining activities. It is the, clearcutting, clearance, or clearing is the removal of the trees is a forest or stand of trees from a piece of land then converted to a non-forest use. Every human, tree and animal will die if deforestation continues at its current pace.
Currently, the most widespread deforestation is occurring, in the Amazon rainforest in South America.
2. Causes of Deforestation:
1. Agricultural Activities: As earlier mentioned in the previous, agricultural activities are one of the major factors affecting deforestation. Due to overgrowing demand for food products, huge amount of trees are fell down to grow crops and for cattle grazing.
2. Logging: Apart from this, wood based industries like paper, match-sticks, furniture etc also need a substantial amount of wood supply. Wood is used as fuel both directly and indirectly, therefore trees are chopped for supplies. Fire wood and charcoal are example of wood being used as fuel. Some of these industries thrive on illegal cutting and felling of trees.
3. Urbanization: Further in order to gain access to these forests, the construction of roads are undertaken; here again trees are chopped to create roads. Overpopulation too directly affects forest covers, as with the expansion of cities more land is needed to establish housing and settlements. There for forest land is reclaimed.
4. Desertification of lands: Some of the other factors that lead to deforestation are also part natural and part anthropogenic like Desertification of land. It occurs due to land abuse making it unfit for growth of trees. Many industries in petrochemicals release their waste into rivers which results in soil erosion and make it unfit to grow plants and trees.
3. Impacts of Deforestation:
Deforestation has caused great damage to the environment. The entire ecological cycle has become disturbed, which is visible everywhere in the form of various types of destruction.
• Untimely change in weather
• excessive rainfall
• drought, etc are the ill effects of destruction of trees.
• Trees are integral to maintenance of
• A large
• Above
every year.
• Cutting
are new additions in the
natural disasters: landslides and
soil erosion.
Part of the fertile land is being lost every year.
With that, innumerable, fragile are losing their lives.
of forests is increasing Carbon dioxide in the environment. Destruction of forests is proving to be poisonous to the environment with tons billion tonnes of extra Carbon dioxide dissolved in the atmosphere every days.
• One of the major utilities of forests is that they absorb water in large quantities during flooding months.
4. Deforestation Solutions:
There are many ways to look at potential solutions for deforestation. The obvious answer is to stop the human activities that are causing it. However as increasing population of people comes an raise in demand for the commodities grown on deforested land.
So, here is what you can do now to help reverse the effects of deforestation.
• Plant a Tree - Every tree planted and cared for will save our environment.
• the forest area should not be reduced for urban expansion, and the development of the cities.
Now there is a need to create and implement such laws/schemes/plans to prevent forest area.


Water Shortage / Scarcity
What is Watershortage?
/Water Scarcity?
• Water scarcity is the lack of sufficient available water resources to meet the demand of water usage within a region. It already affects every continent more than 1.2 billion people lack access to clean drinking water.
What is causes of water shortage?
• Overuse of water: Water overuse is a huge issue that a lot of people are dealing with. It may be overused on people, animals, land, or any other number of things.
• Pollution of water: Water pollution is a huge problem, especially when you're looking at areas that don't necessarily have a good sewage system. Pollution can be anything from oil to carcasses and chemicals.
• Conflict: If there is conflict over an area of land, it may be difficult to acces the water that is located there. In the worst case scenarios, people could end up dying if they try to access the water in those areas (due to violence).
• Drought: A drought is, in short, an area which is not getting enough rainfall to be able to sustain the life that is residing there. Some areas are in perpetual drought. Droughts are common all over the world, and there is little that can be done to prevent such things from happening.
What are effects of water scarcity?
• Lack of Access to Drinking water: the biggest problem that happens when you have water scarcity is that people are not able to get fresh, clean drinking water. And this can result in a number of other problems.
• Hunger: If there is no water that can be used in order to help water the crops, then you are going to have people that are going hungry. Animals will also die, which will result in a lack of meat as well. Water scarcity, in short, causes starvation to occur en masse of both people and animals that are located in the area.
• Diseases: If you don't have clean water access, then you will be more likely to get diseases from the water that you have.
• Sanitation Issues: without access to clean water there is no way to clean food, dishes, or people.
• Poverty: All in all, people who are dealing with water scarcity are often stuck in poverty as well.
Solutions for water scarcity
• Education: There are plenty of opportunities out there that people can use in order to learn more about the world around them. By educating those who are not dealing with water scarcity, they can be in a position to help.
• Recycle water: there are plenty of technologies out there that allow you to recycle rain water and other that you may be using in your home.
• Improve Sewage Systems: clean drinking water starts with a good sewage system. Without proper sanitation the water in an area becomes ridden with disease and any number of other problems. By improving the sewage systems in these areas, we can prevent water scarcity from becoming any worse.
• Support clean Water Initiatives: There are organizations located all over the world that are looking to bring clean water to areas that don't have it. Consider donating to these organizations, either with your time, your skills, or your money.


