

UNIVERSIDAD COMPLUTENSE DE MADRID

FACULTAD DE FILOLOGÍA



TESIS DOCTORAL

El Aprendizaje Basado en Proyectos (ABP) y su eficacia en la enseñanza del inglés en la etapa de la educación superior

Project-Based Learning (PBL) and Its Effectiveness in Teaching English at the Higher Education Level

MEMORIA PARA OPTAR AL GRADO DE DOCTOR

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PROGRAMA DE DOCTORADO EN LINGÜÍSTICA INGLESA

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DEDICATIONS

Cansado de los hombres, me fui con Platero por el sendero adelante.
Juan Ramón Jiménez, *Platero y yo*.

A quienes, como Platero, me acompañan en silencio con cariño,
sin pedir nada, y dan paz en medio del ruido.
A ellos, que iluminan el camino del conocimiento,
dedico esta tesis.

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RESUMEN

La transición hacia una economía basada en la información ha redefinido la productividad, destacando el papel de la generación de conocimiento, el procesamiento de datos y la comunicación simbólica como factores clave del crecimiento económico (Castells, 1999). Esta transformación resalta la creciente importancia de los sistemas educativos en la formación de individuos con las habilidades y el conocimiento necesarios para prosperar en una economía impulsada por el saber. A medida que las industrias priorizan la innovación y la adaptabilidad sobre los recursos tradicionales, el papel de las instituciones de educación superior se vuelve cada vez más esencial en el desarrollo de las competencias que se necesitan para enfrentarse a las exigencias de los entornos profesionales modernos. Por tanto, las universidades deben preparar de manera eficaz a los estudiantes para desenvolverse en un mercado laboral competitivo, el cual está en constante evolución y exige un ajuste continuo (Schwab, 2017).

Estos cambios, impulsados por los avances tecnológicos y la globalización, requieren profesionales que puedan adaptarse rápidamente a nuevas herramientas, metodologías y expectativas. En consecuencia, las universidades se enfrentan al desafío de cerrar la brecha entre la formación académica y las habilidades demandadas por los empleadores, fomentando la experiencia técnica y habilidades como el pensamiento crítico, la colaboración y la comunicación. Esta acción es fundamental para garantizar que los egresados no solo sean empleables, sino que también sean capaces de contribuir de manera real en entornos profesionales dinámicos y diversos.

Para lograrlo, los estudiantes deben ser capacitados en habilidades prácticas como la resolución de problemas, el trabajo en equipo y el dominio de idiomas con fines específicos, los cuales pueden ser desarrollados a través de metodologías activas. En este contexto, la

enseñanza del inglés ha experimentado una gran evolución en los últimos años, incorporando nuevas metodologías para enfrentarse a los nuevos retos de los alumnos. Este estudio evalúa la efectividad del Aprendizaje Basado en Proyectos (ABP) en comparación con los métodos tradicionales. En concreto, se implementó una intervención con un grupo de alumnos de primer año del Grado en Turismo, involucrándolos en la organización y ejecución de un congreso de estudiantes. Como referencia, se establecieron tres grupos de control que siguieron metodologías tradicionales. La evaluación no solo se centró en los resultados del aprendizaje del inglés, sino también en otros aspectos como la percepción de la muestra, la efectividad del trabajo colaborativo y la motivación de los mismos. Los análisis cuantitativos y cualitativos compararon las respuestas del grupo experimental con los grupos de control. Los resultados demuestran que el enfoque tuvo un impacto positivo, mejorando tanto el rendimiento académico como la motivación. Estos hallazgos indican que el ABP es una metodología efectiva para la enseñanza del Inglés para Fines Específicos.

Palabras clave: Aprendizaje Basado en Proyectos, Inglés para Fines Específicos, turismo, metodologías activas, educación superior.

ABSTRACT

The shift toward an information-based economy has redefined productivity, emphasizing the role of knowledge generation, data processing, and symbolic communication as key drivers of economic growth (Castells, 1999). This transformation brings out the increasing significance of education systems in equipping individuals with the skills and knowledge necessary to thrive in a knowledge-driven economy. As industries prioritize innovation and adaptability, higher education institutions play a main role in fostering the competencies required to meet the evolving demands of modern professional environments. Consequently, universities must prepare students effectively for an increasingly competitive labor market that demands continuous adaptation (Schwab, 2017).

Technological progress and globalization accelerate rapid changes, necessitating professionals who can swiftly adjust to new tools, methodologies, and expectations. Universities, therefore, must bridge the gap between academic training and the skills sought by employers, cultivating not only technical expertise but also essential soft skills such as critical thinking, collaboration, and communication. This action is fundamental to making graduates not only employable but also effective contributors in dynamic and diverse professional settings.

This goal can be met by focusing on applied skills such as problem-solving, teamwork, and language proficiency. These competencies can be developed through active learning methodologies. In this context, English language teaching has evolved significantly in recent years, incorporating diverse methodologies to address new challenges faced by students. This study examines the effectiveness of Project-Based Learning (PBL) in comparison to traditional teaching methods. Specifically, an intervention was conducted with a group of first-year

students of the Degree of Tourism, who organized and hosted an undergraduate conference¹ as part of their coursework. Three control groups followed conventional methodologies to serve as a reference. The evaluation considered not only English language proficiency outcomes but also students' perceptions of PBL, the effectiveness of collaborative work, and their motivation. A combination of quantitative and qualitative analyses compared the responses of the experimental and control groups. The findings show that the approach had a significant positive impact, improving both academic performance and student motivation. These results indicate that PBL serves as an effective methodology for teaching English for Specific Purposes (ESP).

Keywords: Project-Based Learning, English for Specific Purposes, tourism, active methodologies, higher education

¹ In this study, both *conference* and *congress* are used as synonyms.

INTRODUCTION

Modern global society faces numerous challenges that threaten life on Earth, including the survival of humanity. Among the most serious threats are global warming and armed conflicts. Climate change has emerged as one of the most pressing global issues, generating widespread concern among citizens and prompting urgent calls for decisive action. A survey conducted by Poushter et al. (2022) revealed that a median of 75% of people across 19 countries perceive climate change as a principal threat to their nations. This widespread recognition underscores the urgent need to address the environmental changes that are increasingly affecting societies worldwide. The survey also highlights regional variations in concern, with developed nations exhibiting heightened awareness. However, the level of perceived threat often correlates with direct exposure to climate-related impacts, emphasizing the need for enhanced international communication strategies to address the consequences of climate change.

Despite the challenges, a global study by Andre et al. (2024) presents an optimistic outlook on collective climate action. According to this research, 69% of citizens worldwide support social norms favoring climate protection, with many even willing to contribute 1% of their income as a tangible commitment to environmental sustainability. Furthermore, 86% of participants believe in how dangerous global warming is in a study conducted from 2019-2021 (Galan, 2024). This widespread support increases pressure on governments to implement regulations and policies that support public expectations for a sustainable future. Although some climate change deniers argue that natural cycles or Earth's own systems drive environmental shifts, the overwhelming consensus among scientists is that unsustainable human activities since the Industrial Revolution are the primary cause of the current environmental crisis.

Simultaneously, persistent conflicts in regions such as Palestine, Africa, and other parts of the world continue to disrupt global stability. The recent escalation of the war in Ukraine has brought human tragedy closer to Western societies, with far-reaching and uncertain consequences. In a speech outlining the United Nations' priorities for 2023, the Secretary-General emphasized that ending wars and implementing bold measures against climate change should be central objectives for governments seeking to protect the present and secure the future (United Nations, 2023). Given that both climate change and armed conflicts are largely human-induced crises, communication and dialogue must serve as fundamental pillars for reconstruction, peacebuilding, and environmental preservation.

In this context, English emerges as a unifying language for global discourse and problem-solving. As the most widely spoken language, English is recognized not only as the language of science but also as the primary tool for international communication. According to Galan (2025), English was the most spoken language worldwide in the previous year, with 1.5 billion speakers, followed by Mandarin (1.1 billion), Hindi (602.2 million), and Spanish (548 million). However, acquiring a second language remains a challenging task. Language teaching methodologies have evolved significantly over time, from the Direct Method to the Grammar-Translation Method and, more recently, to the Communicative Approach developed in the last quarter of the twentieth century. These pedagogical innovations have been adapted to meet the evolving demands of their respective contexts (Richards & Rodgers, 2014). The transition from basic communication strategies used during World Wars I and II to more interaction-based approaches in response to increasing global connectivity has fundamentally reshaped language learning (Brown, 2014).

There is growing concern among pre-university English teachers regarding the evolving role of the English language in today's world. As a result, many educators are adopting innovative methodologies for teaching English, such as PBL, the Flipped Classroom, and

Service Learning (Richards & Rodgers, 2014). Universities are also actively engaging in this transformation, recognizing the new challenges students will face soon. In the context of English language education, students require more than linguistic proficiency, they must integrate their language skills with other disciplines and apply them to express ideas, share opinions, and solve real-world problems (Brown, 2014).

In a knowledge-based society, educational systems often adhere to rigid routines that prevent them from focusing on what truly matters. Bureaucratic constraints limit the adaptability of curricula to the evolving demands of a world that require universities, above all, to prepare students for a constantly changing and increasingly complex landscape. However, traditional teaching methodologies, rooted in the industrial era, often fail to meet these evolving demands. The lack of specialized training for university instructors and the difficulty of securing long-term teaching positions may contribute to the persistence of outdated methodologies. Yet, society requires professionals capable of problem-solving from the outset. A strong theoretical foundation is insufficient if individuals are unable to apply their knowledge to real-world challenges. Maintaining outdated teaching-learning approaches will not resolve the gap between academic instruction and practical skills.

Nevertheless, when teachers implement PBL in the classroom (by introducing an engaging problem, guiding students through problem-solving phases, and integrating different resources in a balanced way) meaningful changes begin to occur. They start perceiving English, the subject of study, as relevant and valuable, leading to the development of competencies that would otherwise be difficult to acquire.

According to the *Ley Orgánica del Sistema Universitario* (Organic Law on the University System),² which was passed by the Spanish Congress in December 2022 and

² Organic Law 2/2023, of March 22, on the University System (*Sistema Universitario*). *Official State Gazette*, No. 69, March 22, 2023, pp. 36740–36871. <https://www.boe.es/eli/es/lo/2023/03/22/2>

approved on March 22, 2023, the Spanish higher education system and society at large have undergone significant changes since the 1970s. However, new challenges now demand urgent attention, including the climate crisis, the expansion of the Internet, and the continuously evolving nature of the job market. Addressing these challenges requires students to develop new competencies. The legislation emphasizes the necessity of integrating innovative methodologies into face-to-face university instruction.

In the context of emerging pedagogical approaches, the Organization for Economic Cooperation and Development (OECD), through its Department for Education and Innovation and the Centre for Educational Research and Innovation (CERI), classifies innovative teaching strategies into six broad categories (OECD, n.d.). These include:

1. Embodied Learning (arts-based learning, better movers and thinkers, maker cultures).
2. Experiential Learning (project-based learning, service-based learning, uncertainty competencies).
3. Computational Thinking (algorithmic thinking, coding).
4. Blended Learning (flipped classrooms).
5. Gamification (game-based learning, learning through storytelling).
6. Multi/Critical Literacies (discussion competencies, overt instruction).

Each of these pedagogical approaches consists of a set of methodologies. In the case of Experiential Learning, PBL is one of three key components, alongside Service-Based Learning and Uncertainty Competencies. However, the OECD clarifies that the inclusion of these methodologies in its framework does not imply that they are inherently innovative or effective. Their success depends on several factors, including teacher engagement, professional development, appropriate pedagogical choices, and supportive learning environments. Furthermore, it highlights that the debate should not be framed simply as “traditional vs.

innovative” or “direct vs. constructivist” teaching methods, but rather as an ongoing exploration of best practices for optimizing education.

