

PEOPLE'S DEMOCRATIC REPUBLIC OF ALGERIA
MINISTRY OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH
UNIVERSITY OF MOHAMED BOUDIAF - M'SILA

Faculty of letters and languages

Department of English stream

N°.....



Domain: foreign languages

English language

Option: linguistics

The Use of Project Based Learning and Its Effects on Student's Critical Thinking

The Case of EFL Third Year Students at MOHEMED
BOUDIAF University department of English language

**Dissertation Submitted to the Department of English Language and Literature in
Partial fulfillment of the Requirements for the Degree of Master in Linguistics**

Submitted by:

Ben Abderrahmane Rima.

Boukhalet Marwa.

Supervised by :

Dr.Touati Mourad

Board of Examiners

El Djemoui Mohamed SABER Chairperson

Dr.Touati Mourad

Supervisor

Hamoudi BOUBAKER

Examiner

Year: 2021 / 2022

DEDICATION

In the Name of Allah, Most Gracious, Most Merciful

This work is dedicated to all those who supported me throughout the process of this work

This work is dedicated to my family especially my beloved parents for their unconditional love, support and encouragement, to my teachers and classmates

To all who support me

Thank you

Manna

I dedicate this work to my beloved family, for my mother and my father, my siblings "Aziz" and "Ahelam" and for

"Chahra" Amira" and "Leila" and to my teachers who supported me to arrive here

Rima

Acknowledgements

We would love to indicate our deepest thanks and grateful to our supervisor Mourad TOUATI for his endless patience and great encouragement to finish this work.

A special thanks to the jury members for evaluating and assessing this work and finally

We would show our sincere gratitude for all participants for their time and effort

Who generously co-operated in this research.

Abstract

PBL (Project-Based learning) is a modern teaching method that attempts to demonstrate students' ability to think critically. A vital aspect of the educational process is guiding students to think critically and creatively. The PBL approach has recently been adopted by the Algerian educational system as one of the education reforms. The purpose of this study is to see how utilizing PBL as a learning strategy in universities affects EFL students' cognitive abilities, specifically critical thinking. It also investigates to what extent PBL approach encourages students to think critically and creatively. Accordingly, the study adopted a mixed method approach in which two data collection tools were used, a questionnaire for students and an interview for teachers of M'sila University of Mohammed Boudhiaf. Despite the obstacles that some EFL students and teachers face while applying PBL, The majority of participants expressed satisfaction with the integration of PBL in English classes, giving it positive feedback and claiming that it plays a significant role in improving students' critical thinking, collaboration, and teamwork skills, as well as their ability to meaningfully fulfill their learning objectives.

Key words: Project-Based learning, Critical thinking, EFL students, EFL teachers.

List of abbreviations

PBL: project -Based learning

CT: critical thinking

EFL: English as a foreign language

CBA: Competency –Based approach

List of tables

Table 1: Gender distribution.

Table 2: student's age.

Table 3: student's preferred method of learning.

Table 4: student's participation in English classes.

Table 5: student's critical thinking skills development in PBL approach.

Table 6: student's ability to use their ideas in project preparation.

Table 7: students' chosen materials in EFL environment.

Table 8: student's attitudes toward self- learning.

Table 9: students view to group work.

Table 10: student's capability of analyzing spoken and written texts.

Table 11: students' abilities in identifying central ideas in written text.

Table12: project work enrich students thought.

Table 13: students convincing capacities in cooperative activities.

Table 14: PBL improvement of students understanding and criticizing abilities.

Table 15: the learning skill enhanced by PBL.

Table 16: student's favorite type of project work.

List of graphs

Graph 01: Gender distribution.

Graph 02: student's age.

Table of content

Dedication.....	I
Acknowledgments.....	II
Abstract.....	III
List of Abbreviations.....	IV
List of Tables.....	V
List of Graphs	VI
Table of Content.....	VII

General Introduction

1. Background	2
2. Statement of the Problem.....	2
3. Research Questions.....	2
4. Objectives of the Study.....	3
5. Significance of the Study.....	3
6. Organization of the dissertation.....	3

Chapter one

Literature review

Section one: overview about Project Based Learning (PBL)

1. Introduction.....	6
2. The project method.....	6
3. Some Key Concepts.....	7
3.1. The concept PBL.....	7
3.2 The concept of a Project work.....	8

4. The implementation of PBL in Algerian educational program.....	8
5. Theories of PBL.....	9
5.1. Constructivism.....	9
5.2. Social constructivism.....	9
5.3. Cognitivism	9
6. The benefits of PBL.....	10
7. PBL in EFL context.....	11
7.1. The teacher's role.....	11
7.2. The student's role.....	11
7.3. TECHNOLOGY ROLE.....	12
8. Project-based learning VS Problem-based learning.....	13
9. Project-Based learning VS Traditional learning.....	14
10. Competency-based approach and project-based learning.....	15
11. Challenges.....	15
12. Conclusion.....	16

Section two: critical thinking

1. Introduction.....	16
2. Definition of critical thinking.....	17
3. The history of critical thinking.....	18
4. Critical thinking as a cognitive process.....	19
5. Teaching critical thinking in EFL context.....	19
6. The Characteristics of critical thinkers.....	20
7. Barriers of critical thinking.....	21
8. Conclusion.....	23

Section three: an overview about PBL and critical thinking

1. Introduction.....	24
2. The Four 21 ST Century skills	24

3. The Effectiveness of PBL.....	25
4. The role of PBL in developing EFL student's critical thinking.....	26
5. Conclusion.....	26

Chapter two

Filed of work and data analysis

1. Introduction	28
2. Research Methodology and Design.....	28
3. Research approach	28
3.1 The mixed method research design.....	28
4. Research Settings and population	29
5. Research sample	29
6. Data Collection Tools.....	29
6.1 The Questionnaire.....	29
6.1.1 Student's questionnaire.....	29
6.2 The interview.....	30
6.2.1 Teachers interview.....	30
7. student's Questionnaire analysis.....	30
8. Teachers interview analysis	43
9. Student's Questionnaire discussion	44
10.The teacher's interview discussion.....	46
11.General Recommendations	47
12.General Conclusion	49
13.References	51
14.Appendix	56
14.1 . Appendix1	57
14.2 .Appendix2	59
15.Résumé	63

General introduction

1. Background of the study

The twenty-first century is marked by the advancement of knowledge, which has prompted changes in a variety of systems, including the social, political, and educational systems. The educational system is regarded as an important aspect of a country's development, and it is recommended to cope with the current changes in society, such as: revolution requirements: a convenient curriculum, and ideal teaching methods. Following independence (1962), the Algerian educational system significantly improved the quality of education by implementing various strategies, one of which is the adoption of competency-based approach (CBA) and project-based learning (PBL). These approaches were adopted as a reaction to the previous implemented methods and traditional systems with their negative ordinary exercises, which reduced the sense of collaboration and creativity among students. The term project-based learning dated back to the work of “WILLIAM KILPATRICK” and “JOHN DEWEY” in 1918, when the term was first used. Their views promoted lifelong learning, believing that students should learn by doing and putting themselves in real-life circumstances in order to grow and gain a variety of cognitive abilities and competencies such as motivation, self-reliance, and critical thinking. The latter has become the major goal of universities, where students are expected to analyze, criticize, and evaluate the information they are given in order to arrive at reasonable knowledge that will help them make effective learning decisions.

2. Statement of the problem:

EFL educational systems have witnessed a range of modifications over the last few decades shifting from teacher-centered to learner-centered strategies. Due to the fail of the prior applied systems to make the learner as an active participant in the learning process. As a result to that PBL was introduced by the philosopher and the educator “JOHN DEWEY” who argued that students gain personal materials and multiple skills if they interact in real word situations.

3. Research questions:

The purpose of this study is to find out whether utilizing project-based learning as a learning strategy in universities has an impact on students' cognitive capacities, basically critical thinking, and to see to what extent the PBL approach encourages students to think critically and creatively

4. Research objectives:

The overall goal of this study is to determine the effectiveness of implementing an innovative pedagogy such as project-based learning in teaching and learning, as well as to highlight the importance of students' engagement in project tasks in order to improve their critical thinking abilities, as well as to investigate the benefits of PBL as an educational approach in the university.

5. Significance of the study:

The university educational system provides students with new skills and cognitive abilities that they may have lacked in previous studies, such as self-reliance, collaboration, and critical thinking. These are the critical skills that students must develop in university before entering the work place .the introduction of PBL as a learning strategy that gains odds on learning and teaching system, it is mainly based on learner's collaboration and integration in authentic issues to build their knowledge and creativity. The value of PBL in boosting student's critical thinking is emphasized in this study. For students in higher education having the opportunity to think freely and challenge other student's ideas with their own is a great experience. PBL assists students in promoting and organizing their learning, solving issues independently and increasing their knowledge and self-efficacy especially in learning a foreign language.

6. Organization of the dissertation:

This study is divided into a general introduction, two main chapters with three sections each, and a general conclusion. The first chapter will cover the origin , importance , and the implementation of PBL as a learning approach , as well as its effects on increasing students cognitive abilities , particularly critical thinking . The second chapters will cover the practical side of the research, it will cover the discussion and analysis of the student's questionnaires, the teacher's interviews, in addition to a general conclusion.

Chapter one

Section one: overview about Project Based Learning (PBL)

1. Introduction

The educational field as many other fields was notable by its change in the 21st century , it has shifted from the traditional method to the PBL approach that focuses on the learner as a center of the learning process which assists him to be prepared to deal with real life situations and develop the needed 21st century skills .

2. The project method :

The project method is a modern teaching method in which students are given the opportunity to design the curriculum. It is based on the principle of learning by doing; students are actively involved in classroom assignments within this strategy. The concept of "the project method" traced back to the work of professor WILLIAM HEARD KILPATRICK (1871-1965), who presented the project method as the center of the new curriculum movement in September 1918. Kilpatrick's idea was widely used in agricultural, industrial, and vocational schools, as well as manual training schools. The project technique is linked to students' motivation to accomplish systematic activities in accordance with their own goals. According to Kilpatrick (1925) "a project is a whole hearted purposeful activity proceeding in social environment". Similarly, BALLARD argued that «project is a bit real life that has been imparted into the schools."

Kilpatrick's pedagogical beliefs, on the other hand, were influenced by JOHN DEWEY's learning philosophy, notably his approach to the project method. Which he articulated it in a book called "My pedagogical creed" published in 1897, where he proposed the concept of "learning by doing». Dewey believes that conducting research in a problem-solving environment assists students build life-long skills. Kilpatrick agreed with Dewey that school is not for life, but for life itself, and he linked education to life as a purposeful act, stating: "the "project method" refers to the "purposeful act" as "the typical unit of the worthy life." Kilpatrick believed that allowing students to research a specific topic would help them improve their self-confidence, critical thinking, and problem-solving skills, as well as their ability to plan and evaluate others' viewpoints.

Kilpatrick (1918) identified four distinct project types: Projects that embody an external idea or plan, such as building a boat, writing a letter, or performing a play, are examples of type 1. Enjoying an esthetic experience, such as listening to a story or appreciating a painting, is an example of Type 2. Type 3's aim is to address a specific problem, such as interpreting the effect of something or figuring out why a problem exists. Type 4 includes learning a specific skill or information, such as writing or learning different verb forms. Recent study has demonstrated that using the project method can help students enhance their motivation, self-confidence, and critical thinking, problem-solving, and collaboration skills. (JOHN, chapter 7, P 158).