Noise pollution
Is the exposure to elevated sound levels that may lead to different effects in humans
Causes of noise pollution
Large events : house parties , concerts, loird speakers
Traffic : transportation especiallynin large and crowded cities
Airport traffic : people who live very close to airports often deal with noie pollution
Solution :
People today can deal with noise pollution in these ways.
Wear earpluys and nois cancelling headphonr
Minimize noise pollution by keeping your car working properly , and not talking on the phone in public.
noise pollution
Air pollution
Air pollution :
Is the contamination of air with chemicals , particulate matter ,or biological materials that cause harme or discomfort to humans on other living organisms or cause damage to the atmospher .
The main causes of air pollution are :
A: natural sources
Natural disasters
-Volcanoes
-Wildfires
-Tornados
b: an made sources
- factories cars ; buses ; planes ; trains
- automobiles
- energy sources
Effects of air pollution
Air pollution causes many problems tu humans plants and animals as well as it damaged our environment. It causes many health problems like various repiratory deseases. More co2 in the air means climate change which leads to global warming it also has a lot to do with the green house effect.
Solutions of air pollution :
-We can use natural gases. like LPG (liquefied petroleum gaz) autos.
-Use less Amount of Fuel for V ehicles.
-Turn off TV, or anythung else that uses electrecity when we are not home.
Water pollution
Land pollution
Water pollution:
Can be defined as the contamination of our water resources including seas,oceans, rivers,lakes through natural of human activities and making it unsuitable for its designated use.
Causes of water pollution:
*Dirty water that comesfrom houses, factories) and bours into the water.
*discharges from a sewage treatment plant; a factory; or a city storm drain.
*a common example is the leaching out of nitrogen compounds from fertilized agriculteral lands.
Effects of water pollution:
It kills organisms that depend on these water. Dead fish; cmles , bird and sea gulls, dolphins and many other animales often wind up on beaches, killed by pollutants in their habitat (living environment). It disrpts the natural food chain as well.
Solution to minimizee water pollution:
*Practice responsible use of fertilizer, herbicides;, and pesticides.
·You can minimize water pollution from stormwater runoff on your property or site and avoid costly fines.
·Filter runoff: use filterswhen the water is not clean.
·Capture and dispose of floating pollution in water way.
Land pollution
Is the contamination of earth's land surfaces often by human activities and their misuse of land resources . It occurs when waste is not disposed properly , too much rubbish
Causes of land pollution :
The major cause is rubbish
Urbanization and concentration of pollution
Plastic bottles and bags ;glass ;paper
Effect of land pollution :
Grount watcr poisoning : the chemicals could end up the ground water , the process is known as leaching . It occur on farms ;indstrialsites
Shifting habitat : animals want to move to find a more confotable place to live in
Solution to land pollution :
Proper waste dsposai that focuses on treating waste and disposing it in the safast manner possible.
Using the three rs : rcycling reusing and deducing