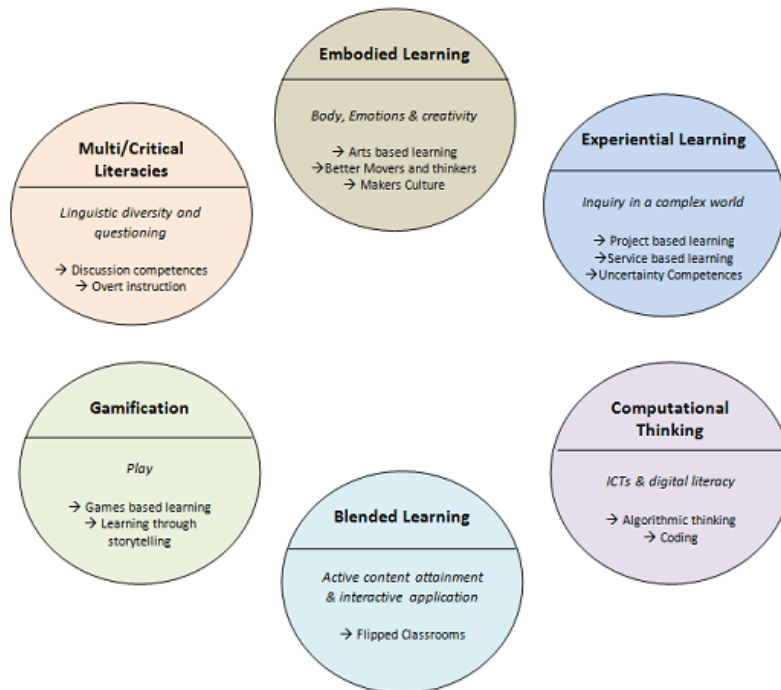


Figure 1. *Compilation of Innovative Pedagogies for Powerful Learning. OECD (n.d.)*

This study examines the impact of PBL as an alternative to traditional teaching methods in the context of English for Specific Purposes (ESP). Specifically, it explores how this approach influences the communicative competence of first-year students of the Degree of Tourism³. The research is based on the hypothesis that students who learn English through PBL will develop their communicative competence more effectively than those following a traditional methodology.

To validate this hypothesis, the study seeks to answer several key research questions:

³ The written documentation or reproduction of images containing personal data of the students in this study has been deliberately omitted, even with the required permissions in accordance with the Complutense University of Madrid, in order to ensure maximum protection of the students' privacy, as stated by the Data Protection Office. Website: <https://www.ucm.es/dpd/oficinadpd>

- How does PBL impact the communicative competence of first-year EFL students?
- What differences exist in academic performance between students that are taught through PBL and those instructed using traditional methodologies?
- How do students perceive their learning experiences under PBL compared to conventional teaching methods?
- Does collaborative work in PBL contribute to improved language learning outcomes?

In order to answer them, a main objective was described: to evaluate the effectiveness of PBL compared to traditional teaching methods in improving the communicative competence of first-year English students in the Degree of Tourism.⁴

A part from this, some specific objectives were defined: (1) to compare students' academic performance in PBL and traditional methodologies, (2) to evaluate student engagement and motivation levels in learning English through PBL versus traditional approaches, (3) to investigate students' opinions and preferences regarding PBL compared to conventional teaching methods through interviews and (4) to assess the effectiveness of collaborative work in enhancing language acquisition within a PBL framework.

To accomplish these objectives, the study is structured into three main parts. The first section presents the theoretical framework, reviewing various pedagogical approaches with a focus on PBL, the Common European Framework of Reference for Languages (CEFR), digital competencies in education, and ESP. The second section outlines the experimental framework, detailing the research methodology, participant selection, data collection procedures, and

⁴ Main and specific objectives, sections 4.2.1. and 4.2.2.

analytical techniques employed, as well as the development of the proposal, the results and the discussion of the findings. Finally, the third section offers conclusions, limitations of the inquiry and future research directions.

PART I. THEORETICAL FRAMEWORK

This section of the dissertation explores the fundamental theoretical concepts underlying foreign language teaching, with a particular emphasis on active learning methodologies and the PBL approach. The strategies for learning a second language have evolved very much, transitioning from the Grammar-Translation Method to more communicative approaches such as the Direct Method and the communicative approach, reflecting innovations tailored to the needs of their respective historical contexts (Richards & Rodgers, 2014). These methods progressed from basic communication techniques used during World Wars I and II to more interactive approaches as global interactions increased (Brown, 2014). However, in recent decades, pedagogy has shifted toward methodologies that encourage active and participatory learning.

Active learning methodologies, such as PBL, cooperative learning, and the flipped classroom emphasize students' direct involvement in the learning process. These approaches not only enhance knowledge retention but also foster critical skills such as problem-solving, teamwork, and analytical thinking (Bonwell & Eison, 1991). This section explores the characteristics and benefits of active learning methodologies in the context of foreign language instruction.

Among these teaching strategies, PBL has emerged as a pedagogical methodology that engages students in exploring complex questions and real-world problems, encouraging active investigation and the practical application of acquired knowledge. In foreign language teaching, PBL enables students to use the target language in meaningful and contextualized ways, promoting communicative competence (Thomas, 2000). This section examines the fundamental principles of PBL, its application in the foreign language classroom, and the benefits it offers for both linguistic and non-linguistic skill development.

However, before implementing PBL in English language instruction, it is essential to assess students' proficiency levels and the descriptors they need to achieve within their coursework. The CEFR serves as a standardized guide that defines language proficiency levels and provides a common basis for teaching, learning, and assessment across Europe and beyond. This section reviews its principles and its relevance to foreign language teaching. Furthermore, the relationship between the CEFR and the PBL will be examined, highlighting how both frameworks can be integrated to enhance students' linguistic competence (Council of Europe, 2001).

PBL provides a dynamic context for applying the descriptors of the CEFR, allowing students to develop language competencies in real-life situations. This framework is designed to be applied and developed within a social context where linguistic interactions naturally occur, alongside social exchanges and learning processes motivated by action, goal achievement, or professional and personal development.

During this section of the thesis, the relationship between the PBL and the levels of the CEFR will be explored to determine how that methodology can contribute to more effective and contextualized language teaching. Specific project examples that support CEFR objectives and promote language acquisition in meaningful ways will be discussed.

Beyond the connection between language proficiency levels and teaching methodology, another key aspect to consider is digital competence. In the digital age, technological proficiency has become an essential skill for educators. The Digital Competence Framework for Educators (DCF-E) provides a structured guide for developing digital skills that are vital for effective teaching in the 21st century. This section reviews the components of the DCF-E and its significance for foreign language instructors. The integration of technology into the teaching process can greatly enhance language learning (Redecker, 2017). Additionally, incorporating digital competence into PBL can improve the overall effectiveness of foreign

language instruction. This section examines how the DCF-E and PBL can be combined to create innovative and dynamic learning environments. Examples of pedagogical practices that incorporate digital tools into language projects will be presented, demonstrating how these approaches enhance both students' digital literacy and linguistic proficiency.

Following this discussion, the study explores ESP, an approach to English language teaching that addresses specific professional or academic needs. This section defines the core concepts of ESP and its significance in today's globalized world. It also explores the distinctive characteristics of ESP and how they differ from general English instruction (Hutchinson & Waters, 1987).

This research focuses specifically on ESP within the tourism industry, where English proficiency is essential. The section analyzes the specific language needs of students preparing for careers in tourism and considers how courses can be designed to meet these demands. Moreover, it discusses the linguistic and cultural competencies necessary for success in the field.

Finally, this study explores the application of PBL in English for Tourism, emphasizing how it fosters both linguistic and practical competencies in this area of knowledge. It examines PBL projects designed to equip students with essential skills for the tourism sector and highlights the advantages of this approach. The discussion demonstrates how PBL offers a more engaging and applicable learning experience, better preparing students for real-world professional settings.

In conclusion, this chapter introduces key methodological approaches in foreign language teaching, with a focus on active learning methodologies and PBL. These approaches demonstrate how language instruction has evolved toward more interactive, student-centered strategies that enhance communicative competence. However, their effective implementation

requires well-established educational frameworks that provide structured guidance for language teaching.

CHAPTER 1 - METHODOLOGICAL BASIS

This chapter opens with an overview of foreign language teaching approaches and methods and follows the evolution of pedagogy from traditional to more innovative, student-centered models. Within this framework, PBL emerges as a pivotal paradigm, emphasizing experiential learning, collaboration, and real-world application. Through a comprehensive examination of PBL, its categorization as an active learning methodology is explored, discovering its transformative potential in promoting student-driven inquiry and problem-solving in language learning.

1.1. Foreign Language Approaches and Methods

As Rivers (1987) states all our teaching must center ultimately in the student and his needs as a communicator. Foreign language teaching methodologies have evolved over time, reflecting different philosophies, theories of language acquisition, and pedagogical approaches, often shaped by the needs of students. The history of foreign language teaching is rich and diverse, with approaches evolving over centuries to meet the changing demands of learners. The origins of foreign language instruction can be traced back to ancient civilizations, where foundational principles of language teaching were first established. Examining the historical progression of foreign language methodologies provides valuable insight into the evolution of pedagogical practices.

a) Ancient Greece and Rome

In ancient Greece, Plato and Aristotle accentuated the importance of language acquisition through dialogue, conversation, and interaction. They believed in the value of active learning and discussion as essential components of language education. One of the earliest references to the significance of teaching methodologies can be found in Plato's *Phaedrus*, written approximately 2,300 years ago. In this dialogue, Phaedrus directly asks Plato whether

he considers discourse to be an effective tool for teaching languages, highlighting an early awareness of the role of structured communication in language learning.

Marco Quintilian, a Roman rhetorician born in La Rioja, Spain, in the first century CE, authored *Institutio Oratoria*, a foundational work in rhetorical education. His teachings outlined long-term methods for instruction that remain relevant today for both students and teachers (Soriano Sancha, 2013). Quintilian's work significantly influenced grammar-based language teaching for centuries, providing a framework that extended beyond rhetoric to encompass broader principles of language acquisition and communication skills.

The following key aspects illustrate Quintilian's contributions to language acquisition (Gwynn, 1926; Kennedy, 1969):

- **Holistic education:** Quintilian advocated for a comprehensive approach to learning, emphasizing the importance of early childhood education and the teacher's role in shaping students' intellectual and moral development. His work covered not only language and rhetoric but also various disciplines, contributing to a well-rounded education.
- **Early language learning:** he stressed the importance of early exposure to language acquisition, arguing that children are particularly receptive to language learning during their formative years. He believed that a strong foundation in communication skills should be established from the beginning of a student's education.
- **Moral and ethical considerations:** in *Institutio Oratoria*, Quintilian did not focus solely on the technical aspects of oratory but also on the ethical and moral responsibilities of a speaker. This perspective added a dimension to language acquisition that went beyond mere linguistic competence, encouraging communication with integrity and responsibility.

- Practical application: his work provided structured exercises and practical methods for the development of effective communication. These approaches made his insights applicable not only to oratory but also to everyday language use and instruction.
- Rhetorical strategies: *Institutio Oratoria* discusses various rhetorical strategies and devices that contribute to persuasive and eloquent communication. Mastering these principles can enhance a learner's ability to communicate effectively in any language.

Quintilian's impact on language acquisition is rooted in his belief that language is more than a tool for communication; it is a means of shaping thought and character. His emphasis on early education, ethical communication, and practical training continues to influence modern theories of language acquisition and education.

b) Medieval and Renaissance Period

Saint Augustine, a Roman citizen born in North Africa in 354 CE, was a prominent Christian philosopher whose works were heavily influenced by his readings of Cicero. He wrote extensively on a variety of topics, including language, often in the form of philosophical dialogues (Unger Parra, 2017).

In *De Magistro (The Teacher)*, Augustine explores the role of vernacular language and translation as tools for language learning. He examines how knowledge is acquired and transmitted, arguing against the idea that it can be conveyed solely through words. Instead, he emphasizes divine illumination and the internal comprehension of truth. Augustine suggests that true learning is an internal process guided by God, with the teacher serving only as an external facilitator who provides stimuli for the learner's self-discovery and intellectual illumination.⁵

⁵ Augustine (2009). *The Teacher* (XI, 38). B.A.C.

c) Grammar-Translation Method (16th Century)

The Grammar-Translation Method is a traditional approach to language teaching with roots dating back to classical antiquity. Historically, it was primarily used for teaching classical languages such as Latin and Greek but was later applied to modern language instruction. This method emphasizes the explicit teaching of grammar rules and the translation of texts between the target language and the learner's native language.

Its central objective is the development of reading and writing skills in the target language. This is achieved through a structured focus on grammar instruction, where teachers present and explain grammatical rules using deductive reasoning.

The method prioritizes grammatical accuracy and translation proficiency, with assessments typically focusing on written tasks such as translation exercises and grammar quizzes. From a practical standpoint, it relies heavily on translation exercises and grammar drills. The texts used for translation are often literary or classical in nature, providing learners with exposure to complex language structures. Vocabulary acquisition is facilitated through rote memorization and the use of bilingual dictionaries to support translation.

Despite its historical prominence, this method has faced criticism. Critics argue that its emphasis on linguistic form over communicative function limits the development of practical language skills and real-world proficiency. Additionally, its focus on written tasks often neglects speaking and listening skills, which are essential for effective communication in everyday contexts. However, it remained relevant during World War II when it experienced a resurgence and played a significant role in military language training. The increased demand for foreign language proficiency among military personnel (particularly for intelligence gathering, communication with allies, and prisoner-of-war interrogations) led to the widespread use of the Grammar-Translation Method. Its stress on grammatical accuracy and

translation skills made it a practical and efficient approach for meeting these urgent language training needs. One of the most notable applications during World War II was in the training programs for military linguists and interpreters. These individuals were responsible for translating intercepted communications, deciphering codes, and providing linguistic support in various operational contexts. It was favored for its ability to rapidly develop reading and writing skills in foreign languages, enabling military personnel to comprehend written documents and translate them accurately.