3. Some Key Concepts:

3.1.The concept of PBL:

Project –based learning has been influenced by the philosophies of John Dewey and William Heard Kilpatrick constructed the "project method" which is regarded as the first formalization of PBL model (Peterson, 2012). The project method took a new life in the 20th century, reconstructed as project – Based learning. PBL is a learner-centered instructional learning strategy. That allows in-depth investigation on a subject worth learning more about, instead of directing learners to a particular path and learning objectives (Harris & Katz, 2001). It arose as a response to traditional teaching and learning approaches, which regard students as passive learners who just receive knowledge, take notes, and take tests. As a result, there was a need for a PBL approach to learning that would facilitate the learning process by allowing students to engage in hands-on tasks that are actual problems that need to be solved (Heba & Abdullah, 202) .

PBL is a learner-centered learning environment in which students' perspectives are valued, allowing them to build curricula and take responsibility of their own learning rather of relying only on lectures, thereby improving students' expectations of self-reliance and independent learning (MICHAEL, 2014). Students use real-world concepts, techniques, and experiences to identify and analyze the problem using their skills, and then generate valuable products that help solve the identified problem as part of the project assignments.

Instead of being led to specific goals, students in the PBL approach spend the majority of their time working toward goals and only a little amount of time focusing on the teacher. Instead of lecturing or providing information, the teacher attempts to encourage teamwork by

playing various roles such as coach, facilitator, and encourage students to think critically in order to seek the project's ultimate outcome. When learning is student-centered, students play an important part in determining learning goals, techniques, and approaches that will help them achieve their objectives. 2010 (Hannafin and Hannafi)

PBL is a model of collaborative and research-based learning that emphasizes active student participation and comparative learning (Loyens et al., 2015). It is an effective way to develop 21st century skills and capacities by encouraging critical thinking, problem solving, creativity, and teamwork (Häkkinen et al., 2017). It also assists them in developing a proper understanding of their own goals, which can improve the learning experiences of students under their supervision (Ljung-Djärf et al., 2014).

3.2.The concept of a Project work:

The term "project" refers to activities that allow students to use their own abilities and experiences to look for, investigate, and explore knowledge. It has various educational implications; Stoller (2002) defines project work as "student-centered", yet the teacher plays a significant role in providing support and supervision throughout the process." In a similar perspective, Eyring (2001) describes project work as "the quintessential experimental language learning approach (...) in terms of its view of language, power relations, teacher and learner roles, view of knowledge, view of curriculum, learning experience, process control, nutrition, and evaluation." (P336). Project work, according to Legut&Thomas (1991), is a learner-centered and task-based activity that is the result of a group discussion among all participants. It is viewed as a task that focuses on language skills acquired through a variety of practical activities (Hedge, 1993). As a result of the project work encouraging creativity, critical thinking, teamwork, and autonomy, students discuss, negotiate, assess, and prepare to end up with a solution. According to Fleming (2000), a project is an experience that allows students to participate in vital activities while applying what they have learned in real-life situations. The project topic is chosen by the students from a list provided by the teacher, from which they select the one that interests them. (Fleming 2000). Students should explore their environment; project work allows them to become familiar with items they are interested in by learning about them and investigating the points using their five senses (Smith, 2018).

4. The implementation of PBL in Algerian educational program:

Prior to independence, French was widely used in education, although Arabic has become increasingly popular in recent decades. English was introduced as a foreign language

in 2002, primarily in middle schools, and it was extensively recommended at all levels of education. The learners would move away from the idea of learning as only learning the structure and vocabulary of a language, and toward a more appropriate approach that helps them develop not only linguistics competencies, but also lifelong learning skills. To keep up with the rapidly changing methods and programs, the Algerian Ministry of National Education chose to adapt the CBA strategy. Students are no longer considered as passive recipients relying on the teacher's knowledge, but rather as active participants in the learning process, as the CBA is built on enhancing students' competences that are required not only within the classroom, but also beyond the classroom . The MNE highlighted various reforms, the most recent of which resulted in a new learner-centered strategy that emphasizes students' independence, autonomy, and critical thinking abilities. PBL, which allows students to personalize their learning, is based on the latter.

5. Theories of PBL :

5.1. Constructivism:

Constructivism has its origin from the work of DEWY, KANT, VOCO, and HAGEL whom introduce it as a theory that focuses on the learner's construct of a new knowledge through experience and which help learners build their knowledge through solving problem stations and make the learner more active and motivated in his process of learning (Dewy 1933) .this theory focus on the learner experience and it has developed into an essential agent in the implementation of the PBL. RAILSBACKIN 2002 affirms that PBL instructional strategies have their own roots in constructivist approach (P6).

5.2.Social constructivism :

BLACK sees that PBL principle are derived accurately from social constructivism theories which is a farther development of constructivism theory that have the view that learning occurs through social interaction and help of the others in group VYGOTSKY (1978) agree that learning takes a place through social interactions in the presence of more knowledgeable other like a skillful tutor , a teacher or parent , in other words a learner with a teacher , a parent or a tutor can collaborate and cooperate to form a union that help develop the learns cognition , this theory become one of PBL method of teaching .

5.3.COGNITIVISM :

According to Piaget, Individuals adapt a certain background to develop their knowledge. This is considered as a biological process. Piaget's cognitive science is based on the concept of the mind being accessed through schema. These processes include constructing schema, assimilation, and accommodation. Assimilation entails the implementation of events in terms of existing cognitive structure, whereas accommodation entails changing the cognitive structure to make sense. . For Piaget, Individuals must construct their knowledge, which is built by experience; experiences allow them to establish schema, which are then changed, developed, and refined through assimilation and accommodation. Learning is an active process, direct experience, making errors, learning for answers, and learning should be authentic and real are two essential Piagian concepts of teaching and learning. The contact with the surrounding environment helps to generate meaning. In contrast to separate skill exercises, students learn better when they are engaged in meaningful activities. Authentic activities that students find fascinating and meaningful.

6. The benefits of PBL:

Researchers have investigated the effectiveness of PBL as an institutional approach that make learners and teachers have good English classes

- Project work is viewed as an interpretation of learners' needs, interests, and learning styles, resulting in more meaningful experiences for them. As a result of their involvement in the learning process, pupils become more interested. It is usually beneficial for students who struggle in traditional classes as well as those who succeed academically (Rosenfeld, 1999; cited in Braunschweig, 2016).
- Increasing motivation: project work is a difficult activity since students are expected to work independently on a topic and solve it in the manner that best suits their skills. Furthermore, rather than memorizing learning materials, students interact in real-world challenges and learn by doing. (Axmedova, 2021, p337-338)
- increasing meta-cognitive and self-regulated learning by requiring students to solve an issue, collect information about it, analyze the information, make hypotheses, and deliver their final result
- Develop real-world skills such as cooperation, critical thinking, decision-making, self-confidence, autonomy, and problem-solving, as well as the ability

to integrate all gained abilities in order to adapt in situations requiring 21st-century skills .

- Encouraging students to communicate for a certain aim. As a result, they have the opportunity to use language in a variety of contexts and engage in meaningful activities that necessitate the use of intellectual language. (Yunyta, 2017; referenced in Railsback, 2002).
- Self-assurance As pupils employ their strongest abilities to learn as much as possible, it has grown. Students become motivated and self-assured when their learning progresses and is dependent on their classmates' and instructors' "ongoing feedback," according to Stoller (2006). He explained that "'ongoing
- Feedback makes it easier for students to reflect on their accomplishments, there by contributing to potential growth in self-confidence, self-esteem, and self-concept."
- According to Fried-Booth (2002), collaborative work on final product raises students' self-confidence (Fried-Booth, 2002; cited in Van Lam, 2011). According to Levine (2004), when students participate in authentic activities, their learning skills improve. (Van Lam, 2011; referenced in Levine, 2004).
- Students develop key information, abilities, and attitudes in project-based learning, according to Boss and Krauss (2013), by examining open-ended questions to "make meaning" that they transmit in meaningful ways.

7. PBL in EFL context:

People use English as a lingua franca to communicate with each other, due to this high proficiency in the use , English become very important ,current research by (SIMPSON, 2011/ ROUSOVIA ,2008/ THOMAS, 2000 / and KE , 2010). The PBL can be valid and effective to improve the English language proficiency. PBL approach is one of the solutions that can help teachers and students to achieve high level of concentration and focus on tasks and improve language skills .In addition to this PBL guaranty an effective and enjoyable EFL classroom where a learner is supposed to sit for hours without any movement.

7.1.The teacher's role:

The typical function of the teacher changes under the PBL approach; the instructor is no longer the center of the learning process; his position shifts from content provider to guide or coach. It may be difficult for some teachers to shift from traditional methods to PBL,

even when many traditional practices are preserved but reformed in the context of projects. The teacher's presentation is less significant in the project work than his support (Hanane, 2019). As a result, students will be able to express a variety of concepts and respect the opposing viewpoints, select the most appropriate tools, and build assessment into their learning process. It is necessary for teachers to allow students question things differently. PBL allows students to produce their own ideas and knowledge, which need teacher's regulation and guidance .

In addition to coaching and guiding, the teacher can also serve as a manager, and facilitator to guarantee that the students' research is on the right path. Teacher creates project that is appropriate for their context and allows for students choice, ensuring that the project addresses key knowledge and understanding in the subject to encourage student independence, growth, and teamwork spirit, as well as pay attention to the quality of knowledge provided. Students are supervised by the teacher when it comes to planning assignments, developing products, and making them public. Their teacher uses a variety of classroom tools, procedures, and tactics to help all types of students achieve the project's objectives.

7.2.The student's role:

Students no longer take a passive part in their learning; instead, they organize groups, manage activities, conduct research, develop numerous solutions to problems, synthesize information, and manage time and tools. They don't just receive knowledge in PBL; they also apply it. They obtain new skills and gain new knowledge through consulting on real-world problems. Students will be able to replicate methodologies, techniques, materials, and the excellent language quality employed by professionals in this process of solving real-world situations.

Students' primary role is to ask questions, gain knowledge, and identify real answers to the recognized challenges, as well as to learn to think critically about how to solve problems. They foster a sense of collaboration and teamwork by holding conversations, debates, critique sessions, and peer reviews with other students, all of which contribute to improve the project's quality. Students are in charge of finding relevant materials, determining group roles, developing plans, and developing activities such as presentations, case studies, surveys, and many more. The audience is shown the final result, and their work is then evaluated. PBL encourages students to take responsibility for their own success.

7.3. TECHNOLOGY ROLE:

Technology as being an important concept in life marked its importance in the PBL approach. According to a published article in the “SCHOODOLOGY EXCHANGE” website there are 3 main ways technology support PBL. first by using “REALIA” which is a fancy word for using real life stuff to teach and its purpose is to connect what students are learning in a class to an actual life outside through the use of technology like chroombooks , tables or any sort of internet –connector device . Secondly by creating the opportunities for communication and collaboration where they sees that there will be a change in the way of communication to digital nomads in the future and that the PBL lessons are the perfect place to increase your students' digital literacy by practicing online communication skills, by creating an online channel to collaborate and communicate the learner be more efficient and get more experience. Finally technology aids the learner to show off their works by presenting their creation once it’s completed.

(Parisa ; Fatemeh ; et el, 2022) mentioned in their article about “The Effect of Technology-Aided Project-Based English Learning on Critical Thinking and Problem Solving as Indices of 21st Century Learning “that According to Taylor (2017), Technology is a major component which support PBL, profiting students to explore project topics and proceed into creation of website, podcasts, and blogs. Taylor (2017) also added that the use technology allows students to work collaboratively (with teammates and teacher) beyond the classroom. As believed by Darling-Hammond et al. (2017), benefiting from technology, teachers can evaluate students’ progress more readily and provide corrective feedback exclusive to every individual student.