food
Shortage

Appendix I

Peer Evaluation Worksheet Sample

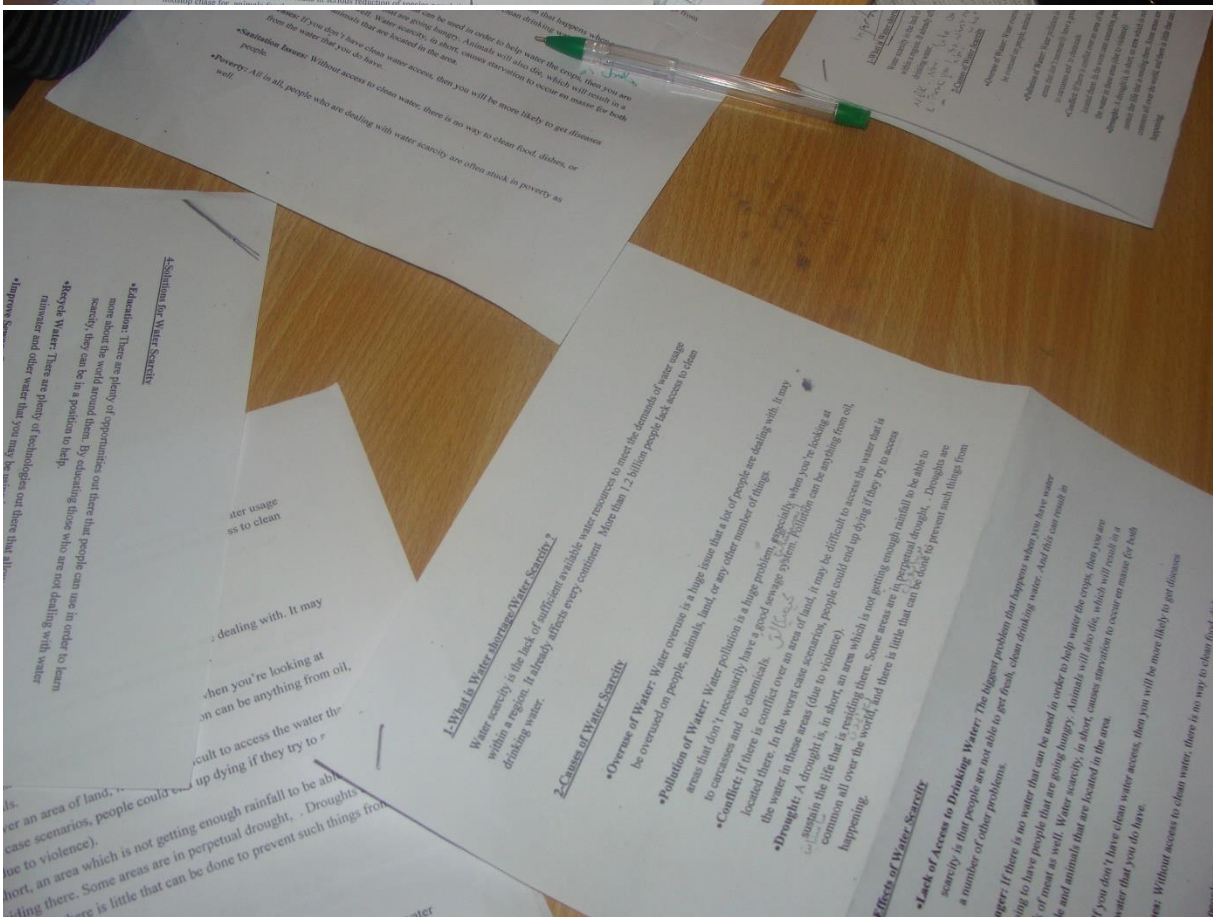
Oral Presentations: Peer Assessment over hunting