Moreover, the method was used in language training programs for soldiers deployed in foreign war zones. These programs aimed to equip soldiers with basic language skills to facilitate communication with local populations, gather intelligence, and navigate unfamiliar environments. The method's emphasis on grammar and translation was considered practical for achieving rapid proficiency in the target languages required for military operations.

Furthermore, during World War II, it was adapted to suit the specific needs of military language training programs. Instructional materials were designed to focus on military terminology, commands, and operational scenarios relevant to the battlefield. Translation exercises often included military documents, maps, and intercepted enemy communications, providing learners with authentic language samples encountered in wartime situations. As a result, this method played an essential role in language education during that time, particularly in military contexts. Its attention on grammatical accuracy and translation skills made it well-suited for rapidly imparting language proficiency to military personnel performing various linguistic roles on the battlefield. While the method has evolved over time, its wartime applications highlight its adaptability and effectiveness in meeting specific language training needs, even in high-pressure environments.

In contemporary language education, it has largely been supplanted by communicative approaches that prioritize meaningful interaction and authentic language use (Swan, 1985).

However, its mentioned properties still have proponents in certain contexts, such as the teaching of highly inflected languages or for academic purposes (Siefert, 2013; Brown, 2014; Richards & Rodgers, 2014).

d) Direct Method (Late 19th Century)

Like many language teaching methods, the Direct Method emerged in response to grammar-based approaches. Developed in the late 19th and early 20th centuries, it sought to address the perceived limitations of traditional grammar-translation methods. This method advocates the exclusive use of the target language in the classroom, fostering naturalistic language acquisition through immersive and communicative experiences.

One of the core principles of this approach is full language immersion, in which learners are exposed exclusively to the target language from the outset. Teachers employ various techniques, including visual aids, gestures, and real objects (*realia*), to convey meaning and facilitate comprehension without translation

Another key feature of the Direct Method is its emphasis on oral communication and listening comprehension over written tasks. Learners engage in interactive activities such as role-plays, dialogues, and language games to promote spontaneous language use and fluency development. As a result, assessment typically involves performance-based tasks that evaluate learners' ability to communicate effectively in the target language. Speaking and listening skills are prioritized, while less emphasis is placed on written proficiency and grammatical accuracy (Larsen-Freeman & Anderson, 2011).

Finally, critics of the Direct Method argue that its exclusive focus on spoken language may neglect the development of reading and writing skills, which are essential for comprehensive language proficiency. Additionally, the method's reliance on immersive instruction may pose challenges for learners who benefit from explicit explanations of grammar rules and structures.

Despite these criticisms, it has highly influenced modern communicative approaches to language teaching and remains a widely used instructional approach in many language programs worldwide. Its emphasis on communicative competence and real-life language use is consistent with contemporary theories of language acquisition and learner-centered pedagogy.

e) Natural Approach (1980s)

Developed in the 1970s as a response to the limitations of traditional grammar-focused methods and the direct method, the Natural Approach was formally introduced in the 1980s, marking a paradigm shift in language teaching. This approach is grounded in theories of second language acquisition and emphasizes the importance of comprehensible input and a supportive language learning environment. Unlike the previous method, which prioritizes immersive language experiences, the Natural Approach focuses more on the role of meaningful input in language acquisition. A central element of it is its comprehensible input, in which learners are exposed to language they can understand even if they do not know all the words or structures. According to Krashen's Input Hypothesis (1985), acquisition occurs when learners encounter meaningful input that slightly exceeds their current proficiency level. As a result, the Natural Approach prioritizes delivering comprehensible input through engaging, contextually relevant experiences (Krashen & Terrell, 1983).

In classroom implementation, it promotes real-life situations, contextually embedded language, and non-verbal cues to facilitate learning. Teachers employ storytelling, visual aids, and demonstrations to provide meaningful input, allowing learners to acquire language naturally and interactively. Unlike traditional grammar-based methods, which emphasize explicit grammar instruction, it encourages implicit learning through exposure to authentic language use.

For evaluation, it assesses learners' ability to comprehend and produce language in meaningful contexts rather than focusing solely on discrete grammar rules or vocabulary lists.

Performance-based tasks such as role-plays, discussions, and storytelling measure learners' communicative competence and proficiency. This approach promotes authentic communication through the assessment of language use in real-life situations.

While critics argue that its reliance on implicit learning may not suit all learners (particularly those who require explicit grammar and vocabulary instruction), proponents contend that its focus on meaningful communication, contextualized language use, and learner-centered instruction reflects contemporary theories of language acquisition and pedagogy. (Richards & Rodgers, 2014; Brown, 2014).

f) Audio-Lingual Method (Mid-20th Century)

Emerging in the mid-20th century, the Audio-Lingual Method became a prominent approach in language teaching, particularly in response to the language training needs of military personnel during World War II. Developed as a means of rapidly training soldiers in foreign languages, this method emphasizes repetition, pattern drills, and audio-based materials to reinforce language learning (Stern, 1983).

A key feature of the Audio-Lingual Method is the use of audio stimuli, such as recordings of native speakers, to expose learners to authentic pronunciation and intonation patterns (Brown & Lee, 2015). Instruction emphasizes repetition and mastery of grammatical patterns through extensive practice and reinforcement.

In classroom practice, it follows a behaviorist approach, reinforcing correct responses and minimizing errors through immediate correction (Larsen-Freeman & Anderson, 2011). Teachers present materials in a structured, systematic manner, using drilling and repetition to ensure mastery of linguistic forms and patterns.

Assessment often involves performance-based tasks that evaluate learners' ability to produce language accurately and fluently. Role-plays, dialogues, and language games are commonly used to assess communicative competence and proficiency in real-life situations.

Critics argue that the method's reliance on rote memorization and mechanical practice may limit language proficiency and hinder communicative competence (Widdowson, 1978). Additionally, its strong emphasis on oral proficiency may neglect reading and writing skills, essential components of comprehensive language learning. Despite these criticisms, the Audio-Lingual Method has greatly influenced language teaching, particularly in the development of audio-based materials and instructional techniques. While it may not suit all learners or contexts, aspects of the method continue to inform contemporary language education.

g) Communicative Language Teaching (CLT – Late 20th Century)

CLT emerged as a prominent approach to language instruction in the late 20th century, breaking away from traditional methods that primarily focused on grammar and vocabulary acquisition. CLT prioritizes the development of communicative competence, aiming to equip learners with the ability to use language effectively in real-life contexts. This approach has had an undeniable impact on contemporary foreign language teaching methodologies, largely due to the principles upon which it is based (Widdowson, 1978; Canale & Swain, 1980; Littlewood, 1981; Canale, 1983; Dörnyei, 2001; Ellis, 2003; Nunan, 2004; Scrivener, 2010; Long, 2015):

- Communicative competence: it is connected to the concept of communicative competence. This framework encompasses grammatical competence, discourse competence, sociolinguistic competence, and strategic competence, emphasizing not only grammatical accuracy but also the ability to understand and use language appropriately across various social contexts.
- Learner-centered instruction: it places a strong emphasis on learner engagement, encouraging students to actively participate in meaningful communication tasks relevant to their lives and interests.

- **Authenticity:** the approach promotes the use of authentic materials and tasks that reflect real-life language use. Materials such as newspapers, advertisements, and videos expose learners to genuine language input and cultural context.
- **Interaction:** interaction is central to CLT, with activities designed to promote meaningful communication among learners. Pair and group work, role-plays, and information gap tasks are frequently used to encourage interaction and the negotiation of meaning.
- **Task-based learning:** CLT advocates for task-based learning, in which learners engage in communicative tasks that require language use to achieve a specific goal or outcome. These tasks are designed to be both authentic and meaningful, shifting the focus from linguistic form to effective communication.

Having examined the principles upon which this methodology is based, it is now essential to consider the main techniques employed in CLT. These include:

- **Role-plays:** role-plays are frequently used in CLT classrooms to simulate real-life situations, allowing learners to practice language in a meaningful and contextualized manner.
- **Information gap activities:** these activities require learners to work in pairs or groups to exchange missing information, fostering communication and collaboration.
- **Communicative games:** language learning games provide learners with opportunities for meaningful communication and practice while making the learning process more engaging and enjoyable (Richards & Rodgers, 2014).
- **Authentic materials:** the use of authentic texts, videos, and audio recordings exposes learners to real-world language use and cultural contexts, enhancing their overall language learning experience. Incorporating authentic materials into CLT provides

several benefits (Littlewood, 1981). First, it exposes learners to idiomatic expressions, colloquialisms, and cultural references, all of which contribute to the development of communicative competence. Second, they allow learners to engage with topics relevant to their personal interests, thereby increasing motivation and engagement in language learning. Lastly, real-world materials present meaningful content that helps learners transfer their language skills to real-life communication settings more effectively, ultimately leading to increased proficiency and confidence.

- Collaborative activities: encourage interaction and peer learning, providing learners with opportunities to practice communication in a supportive environment (Richards & Rodgers, 2014).

Despite its many advantages, CLT has also faced criticism. The most common concerns include:

- Insufficient focus on grammar: critics argue that CLT does not provide sufficient explicit grammar instruction, which may lead to gaps in learners' grammatical knowledge and accuracy (Ellis, 2003).
- Imbalance between fluency and accuracy: some scholars contend that CLT places too much emphasis on fluency at the expense of grammatical accuracy, potentially limiting learners' ability to produce structurally correct language (Long, 2015).
- Teacher training and implementation challenges: effective implementation of CLT requires specialized teacher training and continuous professional development, which may not always be accessible.
- Assessment difficulties: assessing communicative competence poses a challenge, as traditional assessment methods may not adequately measure learners' ability to use language effectively in real-life situations (Richards & Rodgers, 2014).

While these criticisms highlight potential challenges in CLT, its emphasis on meaningful communication, interaction, and authentic language use continues to make it one of the most influential approaches in modern language education.

h) Task-Based Language Teaching (TBLT – Late 20th Century)

TBLT is an approach to language instruction that centers on the use of meaningful tasks as the primary unit of instruction (Ellis, 2003). Emerging as a significant development in the field of second language acquisition in the late 20th century, TBLT gained widespread popularity due to its similarities to communicative language teaching principles and its emphasis on promoting authentic language use and proficiency.

Its origins can be traced back to the 1980s when scholars and educators began challenging traditional grammar-based instruction and advocating for more communicative and learner-centered approaches. Influenced by the cognitive revolution in psychology, this methodology highlights the importance of meaningful learning tasks in facilitating language acquisition. Additionally, seminal works such as Long and Crookes' research (1992) on task-based syllabus design provided a theoretical foundation for TBLT, contributing to its growing recognition among language educators worldwide.

In TBLT, *tasks* refer to activities that learners undertake to achieve a specific communicative goal using language. The approach aims to foster language learning through authentic, purposeful communication in real-world contexts. The key principles of TBLT include (Willis, 1996; Skehan, 1998; Ellis, 2003; Nunan, 2004; Long, 2015):

- Task-centered instruction: it is based on the idea that tasks serve as the primary focus of instruction. These tasks are designed to be meaningful, communicative, and engaging, providing learners with opportunities to use language to accomplish real-world objectives.

- Priority on meaningful communication: rather than focusing on explicit grammar instruction, TBLT underlines the importance of authentic language use, allowing learners to develop communicative competence through real-life communication tasks.
- Balance between language input and output: it promotes both exposure to language (input) and language production (output). Learners receive input through authentic materials and interactions with others, while language production occurs as they engage in task performance.
- Progressive task sequencing: tasks are typically structured in a sequence that provides learners with increasingly complex opportunities for language use. Initial tasks may focus on comprehension, while later tasks require more active production and negotiation of meaning.

As a result, TBLT offers several benefits, including:

- Fostering communicative competence: it enhances learners' communicative competence by providing opportunities to use language in meaningful contexts. Through real-life communication situations, learners develop their ability to comprehend and produce language effectively.
- Increasing student motivation: compared to traditional grammar-based approaches, TBLT is often more engaging and motivating for learners. Tasks are designed to be relevant and interesting, fostering intrinsic motivation and encouraging active participation in language learning.
- Integrating language skills: it promotes the simultaneous development of all language skills (listening, speaking, reading, and writing) within the context of meaningful tasks. Learners practice these skills in an integrated manner, reflecting the holistic nature of real-life communication.