8. Project-based learning VS Problem-based learning:

Project based learning and problem based learning share several characteristics since both are considered as institutional teaching methods. According to Schneider and Synteta (2005), the following characteristics are shared by both methods: both engage students in critical thinking and using their own ideas, then applying the knowledge they have gained; students are given open-ended problems with multiple answers or solutions; students may function as scientists or social scientists using a variety of technologies(Hanane , 2019) . Both systems focus on the student, with the teacher acting as a facilitator or coach. Students engage in groups to identify and analyze a problem before offering answers or solutions.

The variations between them rely in the extent to which the end product is the project's organizing core. Students establish the aim of their research, design their product, create a plan, and then apply what they have acquired to solve the problem that was raised in the production. The overall process tends to be authentic, with students completing projects using their own ideas. Problem learning, on the other hand, begins with a problem that students must solve or increase their knowledge on, and the issues are designed to be "ill-structured" in order to limit the complexity of real-life situations (Geraldine & Sarah & Barry, 2005). Furthermore, in problem-based learning, the durations and outcomes are more common and expected, whereas in project-based learning, the outcomes or solutions are primarily dependent on students working together to achieve the identified goal .

9. Project-Based learning VS Traditional learning:

Active teaching and learning methodologies, such as PBL, are new type of education in which students take a fundamental role in the learning process. The PBL approach is an instructional strategy that emphasizes active and hands-on activities that allow students to take charge of their own learning (Dewey, 1916/1997; Piaget, 1954, 1973). Active learning, according to Bicknell-Holmes and Hoffman (2000), encourages students to explore and solve issues in order to develop and generalize information rather than passively absorbing what is stated or read. Students develop application skills through problem-solving and risk-taking projects, which contributes significantly to students' critical thinking abilities and ownership of their learning.

PBL focuses on how to analyze and interpret data in order to gain a better knowledge of it. Learning is incomplete without the engagement and interaction between students and teacher in the classroom, not only giving the right form from rote memorization (Dana n.d.). Students are expressing their own thoughts to add new information to the previously acquired material, rather than working alone as is typical in the traditional classroom, where the teacher manages the flow of information and knowledge and students tend to rely on short-term memorization. PBL encourages real investigation through active, process-oriented teaching approaches, allowing for a deeper understanding.

The following are the major differences between PBL and traditional learning (Bonwell, 1998; Mosca & Howard 1997; Papert, 2000): Learning in PBL is active, as opposed

to the traditional method, which is considered passive; learning is process-based rather than fact-based; teacher and student feedback is an important component of PBL; and understanding is strengthened by studying authentic problems that require solutions. Active learning can be encouraged in the classroom through a variety of strategies.

10. Competency –based approach and project _ based learning:

CBA is a new approach to learning that allows students to advance in their studies by using their own strengths to grasp new skills and knowledge at their own speed. It began in the 1970s in the United States and focuses on measurable knowledge, skills, and competences. It entails teachers offering instructions on specific topics in order to achieve a deeper and broader understanding. This approach has acquired a lot of popularity in curricular discussions because it claims that students should use their knowledge and abilities. It is concerned with the input as well as the output of students' learning. CBA could lead to a movement away from rote memorization and toward the development of higher-order skills and life skills in general, including as communication, creativity, critical thinking, and other related skills. It focuses on what learners should do rather than what they should learn. (BAGHOUSSE, 2020).

Learning is defined as learners' active participation and ability to create and apply new knowledge through interaction with others. In this approach, the teacher's and students' roles in the classroom are changed. . MURDOCH (1990) claims that" teacher is no longer expected to tightly orchestrate and dominate all the work in the classroom (...), his role is defined more in terms of a facilitator who sets up conditions and activities that will make it possible for students to operate with language " (cited in BAGHOUSSE , 2020)) . Algerian MNEs adopted the CBA as a new learning strategy in 2002 and used it to teach a variety of subjects, including English as a foreign language. New English textbooks and syllabuses were designed to implement it methodologically, and they recommend the implementation of PBL, whose main component is project work. To emphasize its significance, MNE (2005b) states, "It is via project work that our learners and we can live up to the essential principles of the competency-based approach" (P, 17). The application of CBA and PBL methodology distinguishes this approach from previously implemented and traditional methodologies.

11.Challenges:

Youki Terada in her research in 2021 which named “New Research Makes a Powerful Case for PBL” criticized PBL and showed that” the pedagogy places too much responsibility on novice learners, and ignores the evidence about the effectiveness of direct instruction by teachers. By de-emphasizing knowledge transfer from experts to beginners, the critics suggest, PBL undermines content knowledge and subject fluency”.

According to (Spencer B. Perry), PBL may increase the difficulty of classroom management if students begin to engage in social loafing.

Learning theories website identifies two common criticism for PBL, the first one is that students are not aware of what is important for them to learn, especially in the areas which they have no prior experience and the second is that a teacher working with PBL may cover as much material as a conventional lecture-based course and that PBL approach can be very challenging to implement.

12. Conclusion:

To sum up, the current section aims to provide an overview of the Project-Based Learning approach, beginning with the historical context of when the term was first used and the various definitions of PBL. It also highlighted a few key concepts related to PBL, as well as the cognitive theories that led to the development of this approach. Furthermore, this aspect of the study highlighted the key differences between PBL and other traditional learning approaches, as well as the advantages of using PBL in a foreign language environment. It was also necessary to describe the frequent challenges encountered when implementing PBL in foreign language classes.

Section two: an overview about critical thinking

1. Introduction:

Critical thinking skills have become increasingly important. Since students are requested to apply critical evaluation and offer enough proof for their opinions, it has been a required 21st century skill that students need to learn in higher education. Preparing students to think critically is the main goal of many professors in higher education. Many educators and psychologists regard developing CT skills as a critical aim. One of the most memorable experiences for students is the capacity to think freely and critically about other people's points of view (Halil øbrahim & Serap, 2009). Teachers are responsible for assisting students

in the development of some cognitive abilities that enable them to examine and interpret content before adopting and storing it while learning the foreign language. "To better prepare our students for the challenges they will face, teachers must explicitly teach critical thinking processes, giving young people with twenty-first-century skills," according to Hove (2011). (p.7). The teacher's choice of teaching strategies and techniques should be based on the ability to stimulate students' critical thinking skills, which will help them develop their decision-making and problem-solving skills in new situations. Students' cognitive growth can be enhanced by creating a learning environment that allows them to be self-sufficient.

2. Definitions of critical thinking:

Critical thinking is a cognitive process and academic skill which enables students to understand, comprehend and successfully solve problems. It allows students to think in a reasonable way and systematically impose intellectual criteria upon their thinking. Several experts on various fields such: psychology, philosophy and education attempt to understand the nature of critical thinking. CT, according to Robert Ennis (1996), is important in all aspects of life, including politics and social life. CT was defined by Ennis (1993, p. 180) as "reasonable, reflective thinking focused on deciding what to believe or do." Believing that good judgement is essential while making decisions. Similarly, Richard Paul (1993) said that Ct is essential for students to assess and comprehend the amount of knowledge they are exposed to, defend their ideas, and make smart decisions. (Cited in; Nassira &Mustafa, 2021).

Because it is not enough to have knowledge and information in mind to be effective in learning and the workplace, students must also have the ability to think critically in order to make correct learning and life decisions. "Critical thinking is a process through which we analyze claims and arguments to determine which have value and which do not," according to Ruggiero (2012). As a result, evaluating the accuracy of claims and arguments necessitates critical thinking.

Students are better prepared for academic and professional success when they learn in an environment that emphasizes critical thinking. When a teacher uses Ct in the classroom, the students' academic progress improves. Mbato (2019) argued that CT provides the added benefit of encouraging participation in the public interest rather than merely self-interest. CT is a taught and acquired skill that requires time and effort to acquire (as cited in Houda , Nabil Aziz , Fatiha . n.d.) According to Snyder & Snyder (2008), is a teachable skill that should be cultivated, practiced, and integrated into the educational curriculum. Teachers need to

consider their teaching approaches and strategies in relation to their students' learning. When active teaching and learning practices are implemented, students gain knowledge and skills while also benefiting.

3. The history of critical thinking:

Many fields, including philosophy, psychology, and education, have employed and explored critical thinking skills. These fields have developed several techniques to defining Ct that reflect their viewpoints.

_the philosophical approach : "Democritus," who tended to clarify the relationship between cause and effect, and "Socrates," who gave theories about thinking in logic, which led to the birth of critical thinking, are examples of critical thinking theories traceable back to the work of philosophers. The philosophers placed a greater emphasis on the qualities and features of critical thinkers than on the activities and behaviors they can accomplish. "This school of thinking considers the critical thinker as an ideal type, focused on what people can do under the best circumstances," according to Sternberg (1986). Philosophical scholars have also emphasized the importance of thought qualities. CT is defined by Bailin (2002) as "thinking of a certain quality." Adequacy and accuracy, according to Bailin, are specific criteria or standards for critical thinking. A critical thinker, according to some philosophers, is someone who is open-minded, flexible, understands and respects different points of view, and is able to judge and examine alternative perspectives (Facione, 1990)

_the cognitive Psychological approach : Psychologists focused on how people naturally think rather than how they should think in ideal circumstances. In contrast to the philosophical view, psychologists believe that "critical thinking is defined by the types of acts and behaviors the critical thinker can undertake." (Sternberg, 1986, p. 3, as cited in Emily, 2011) defines critical thinking as: "the mental processes, strategies, and representations people use to solve problems, make decisions, and learn new concepts". The cognitive view of Ct has been critiqued by philosophers as being oversimplified. for example Bailin (2002) claimed that it is misconception to regard CT as a sequence of discrete processes or skills , and few Philosophers have emphasized it is possible simply proceeding through the phases of CT without actually participating in critical thought (Bailin 2002)

_the educational approach : ultimately , the work of the philosophers and the psychologists expand to the educational area , it started with John Dewey who popularized the rebirth of CT

movement which affect the educational field , mainly in USA and Canada . Nowadays, studying should ensure students to have some skills are regarded to be vital to attain successful life. In addition to Bloom's taxonomy, which is one of the most widely used resources in education for teaching and assessing higher-order thinking skills. Unlike cognitive and philosophical traditions, educational approaches to learning are based on classroom observation and experience. Harvey Siegel (1988, p.55–61) argued that CT should be integrated into educational approaches to allow students to become self-sufficient, free of the learning obstacles that prevent creativity and competency, and, more importantly, to allow students to acquire the ability to grasp and properly evaluate relevant reasons for judgment.

4. Critical thinking as a cognitive process:

As mentioned before Critical thinking is a cognitive process and academic skill which enables students to understand, comprehend and successfully solve problems .yet critical thinking as cognitive process is a mantel activity as whole , comprehensively and systematically to solve problem and make decisions logically by reflecting on various type of knowledge consistently (ABDUL HARIS ,2020) , in addition to this critical thinking its self can be a cognitive process because it includes several cognitive activities like weighting , evaluating and understanding the information to solve a problem.

5. Teaching critical thinking in EFL context:

Current findings in English as a foreign language (EFL) has highlighted the importance of including Ct into an English language program (Davidson & Dunham, 1997; Shirkhani & Fahim, 2011; Sun, 2015; Tang, 2016 as cited in Cairan& Ambigapathy& Manjet, 2016). Students in foreign language classes must comprehend hidden meanings, read beyond literal words, write persuasively, and defend their points of view with adequate evidence. Scholars underlined the importance of improving students' critical thinking skills, such as their ability to communicate in a non-native language and to produce a variety of written and spoken discourses. Moreover, incorporating CT skill in language classroom could make learners aware of their progress and develop linguistic autonomy, enhance their awareness of their metacognitive process, which can make their learning deeper and beneficial, preparing them for successful professional life, as Kabilan (2000) argues. Furthermore, CT stressed the need of empowering students to communicate openly about their learning experiences, make decisions, and assess their learning progress, all of which are critical components of success. Fostering students' CT skills is becoming an increasingly important component of classrooms

around the world. Almost every educational program emphasizes the importance and necessity of this skill, making it a top priority in all schools and institutions.