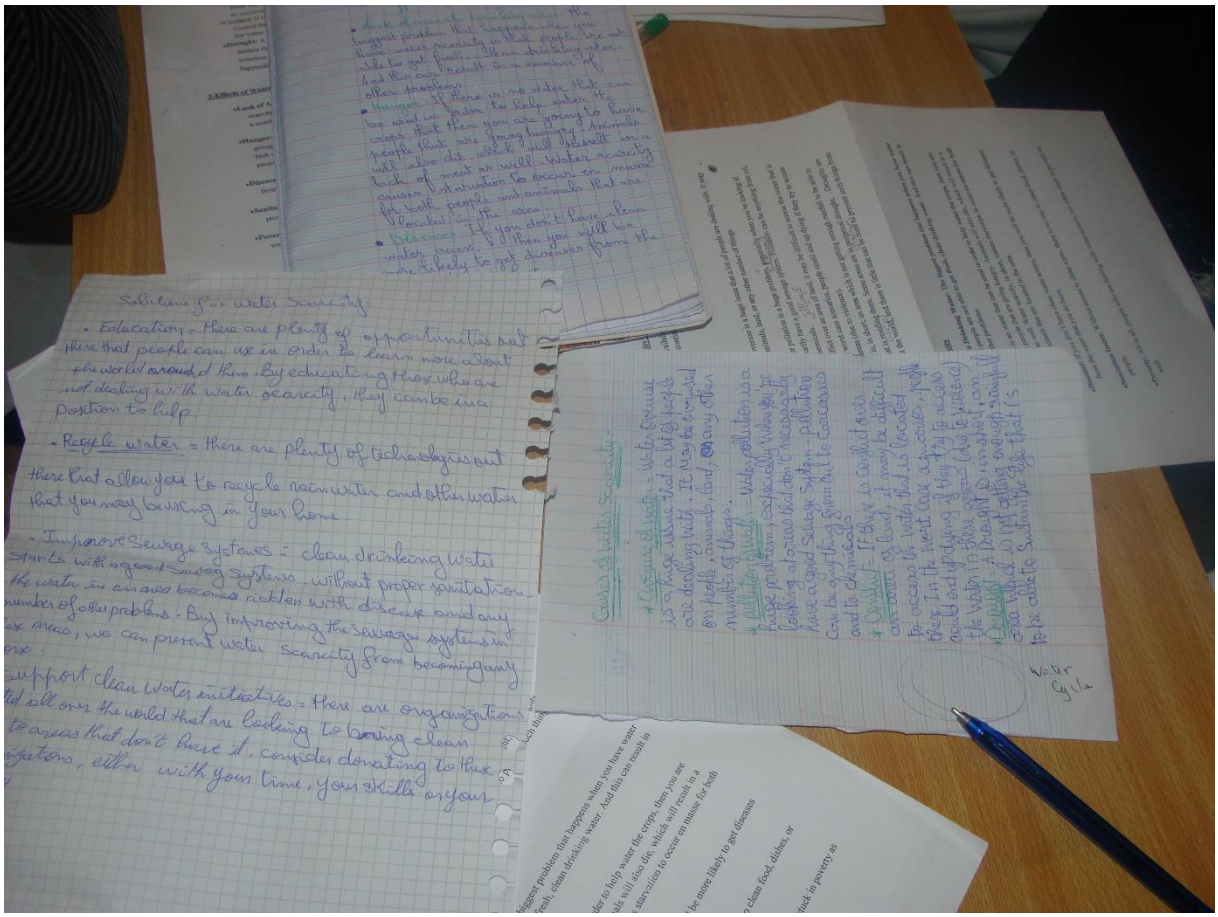
	Very Good 3	Satisfactory 2	Poor 1
Gave an interesting introduction	X		
Presented clear explanation of topic	X		
Presented information in acceptable order		X	
Used complete sentences	X		
Offered a concluding summary		X	
Spoke clearly, correctly, distinctly and confidently		X	
Maintained acceptable posture			
Maintained the interest of the class	X		
Used visual/audio aids well	X		
Handled questions and comments from the class very well	X		
Total			

Appendix J

Pupils Carrying out the Investigation


Overpopulation
overhunting for food
tradition and culture
hunting for fun or sport
hunting for decoration
I/what is Overhunting?