1.2. Active Learning Methodologies

Although various educational approaches have long aimed to place students at the center of the learning process, the term *Active Learning Methodologies* (ALM) was not introduced and widely implemented in instructional systems until a huge pedagogical shift occurred. The concept of active learning is often attributed to Bonwell and Eison (1991), who define it as “anything that students do in a classroom other than merely passively listening to an instructor’s lecture. This can include class discussions, cooperative learning, writing, and problem-solving activities” (p.2)

They introduced and popularized the term in their 1991 book, *Active Learning: Creating Excitement in the Classroom*, in which they discuss various strategies for fostering active learning in higher education. Their work emphasizes engaging students in activities beyond passive listening.

Other scholars have expanded on the concept of active learning. Prince (2004) defines it as “any instructional method that engages students in the learning process. In short, active learning requires students to do meaningful learning activities and think about what they are doing” (p. 1).

Among the most influential researchers in student-centered learning Felder and Brent (2009) made contributions to engineering education and active learning methodologies. They emphasize the importance of engaging students in cognitive activities, stating that “active learning consists of short course-related individual or small-group activities that all students in a class are called upon to do, alternating with instructor-led intervals in which student responses are processed and new information is presented” (p. 2).

Felder has been a key advocate for student engagement, participatory learning, and diverse strategies that actively involve students in the learning process. In collaboration with Brent, he has played a pivotal role in implementing active learning methodologies, particularly

in STEM (science, technology, engineering, and mathematics) education. Their research has significantly influenced teaching and learning approaches in these fields.

A major contribution of Felder and Brent is the *Felder-Silverman Learning Style Model*, which categorizes students based on learning preferences, such as sensing/intuitive and active/reflective. This model highlights the diversity of learning styles and encourages educators to adopt varied instructional strategies to accommodate these differences. Their research reinforces the idea that active learning fosters critical thinking, practical application of concepts, and collaborative engagement rather than relying solely on traditional lecture-based instruction.

Active learning methodologies prioritize learner engagement, participation, and interaction. Unlike traditional passive learning methods, where students primarily receive information, active learning requires learners to construct knowledge actively, apply concepts, and solve problems through hands-on activities and experiences (Prince, 2004). The following section outlines key principles guiding the implementation of active learning methodologies in the classroom:

- Learner-centeredness: students are at the center of the educational experience, acknowledging their diverse backgrounds, interests, and learning styles (Bonwell & Eison, 1991). Instruction is tailored to meet the needs and preferences of individual learners, fostering greater engagement and motivation.
- Engagement and participation: people are encouraged to engage with course content through activities, discussions, and interactive exercises (Freeman et al., 2014). By actively participating in the learning process, students develop a deeper understanding of the material and improve information retention.
- Critical thinking and problem-solving: active learning methodologies emphasize the development of critical thinking, problem-solving, and analytical skills (Meyers &

Jones, 1993). Learners are encouraged to examine information critically, evaluate evidence, and generate creative solutions to complex problems, preparing them for both academic and real-world challenges.

- Collaboration and communication: active learning promotes collaboration and communication among learners, fostering peer interaction, knowledge sharing, and teamwork (Johnson et al., 2014). Through collaborative activities, students exchange ideas, learn from one another, and collectively construct knowledge.

In an effort to move away from the passive role traditionally assigned to students in foreign language learning, various methodologies emerged within the framework of ALM. The most significant approaches include:

1. Problem-Based Learning (PBL): in this method, students work collaboratively to solve real-world problems or case studies, applying their knowledge to develop solutions (Savery & Duffy, 1995). It fosters critical thinking, decision-making, and the practical application of concepts.
2. Project-Based Learning (PBL): this methodology involves students working on extended projects that require research, investigation, and presentation of findings (Thomas, 2000). It promotes creativity, self-directed learning, and interdisciplinary skill development.
3. Cooperative Learning: it encourages students to work together in small groups to achieve common learning goals (Johnson & Johnson, 1999). This approach enhances teamwork, communication, and peer support.
4. Flipped Classroom: this model reverses the traditional lecture format, engaging students in active learning. Instead of receiving direct instruction in class, students review instructional materials beforehand, allowing class time for discussion, problem-

solving, and hands-on activities (Prince, 2004). This strategy fosters interaction, engagement, and deeper comprehension of course content.

There are common characteristics that define active or student-centered methodologies, including:

- Increased engagement and motivation: active learning involves students directly in the learning process, increasing motivation, interest, and investment in their education (Freeman et al., 2014).
- Improved learning outcomes: compared to passive learning methods, active learning promotes deeper understanding, better retention, and more effective knowledge transfer (Prince, 2004). It also fosters the development of critical thinking, problem-solving, and communication skills, which are essential for both academic and professional success.

Active learning encourages students to take ownership of their learning, fostering curiosity, exploration, and a lifelong learning mindset (Bonwell & Eison, 1991). Through this approach, learners become self-directed and independent thinkers, capable of adapting to new challenges and opportunities.

Recent research has further highlighted the role of active learning in fostering lifelong learning skills. Hattie and Zierer (2017) argue that active learning strategies not only engage students but also enhance their intrinsic motivation, a key driver of lifelong learning. This motivation encourages individuals to seek knowledge and develop skills beyond the classroom. They suggest that when students actively participate in their learning, they gain a deeper understanding of content and a greater appreciation for the learning process, fostering a long-term commitment to lifelong learning. Freeman et al. (2014) conducted a meta-analysis of

active learning practices in science, engineering, and mathematics, finding that these approaches lead to higher student performance than traditional lecture-based instruction. Their study indicates that active learning fosters critical thinking and problem-solving skills, both essential for adapting to new and complex situations in professional and personal contexts. This adaptability is a cornerstone of lifelong learning, enabling individuals to continuously acquire and apply new knowledge in an ever-changing world. Asikainen and Gijbels (2017) provide a comprehensive review of how active learning environments contribute to deep learning approaches. They emphasize that active learning promotes engagement with material, encouraging students to make connections between different concepts and apply their knowledge in practical contexts. This deeper engagement is vital for lifelong learning, as it equips students with the ability to transfer their learning to new and diverse situations.

Further, active learning fosters a collaborative learning environment, allowing students to learn from one another, share diverse perspectives, and engage in meaningful discussions (Bonwell & Eison, 1991). This collaborative aspect not only enriches the learning experience but also helps students develop essential social and communication skills necessary for lifelong learning.

Recent studies further underscore the long-term benefits of active learning in preparing students for continuous professional development. Brown and Ryoo (2008) emphasize that active learning experiences such as problem-solving tasks and collaborative projects (not only deepen conceptual understanding but also enhance metacognitive awareness and self-regulated learning strategies). Similarly, Smith and Robinson (2020) discuss how it contributes to career advancement by equipping students with critical thinking, communication, and problem-solving skills essential for navigating the complexities of the modern workforce.

In conclusion, active learning methodologies foster a culture of lifelong learning by engaging students, enhancing intrinsic motivation, and developing critical thinking, problem-

solving, and collaboration skills. These competencies are essential for continuous personal and professional growth in an evolving global landscape.

1.3. The Project-Based Learning Approach (PBL)

The PBL approach to language teaching emerged in the late 20th century, influenced by the principles of communicative language teaching and task-based language teaching, as previously discussed. PBL involves learners collaboratively working on projects to investigate, explore, and solve real-world problems or tasks using the target language (Stoller, 2006).

Several key principles define PBL:

- **Realness:** PBL emphasizes the use of real-world tasks and projects that are meaningful and relevant to learners' lives and interests (Willis, 1996). Real tasks provide learners with opportunities to engage in genuine language use and develop practical language skills.
- **Cooperation:** as learners work together to make a plan, execute, and present their projects is central (Stoller, 2006). Collaboration fosters communication, negotiation of meaning, and interpersonal skill development.
- **Task-based learning:** PBL is rooted in task-based learning principles, with projects serving as extended, complex tasks that require learners to use language to achieve specific goals (Ellis, 2003). Projects typically progress through multiple stages, including planning, research, implementation, and presentation.
- **Integrated skills:** this approach integrates all language skills (listening, speaking, reading, and writing) within meaningful projects (Stoller, 2006). Learners engage in diverse language activities as they gather information, communicate ideas, and present their findings.

Over these principles, several techniques support the effective implementation of PBL in foreign language classrooms:

- **Project design:** teachers design or select projects that help learners' interests, language proficiency levels, and learning goals (Stoller, 2006). Projects should be authentic, engaging, and feasible within the classroom context.
- **Group work:** peer work in small groups to collaboratively plan, execute, and present their projects (Willis, 1996). Group work promotes peer interaction, negotiation of meaning, and teamwork skills.
- **Task sequencing:** projects are divided into multiple stages or tasks, allowing learners to progressively work toward project completion (Ellis, 2003). Task sequencing scaffolds learning and provides opportunities for ongoing feedback and reflection.
- **Accurate assessment:** evaluation in PBL focuses on learners' ability to successfully complete the project and effectively communicate their findings (Stoller, 2006). Authentic assessment methods may include presentations, reports, portfolios, and peer evaluations.

According to Willis (1996), Ellis (2003), and Stoller (2006), PBL offers several advantages:

- **Promotion of authentic language use:** PBL provides learners with opportunities to engage in real-world language use, enhancing their communicative competence and language proficiency.
- **Development of critical thinking skills:** engaging in projects requires learners to think critically, analyze information, and solve problems, fostering the development of higher-order thinking skills.

- Increased motivation and engagement: PBL enhances learner motivation by incorporating meaningful, relevant tasks that connect language learning to learners' interests and experiences.
- Integration of language skills: PBL encourages the simultaneous development of listening, speaking, reading, and writing skills, allowing learners to practice language in a holistic and contextualized manner.

However, these same authors, besides highlighting the benefits of this approach, also examined the challenges associated with the PBL methodology from three key perspectives:

1. Time and resource constraints: implementing PBL can be challenging due to limited time and resources in educational settings. Designing and executing meaningful projects requires substantial planning, preparation, and classroom time, which may be restricted by curricular constraints. Additionally, providing necessary materials, technological support, and teacher training can further complicate implementation.
2. Assessment difficulties: evaluating projects in PBL presents unique challenges, as traditional assessment methods may not fully capture the range of skills and competencies developed through project work. Effective assessment often requires holistic and authentic evaluation approaches that consider not only language proficiency but also critical thinking, collaboration, and problem-solving skills. Developing reliable and practical assessment frameworks remains a significant concern for educators.
3. Challenges in group work: while group work is a fundamental aspect of PBL, it can also lead to difficulties related to group dynamics. Issues such as unequal participation, conflicts among group members, and coordination difficulties may arise, potentially affecting the effectiveness of collaborative project work. Teachers must provide

guidance and structured support to address these challenges and promote positive group interactions.

Based on the discussion above, it can be concluded that PBL offers numerous benefits for language learning (including authentic tasks, collaboration, and the integration of language skills) it also presents challenges such as time and resource constraints, assessment difficulties, and group dynamics. To defeat these challenges, careful planning, continuous support, and the adaptation of teaching methods are essential for the successful implementation of PBL in language education.

CHAPTER 2 - SUPPORTING DOCUMENTS

This chapter focuses on key frameworks that influence educational practices, particularly in language teaching and digital competence. It examines two principal documents: the Common European Framework of Reference for Languages (CEFR) and the Digital Competence Framework for Educators (DCF-E). They guide pedagogical strategies and shape educational outcomes across diverse contexts.

The CEFR, established by the Council of Europe (2001), standardizes language proficiency levels from A1 to C2, providing a comprehensive framework for assessing and coordinating language competencies. This section analyzes the implications of the CEFR in educational settings, particularly its role in defining language learning objectives and fostering a shared understanding of language proficiency.

Also, this chapter examines the integration of PBL with both the CEFR and the DCF-E. Recognized for its focus on active and contextualized learning, PBL provides a dynamic methodology that reinforces the competencies outlined in these frameworks (Thomas, 2000). The relationship between PBL and these frameworks allows educators to better understand how to leverage them to strengthen language acquisition, digital literacy, and overall educational effectiveness.

The following sections detail the specific contributions of each framework to educational practice, accentuating their interconnectedness and potential synergies in fostering student-centered learning environments. Through this exploration, Chapter 2 aims to provide insights into how these documents inform and shape contemporary educational strategies, equipping students with the skills necessary for success in a rapidly evolving global landscape.

Finally, as Boote and Beile (2005) point out, a well-structured literature review is fundamental in research preparation, serving as a foundation that informs methodological choices and theoretical frameworks. Their perspective asserts the importance of critically

engaging with existing frameworks (such as the CEFR and DCF-E) to establish that pedagogical approaches are grounded in established research and effectively adapted to real educational needs.