Besides, Teachers also play an essential role in the development of students' CT abilities by fostering student interaction, which leads to active participation in the learning process. Teachers are responsible for creating an environment in which students can actively participate in their own development. Self-confidence, curiosity, maturity, and open-mindedness are commonly demonstrated when CT is supported in the classroom. The teacher must teach students proper thinking techniques. Halpern (1998) argues that the process of CT involves scientific training and methods to seek meaningful connections to our judgements. she proposed four structural components to improve the teaching and learning to think: dispositional or behavioral element, a teaching and practice with critical thinking skills, structured activities designed to facilitate transfer across contexts, and a metacognitive component used to direct and evaluate thoughts (Ibid, p.451).

6. THE Characteristics of critical thinkers:

1- “Gregory, William, et al” in their book “critical thinking student’s introduction” identify the key intellectual traits of a critical thinker a following:

- They have a passionate drive for clarity and accuracy.
- They are sensitive to the impediments that can influence the deviation of their critical thinking.
- They are proficient in analyzing, evaluating and understanding the argument and the point of views where they can draw a clear conclusion through the use of logic and reason.
- They are well educated, direct with themselves, recognize what they know and what they don't and know their limitations.
- They are flexible, they listen to other's point of view and welcome criticism of beliefs and assumption.
- They build their thoughts through evidence and logic and not through self- interest and personal preference.
- They are independent in their way of thinking and they are unafraid to contrast a group opinion.
- They can arrive to the heart of the problem without being district by the small details.

- They have the courage to face any ideas fairly even if this ideas challenge their most basic beliefs.
- They are curious about many issues and they seeks the truth.
- They have the intellectual perseverance to look for the truth even if they face obstacles and difficulties.

2- According to an article named “16 Characteristics of Critical Thinkers” in the “Entrepreneur” by “Deep Patel” there are 16 characteristic of critical thinkers and they are ordered as following:

- Observation: the ability to perceive understand the surrounded world
- Curiosity: being interested in the world and understanding it.
- Objectivity: they focus on facts and on the scientific evaluation of the information in hand
- Introspection: being aware of t heir thinking
- Analytical thinking : the ability to analyze information’s
- Identifying biases: challenging themselves to identify the evidence that form their beliefs.
- Determining relevance: figuring out which information is the most relevant, meaningful and important.
- Inference : asses the information and draw a conclusion
- Compassion and empathy: avoid sentiments and emotions that can skew their perception
- Humility: the willingness to know one’s shortcomings and see his positive attributes in an accurate way.
- Willing to challenge the status quo: they reject the traditional method.
- Open-mindedness: they like to understand the problem from all the perspectives and hear from the others
- Aware of common thinking errors: they don’t allow misconceptions effect their logic and reasoning thinking.
- Creative thinking: they reject the standardized format for problem solving
- See the problem from different angles
- Active listeners: they engage in active listening and hear others point of view.

7. Barriers of critical thinking:

As stated by “Gregory , William , et el” in their book “ critical thinking students introduction” there are many obstacles for people to think critically even if they are highly educated and intelligence the they identify the following list as the most common barriers to critical thinking :

- Lack of relevant background information
 - Poor reading skills
 - Bias
 - Prejudice
 - Superstition
 - Egocentrism (self-centered thinking)
 - Sociocentrism (group-centered thinking)
 - peer pressure
 - Conformism
 - Provincialism
 - Narrow-mindedness
 - Closed-mindedness
 - Distrust in reason
 - Relativistic thinking
 - stereotyping
 - Unwarranted assumptions
 - scapegoating
 - Rationalization
- Citizens who
- Denial
 - Wishful thinking

- Short-term thinking
- Selective perception
- Selective memory
- Overpowering emotions
- Self-deception
- Face-saving
- Fear of change

... They additionally emphasize on egocentrism, sociocentrism, unwarranted assumptions, relativistic thinking, and wishful thinking because they play a strong role in preventing critical thinking.

- 1- Egocentrism as being the “self-absorbed people who view their interests, ideas, and values as superior to everyone else’s “ can manipulate its self into 2 common forms self-interests thinking and self-serving bias as a major problem that influence one’s critical thinking direction through trampling the mind.
- 2- Sociocentrism in contrast to Egocentrism and as being “a group centered thinking that focus on the rational thinking of a group can influence one’s critical thinking because it convince the mind with a set of rules and beliefs in which he grows up with in his society
- 3- Unwarranted assumptions: an assumption is something taken for granted and when an individual had an unwarranted assumption it will prevent him from seeing things clearly and effect his reasoning and cause a critical problem for him.
- 4- Relativistic thinking due to Relativism which views the truth as a matter of opinion , Relativism with its popular forms subjectivism ; the truth is a matter of one individual opinion , and cultural Relativism; truth as a matter of social cultural opinion can be traverse to one critical thinking .
- 5- Wishful thinking which is the belief of something by the individual because he wished for it and not because of evidence that will ends by harmful consequence.

8. Conclusion:

As a summary, this section deliver a clear idea about critical thinking and how it had become one of the important skills of the 21st century, in addition to that it clarify the

concept of critical thinking and the set of moves that led it to be one of the needed skills in our days, coming up with its relation to cognition and how it is taught in an EFL context ending by presenting the critical thinker characteristics and critical thinking barriers.

Section three: an overview about PBL and critical thinking

1. Introduction :

Critical thinking has become one of the most crucial skills to teach in an EFL context in order to prepare students for life's problems. Mastery of thinking skills is considered a basic requirement in today's age of knowledge and technology to adapt in this rapidly changing methodologies. Learning to think critically is a life skill that may be applied both in and out of the classroom. According to Heyman (2008), good critical thinking promotes the growth of human minds, and it is through such thought patterns that science and art are formed. Students are encouraged to think critically and develop knowledge actively and independently using the PBL approach. Students are actively involved in authentic issues and responsibilities because it is a student-centered model. In PBL students have the freedom to make more informed decisions and comprehend information more deeply and meaningfully, study collaboratively, and behave as researchers using specialized tools, materials, and strategies. Teachers are responsible in this approach for shedding light on how students should think, work in groups, interpret and present information, and ask students to complete projects that include critical questions that require different possible answers depending on the students' understanding and thinking. In order to acquire CT skill, students must be offered critical examples of thoughts and given feedback. Students are encouraged to become independent, critical thinkers, and lifelong learners using the PBL model.

2. The Four 21st Century skills:

Nowadays Life is considered as more complicated than it was in the past, and educational institutions require levels of information and technologies that go well beyond the basic understanding that was sufficient previously. The previous systems could not be more applicable to school curriculum. Furthermore, the workforce necessitates certain skills, and certain jobs necessitate specific competences such as critical thinking and the capacity to deal with individuals from various linguistic and cultural backgrounds. The four 21st century skills need undoubtedly be fully integrated in the classroom.

_critical thinking : It has been a necessary skill. Students who are taught critical thinking and problem solving skills develop other abilities such as deep analytical abilities, high levels of concentration, the ability to produce new ideas, evaluate claims, and make good decisions. In other words, students who have mastered this skill can argue with evidence, recognize different types of things and differentiate between them, and identify the causes and effects of an issue in order to solve it. Students should strengthen their critical thinking skills to improve their learning results, produce new products, and gain new knowledge.

_creativity : Designing something and attempting new techniques to get things done, innovations and inventions are all examples of creativity. Creativity is becoming a need for personal and professional success in today's environment. Students need to create something, which includes constructing materials according to a plan, designing materials, ideas, and plans, and achieving their aim. They can display originality in their work and adapt new ideas because creative skills are greatly required in almost all disciplines, particularly the educational system and the workforce.

_collaboration : It's about working together to achieve a goal, putting skills and competencies in the work . Because of the advancement of technology and globalization, students should collaborate more as the world becomes more interconnected. They should be able to assign tasks to group members in order to successfully complete a task, to manage the group in such a way that all members contribute according to their ability, and to effectively establish teams. As a result, the group can develop more knowledge, making collaboration an important factor in today's society for students.

_communication: It's all about exchanging questions, ideas, and findings . Technology has created a more convenient means of communication. Without communication, nothing gets done, both inside and outside the classroom. Students are exposed to various forms of communication and need to be able to analyze specific situations, consider the goal and context, encode and decode messages, and move from sender to recipient thoughts. The importance of fluent reading and proper speaking has always been emphasized in education. He communication process can only be effective if the message is delivered correctly.

3. The Effectiveness of PBL :

“PBL techniques improves student’s engagement by enabling knowledge and information sharing and discussion. Thus, the PBL approach is highly recommended for educational use by students and should be encouraged in universities” (Mohammed , 2020) a result that was founded after a research done in 2020 about the effectiveness of PBL approach , where they examine its influence on students and arrives to agree with (Häkkinen et al., 2017) who claimed that “The PBL approach is an effective way to develop 21st-century capabilities by promoting critical thinking as well as problem-solving, interpersonal communication, information and media literacy, cooperation, leadership and teamwork, innovation, and creativity”, in fact another research done by “Filippatou, Diamanto , Kaldi, Stavroula in 2010 Showed that the use of PBL support pupils in their academic performance, group work and motivation.

4. The role of PBL in developing EFL student's critical thinking:

EFL classrooms attempt to enhance students' capacity to utilize language as a tool in real-world communication (Puangpunsi. n.d.) While PBL emphasizes authentic activities, allowing students to encounter and analyze authentic situations in the classroom. PBL facilitates the development of 21st century skills such as collaboration, communication, creativity, and critical thinking skills, the latter of which has become necessary and highly valued in almost all fields, including education. It is critical to teach students how to think and provide materials that will help them develop CT skills, which will not only help them acquire, evaluate, and produce information, but will also lead them to make effective and powerful decisions. PBL has lately been recognized as an effective method of teaching English as a foreign language and developing students' CT skills. In this approach, the teacher should put students at the center of the learning process by teaching them how to transfer, use, and evaluate stored knowledge, as well as giving them the opportunity to think, integrate their ideas, and abilities to solve a specific problem using collaborative methods. Learning through projects is an effective approach that helps kids become critical thinkers, problem solvers, and workforce prepared, according to several studies.

5. Conclusion:

This section is devoted for “critical thinking and “PBL” as an important concepts in this research emphasizing on idea of applying PBL in the Algerian education and its effectiveness in addition to its role in developing the critical thinking of an EFL learner so he can be prepared to face real life problems.

Chapter two

1. Introduction:

The current chapter represents the methodological fieldwork of the study. It is divided into three sections: the first section is devoted to the description of the research design, population sampling, and setting in which the research takes place, as well as shed light on the main data collection tools used, the second section is devoted to data analysis, interpretation, and discussion of the data collection tools, and the third section is devoted to the general conclusion, and recommendations for further research. This chapter attempts to collect data in order to answer the main research questions.

2. Research methodology and design:

Research methodology presents the path through which researchers used to conduct the study, formulate their research questions, research objectives, and present the result of the obtained data. This section explains the research methodology and research design utilized in this study, including the research method, setting, sampling, data collection tool, and statistical tools. To accomplish the research objectives, a descriptive research methodology was selected.

3. Research approach:

Research approaches are research strategies and procedures that outline the steps from general assumptions to specific data collecting, analysis, and interpretation methodologies. This plan involves several decisions need to be taken in order to make sense to the conducted research. The current research opted for the mixed method approach which is an approach involves collecting both qualitative and quantitative data.