1-What is Water shortage/Water Scarcity ?
2-Causes of Water Scarcity
•Overuse of Water:
•Pollution of Water:
•Conflict:
•Drought:
Effects of Water Scarcity
•Lack of Access to Drinking Water:
4-Solutions for Water Scarcity
•Education:
•Recycle Water:


Solutions for water scarcity:
Causes of water scarcity:

Appendix K

Pupils' Evaluating their Peers

Appendix L

Pupils' Attitude Scale

Attitude Scale towards Group Investigation Cooperative Learning Model

Dear Pupils,

This attitude scale has been designed to help your teacher investigate your attitudes towards the new method " Group Investigation". Read the statements carefully, and tick (√) the answer that best reflects your opinion. Note that (5) = strongly agree, (4) = agree, (3) = Not Sure, (2) = Disagree, and (1) = Strongly disagree.

Please be honest in your response, as the information will be used in a study to improve the teaching of projects in secondary schools. You can be sure that this questionnaire is for research purposes only, and that you will not be identified in any discussion of the data. Remember, there is no good or bad answer, the best answer is the one that corresponds to your opinion. This questionnaire is anonymous, so you do not have to write your name. It is also confidential, so nobody will see your answers.

Thank you for your cooperation

Section One: Attitudes towards the New Method "Group Investigation" in English Project

N	Item	5	4	3	2	1
1	Project work becomes more enjoyable now					
2	Now, I can make real-world connection to what I learn					
3	Group Investigation helps me think of new ideas and be more creative					
4	Group Investigation makes learning more interesting					
5	Now I feel more independent and responsible					
6	The method encourages me to incorporate technology into my presentation					
7	I can evaluate myself and others					
8	The method's stages are interdependent: I work both independently and together					
9	I feel excited to do future projects					

Section Two: Attitudes towards Target Language Use

N	Item	5	4	3	2	1
1	Now, I can participate in the class using the English Language					
2	I can use English outside the classroom better than before					
3	When I speak English now, I feel more relaxed and confident					
4	The method encourages me to learn new words to use later					
5	I can speak, read and write better than before					

Section Three: Attitudes towards Content Knowledge

N	Item	5	4	3	2	1
1	Now, I am able to search for useful information and sources about my topic					
2	I understand my topic very well, and I can explain it to others					
3	I connect what I am learning to what I already know, which enhances my memory storage					
4	I can easily answer questions about my topic					

Section Four: Attitudes towards Group Work

N	Item	5	4	3	2	1
1	Working in groups becomes easier and enjoyable					
2	I exchange ideas and interact better with my teamwork					
3	I can learn new interesting things from my peers better than before					
4	I respect and trust my peers; it is like family teamwork					
5	I respect team roles and understand my and others' responsibility					
6	Now, I can resolve team conflicts					

Appendix M

Rubric Pilot Study

Reliability Statistics

Cronbach's Alpha	N of Items
,910	20

Reliability Statistics

Cronbach's Alpha	Part 1	Value	,832
		N of Items	10[a]
	Part 2	Value	,855
		N of Items	10[b]
	Total N of Items		20
Correlation Between Forms			,774
Spearman-Brown Coefficient	Equal Length		,873
	Unequal Length		,873
Guttman Split-Half Coefficient			,867

a. The items are: VAR00001, VAR00002, VAR00003, VAR00004, VAR00005, VAR00006, VAR00007, VAR00008, VAR00009, VAR00010.

b. The items are: VAR00011, VAR00012, VAR00013, VAR00014, VAR00015, VAR00016, VAR00017, VAR00018, VAR00019, VAR00020.