2.1. The Common European Framework of Reference for Languages (CEFR)

The most significant methodologies in language teaching, from ancient dialogues to active, student-centered approaches, have already been examined. It is now indispensable to analyze the current state of foreign language learning, with a particular focus on the study of English as a foreign language in Europe. A key aspect of this discussion is the impact of CEFR on language teaching and assessment across all educational levels.

It is particularly important because it provides a standardized framework for foreign language instruction, guiding teachers in curriculum design, materials development, and language assessment. Its influence extends across all levels of education, shaping the way languages are taught and evaluated.

Why does the CEFR have such a significant impact on language teaching? Beyond its contributions to curriculum design and material development, one of its most important roles is supporting communicative and task-based language teaching approaches. These methodologies emphasize the practical use of language in real-life contexts, helping learners develop functional communicative skills rather than focusing solely on grammatical accuracy (Nagai et al., 2020).

To better understand the CEFR's impact, it is necessary to examine the contributions of scholars who have explored its relationship with foreign language education. Their research offers valuable insights into how the framework has shaped contemporary language teaching practices.

Scholars such as Canale and Swain (1980) and Kramsch (2006) have made a significant impact on language education through their focus on communicative competence. The CEFR reflects with this shift, promoting practical language use and meaningful communication in real-life situations.

Language education specialists such as Larsen-Freeman (2015) and Thornbury (2017) have advocated for CLT, an approach that the CEFR actively supports. The framework encourages English language educators to create activities that foster interaction and task-based learning. Similarly, the CEFR promotes that the four skills, reading, writing, listening, and speaking are interconnected rather than taught in isolation.

It has also shaped language assessment practices. Scholars such as Bachman and Adrian (2022) have contributed significantly to the field of language testing. The CEFR provides a standardized framework for describing language proficiency levels, facilitating the development and evaluation of language exams.

Furthermore, the development of the European Language Portfolio (ELP), a tool associated with the CEFR, encourages learners to take an active role in their language-learning process, in line with the CEFR's emphasis on learner-centered education.

The CEFR's influence extends beyond Europe. Scholars such as Byram and Parmenter (2012), who have focused on intercultural competence, have contributed to understanding language education in a global context. The CEFR's international recognition has facilitated a shared understanding of language proficiency across borders, enhancing mobility and consistency in language learning worldwide.

2.1.1. The Relationship Between the CEFR and PBL

The CEFR provides a comprehensive and transparent system for describing language competencies, categorizing proficiency levels into six main stages: A1 (Beginner) to C2 (Proficiency).

Several researchers have highlighted the benefits of integrating the CEFR with PBL in EFL instruction. The key areas where the CEFR and PBL complement each other are as follows:

1. Consistency in language proficiency levels: the document provides a standardized framework for assessing learners' language proficiency, which can inform the design and implementation of PBL activities in EFL instruction (Aznar Juan, 2022). Teachers can use its descriptors to ensure that PBL tasks are appropriately scaffolded according to learners' linguistic abilities, allowing for meaningful language practice and skill development at each proficiency level.
2. Integration of language skills: it points out the integration of the four language skills, listening, speaking, reading, and writing, along with competencies such as grammar, vocabulary, and discourse competencies in authentic communicative contexts (Council of Europe, 2001). PBL provides an effective framework for integrating these skills, as projects require learners to engage in diverse language activities such as conducting research, presenting findings, and collaborating with peers (Stoller, 2006).
3. Promotion of communicative competence: this framework highlights the communicative competence, which includes not only linguistic accuracy but also sociolinguistic appropriateness and strategic language use (Council of Europe, 2001). PBL fosters communicative competence through real-world contexts where learners practice language in meaningful ways. (Ellis, 2003). For example, students may engage

in role-plays, debates, or collaborative projects that require them to negotiate meaning, express opinions, and interact with others in English.

4. Cultural and intercultural awareness: it stresses the importance of cultural and intercultural awareness in language learning and teaching (Council of Europe, 2001). PBL projects can incorporate cross-cultural communication tasks, helping learners explore cultural diversity while enhancing their language skills (Savignon, 2002). For instance, students may research and present topics related to global issues, cultural practices, or intercultural communication strategies.
5. Assessment and evaluation: the CEFR gives guidelines for assessing language proficiency using a holistic approach that considers learners' ability to perform language tasks in real-world contexts (Council of Europe, 2001). PBL projects can be designed to correspond with CEFR proficiency levels and assessment criteria, allowing educators to effectively evaluate learners' language development (Norris & Ortega, 2000). Assessment methods may include project presentations, portfolios, self-assessments, and peer evaluations.

In summary, the CEFR contributes to the description of language proficiency levels and competencies, offering valuable guidance for implementing PBL in EFL instruction at college level. When PBL activities are designed to reflect the CEFR's descriptors and principles, educators can create engaging and meaningful language learning experiences that enhance communicative competence, cultural awareness, and overall language proficiency in EFL learners.

2.2. The Digital Competence Framework for Educators (DCF-E)

The DCF-E is a framework developed by the European Commission to guide tutors in effectively integrating digital technologies into their teaching practices based on the research of Redecker (2017). It aims to establish a common language and set standards for digital competence among educators worldwide, enabling them to enhance teaching and learning experiences through the use of digital tools and resources. According to Carretero et al. (2017), documents like the DCF-E are needed in defining digital competence, helping citizens' ability to function in an increasingly digital society.

At the core of the DCF-E there are six key competence areas that define the digital skills and knowledge essential for effective teaching in the digital age. These areas combine professional engagement, digital resources, teaching and learning, assessment, empowering learners, and facilitating digital citizenship. Following Redecker (2017), the first competence area, professional engagement, refers to educators' ability to effectively use digital technologies for professional development, collaboration, and networking within the education community. It covers participating in online professional networks, accessing digital learning resources, and staying informed about emerging technologies and pedagogical practices.

The second area, digital resources, involves educators' proficiency in identifying, selecting, and creating digital content to enhance teaching and learning. This comprises evaluating digital resources, adapting materials for digital platforms, and designing multimedia-rich instructional content.

The third area, teaching and learning, refers to teachers' capacity to design and implement technology-enhanced learning experiences that actively engage students. This entails integrating digital tools into lesson planning, using online platforms for collaborative learning, and incorporating multimedia content to enhance comprehension and retention.

The fourth area, assessment, focuses on educators' ability to use digital tools and techniques to evaluate student learning outcomes and provide timely feedback. It includes designing and administering online assessments, analyzing student performance data, and utilizing digital portfolios to track progress.

The fifth area, empowering learners, encompasses fostering students' digital literacy, critical thinking, creativity, and problem-solving skills through technology. This involves promoting digital citizenship, online safety, and responsible technology use while encouraging students to explore and experiment with digital tools for learning.

The final area, digital citizenship, relates to educators' role in promoting ethical and responsible digital practices and ensuring a safe and inclusive online learning environment. It carries addressing cyberbullying, digital privacy, copyright, and online etiquette while helping students develop the skills necessary to navigate the digital world responsibly.

The DCF-E provides a flexible and adaptable reference framework that can be used by educators, educational institutions, and policymakers to support professional development, curriculum design, and the integration of digital technologies in education.

2.2.1. Relationship Between the DCF-E and PBL

The relationship between the DCF-E and the PBL in foreign language teaching at the college level is considerable and mutually reinforcing. Some intellectuals have featured how these frameworks complement each other, particularly in the following areas:

- Integration of digital tools in PBL: it dispenses educators with a structured framework for developing digital competencies essential for modern teaching (Redecker, 2017). When implementing PBL in foreign language instruction, teachers can incorporate digital tools and resources based on the DCF-E to improve project development, collaboration, and presentation (Thomas, 2000). For example, educators may use online

platforms for project management, multimedia tools for creating presentations, and communication tools to facilitate student collaboration (Johnson et al., 2014).

- Promotion of digital literacy skills: the framework emphasizes digital literacy, including the ability to critically evaluate and select digital resources for teaching and learning (Redecker, 2017). Within PBL, educators can guide students in conducting online research, assessing source credibility, and effectively using digital communication tools for project collaboration (Meyers & Jones, 1993; Ellis, 2003).
- Facilitation of blended and online learning: it encourages educators to integrate digital technologies into their teaching to support blended and online learning experiences (Redecker, 2017). In foreign language instruction, PBL activities can incorporate asynchronous online collaboration, virtual project presentations, and learning management systems for organizing materials (Prince, 2004; Bonwell & Eison, 1991).
- Enhancement of 21st-century skills: both the DCF-E and PBL focus on fostering 21st-century competencies such as critical thinking, problem-solving, communication, collaboration, and digital literacy (Redecker, 2017; Thomas, 2000). Digital tools that correspond to the DCF-E in PBL activities allow educators to provide students with opportunities to develop these skills in meaningful, project-based contexts. (Freeman et al., 2014). For instance, students may collaborate virtually on research projects, analyze digital sources, and present findings using multimedia tools (Savery & Duffy, 1995).
- Preparation for digital citizenship: the scheme underlines the importance of promoting responsible and ethical digital practices among educators and students (Redecker, 2017). In PBL, educators can incorporate discussions and activities on digital citizenship, addressing topics such as online safety, privacy, copyright, and digital etiquette (Johnson & Johnson, 1999; Johnson et al., 2014).

The connection between the DCF-E and PBL in foreign language education is clear: while the first gives a structured framework for developing educators' digital competencies, the second offers an authentic setting for applying digital tools and resources in language instruction.

This discussion of CEFR and the DCF-E sets off how official reference frameworks support foreign language education. The CEFR provides a standardized system for describing and assessing language proficiency, ensuring that methodologies such as PBL foster measurable communicative competence. Similarly, the DCF-E addresses the growing importance of digital competence, equipping educators with the tools necessary to integrate technology into their teaching.

As demonstrated in this chapter, combining these frameworks with active learning methodologies such as PBL fosters a more student-centered, interactive, and contextualized approach to language learning.

This foundation sets the stage for the next chapter, which attends ESP and the adaptation of language instruction to professional contexts. Particularly, it explores how English education addresses the needs of students in disciplines such as tourism, business, and other specialized fields. The integration of PBL in ESP settings provides students with opportunities to apply their language skills in real-world professional scenarios, enhancing both their linguistic proficiency and practical competencies.

From this perspective, the next chapter will examine how ESP methodologies get along with contemporary pedagogical trends, ensuring that language instruction remains relevant and applicable to students' future careers.

CHAPTER 3 - ENGLISH FOR SPECIFIC PURPOSES

English for Specific Purposes (ESP) is a specialized approach within language education that addresses the specific linguistic needs of learners in professional contexts (Dudley-Evans & St. John, 1998) such as tourism, healthcare, and business. In today's globalized tourism industry, proficient English communication skills are significant for facilitating interactions with international visitors and enhancing customer satisfaction (Ennis & Petrie, 2020). This section examines the evolving role of ESP in addressing the linguistic and communicative challenges faced by tourism professionals, integrating contemporary research and methodologies.

Recent advancements in language education highlight the integration of innovative pedagogical approaches, such as PBL, to enhance ESP outcomes. PBL engages learners in authentic, project-driven tasks that simulate real-world scenarios, promoting practical language use and professional skills development (Thomas, 2000). PBL contextualizes language learning, enabling educators to effectively prepare students to navigate the complexities of the tourism industry with confidence and competence. Additionally, the digital transformation of education has reshaped ESP instruction, encouraging educators to incorporate technological resources that enrich learning experiences and enhance communicative competence (Reinders & Balcikanli, 2011). This chapter also examines how digital technologies can be leveraged in ESP contexts to foster interactive learning environments and facilitate cross-cultural communication.

A comprehensive understanding of ESP in tourism is achieved through the synthesis of theoretical frameworks, empirical research, and practical applications. It draws attention to the theoretical foundations, methodological innovations, and practical implications for language education and professional development.

3.1. English for Specific Purposes (ESP): main concepts

ESP is an approach to language teaching that pay attention to developing English language skills adapted to professional or academic contexts (Hutchinson & Waters, 1987). Unlike general English courses, which provide a broad foundation in language mastery, ESP courses are designed to meet the specific linguistic needs, interests, and goals of learners in specialized fields.

It emerged in the mid-20th century in response to the increasing demand for English proficiency in specific professional and academic domains (Swales, 1988). Early ESP programs were developed to address the communication needs of professionals in fields such as business, medicine, engineering, and aviation, where effective language skills are essential for success.

As far as the main methodologies and techniques are concerned, ESP employs a variety of them, adapted to learners' specific contexts. Some of the most widely used approaches and resources include:

First, it is important to do a needs analysis to identify learners' specific language requirements, communicative tasks, and professional or academic goals (Dudley-Evans & St. John, 1998). Conducting a needs analysis enables educators to tailor course content, materials, and activities to address learners' real-world linguistic needs effectively. In ESP, this analysis is central to developing didactic programs that meet students' professional or academic objectives (Hutchinson & Waters, 1987). This process systematically identifies language deficiencies, proficiency levels, and communicative demands within learners' specialized fields (Munby, 1978). Surveys, interviews, and collaborative tools such as Padlet allow instructors to gather data and develop curricula that integrate authentic materials and relevant tasks (Basturkmen, 2005).