3.1. The mixed method research design:

The present study mainly seeks to evaluate the use of PBL strategy in teaching and learning a foreign language has an effect on students' CT skills. As a result, the mixed method technique appears to be the best option for answering the study questions. It is a sort of study that entails gathering, analyzing, and interpreting qualitative and quantitative data. "Impact research concerns are increasingly being addressed using mixed method research designs." (P.7, Saville, 2017). Therefore, integrating two forms of data provides a more complete knowledge of a research problem than either qualitative or quantitative data alone.

4. Research setting and population:

This research is conducted at Mohamed Boudiaf University of M'sila, specifically in the English language department, during the academic year 2021/ 2022 during the second semester, with 45 third-year students and (6) English teachers as the targeted population.

5. Research sample:

The main sample consists of third-year EFL students and English teachers of M'sila University. Third-year students are an ideal sample for this study because they are on the verge of graduation and are about to enter the workforce, where various skills, particularly CT abilities, are in high demand. Students also prepare and present a lot of project work in third year, which is the core principle of PBL. Therefore, to investigate whether this method (PBL) has had an impact on students' CT skills, which they will require later in their professional lives. The questionnaire sample consists of 46 people, both males and females. Also, six (6) Teachers are interviewed as a sample (EFL teachers).

6. Research tools:

A research tool is a methodical procedure that involves acquiring, analyzing, and evaluating specific data from a variety of relevant resources in order to provide answers to research questions and evaluate the final results. To assure the quality of the research, specific data collection tools are required. A questionnaire was constructed to examine the effectiveness of PBL on students' CT skills. In addition to an interview with teachers to see whether they are utilizing PBL in their classroom and if CT skills can be strengthened by engaging students in authentic activities through the use of PBL in the educational program.

6.1. The questionnaire:

A questionnaire is a research tool that consists of a set of questions designed to collect data from respondents. A student's questionnaire is utilized to efficiently perform this study for the goal of assessing the adoption of PBL in EFL classrooms and its effect on students' CT skills. It includes various types of questions.

6.1.1. Student's questionnaire:

The current questionnaire is a data collection tool for M'sila University's English language department's third-year EFL students. The questionnaire is designed to assess

students' attitudes toward project work in order to improve their critical thinking skills. Furthermore, it reveals how students improve their CT skills through project work. There are nineteen (19) items in this tool, grouped into three (3) sections.

Two (2) items of background information are included in the first section of the student's questionnaire.

The questions are based on personal information such as the gender and age of the student.

The second section consists of twelve (12) items and includes closed-ended questions that require students to respond with (strongly agree, agree, neutral, disagree, and strongly disagree). In addition, two (2) items require students to select the appropriate response from a list of options and to justify their choices. This section tries to illuminate the extent to which students are involved in project work and how it aids in the development of their critical thinking skills.

The third section includes two (2) open-ended questions intended to elicit further information about the student's responses and choices. It highlights students' views on the use of PBL as a method of teaching CT skills in the classroom.

6.2. The interview:

Interview is a research strategy used by researchers to discover new evidence in a systematic, quantitative, and secure manner (Chand (2020)). Interview was defined by Williams (2007) and Kvale et al. (2008) as a direct discussion between interviewee and interviewer on a specific subject under investigation, taking into account interviewee's perspectives and experiences in order to produce reliable information.

6.2.1. Teacher's interview:

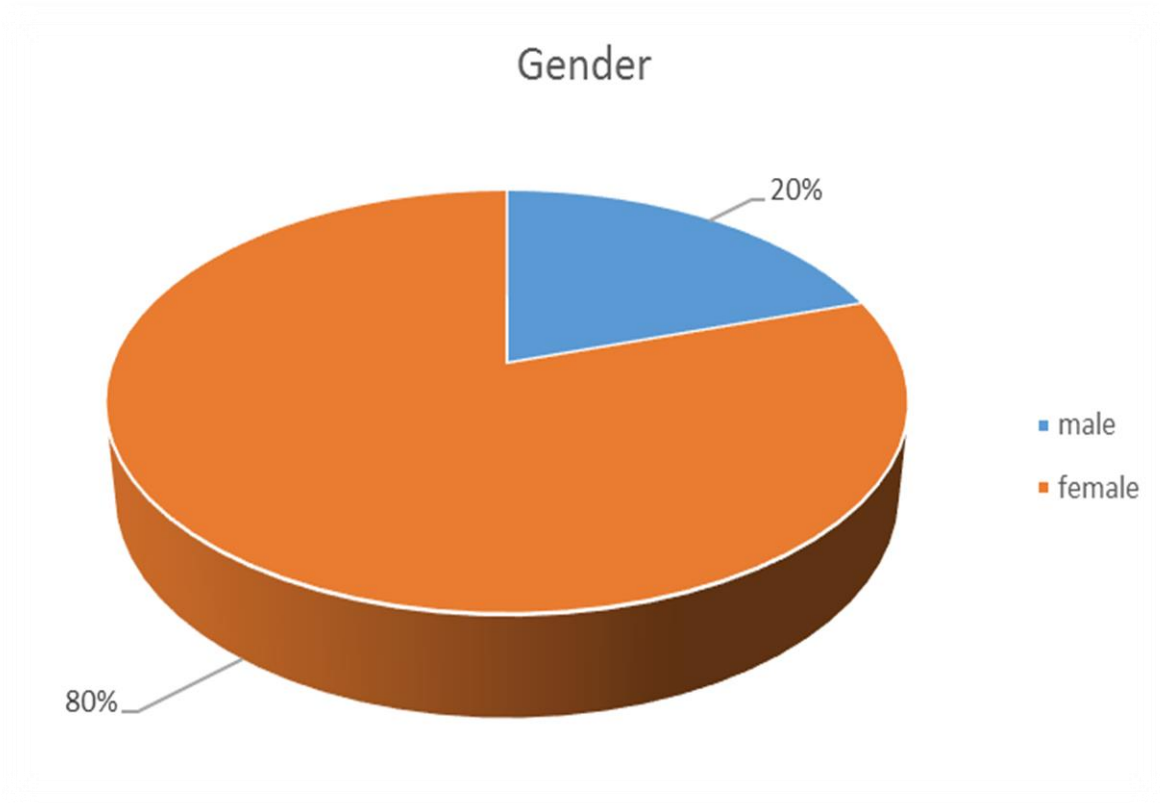
The interview is targeted at six (6) English teachers at M'sila University in order to shed light on the implementation of PBL and its implications on students' CT abilities. The interview consists of five (5) open-ended questions, the first of which is about the teacher's personal experience teaching English as a foreign language. Then, to learn more about their experience in understanding and implementing PBL in their courses, as well as their thoughts on the value of project work in improving students' cognitive capacities, particularly in CT.

7. Questionnaire analysis

Table 1: Gender distribution

Options	Frequency	Percentage
Male	9	20%
Female	36	80%
	45	100%

As the table (1) displays, that, there were 45 students participating in this questionnaire. Accordingly , there is difference between the number of the participants , the responses were divided into two categories , a category made of 9 males (20%) and another category of 36 females (80%) , this indicate that girls are more dominant in English classes than boys .

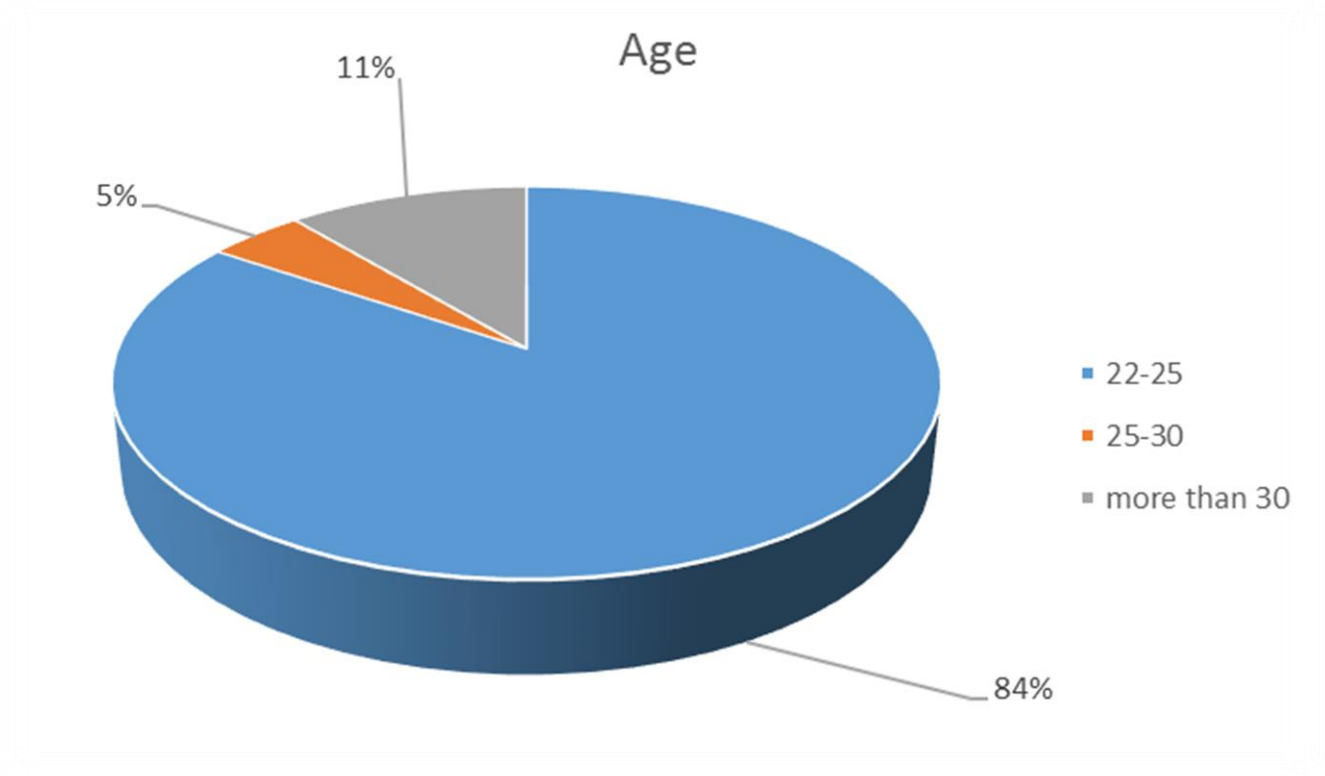


Gender distribution

Table 2: student's age

Options	Frequency	Percentage
22-25	38	84%
25-30	2	5%
more than 30	5	11%
	45	100%

This question is meant to determine participant's dominant age. the results show that the responses were divided into three categories, a category made of 38 students (84%) opted for (22_25) option, and only 2 students (5%) their age is between (25 -30) years old, and (11%) are more than (30) years old. student's age is an important factor to ensure the cohesive and the smooth of the classroom atmosphere.



Student's age

QUESTIONS Analysis

Statement 1: " I prefer the PBL to the traditional methods"

Table 3: student's preferred method of learning

Options	Frequency	Percentage
Strongly disagree	2	4%
Disagree	7	16%
Neutral	17	38%
Agree	18	40%
Strongly agree	1	2%
	45	100%

concerning the student's preferred classes for learning English as a foreign language The majority of students (40%) prefer project work as their primary mode of learning, this indicates that that they prefer collaborative learning and enjoy participating in learning activities, and (16%) prefer traditional classes or teacher-centered classes, in which the teacher controls the entire class and the students' role is to gather information, store it, and retain it in order to achieve higher grades.