Correlations

CRITERIA		Non Verbal Skills	Language Use	Content	Visual Aids	Contribution to The Group	Project oral presentation
Non Verbal Skills	Pearson Correlation	1	,820**	,481	,300	,572	,813**
	Sig. (2-tailed)		,004	,160	,399	,084	,004
	N	10	10	10	10	10	10
Language Use	Pearson Correlation	,820**	1	,657*	,722*	,786**	,969**
	Sig. (2-tailed)	,004		,039	,018	,007	,000
	N	10	10	10	10	10	10
Content	Pearson Correlation	,481	,657*	1	,377	,410	,717*
	Sig. (2-tailed)	,160	,039		,283	,239	,020
	N	10	10	10	10	10	10
Visual Aids	Pearson Correlation	,300	,722*	,377	1	,748*	,706*
	Sig. (2-tailed)	,399	,018	,283		,013	,022
	N	10	10	10	10	10	10
Contribution to The Group	Pearson Correlation	,572	,786**	,410	,748*	1	,865**
	Sig. (2-tailed)	,084	,007	,239	,013		,001
	N	10	10	10	10	10	10
Project oral presentation	Pearson Correlation	,813**	,969**	,717*	,706*	,865**	1
	Sig. (2-tailed)	,004	,000	,020	,022	,001	
	N	10	10	10	10	10	10

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Appendix N

T-test calculations (SPSS)

Group Statistics

	Group	N	Mean	Std. Deviation
Non Verbal Skills	Pre-test Achievements of the Experimental Group	21	2,5714	,81064
	Pre-test Achievements of the Control Group	21	2,7143	,90238
Language Use	Pre-test Achievements of the Experimental Group	21	1,3333	,96609
	Pre-test Achievements of the Control Group	21	1,5238	,81358
Content	Pre-test Achievements of the Experimental Group	21	1,3810	,86465
	Pre-test Achievements of the Control Group	21	1,4286	1,16496
Visual Aids	Pre-test Achievements of the Experimental Group	21	,1429	,35857
	Pre-test Achievements of the Control Group	21	,1429	,35857
Contribution to The Group	Pre-test Achievements of the Experimental Group	21	1,2381	1,09109
	Pre-test Achievements of the Control Group	21	1,1429	,79282
Project oral presentation	Pre-test Achievements of the Experimental Group	21	6,6667	1,87972
	Pre-test Achievements of the Control Group	21	6,9524	2,31249

Independent Samples Test

	t-test for Equality of Means			
	t	df	Sig. (2-tailed)	Mean Difference
Non Verbal Skills	-,540	40	,592	-,14286
Language Use	-,691	40	,493	-,19048
Content	-,150	40	,881	-,04762
Visual Aids	,000	40	1,000	,00000
Contribution to The Group	,324	40	,748	,09524
Project oral presentation	-,439	40	,663	-,28571

Paired Samples Statistics

	Mean	N	Std. Deviation
Non Verbal Skills-Pre-test Achievements of the Experimental Group	2,5714	21	,81064
Non Verbal Skills-Post-test Achievements of the Experimental Group	3,9524	21	,66904
Language Use-Pre-test Achievements of the Experimental Group	1,3333	21	,96609
Language Use-Post-test Achievements of the Experimental Group	2,7619	21	,99523
Content-Pre-test Achievements of the Experimental Group	1,3810	21	,86465
Content-Post-test Achievements of the Experimental Group	3,7619	21	,53896
Visual Aids-Pre-test Achievements of the Experimental Group	,1429	21	,35857
Visual Aids-Post-test Achievements of the Experimental Group	1,0000	21	,00000
Contribution to The Group-Pre-test Achievements of the Experimental Group	1,2381	21	1,09109
Contribution to The Group-Post-test Achievements of the Experimental Group	4,6667	21	,57735
Project oral presentation-Pre-test Achievements of the Experimental Group	6,6667	21	1,87972
Project oral presentation-Post-test Achievements of the Experimental Group	16,1429	21	1,52597