The investigation also facilitates the identification of essential language skills, discourse conventions, and communicative strategies required for effective communication in specific professional environments (Dudley-Evans & St. John, 1998). This approach ensures that ESP instruction is practical, relevant, and connected with learners' real-world applications. Further, incorporating active learning methodologies in ESP fosters communication and problem-solving skills, which are essential for navigating the complexities of modern professional settings

In the second place, the use of real resources or materials such as texts, documents, and multimedia resources from learners' professional or academic fields (Swales, 2014). They help learners to be ready for real-world language use and to develop language skills and competencies relevant to their specialized contexts. ESP courses or syllabi frequently incorporate authentic materials to enhance language learning within specialized contexts. These materials encompass texts, documents, and multimedia resources sourced directly from learners' professional or academic domains. This integration offers learners exposure to genuine language usage within their field, facilitating the development of language skills and competencies pertinent to their specialized domains.

Swales (2014) marks the implication of authentic materials in ESP pedagogy, emphasizing their role in bridging the gap between language learning and real-world communication within professional or academic settings. When using authentic texts, learners are exposed to the language conventions, terminology, and discourse patterns specific to their area of expertise.

Moreover, using real materials in ESP courses promotes learner motivation and engagement by offering relevant, meaningful content that resonates with learners' professional or academic interests and goals (Dudley-Evans & St. John, 1998). This authentic context fosters a deeper understanding of language use within specific contexts and encourages learners

to actively apply language skills to authentic tasks and situations encountered in their professional or academic endeavors.

Incorporating real materials into ESP teaching requires careful selection and adaptation to confirm coordination with learners' proficiency levels and learning objectives (Belcher, 2006). Furthermore, teachers may need to provide scaffolding and support to facilitate learners' comprehension and effective use of them, such as pre-reading activities, vocabulary exercises, and guided tasks (Basturkmen, 2005).

Thirdly, centered-approaches, such as TBLT or PBL, are popular ones in ESP. They pore over on attracting learners in original, goal-oriented activities relevant to their professional or academic contexts (Robinson, 2001). Tasks may include case studies, simulations, problem-solving activities, and project-based assignments that require learners to use English to accomplish specific objectives.

In the fourth place, the Content-Based instruction may be used, integrating language learning with subject-matter content from learners' specialized fields or disciplines (Brinton et al., 1989). In ESP, content-based instruction helps learners develop both language proficiency and content knowledge relevant to their professional or academic contexts.

Finally, the English for Academic Purposes (EAP) approach can be applied. This is a specialized branch of ESP that prepares learners for academic study in universities and other academic settings (Hyland, 2014). EAP courses help learners develop academic literacy skills such as reading, writing, listening, and speaking, as well as critical thinking and research skills necessary for academic success.

Paltridge and Starfield (2013) identify several key trends in ESP that reflect the evolving nature of its research and practice, as well as emerging areas of interest and innovation. These trends include:

1. Technology-Mediated Learning: the integration of technology in ESP instruction is a serious trend, emphasizing digital tools and resources to enhance language learning, communication skills, and access to authentic materials. This includes online platforms, multimedia resources, virtual environments, and computer-assisted language learning (CALL) applications, which create engaging and interactive learning experiences for ESP learners.
2. Corpus Linguistics: it has become a valuable tool in ESP research and curriculum development. Corpora allow language specialists to analyze authentic language use within specific domains, identify recurring patterns and features of disciplinary discourse, and design targeted language instruction and materials.
3. Genre-Based approaches: genre-based pedagogies are increasingly prominent in ESP instruction, emphasizing the analysis and teaching of disciplinary genres and communicative practices. This approach involves identifying rhetorical structures, language features, and communicative purposes of genres relevant to learners' professional or academic fields and providing explicit instruction on genre conventions and strategies for effective communication.
4. English as a *lingua franca* (ELF): as global communication expands, English as a *lingua franca* is increasingly recognized in international professional and academic contexts. ESP instruction is adapted with a focus on intercultural communicative competence, pragmatics, and accommodation strategies, facilitating effective communication in diverse linguistic environments.
5. Needs analysis and contextualization: there is a continued emphasis on needs analysis and contextualization in ESP curriculum design and instructional practices. Educators are encouraged to conduct thorough needs assessments to identify learners' specific language needs, goals, and communicative purposes within their professional or

academic domains, and to configure instruction accordingly to establish relevance and effectiveness.

These trends reflect the ongoing evolution of ESP as a dynamic and interdisciplinary field, shaped by advancements in technology, pedagogical approaches, linguistic research, and changing communicative contexts. Staying abreast of these allows ESP practitioners to effectively address the evolving needs of learners and promote language learning and communication skills development within specialized domains.

3.1.1. English for Tourism

The development of ESP in the Degree of Tourism is closely linked to the increasing globalization of the tourism industry and the growing demand for English proficiency among professionals in this field (Dudley-Evans & St. John, 1998). As tourism businesses cater to international clientele, specialized language training has become essential for professionals in areas such as hospitality services, travel agencies, cultural exchange, and customer relations (Smith & Robinson, 2020).

ESP programs in tourism emerged to equip students with the linguistic and communicative skills necessary for various professional roles, including tour guides, hotel managers, travel agents, and event coordinators (Hutchinson & Waters, 1987). These programs integrate language instruction with subject-specific content in tourism management, marketing, customer service, and cultural awareness to prepare students for real-world professional challenges (Brinton et al., 1989).

Collaboration with industry partners, such as hotels, travel agencies, and cultural organizations, has been fundamental in shaping ESP curricula. These partnerships ensure that

language training meets the specific communication needs of the tourism industry, enhancing students' employability and professional preparedness (Dudley-Evans & St. John, 1998).

Over time, ESP programs in tourism have adopted innovative teaching methodologies, including TBLT, PBL, and experiential learning. These approaches, along with the integration of authentic materials and multimedia resources from the tourism industry, foster interactive and contextually relevant learning experiences (Robinson, 2001). Real-world language tasks in these methodologies contribute to the development of both language proficiency and communicative competence in professional tourism contexts.

3.2. PBL and English for Tourism

While the potential benefits of PBL in second language acquisition are widely acknowledged, research on its application in higher education remains limited, particularly in English for Tourism. Most existing studies on PBL focus on pre-university education (Kokotsaki et al., 2016; De la Torre Neches, 2021), while research in higher education predominantly examines its effectiveness in fields such as engineering. For example, Cain and Cocco (2013) carried out a study within the Canadian Engineering Education Association, demonstrating that PBL can be an effective tool for developing leadership skills in engineering students. Multidisciplinary teams and real-world problems help students develop key competencies such as communication, teamwork, and self-directed learning—skills essential for their professional development.

Regarding the relationship between PBL and English language learning, some studies have explored its effectiveness. Hmelo-Silver et al. (2007) conducted a meta-analysis of 17 studies on PBL in science and engineering education, concluding that PBL intensifies content knowledge, problem-solving skills, and critical thinking abilities. More recently, Song et al. (2024) examined the impact of PBL on EFL learners' critical thinking and language proficiency

in a theoretical review, finding important improvements in both areas but showing limitations on their study due to the low number of institutions involved. Similarly, Lin (2018) investigated a methodology called *Problem-based Learning* (Problem-BL), and its effects on English writing proficiency, reporting enhanced skills in idea generation, organization, and language use. The study examines how it influences English reading comprehension in an online course. Two groups of university students participated, one using Problem-BL and the other following a traditional method. The results indicate that students in the Problem-BL group achieved higher reading comprehension scores. The research also explores student perceptions, showing positive feedback on this approach.

Besides, a study by Crespi et al. (2022) assessed the effectiveness of PBL in improving interpersonal communication and teamwork skills among university students in Madrid. The quasi-experimental study, involving 610 students (387 in the PBL-based experimental group and 223 in the control group), demonstrated that PBL fosters significant improvements in these transversal competences, highlighting its value for personal and professional development.

Despite these findings, a key challenge in PBL research is the lack of random assignment in control and experimental groups, affecting the reliability of results (Sweller et al., 2007). Moreover, rigorous scientific studies on the application of PBL in higher education (particularly in the humanities and language teaching) remain scarce. This gap underscores the need for further empirical research to evaluate PBL's effectiveness in university-level ESP courses, particularly in the context of tourism.

In conclusion, further research is needed to assess the effectiveness of PBL in higher education, specifically in second language acquisition. The theoretical framework presented so far has examined key foreign language teaching methodologies, focusing on active learning strategies and PBL. These approaches have demonstrated their potential to strengthen students'

engagement, collaboration, critical thinking, and communicative competence, in response to the evolving demands of modern education.

PART II. EXPERIMENTAL FRAMEWORK

In Part II of this dissertation, the focus moves to the experimental framework, which explores and evaluates an innovative pedagogical approach in language teaching and learning. This section represents a critical phase where theoretical perspectives merge with empirical investigation, aiming to deepen understanding of language acquisition and instructional design in educational research (Smith & Robinson, 2020). The methodological framework outlines the systematic approach to research design and implementation. This includes the application in the classroom of the transformative educational methodology that emphasizes active, collaborative, and experiential learning (Thomas, 2000): the PBL.

Chapter 4 serves as the cornerstone of this exploration, presenting the key research questions that shape the investigation. These questions assess the effectiveness and impact of specific educational interventions, providing a structured approach to analyzing their outcomes (Johnson & Christensen, 2024).

At the core of this framework are the main objectives, which define the overarching goals of the study, and the specific objectives, which detail the precise dimensions of inquiry essential for a comprehensive analysis (Brown, 2014). These objectives propel the research forward and connect it to broader educational goals.

The hypotheses articulated in this section present testable propositions grounded in established theories and emerging pedagogical paradigms (Dankasa, 2015). These hypotheses guide empirical research while contributing to the theoretical foundations of educational practice.

The participants and context, discussed in Section 4.6, provide a comprehensive understanding of the demographic, cultural, and institutional factors shaping the study environment (Perna, 2006). This contextual framework enriches the interpretation of findings and enhances the applicability of research outcomes in diverse educational settings.

The analysis categories and study variables (Section 4.7) are carefully defined to capture the multifaceted aspects of educational outcomes and learner experiences. These categories serve as analytical tools for examining both qualitative and quantitative data, offering insights into the efficacy of innovative pedagogical practices (Halverson & Graham, 2019).

The data collection techniques and instruments (Section 4.8) include field diaries, evaluation tests, and rubrics, all tailored to gather rich and nuanced data essential for comprehensive analysis (Keller et al., 2021). These instruments facilitate a thorough examination of educational processes and outcomes.

The implementation, Chapter 5, describes the systematic steps taken to execute the research design with methodological rigor and consistency (Keller et al., 2021). This framework ensures the integrity and reliability of research findings.

The experimental framework also encompasses the presentation and analysis of research results, followed by an in-depth discussion. Chapters 6 and 7 are dedicated to these phases, offering an empirical assessment of the pedagogical interventions studied and their outcomes.

Chapter 6 focuses on the results, presenting both quantitative and qualitative analyses of the student outcomes. The quantitative analysis includes descriptive statistics and statistical tests, such as ANCOVA, t-tests, and ANOVA, which are employed to assess the effectiveness of PBL approach in fostering student learning. It further explores the results from the students' questionnaires, examining correlations and reliability tests, offering a comprehensive understanding of the intervention's impact. In the same way, qualitative data is analyzed to gain insights into the learner's experiences, thus enriching the overall understanding of the study's findings.

Chapter 7 examines the discussion of the results. It interprets the quantitative outcomes, providing a detailed examination of the statistical findings, including the results from the covariance analysis, pairwise comparisons, and group comparison tests. The discussion also reflects on the significance of the students' responses to the questionnaires, drawing correlations between their attitudes and the learning process. In a similar manner, the qualitative results are explored, offering a detailed understanding of the learners' perceptions and experiences, which complement the statistical data.

These chapters provide an extensive evaluation of the PBL methodology, offering a critical analysis of the effectiveness of innovative pedagogical strategies in language teaching. The findings not only contribute to the theoretical understanding of language acquisition but also inform future practices in ESP contexts.

In summary, Part II of this research contributes to the ongoing discourse on educational methodologies by integrating theoretical perspectives with empirical investigation. It aims to enhance our understanding of effective language teaching practices and their impact on student learning outcomes across diverse educational contexts.