Statement 2: "projects motivate students to participate in classroom activities"

Table 4: student's participation in English classes

Options	Frequency	Percentage
Strongly disagree	1	2%
Disagree	3	7%
Neutral	8	18%
Agree	23	51%
Strongly agree	10	22%
	45	100%

As shown in the table above, almost half of the students (51%) stated that project work motivates them and that they prefer working in groups to solve problems. This indicates a high level of interest and motivation to participate in group work projects, as pbl’s primary purpose is to motivate students to learn. While (7%) of them stated that project work does not drive them to learn, this indicates that they prefer to work alone or rely on the teacher's knowledge.

Statement 3: “PBL approach of learning help me improve the use of my own thoughts and organize them”

Table 5: student's critical thinking skills development in PBL approach

Options	Frequency	Percentage
Strongly disagree	3	6%
Neutral	8	18%
Agree	22	49%
Strongly agree	12	27%
	45	100%

The current question examines students' perceptions of to what extent PBL aids them in improving their ability to organize and utilize their own thoughts. The majority of students (49%) and (27%) agreed that implementing PBL in the classroom helps them cooperate, exchange ideas, and work on real-world projects, all of which help them improve their thinking abilities and the way they organize and manage their thoughts. On the other hand, (6%) of participants disagreed that PBL aids in the improvement of their learning capacities.

Statement 4: "In preparing a project presentation I have the freedom to apply my own ideas”.

Table 6: student's ability to use their ideas in project preparation

Options	Frequency	Percentage
Strongly disagree	2	5%

Disagree	6	13%
Neutral	9	20%
Agree	19	42%
Strongly agree	9	20%
	45	100%

Furthermore, after doing the statistical processing , the results achieved that (42%) and (20%) of participants enjoy PBL classes as they have the freedom to use their thoughts in PBL presentations by solving a problem, immerse themselves in authentic situations to activate their learning, acquire more sufficient knowledge, and solve their learning problems according to their abilities. However, (13%) and (5%) disagreed to this approach, implying that they would be unable to use their own personal skills and to present a final result.

Statement 5: "I prefer authentic materials of the project compared to the materials in traditional classroom environment ":

Table 7: students' chosen materials in EFL environment

Options	Frequency	Percentage
Strongly disagree	3	6%
Disagree	8	18%
Neutral	13	29%
Agree	17	38%
Strongly agree	4	9%
	45	100%

Furthermore, the table illustrates that (38%) and (9%) of students prefer to use authentic materials that are directly related to their real lives and real issues in their communities, which causes them to reflect on their learning achievements and capacity to

gain experiences during their problem-solving investigations. However, (18%) and (6%) prefer traditional tasks and activities in which they follow the teacher's instructions.

Statement 6: "I prefer to promote my learning rather than being controlled by the teacher".

Table 8: student's attitudes toward self- learning

Options	Frequency	Percentage
Strongly disagree	4	9%
Disagree	10	22%
Neutral	9	20%
Agree	14	31%
Strongly agree	8	18%
	45	100%

In this item, the students were asked whether they like to control their own learning or they prefer to be guided and controlled by the teacher. (31%), (18%) of students want to regulate their learning process for higher productivity and academic achievement by choosing what, when, and how they study based on their needs and interests. The other (22%), (9%) prefer teacher-centered classes in which he chooses which tasks students must accomplish.

Statement 7: "I find that I learn better when working with others "

Table 9: students view to group work

Options	Effective	Percentage
Strongly disagree	5	12%
Disagree	11	24%
Natural	7	16%
Agree	11	24%
Strongly agree	11	24%

	45	100%
--	-----------	-------------

The table above explain the agreements of the students about group project where (48%) showed their agreement to collaborate with others in classroom activities, yet (36%) disagree and prefer to work individually, the rest (16%) set that they do not have any problem in working in group or individually .

Statement 8: “I can analyze any spoken or written text and figure out the missing point in the text “

Table 10: student’s capability of analyzing spoken and written texts”

Options	Effective	Percentage
Strongly disagree	4	9%
Disagree	9	20%
Natural	13	29%
Agree	16	35%
Strongly agree	3	7%
	45	100%

As noticed in the table the majority (42%) showed their capability of understanding and analyzing spoken and written text with the ability to set the missing point and correct it in contrast to the (29%) who expressed their inability to do that, the rest of the sample which present (29%) expressed their natural position .

Statement 9:” if a written text was presented to me, I can directly understand its central idea “

Table11: students’ abilities in identifying central ideas in written text

Options	Effective	Percentage
Strongly disagree	2	4%

Disagree	3	7%
Natural	13	29%
Agree	22	49%
Strongly agree	5	11%
	45	100%

Student showed their support to this statement where (60%) agree or strongly agree that they can directly find the central idea of any written text presented. In contrast (11%) explain that they find some difficulties in understanding central ideas of written texts the rest (29%) set their natural position.

Statement 10:” doing a research to a presentation enrich my own thought “

Table12: project working enrich students thought

Options	Effective	Percentage
Strongly disagree	3	7%
Disagree	5	11%
Natural	7	15%
Agree	12	27%
Strongly agree	18	40%
	45	100%

The outcomes of this statement showed that research help students enrich their thought where (67%) of participant agreed with this statement, (18%) disagree and (15%) presented their natural position.

Statement11: “In cooperative activity I am able to analyze and convince my partner with my thoughts “

Table 13: students convincing capacities in cooperative activities.

Options	Effective	Percentage
Strongly disagree	2	4%
Disagree	7	16%
Natural	13	29%
Agree	18	40%
Strongly agree	5	11%
	45	100%

The table above indicate that students are able to analyze and convince each other in cooperative activities as explained in the table (40%) agreed and (11%) strongly agree on this statement, in contrast (16%) disagree and (4%) strongly disagree to the statement , the rest of the participant representing (29%) had a natural position toward this statement.

Statement 12:” PBL help me to improve my understanding and criticize others point of view “

Table 14: PBL improvement of students understanding and criticizing abilities

Options	Effective	Percentage
Strongly disagree	2	4%
Disagree	2	4%
Natural	8	18%
Agree	26	58%
Strongly agree	7	16%
	45	100%

The table findings was divided into 4 categories the first one presented (4%) of a strong disagreement which is equal to the disagreement category followed by (18%) that present a natural opinion category and finally the last category which present the majority (74%) as showing accepted and agreed that PBL approach improve their understanding and criticizing abilities.

Statement 13:” what are the learning skills that PBL enhance more”

Table15: learning skill enhanced by PBL

Options	Effective	Percentage
Critical thinking and problem solving	14	31%
Active learning	7	16%
Collaborative communication	9	20%
All the above	15	33%
	45	100%

The question is devoted to investigate the student’s opinion about the most enhanced learning skill by PBL approach where participants were presented to 4 options. The table above as showing divide the result into 4 categories, the first one is composed of 14 students representing (31%) of the sample opted for critical thinking and problem solving arguing that PBL develop the learner knowledge and set for a new information that help them solve problems. the second category representing 7 students which is (16%) stands for active learning due to that PBL approach help learners to be independent and active in the process of learning. (20%) of the sample opted for collaborative communication explaining that PBL approach create a communicative environment in the classroom which allow them develop their communication skill. the last category which represent the majority (33%) ,15 participant in number , showed their agreement with the 4th option which is all the learning skills mentioned before stating that PBL is an approach that focuses on all the language skills

and that it has different strategies and methods of learning a language and which allow the students acquire all the learning skills mentioned before.

Statement 14: "Do you prefer to work"

Table 16: student's favorite type during project work

Options	Frequency	Percentage
In pairs	8	18%
Individually	19	42%
In groups	18	40%
	45	100%

This question is intended to elicit the participant's preferred project mode. The statistics above show that (40%) prefer working in groups to complete projects, justifying this by stating that group work allows them to discuss issues or engage in activities that are relevant to their abilities as well as avoiding the anxiety that some language learners experience when speaking and interacting with the teacher in front of the entire class. Others stated that group work motivates them and allows them to look at a problem from several perspectives, allowing them to help each other solve a problem effectively.

(18%) of the participants prefer to collaborate with their close friends, claiming that they share similar opinions and points of view, resulting in successful research outcomes.

Individual work, on the other hand, appeals to (42%) because it allows them to express their desires, put themselves to the test as individuals, and develop individual learning skills through the creation of personalized solutions.

Question 15: "Do you think it's possible to teach critical thinking in EFL classrooms?"

The 15th item was done to investigate the possibility of teaching critical thinking in EFL context and it was presented as following "Do you think it possible to teach critical thinking in EFL context?" The result presented a remarkable acceptance from students to study critical thinking in their EFL classroom. Substantially 31 students agree and support the idea of teaching critical thinking in EFL classroom, arguing that learning critical thinking

would improve and develop their use of the English language and that they are going to be able to use it in an appropriate and effective way, additionally they explain their opinion by saying that critical thinking skill is a base to learn a language and that critical thinking would aid them to argue, criticize and evaluate others arguments. Some of them said that learning critical thinking will enhance their fluency, others clarify their opinion by the idea of “attention realization” where they find it enjoyable and interesting to discuss and argue others points of view, yet they did emphasize on taking their levels and capacities in consideration when it comes to practice.

Although the majority accepted this idea of teaching critical thinking in EFL context, still 14 participants disagree and refuse this idea demonstrating the degree of difficulty in learning critical thinking viewing that it would be difficult, and complicated especially for beginners who cannot express themselves appropriately. Others explain their rejection saying that critical thinking skill is developed through experience and practice and not through learning where they saw that analyzing short texts would be enough to develop such skill.

Question 19: " What do you think of the implementation of PBL as an approach to develop EFL critical thinking skills? "

Concerning this question, there are mainly 25 answers. Essentially, 22 students (88%) agree that PBL should be integrated into EFL classrooms because they believe that students need to reflect on their own ideas and opinions, express their points of view, and develop their understanding abilities, arguing that when students are engaged in authentic situations, they will expand their knowledge background and be able to control and rely on themselves. . Furthermore, they will develop new knowledge through their research and analysis in the problem-solving process, which will eventually affect the project outcomes and their overall learning. Other students believe that traditional learning environments cannot develop essential skills that they will need in their professional lives, and that it is necessary to place students in a position where they can use the knowledge they have gained to construct new skills, mainly CT and collaboration. When students collaborate with one another, their CT perceptions and self-knowledge are challenged, which can stimulate cognitive process development.

On the other hand, (3)students (12%) disagree that PBL can improve students' CT skills, claiming that successful implementation of PBL is challenging and that teaching some skills, particularly CT, is complicated. Moreover, some teachers have trouble transitioning

from a teacher to a guide and director. If the teacher does not place enough attention on students acquiring and practicing important skills, they will not be able to reach their objectives. In other words, students can often fail without the teacher's support, direction, and guidance.

8. Teachers interview analysis

Question 1: "What is your experience in teaching English as a foreign language?"

Options	Frequency	Percentage
5 – 10 years	2	33%
More than 10 years	4	67%
Total	6	100%

Table 1: teacher's experience

In general, the responses to this question varied; it is reported that (33%) of teachers have taught English for less than 10 years and (67%) have taught English for more than 10 years. As a result, we might assume that this teaching experience has provided us with sufficient responses. Depending on the teaching methods they encounter over their career as teachers and the most appropriate approach for the learners, a teacher's experience might provide a variety of explanations. This question allows for further data to be obtained in order to reduce ambiguity

Question 2: «What do think of "PBL" as a learning and teaching strategy?"

In this question, Teachers were invited to provide their opinions on the PBL strategy. Almost all teachers agree that PBL is an important method for putting learners back to the center of the learning process. Teachers find project work exciting as long as they can get the learners' interest in discovering answers and solving real-world challenges. As a result, PBL can be beneficial to both teachers and autonomous learners because students are allowed to interact, investigate, and create a final product based on their own abilities. A teacher further adds, PBL can only be effective if it is implemented properly.

Question 3: "Do you use PBL in your courses?"