Paired Samples Test

	t	df	Sig. (2-tailed)
Non Verbal Skills-Pre-test Achievements of the Experimental Group - Non Verbal Skills-Post-test Achievements of the Experimental Group	-7,319	20	,000
Language Use-Pre-test Achievements of the Experimental Group - Language Use-Post-test Achievements of the Experimental Group	-8,076	20	,000
Content-Pre-test Achievements of the Experimental Group - Content-Post-test Achievements of the Experimental Group	-12,619	20	,000
Visual Aids-Pre-test Achievements of the Experimental Group - Visual Aids-Post-test Achievements of the Experimental Group	-10,954	20	,000
Contribution to The Group-Pre-test Achievements of the Experimental Group - Contribution to The Group-Post-test Achievements of the Experimental Group	-15,281	20	,000
Project oral presentation-Pre-test Achievements of the Experimental Group - Project oral presentation-Post-test Achievements of the Experimental Group	-33,685	20	,000

Group Statistics

	Group	N	Mean	Std. Deviation
Non Verbal Skills	Post-test Achievements of the Experimental Group	21	3,9524	,66904
	Post-test Achievements of the Control Group	21	3,2381	1,17918
Language Use	Post-test Achievements of the Experimental Group	21	2,7619	,99523
	Post-test Achievements of the Control Group	21	1,6190	,97346
Content	Post-test Achievements of the Experimental Group	21	3,7619	,53896
	Post-test Achievements of the Control Group	21	1,7143	1,27055
Visual Aids	Post-test Achievements of the Experimental Group	21	1,0000	,00000
	Post-test Achievements of the Control Group	21	,1429	,35857
Contribution to The Group	Post-test Achievements of the Experimental Group	21	4,6667	,57735
	Post-test Achievements of the Control Group	21	1,4286	,97834
Project oral presentation	Post-test Achievements of the Experimental Group	21	16,1429	1,52597
	Post-test Achievements of the Control Group	21	8,1429	2,45531

Independent Samples Test

	t-test for Equality of Means		
	t	df	Sig. (2-tailed)
Non Verbal Skills	2,414	40	,020
Language Use	3,762	40	,001
Content	6,799	40	,000
Visual Aids	10,954	40	,000
Contribution to The Group	13,062	40	,000
Project oral presentation	12,682	40	,000

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Non Verbal Skills-Pre-test Achievements of the Control Group	2,7143	21	,90238	,19691
	Non Verbal Skills-Post-test Achievements of the Control Group	3,2381	21	1,17918	,25732
Pair 2	Language Use-Pre-test Achievements of the Control Group	1,5238	21	,81358	,17754
	Language Use-Post-test Achievements of the Control Group	1,6190	21	,97346	,21243
Pair 3	Content-Pre-test Achievements of the Control Group	1,4286	21	1,16496	,25422
	Content-Post-test Achievements of the Control Group	1,7143	21	1,27055	,27726
Pair 4	Visual Aids-Pre-test Achievements of the Control Group	,1429[a]	21	,35857	,07825
	Visual Aids-Post-test Achievements of the Control Group	,1429[a]	21	,35857	,07825
Pair 5	Contribution to The Group-Pre-test Achievements of the Control Group	1,1429	21	,79282	,17301
	Contribution to The Group-Post-test Achievements of the Control Group	1,4286	21	,97834	,21349
Pair 6	Project oral presentation-Pre-test Achievements of the Control Group	6,9524	21	2,31249	,50463
	Project oral presentation-Post-test Achievements of the Control Group	8,1429	21	2,45531	,53579

a. The correlation and t cannot be computed because the standard error of the difference is 0.

Paired Samples Test

		t	df	Sig. (2-tailed)
Pair 1	Non Verbal Skills-Pre-test Achievements of the Control Group - Non Verbal Skills-Post-test Achievements of the Control Group	-2,447	20	,024
Pair 2	Language Use-Pre-test Achievements of the Control Group - Language Use-Post-test Achievements of the Control Group	-,698	20	,493
Pair 3	Content-Pre-test Achievements of the Control Group - Content-Post-test Achievements of the Control Group	-2,335	20	,030
Pair 5	Contribution to The Group-Pre-test Achievements of the Control Group - Contribution to The Group-Post-test Achievements of the Control Group	-2,335	20	,030
Pair 6	Project oral presentation-Pre-test Achievements of the Control Group - Project oral presentation-Post-test Achievements of the Control Group	-4,675	20	,000