CHAPTER 4 - OBJECTIVES AND METHODOLOGY

An appropriate research paradigm must be selected as a critical step in any study. Scholars have posed fundamental questions regarding qualitative research, such as: What constitutes qualitative research? What types of knowledge underpin qualitative inquiry? And what methodologies fall under the umbrella of qualitative research? (Smith & Robinson, 2020). Various definitions of qualitative research have emerged in recent literature. Some scholars define it as an approach that generates findings without relying on statistical methods or quantification (Brown & Lee, 2015). Others characterize it as a methodology that produces descriptive data, including individuals' verbal or written expressions and observable behaviors (Taylor et al., 2015). Additionally, qualitative research emphasizes understanding the world from the perspectives of its participants, aiming to capture the viewpoints that guide their actions within specific social contexts.

Given these characteristics, qualitative research is well-suited to the objectives of this study. The research aims to collect comprehensive data on students' expectations regarding the implementation of PBL and their experiences learning through this method.

It also reflects a post-positivist paradigm. This operates under the premise that, due to the limitations of human inquiry, the inherent order of the world can never be fully comprehended (Hitchcock & Onwuegbuzie, 2022). This paradigm also adopts a critical realist stance, subjecting claims of truth to rigorous scrutiny to enhance understanding. While post-positivism acknowledges the existence of an objective reality, it posits that reality can only be approximated.

Within this framework, researchers seek to approach reality as closely as possible while maintaining objectivity throughout the investigative process (Rogo, 2024).

Moreover, a quantitative approach was also integrated into the study. According to Johnson and Christensen (2024), quantitative inquiry involves defining the research scope,

formulating precise inquiries, collecting numerical data, analyzing it using statistical techniques, and maintaining objectivity throughout the investigation. This approach was applied to capture various aspects of students' perceptions through different questions. Moreover, it facilitates the analysis of PBL implementation trends and enabled the categorization and statistical examination of students' perceptions of this approach.

The integration of both quantitative and qualitative approaches within a single study is increasingly recognized as a valuable research strategy. Mixed-methods research, which combines both paradigms, provides a more complete understanding of research phenomena (Taylor, 2005). As Hitchcock and Onwuegbuzie (2022) assert, mixed-methods research allows scholars to capitalize on the strengths of both quantitative data (which offers statistical generalizability) and qualitative data (which provides contextual depth), thereby enhancing the depth and breadth of insights into research questions. These advantages support the use of a mixed-methods approach in this study, offering a broader and more detailed perspective on the research objectives.

4.1. Research Questions

Research questions serve as fundamental tools in guiding any investigation. They shape the study's focus, provide clarity to its purpose, and ensure that the methodological approach corresponds with the research objectives. Well-defined research questions not only direct the study but also ensure that its outcomes remain relevant and contribute meaningfully to the field. Specific queries facilitate a structured exploration of complex issues, making them essential for deriving meaningful conclusions.

In the context of this study, the research questions are closely linked to evaluating the effectiveness of PBL compared to traditional teaching methods in fostering communicative competence among first-year English students. These questions aim to analyze how different

pedagogical approaches influence student performance, motivation, and learning expectations. Ensuring that the study remains rooted in practical educational outcomes, the research offers both theoretical insights and real-world applications.

Moreover, well-formulated research questions help reduce existing knowledge gaps. The inquiry framed around key aspects of PBL (its comparative effectiveness, student perceptions, and anticipated benefits), contributes to the growing body of literature on innovative teaching methodologies. This approach not only addresses current challenges in education but also paves the way for further research into optimizing language learning environments.

The following research questions guide this investigation:

a) Main Research Question

- Do first-year English students of the Degree of Tourism develop communicative competence more effectively through PBL compared to traditional teaching methods?

b) Specific Research Questions

- How do student outcomes in English language competencies differ between traditional and student-centered methodologies (PBL)?
- What are students' perceptions of PBL in comparison to traditional teaching methods?
- Does group work, as a core component of PBL, contribute to better results in English?

4.2. Research Objectives

In recent years, educational methodologies have evolved significantly, integrating innovative approaches to address diverse learning needs and enhance academic outcomes. As explored in this study, PBL emphasizes active learning, practical application, and collaborative projects. This research aims to determine whether PBL offers a significant advantage over traditional teaching methods in improving students' English proficiency.

To achieve this, the study is guided by a primary objective, which defines the overall aim of the investigation. Additionally, the research pursues several specific objectives, including assessing language proficiency development, examining the acquisition of transferable skills, evaluating student engagement and motivation, and exploring the impact of collaborative learning.

The following sections outline the main objective and specific objectives of the study, as well as the hypothesis that underpins the research.

4.2.1. Main Objective

To evaluate the effectiveness of PBL compared to traditional teaching methods in improving the communicative competence of first-year English students in the Degree of Tourism.

Establishing clear objectives is fundamental to any research, as they define the scope and direction of the study. In this investigation, the primary objective is to assess whether PBL offers a more dynamic and interactive learning environment that enhances communicative competence more effectively than conventional approaches. Thanks to be focused on the communicative competence, this study aims to contribute to discussions on modernizing language teaching methodologies and adapting them to the needs of contemporary learners.

4.2.2. Specific Objectives

To complement the central aim, the study outlines several specific objectives that allow for a more detailed and structured analysis. These objectives include examining student performance under different methodologies, assessing engagement and motivation levels, and gathering student perspectives on PBL through interviews. Besides, the research explores how

collaborative work within PBL contributes to language development, emphasizing teamwork as a key component of this pedagogical approach.

The specific objectives of this study are:

- To compare students' academic performance in PBL and traditional methodologies.
- To evaluate student engagement and motivation levels in learning English through PBL versus traditional approaches.
- To investigate students' opinions and preferences regarding PBL compared to conventional teaching methods through interviews.
- To assess the effectiveness of collaborative work in enhancing language acquisition within a PBL framework.

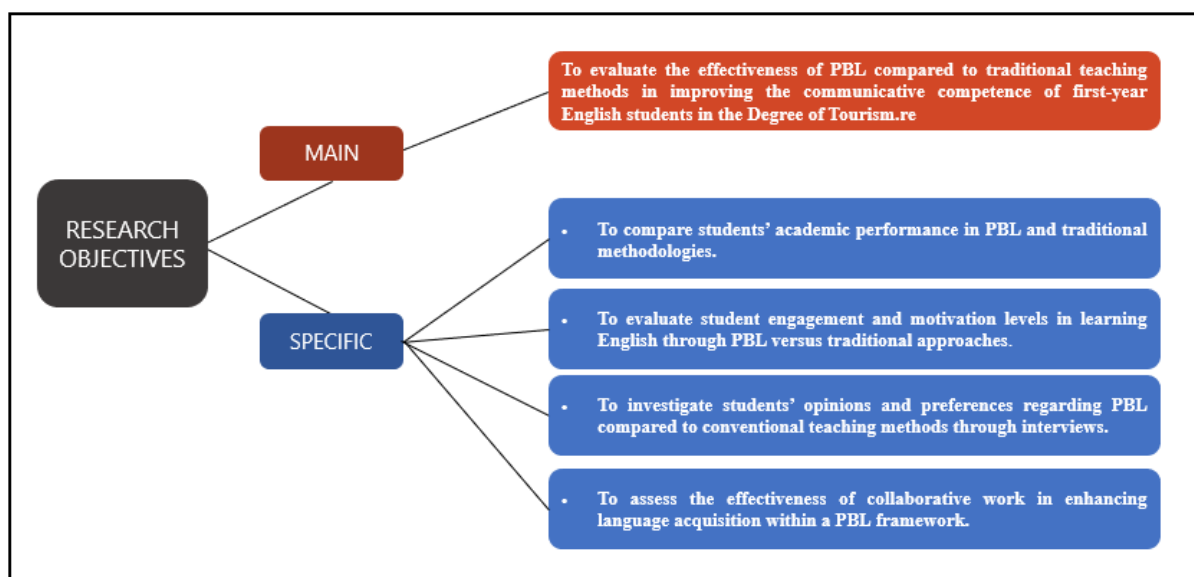


Figure 2. *Research Objectives*

The previously outlined objectives provide a structured foundation for investigating the potential benefits of PBL compared to traditional teaching methods. Student performance, engagement, and perspectives are analyzed in this study to determine whether PBL fosters a more interactive and effective approach to language learning.

Building upon these objectives, the research hypothesis naturally emerges as a key focal point. This study hypothesizes that first-year EFL students of the Degree of Tourism of the Faculty of Business and Tourism who engage in the PBL will demonstrate greater improvements in communicative competence than their peers who follow conventional instructional methods. This hypothesis serves as the guiding premise of the research, shaping both the methodological approach and analytical framework used to assess the impact of PBL on language acquisition.

4.3. Research Hypothesis

Building upon the arguments outlined above, the following hypothesis is formulated for this study:

First-year EFL students of the Degree of Tourism who learn through PBL will demonstrate greater improvements in communicative competence in English compared to those following a traditional teaching methodology.

4.4. Research Phases

An academic investigation is a structured intellectual process that involves systematic questioning, methodological rigor, and scholarly contribution within a given discipline. This study unfolded over three distinct phases, spanning several years, and encompassed a rigorous exploration of research questions, empirical investigation, and synthesis of findings to advance knowledge and inform pedagogical practice. Grounded in established theoretical frameworks and methodologies, this section outlines the progressive stages of the research, emphasizing key objectives, theoretical underpinnings, and methodological considerations.

The phases of this study were designed with several essential factors in mind. Certain constraints, such as scheduling and student availability, were predetermined by the structure of

the course and Faculty organization. Specifically, the study took place within the framework of *English I*, a first-semester course of the students of the Degree of Tourism. Course sessions were scheduled on Mondays and Wednesdays from 11 a.m. to 1 p.m., defining the timeframe for data collection and instructional implementation.

Further, elements such as Faculty staff, classroom availability, and material resources were dictated by the institutional organization of the university. These logistical considerations influenced the scope and execution of the study while maintaining coherence with the university's academic structure and available resources.

4.5. Research Methodology

The methodology is a key component of any investigation, as it defines the framework and procedures that guide data collection and analysis. In this study, a mixed-methods approach was adopted to evaluate the effectiveness of PBL compared to traditional teaching methods in English language instruction. This approach integrates both quantitative and qualitative techniques, allowing for a more comprehensive and nuanced understanding of the phenomenon under investigation.

From the outset, the study was designed as a quasi-experiment due to the lack of random assignment. The research was conducted with pre-existing student groups that had already been assigned rather than being randomly selected. According to Anderson-Cook (2005), quasi-experiments are characterized by their lack of random participant assignment, which makes them more susceptible to potential confounding variables but still valuable for studying real-world educational settings. Importantly, the aim was to observe and assess the natural progression of the classes without disrupting their normal development.

The study was implemented within the *English I* course, which took place during the first semester of the academic year, running from mid-September to mid-December.

Quantitative data collection was carried out using SPSS statistical software, enabling the analysis of both dependent and independent variables. This facilitated the application of statistical tests to determine the significance of the results obtained (Creswell & Clark, 2018).

Alongside this quantitative analysis, the study incorporated a qualitative dimension through open-ended questions embedded within a Likert scale survey. These questions were designed to capture students' perceptions and experiences regarding the PBL method, providing insights that cannot be easily quantified. The qualitative analysis was conducted using coding and data categorization techniques, allowing for the identification of patterns and recurring themes in students' responses (Tisdell et al., 2025).

The integration of both quantitative and qualitative approaches was essential for obtaining a holistic view of the effects of PBL on English language learning. This mixed-methods approach not only enriched the study's findings but also enhanced the validity and reliability of the results by enabling data triangulation, where multiple sources of evidence corroborated the findings.

Thus, the decision to employ a mixed-methods approach was strategic, responding to the complexity of the research phenomenon. It provided a solid foundation for interpreting the results and formulating relevant and applicable conclusions in the context of university-level English language teaching.

4.5.1. Methodology for the Application of PBL

The methodology section plays a critical role in outlining the systematic approach undertaken in this investigation. This study integrates multiple strategies and techniques to thoroughly examine the implementation and impact of PBL in English language education. The methodological framework is designed to ensure the collection of valid and reliable data,

enabling a comprehensive analysis of the research questions (Creswell & Creswell, 2017; Tisdell et al., 2025).

To address the multifaceted nature of the research problem, a mixed-methods approach was adopted, incorporating the qualitative and quantitative approach and a quasi-experimental methodology (Johnson et al., 2014). This integrated approach allows for a holistic understanding of the research problem, capturing both numerical data and qualitative insights to provide a richer interpretation of findings.

The research design begins with a clear definition of the study framework, followed by a justification for selecting specific methodologies. Each chosen method fits the research objectives, making the collected data both relevant and meaningful (Yin, 2018; Patton, 2014). The following sections further elaborate on the methodologies employed, including:

- Application of PBL in English language instruction.
- Qualitative and quantitative data collection techniques.
- Quasi-experimental design.
- Integration of mixed methods for comprehensive analysis.