The question asks if the teachers in the sample introduce project work in their classrooms in order to determine to what extent they rely on it. (5) Teachers stated that they always use project work in their classes, arguing that it is critical to integrate PBL because it allows students to develop a wide range of skills such as critical thinking and problem solving, communication, collaboration, and others. We can conclude that (1) teacher uses PBL but sometimes refers to other methodologies. The use of PBL by teachers can increase students' academic performance in general.

Question 4:" Do you believe that “project work “may help students develop their cognitive abilities like creativity and critical thinking?"

All the 6th teachers agree and confirm that PBL can help students to develop their cognitive abilities. They said that the use of such approach support the student’s abilities to think critically, in addition to this PBL allow weak students to participate in class and be comfortable in expressing themselves freely. Yet teachers also explains the importance of their role in providing instructions, one of the participated teachers also emphasize on the nature of the project and the subject itself.

Question 5: "How does “PBL” effect student’s critical thinking?"

Teachers agree on one opinion, which is that PBL enhance and develop students critical thinking, first they said that PBL engage them in solving problems and use their knowledge to deal with real life situations .Second it gave students the flexibility to process all their knowledge and seek for a new one where a student will form a set of new result to work with and become independent in their learning and to become a critical thinkers due to their analysis , evaluation and synthesizing of information . Finally they clarify that the use of PBL in a group or in a group work would help student’s arguing, discussing and analyzing to draw a conclusion that much their different ways of thinking.

9. Student's Questionnaire discussion :

Through the analysis gathered from student’s questionnaire, it is clear that 3year students are aware of the importance of PBL approach and its effect on their critical thinking where the result reviled that students prefer PBL approach strategies to traditional method in their EFL classrooms finding themselves more productive, enjoyed and motivated.

The first part of the questionnaire which is presented as a 12 closed-ended questions showed that PBL can have a positive effect on students critical thinking where (74)

of participants agree that PBL help them improve their understanding and criticizing abilities. In addition to this the results showed using PBL activities like project work will set learners to be more productive where students believe that this kind of tasks done in a group work aid them to cooperate and exchange thoughts , adding that PBL activities help them improve their thinking abilities and the way they organize and manage their thoughts in an enjoyable classroom process with the feeling of an independent learner who can understand and analyze any central idea of written or spoken text .

The second part was directed for 2 Semi-open questions that investigate the best type of work among students and their opinion on the most enhanced learning skill by PBL, the outcomes of the following questions, first revealed that students like to work in groups or in collaboration with their friends justifying their choice that such type of works allow them to discuss issues and engage in activities that are relevant to their abilities and avoid anxiety adding that group work motivate them and allow them to see problems from different points of view , however 42 like to work individually expressing that that individual activities permit them to express their desire and prefer to create personal solutions , the second Semi-question was about students view of the most enhanced learning skill by PBL , the result had many options , where a part of our participants see that PBL enhance their active learning expressing this opinion by the fact that PBL allow them to participate and control their learning process and aid them to be independent learners and rely on themselves in learning . The other part of the sample opted for collaboration communication skill where they explain that PBL create a communicative environment that give them the chance to practice and enhance their communicative skill. The third option which present (31) set that PBL enhance critical thinking and problem solving due to its activities that help them improve their critical thinking and enrich their knowledge and develop their capacities of understanding and analyzing thoughts so they can use this to solve problems .the last part of students which represent the majority who agreed with the option of “all the above” explaining that PBL is an approach with a different methods and strategies that guaranty the development for all the important skills mentioned before

The last part of the questionnaire was set for 2 open-ended questions that consider teaching critical thinking in EFL context and the student’s reflection on the implementation of such approach to teach critical thinking. The findings presented a significant acceptance for the possibility of teaching critical thinking in EFL context where the majority of the students support the idea of learning critical thinking in their EFL classroom believing that this will

help them improve and develop their English , they believe that critical thinking skills is one of the bases to learn a language adding that learning how to think critically will help them criticize , analyze and draw a clear conclusion on any problem .As for students reflection about using PBL to develop critical thinking ,result revealed that most of students support the use of PBL to develop critical thinking admitting that PBL open the doors for them to reflect their ideas and opinions and express their thoughts , additionally they see that engage theme in an authentic students that help them be prepared to use their critical thinking abilities to solve problems in their future lives .

10.The teacher's interview discussion :

The overall results of the gathered data from the teacher's interview shed light on teachers' perceptions of PBL implementation in EFL classrooms and its impact on student's CT skills which assisted in the resolution of some of the previously stated research questions. They emphasized on the significance of PBL for its beneficial effects on students' thinking skills. The majority of teachers confirmed their reliance on project work claiming that it is a crucial strategy in building students' skills to critically solve authentic problems

Furthermore, some teachers highlighted the importance of cooperative work when using PBL, which necessitates interaction, discussion, and idea exchange among group members in order to effectively complete project work. As a result of the process of mutual comprehension of both old and new gained knowledge, PBL allows students the flexibility to absorb all of the received information and seek new knowledge on their own. According to a teacher. When students analyze and synthesize knowledge from a variety of sources to give their own justified interpretations, they become self-reliant in their learning and critical thinkers.

The participants added that it is not enough to learn only theories; practical skills are also important. They believe that PBL is a vital aspect in the development of their students' thinking and creativity because they practice these skills to create effective projects and communicate them. Both the teacher and the students benefit from it.

However, a teacher believe that utilizing PBL to teach CT is difficult. Indeed, some teachers believe that the nature of group work and the topic itself determines student engagement and CT development. To emphasize the importance of CT, teachers selecting topics that require students to think critically in order to produce adequate final results, students should be given the opportunity to choose the appropriate topic and the group work

based on their interests and learning styles. A teacher stated that he does not always rely on project work and that he occasionally refers to other approaches, citing his students' disengagement in the classroom and the absence of support for project work as reasons. Finally, despite the differing viewpoints, the majority of teachers highlight the significance of project work in developing students' CT because it places the learners at the center of the learning process and encourages them to engage in problem-solving activities. They find the learning process more engaging when they use PBL.

11. General recommendations

On the light of the analysis and discussion of the research findings, some recommendations are proposed to enhance student's skills within the learner-centered approach:

- Students should be encouraged to be active and gain knowledge on their own.
- Classroom tasks should be related to student's real-life situations and designed according to their abilities and interests.
- Teachers should provide students with the freedom to decide the appropriate materials that would enhance their learning process
- Explore the use of PBL approach in enhancing the 21st century skills.
- Assess the level of teaching critical thinking among EFL students.
- Investigate other teaching and learning strategies that encourage the development of CT skills among EFL students.

General conclusion

General conclusion:

The major responsibility of the educational systems is engaging students with cognitive skills , it has been highlighted the importance and necessity of developing 21st century skills, particularly critical thinking, as an integral part of the English language curriculum in order to give students the opportunity to actively proof their points of view and overcome the learning obstacles they may face. The PBL technique has proven to be an empirical teaching paradigm that is compatible with 21st-century skills.

This study aims at investigating the implementation of Project-Based learning (PBL) and its impacts on student's critical thinking skills. In order to accomplish this purpose, this research has adopted the mixed method approach to collect data. Ultimately, two data collection tools were used, an interview demonstrated for six EFL teachers and a questionnaire demonstrated for Forty-five EFL students of Mohamed Boudhiaf University. M'sila. Although some teachers and students confront challenges in implementing PBL, such as distracted learners and a lack of student participation for project work , the majority of them agree that PBL encourages students to develop practical skills such as teamwork, critical thinking, and problem-solving. They also emphasized their independence through conducting an in-depth investigation process on their own and presenting an efficient final product. Overall, both teachers and students believe that implementing PBL can result in developing EFL students critical thinking skills.

References

REFERENCES

- A. Hein, R (2018). The Centenary of William H. Kilpatrick's "Project Method": A Landmark in Progressive Education Against the Background of American-German Relations After World War I. *Ratter: The Centenary of William H. Kilpatrick's "Project Method"* *International Dialogues on Education*, 5(2) : pp. 15-17.
- B. Houda, Nabil Aziz, Fatiha (n.d.). *Classroom Debate to Enhance Critical Thinking Skills*. *Revue Elbahith Des Sciences Sportif Et Sociales*. 4(7). PP 442. univ.boumediene@gmail.com.
- C. • Michael M. Grant, (n.d), GETTING A GRIP ON PROJECT-BASED LEARNING: THEORY, CASES AND RECOMMENDATIONS, *A Middle School Computer Technologies Journal* a service of NC State University, Raleigh, NC ,Volume 5, Issue 1, Winter 2002,ISSN 1097 9778 URL: <http://www.ncsu.edu/meridian/win2002/514>.
- D. Myeong-Hee, S (2018). *Effects of Project-based Learning on Students' Motivation and Self-efficacy*. *English Teaching*. 73(1). PP113. 10.15858/engtea.73.1.201803.95.
- E. Ali, R (2018). *Effective Groupwork Strategies: Faculty and Students' Perspectives*. *Journal of Education and Learning*, Published by Canadian Center of Science and Education. 7(5). P 1. <https://doi.org/10.5539/jel.v7n5p1>.
- F. ASMA, M (n.d.). *Effects of an Instructional Model on the Improvement of EFL Students' Critical Thinking Skills for Reading Historical Documents*. Université Medea. PP 262-265.
- G. ATIA, H.A. (2019). *The Role of Project-Based Learning in Engaging*.
- H. Axmedova Ugiljon, K (2021). *Benefits and Drawbacks of Implementing PBL in Curriculum*. *The American Journal of Social Science and Education Innovations*. 3 (3). PP 537-538. <https://doi.org/10.37547/tajssei>.
- I. BAGHOUSSE, M (2020). *Enhancing critical thinking through project work: The case of Algerian secondary school English language classes [Doctoral thesis, University of Mosrghanem]*.
- J. Barbara, Janet, Mary, Michael, Sonia, Larissa, Elizabeth. (2017). *Project-Based Learning A Literature Review Working Paper*. MDRC.
- K. Dareen, A (2018). *Motivating Language Learners during Times of Dhikra & Souhila* (2021). *Students' and Teachers' Attitudes towards the Effect of Project Based Learning on the Speaking Skill in Higher Education*. *Afak for sciences journal*. 6(3). PP 498-499. s.hellalet@univ-batna2.dz.

- L. Egon, Hans H, Lone (2006). *Individual activities as an integrated part of project work: an innovative approach to Project Oriented and Problem-Based Learning (POPBL)*. World Transactions on Engineering and Technology Education. 5 (1). P13. <https://www.researchgate.net/publication/258885650>.
- M. Emily, L (2011). *Critical Thinking: A Literature Review*. Pearson. PP 4-9.
- N. Geraldine , Sarah , Barry (2005) . *Emerging Issues in the Practice of University Learning and Teaching*. All Ireland Society for Higher Education (AISHE). PP 89: <http://www.aishe.org/>.
- O. Grant, M. (2002). GETTING A GRIP ON PROJECT-BASED LEARNING:
- P. Hacène, H (2011). Feasibility and Evaluation of Project Work in EFL at Secondary School. Ecole Normale Supérieure – Constantine. PP 82
- Q. Halil øbrahim & Serap (2009). The effects of blended learning environment on the critical thinking skills of students. *Procedia Social and Behavioral Sciences*. PP 1745. www.sciencedirect.com.
- R. Handhika, Cari, Sunarno, Suparmi, Kurniadi (2018). The influence of project-based learning on the student conception about kinematics and critical thinking skills *Journal of Physics: Conference Series*. PP 1. 10.1088/1742-6596/1013/1/012028.
- S. Heba Bani Issa, A (2021). *The Effect of Using Project Based Learning on Improving the Critical Thinking among Upper Basic Students from Teachers' Perspectives*. *Pegem Journal of Education and Instruction*, 11 (2), PP 54. 10.14527/pegegog.2021.00.
- T. Jelena & Svetlana (2016). Literature and critical literacy pedagogy
- U. Jill & Gina (n.d.). Literature Review on Project-Based Learning. Center of Excellence in Leadership of Learning University of Indianapolis.
- V. Jonathan, Claire, Daniel, Dara, Ian (2020). *CRITICAL THINKING: Joyce, C (n.d.). Discovery learning for the 21st Century: What is it and how does it compare to traditional learning ineffective. Accelerating the world's research.*
- W. Kali & Graham (2011). Blending project-based learning and traditional lecture-tutorialbased teaching approaches in engineering design courses *Deakin Research Online*. pp <http://hdl.handle.net/10536/DRO/DU:30054397>.
- X. Loizos & Iasonas (2014). *Approaches of Research and Methodology*. Chapter 3. <https://www.researchgate.net/publication/259763532>.
- Y. Marsela, Veneranda (2017). *Fostering Learner's Critical Thinking Skills in EFL:*

- MICHAEL, K (2014). IN: ENCYCLOPEDIA OF EDUCATIONAL THEORY AND PHILOSOPHY, ED. C.D. PHILLIPS. THOUSEND OAKS, CA: SAGE .
ResearchGate. PP2. <https://www.researchgate.net/publication/316554427>.
- Z. Mohammad, a (2020). INTERVIEW VERSUS QUESTIONNAIRE FROM THE PERSPECTIVE OF CBE MEMBERS. *International Journal of Education, Learning and Development*. 8(2). PP 75.
- AA. Mohammed Abdullatif, a (2020). *The Effectiveness of the Project-Based Learning (PBL) Approach as a Way to Engage Students in Learning*.
journals.sagepub.com/home/sgo. pp 4.
- BB. Naeema Saleh & Abdo Mohammed (2017). *The Practice and Challenges of Implementing Critical Thinking Skills in Omani Post-basic EFL Classrooms*. *English Language Teaching*, Published by Canadian Center of Science and Education. 10(12). PP 116. <http://doi.org/10.5539/elt.v10n12p116>.
- CC. Nassira & Hachemi (2021). Teachers' Perceptions of Critical Thinking and the Impact They Have on Language Teaching. *Social and Human Sciences Review*, Batna 1 university. 22(1). PP 543 .548.
- DD. Ngadiso, Teguh, Muhammad, Nur, Anis (n.d.). *Project-based Learning (PBL) in EFL Learning*. *Al-Ishlah: Jurnal Pendidikan*. P 1121.
<http://www.journal.staihubbulwathan.id/index.php/alishlah>.
- EE. Omar, Islam, Hashem (2020). *The Role of Using Case Studies Method in Improving Students' Critical Thinking Skills in Higher Education*. *International Journal of Higher Education*. 9 (2). PP 298. <http://ijhe.sciedupress.com>.
- FF. Puangpunsi, N (n.d.). *Learners' Perception towards Project-Based Learning in Encouraging English Skills Performance and 21st Century Skills*. *THAITESOL JOURNAL*. 34(1). PP 5-7.
- GG. Raynesa, Eka, Eva (2019). *PROBLEM-BASED LEARNING: DEVELOPING STUDENTS' CRITICAL THINKING*. *Linguists: Journal of Linguistics and Language Teaching*. 5 (1). PP 61 <http://ejournal.iainbengkulu.ac.id/index.php/linguists>.
- HH. Saraswati, D (2021). Mixed-Methods Research: A Discussion on its Types, Criticisms. *Journal of Practical Studies in Education*. 2(2). PP 27.
<https://doi.org/10.46809/jpse.v2i2.20>.
- II. Sariudin, A. Haryani, S. Wardani, S. (2015). *CHARACTERIZED PROJECT BASED LEARNING TO IMPROVE CRITICAL THINKING SKILL*. *International Conference on Mathematics, Science, and Education 2015 (ICMSE 2015)*, PP 6 .

- JJ. A Case Study of Second- Year Students in MekkiMenni Secondary School, Biskra. [MASTER DISSERTATION, University of Biskra].
- KK. *Crisis through Project-based Learning: Filming Activities at the Arab International University (AIU). Theory and Practice in Language Studies*, 8 (2), P 1650, 1656. <http://dx.doi.org/10.17507/tpls.0812.10>.
- LL.David, H (2018). *Critical Thinking*. Stanford Encyclopedia of Philosophy.
- MM. Deep Patel, October 2018 ,16 *Characteristics of Critical Thinkers*, entrepreneur website , URL: <https://www.entrepreneur.com/article/321660>.
- NN. Filippatou, Diamanto; Kaldi, Stavroula, 2010, *The Effectiveness of Project-Based Learning on Pupils with Learning Difficulties Regarding Academic Performance, Group Work and Motivation*, International Journal of Special Education, URL: <https://eric.ed.gov/?id=EJ890562>.
- OO. Gregory B, William I, Henry N ,James M ,Wallace , (n.d),*Critical Thinking “A student's Introduction” fourth edition In the EFL classroom: Towards a model of teaching critical thinking skills*. Studies in Second Language Learning and Teaching Department of English Studies, Faculty of Pedagogy and Fine Arts, Adam Mickiewicz University, Kalisz . 6(4). PP 684. <http://www.sslt.amu.edu.pl>.
- PP. Abdul Haris, February 2020, *Critical Thinking, Cognitive Processes, and Learning Designs of Islamic Religious Education*, <http://ejournal.kopertais4.or.id/sasambo/index.php/alfurqan/article/view/4078>
- QQ. Mohammed A, July 2020, *The Effectiveness of the Project-Based Learning (PBL) Approach as a Way to Engage Students in Learning*, DOI:10.1177/2158244020938702 URL: https://www.researchgate.net/publication/342715218_The_Effectiveness_of_the_Project-Based_Learning_PBL_Approach_as_a_Way_to_Engage_Students_in_Learning.
- RR. Parisa A, Fatemeh H, Afsar R, Farzaneh Kh, January 2022, *The Effect of Technology-Aided Project-Based English Learning on Critical Thinking and Problem Solving as Indices of 21st Century Learning*, , ResearchGate, URL: https://www.researchgate.net/profile/Farzaneh-Khodabandeh/publication/357152458_The_Effect_of_Technology-Aided_Project-Based_English_Learning_on_Critical_Thinking_and_Problem_Solving_as_Indices_of_21_st_Century_Learning_Article_Info_ABSTRACT/links/61bdb7081d88475981fa2f91/The-Effect-of-Technology-Aided-Project-Based-English-Learning-on-Critical-

[Thinking-and-Problem-Solving-as-Indices-of-21-st-Century-Learning-Article-Info-ABSTRACT.pdf?origin=publication_detail.](#)

- SS. Richard, Linda, Ted (2019). *A Brief History of the Idea of Critical Thinking. Foundation for Critical Thinking*, Taken from the [California Teacher Preparation for Instruction in Critical Thinking: Research Findings and Policy Recommendations: State of California, California Commission on Teacher Credentialing](#), Sacramento, CA.
- TT. Secondary School Learners to Speak English as a Foreign Language
- UU. *SKILL DEVELOPMENT FRAMEWORK*. The Australian Council for Educational Research Ltd. PP 2-3. https://research.acer.edu.au/ar_misc/41
- VV. Some Practical Activities. *European Scientific Journal*. 13(29). PP 127-128.
[URL:http://dx.doi.org/10.19044/esj.2017.v13n29p126](http://dx.doi.org/10.19044/esj.2017.v13n29p126)
- WW. THEORY, CASES AND RECOMMENDATIONS. *Meridian: A Middle School Computer Technologies Journal* a service of NC State University, Raleigh, NC, 5 (1), 1.
- XX. Youki Terada, 2021, New Research Makes a Powerful Case for PBL ,URL:
[https://www.edutopia.org/article/new-research-makes-powerful-case-pb.](https://www.edutopia.org/article/new-research-makes-powerful-case-pb)

Appendix

Appendix 01

Teacher's interview

1-What is your experience in teaching English as a foreign language?

.....

.....

.....

.....

.....

2- Choose one answer

A- What are the learning skill that PBL enhance more?

1- Critical thinking and problem solving.

2- Active learning.

3- Collaborative communication.

4- All the above.

Justify :

.....

.....

.....

.....

.....

B- Do you prefer to work?

1- In pair.

2- Individually.

3- In group.

Justify

.....

.....

.....

.....

.....
.....

3-Answer the following questions

A-Do you think it's possible to teach critical thinking in EFL context?

.....
.....
.....
.....
.....
.....
.....
.....

B-What do you think of implementation of PBL as an approach to develop EFL critical thinking skill?

.....
.....
.....
.....
.....
.....
.....
.....

Thank you!

Résumé

PBL (l'Apprentissage par les projets) est une méthode d'enseignement moderne qui tente de démontrer la capacité des étudiants à penser de manière critique. Un de l'aspect essentiel du processus éducatif et de guider les élèves à penser de manière critique et créative, L'approche APP a récemment été adoptée par le système éducatif algérien comme l'une des réformes de l'éducation. Le but de cette recherche est de voir comment l'utilisation de l'APP comme stratégie d'apprentissage dans les universités affecte les capacités cognitives des étudiants

d'anglais, en particulier son pensée critique en plus il mesure le degré de dans le quelle l'approche de PBL encourage les étudiants de penser de manière critique et créative. L'étude a adopté une approche de méthode mixte dans laquelle deux outils de collecte ont été utilisés, un questionnaire pour les étudiants et un entretien pour l'enseignant de l'Université de Mohammed Boudiaf "M'sila". Malgré tous les obstacles la majorité des participants sont satisfaits avec l'intégration de l'APP dans les cours d'anglais, donnant des commentaires positifs et affirmant que cette approche joue un rôle important dans l'amélioration de la pensée critique.

Mots clés : Apprentissage par projet, Pensée critique, étudiants EFL, professeurs EFL.

ملخص :

التعلم المبني على اساس المشاريع هو طريقة تعليم جديدة تساعد على اظهار قدرات التفكير النقدي للطلاب و تتمثل احد ادوار هذا الاسلوب في تطوير و توجيه تفكير الطالب النقدي و الابداعي و قد تم تبني هذا الاسلوب في المنهج التعليمي الجزائري مؤخرا كواحدة من الاصلاحات المتعلقة بالتعليم . الغرض من هذه الدراسة هو معرفة تأثير هذا المنهج و اسلوب التعلم عن طريق المشاريع على القدرة الادراكية عامة و التفكير النقدي خاصة لدى طلبة اللغة الانجليزية كما انه يبحث في مدى تشجيع هذا المنهج على تعزيز قدرة الطالب على التفكير النقدي و قد تم استخدام اداتين لجمع بيانات هذه الدراسة تمثلت

في استبيان خاص بالطلبة و مقابلة مع اساتذة جامعة محمد بوضياف بالمسيلة و قد تبين انه على الرغم من العقبات التي واجهها طلبة و اساتذة قسم اللغة الانجليزية في العمل بهذا الاسلوب فقد اعراب غالبية المشتركين في هذه الدراسة على رضاهم في ادماج التعلم عن طريق المشاريع في فصول اللغة الانجليزية مبريرين انه يعطي استجابة ايجابية و انه يلعب دورا مهما في تحسين التفكير النقدي لدى الطلبة كما انه يعزز مهارات العمل الجماعي و قدرتهم على تحقيق اهدافهم التعليمية .

الكلمات المفتاحية : التعلم على اساس المشاريع ، التفكير النقدي ، طلبة اللغة الانجليزية ، اساتذة اللغة الانجليزية.