Given the non-random assignment of students to the experimental group (due to the organizational structure of the university), it was necessary to employ a diverse methodological approach. This study, therefore, aims to provide a comprehensive and nuanced understanding of the impact of PBL in English language education. The combination of empirical evidence with practical insights contributes to existing research and offers valuable implications for educators and researchers (Miles et al., 2014; Bryman, 2016).

4.5.2. Quasi-Experimental Methodology

A quasi-experimental study is an investigation in which students are already assigned to a certain group (Mavrou, 2022). The quasi-experimental investigation may involve two or more groups, but there is no random distribution (Anderson-Cook, 2005). This method is particularly valuable in educational research, where true experimental designs are often difficult to implement due to the constraints of randomization. To evaluate the effectiveness of PBL compared to traditional methods, quasi-experiments provide a robust alternative.

Long and Crookes (1992) classify research on second-language acquisition into qualitative and quantitative approaches. Over time, scholars such as Mackey and Gass (2015) have refined these distinctions by considering factors such as data types and investigative methodologies, enabling researchers to select the most appropriate method for their specific research questions. In this quasi-experimental study, the independent variable, teaching methodology (PBL) is manipulated to observe its impact on the dependent variable: students' English proficiency outcomes. Unlike true experimental designs, quasi-experiments do not rely on random distribution to groups. Instead, they use pre-existing groups, such as different classes within the same institution. This approach is particularly relevant in educational settings where logistical, ethical, or administrative constraints prevent the random assignment of students to different instructional methods.

The lack of randomization introduces the potential for confounding variables; however, careful research design and statistical controls can mitigate these risks (Anderson-Cook, 2005). One of the strengths of the quasi-experimental method is its ability to provide strong evidence of causal relationships while maintaining ecological validity, meaning that findings can be generalized more easily to real-world educational settings. In this study, the quasi-experimental design allows for an assessment of the effectiveness of PBL in a natural classroom environment, generating insights that are directly applicable to actual teaching practices.

Additionally, quasi-experiments can incorporate pre-tests and post-tests, which help measure changes over time and control for baseline differences between groups. The method can also be enriched with the integration of elements of mixed-methods research. Quantitative data, such as test scores, and qualitative data, such as student interviews and open-ended survey responses, provide researchers with a more comprehensive understanding of the teaching method's effects (Creswell & Clark, 2018). For example, in comparing PBL with traditional teaching methods, quantitative data might indicate improved test scores, while qualitative data could provide insight into students' perceptions of engagement and motivation in learning English. This combination makes the quasi-experimental method a versatile and practical approach in educational research, particularly in contexts where random assignment is not feasible. This study offers a valuable contribution to the field of second-language acquisition and pedagogy, focusing on causal relationships between instructional methods and learning outcomes while maintaining ecological validity, and combining both quantitative and qualitative data.

4.5.3. Mixed-Methods Approach

The mixed-methods approach combines qualitative and quantitative research methodologies, providing a broader and deeper perspective for this study. As Dörnyei (2007) states that research is an engaging process where curiosity and discipline form the foundation of meaningful inquiry. This approach is particularly beneficial in educational research, as it allows for the exploration of complex phenomena from multiple perspectives (Johnson & Christensen, 2024).

In this quasi-experimental study, a mixed-methods approach was adopted to evaluate the effectiveness of PBL in teaching English compared to traditional methods. The quantitative component of the study involved using evaluation rubrics for students' presentations and

administering a Likert scale test to assess students' perceptions. The qualitative component included field diaries and open-ended questions posed to students following their participation in the *First Conference of Students of Tourism*.

The primary reason for employing a mixed-methods approach is the potential for data triangulation, which enhances the validity and reliability of findings (Dörnyei, 2007). Triangulation involves using multiple data sources and methods to corroborate results, providing a more comprehensive understanding of PBL's educational impact. The Likert scale test collected students' perceptions and attitudes toward PBL, offering insights into their learning experiences and the perceived effectiveness of this methodology in comparison to traditional approaches. Responses were analyzed to identify patterns and trends in students' perspectives.

Simultaneously, quantitative data were gathered during the conference, where PBL was implemented in a practical learning environment. The four language skills were assessed through detailed rubrics, ensuring a structured and objective evaluation of students' performance. Field diaries provided continuous observational records and researcher reflections, offering a contextualized view of the learning process. Additionally, students' presentations and contributions at the congress were evaluated to measure their ability to apply language skills in real-world scenarios.

The concurrent mixed-methods design employed in this study allowed the simultaneous collection of qualitative and quantitative data, yielding a comprehensive analysis of PBL's effectiveness. The combination of multiple data sources enriched the findings, allowing for a well-rounded understanding of the impact of PBL on English language acquisition. The analysis assessed students' academic performance and provided valuable insights into their learning experiences by combining these methodological approaches.

Despite its advantages, using a mixed-methods approach presents challenges. Managing both qualitative and quantitative data requires expertise, as well as considerable time and effort (Teddlie & Tashakkori, 2009). Additionally, integrating and interpreting data from different sources can be complex, demanding strong analytical skills and a deep understanding of both methodological paradigms.

The study is structured according to the following phases (Le-Thi et al., 2022):

1. Selection of participants: they are first-year university students of the Degree of Torusim, enrolled in the *English I* course as part of their curriculum.
2. Group distribution: participants are divided into four groups: one experimental group, which learn through PBL, and three control groups, which follow a traditional classroom methodology based on a course textbook. The experimental group engages in PBL activities, while the control groups receive conventional instruction.
3. Assessment of language proficiency: at the end of the course, students' mastery levels in the control groups are measured using a standardized test and a final oral presentation. The experimental group was evaluated through lectures and daily field diaries.
4. Data analysis: the data collected are analyzed using SPSS (IBM) statistical software to determine whether significant differences exist between the PBL and traditional classroom groups in terms of language proficiency outcomes.
5. Drawing conclusions: based on the statistical and qualitative analyses, conclusions are drawn regarding the effectiveness of PBL in university-level English language instruction.

This structured research design provides empirical evidence regarding the effectiveness of PBL in fostering communicative competence among university students

4.6. Participants and Their Context

The participants in this study were first-year students enrolled in the Degree in Tourism program. The study included an experimental group and three control groups:

- Experimental Group (Class B): 45 students
- Control Group 1 (Class A): 57 students
- Control Group 2 (Class C): 40 students
- Control Group 3 (Class E): 40 students

These students had recently graduated from either high school or vocational training programs, where they were expected to develop linguistic competencies in accordance with the CEFR. According to Royal Decree 243/2022 (April 5th)⁶, which defines the organization and minimum requirements for the *Bachillerato* curriculum in Spain, students must develop communicative and plurilingual competencies. While the decree does not specify an exact required language level, the competencies outlined are consistent with those expected at a B1 level under the CEFR. This level indicates that students should be able to understand and produce clear texts on familiar topics and communicate effectively in everyday situations.

At the B1 level, as defined by the CEFR, students should be able to:

- Comprehend the main points of clear, standard input on familiar topics commonly encountered in work, school, and leisure.
- Handle most situations that may arise while traveling in an English-speaking environment.
- Produce simple, connected texts on familiar or personally relevant topics.

⁶ Royal Decree 243/2022, of April 5, which establishes the organization and minimum teachings of the Baccalaureate. *Official State Gazette*, (81), pp. 45327–45460. <https://www.boe.es/eli/es/rd/2022/04/05/243>

- Describe experiences, events, dreams, hopes, and ambitions, and provide brief reasons and explanations for opinions and plans.

The selection of participants was based on their enrollment in the Degree in Tourism program, ensuring a diverse sample of students with varying educational backgrounds but a shared academic goal. While students' prior English language education differed, all participants were expected to have attained a minimum of B1 proficiency, as this was a prerequisite for entry into the program.

The experimental group, Class B, participated in a PBL approach that organized and set up the *First Conference of Students of Tourism*. This real-world project provided an opportunity for students to apply their language skills in a meaningful context, allowing them to develop and demonstrate proficiency in listening, speaking, reading, and writing. The hypothesis underlying this approach is that an interactive and experiential learning environment, emphasizing collaboration, would lead to more effective language acquisition than traditional methods.

In contrast, the control groups, Classes A, C and E, followed a traditional teaching methodology. These groups relied on conventional instructional techniques such as lectures, textbook exercises, and standardized tests. The inclusion of these control groups allowed for a direct comparison between PBL and traditional methods in terms of their effectiveness in language learning.

Understanding the students' background is essential to evaluate their learning needs and potential challenges. The participants in this study had recently transitioned from high school (*Institutos de Bachillerato*) or vocational training programs (*Formación Profesional*) to university-level studies in tourism. Their prior educational experiences provided the foundation

for their English proficiency and shaped their approach to language learning at the university level.

While students had varying degrees of prior exposure to English, the baseline expectation was that they had achieved a B1 level of proficiency under the CEFR. This provided a standardized foundation for evaluating whether PBL could enhance their language skills beyond this level and better prepare them for professional communication in the tourism industry.

Regarding the ages of the participants, the experimental group consisted of students whose ages ranged from 18 to 24 years, while in the control groups, the age ranges were as follows: in group A, from 18 to 26 years, in group C, from 18 to 23 years, and finally, in group E, from 18 to 26 years. This will be further detailed in section 6.1, where the results of the student groups will be analyzed.

4.7. Categories and Variables

This section outlines the analysis categories and study variables that form the foundation of this investigation into the effectiveness of PBL in English language teaching. The primary objective of this research is to assess whether PBL enhances students' English proficiency more effectively than traditional teaching methods. Additionally, the study aims to examine the impact of PBL on students' collaborative skills and to gather insights into their perceptions of this learning approach.

As discussed throughout this work, PBL is a teaching-learning methodology that encourages students to acquire and apply knowledge and skills through hands-on projects designed around real-world challenges. The effectiveness of PBL has been widely explored in educational research, with many scholars arguing that it fosters higher engagement, improved critical thinking, and enhanced practical skills among students (Bell, 2010; Blumenfeld et al.,

1991). However, empirical studies specifically measuring its impact on language learning, particularly in non-native English-speaking contexts, remain limited. This research seeks to contribute to this field through the systematic analysis of key variables related to language acquisition, collaboration, and student engagement within the PBL framework.

4.7.1. Category Analysis

This study focuses on three main categories: language proficiency, collaborative skills, and student perceptions and motivation regarding the use of PBL. These categories are examined to offer an evaluation of PBL's effectiveness in English language learning.

1) Language proficiency

Language proficiency is a key indicator of success in language learning and plays a critical role in students' academic and professional development. This study evaluates mastery across the four primary language skills: speaking, listening, reading, and writing, using the following assessment methods:

- **Speaking:** assessed through student presentations during the conference, where participants deliver speeches or lectures using PowerPoint. These assessments evaluate students' ability to articulate ideas clearly, use appropriate vocabulary, and maintain grammatical accuracy in both spontaneous and planned speech (Bygate, 2018).
- **Listening:** measured through comprehension activities related to congress presentations, including structured feedback sessions and comprehension questions. These tasks assess students' ability to understand and interpret spoken English in an academic setting (Rost, 2016).
- **Reading:** evaluated through diary entries and project-related reading tasks, requiring students to comprehend, analyze, and interpret texts relevant to their projects (Grabe & Stoller, 2019).

- Writing: assessed through diary entries documenting students' progression in their projects. These entries evaluate students' ability to organize thoughts, use appropriate grammar and vocabulary, and express ideas coherently (Hyland, 2014).

2) Collaborative skills

Collaborative competence is essential for the successful implementation of PBL, as this approach relies on teamwork. Effective collaboration involves communication, cooperation, and meaningful contribution to group tasks. The study examines students' ability to work in teams, coordinate efforts, and engage in constructive peer interactions throughout the project.

3) Student perceptions and motivation

Understanding students' perceptions of PBL is indispensable for evaluating its acceptance and effectiveness from the learners' perspective. Students' attitudes and experiences provide valuable feedback on both the advantages and challenges of PBL, helping educators refine their teaching strategies. This category is assessed through student surveys, which include both closed and open-ended questions designed to gather qualitative and quantitative data on their experiences with PBL. The results will provide insights into student motivation, engagement, and perceived learning outcomes.

4.7.2. Variable Analysis

The variable analysis focused on identifying and measuring specific elements within the analysis categories. These variables were examined using data collected from bi-weekly field diaries, evaluation rubrics, and a Likert-scale questionnaire with an open question.

In evaluating language proficiency during student speeches, several variables were considered across the four key language skills: speaking, listening, reading, and writing.

- Speaking skills variables

- Fluency: the ease and flow of speech, measured by the ability to speak without excessive hesitation, repetition, or fillers.
- Pronunciation: accuracy in producing sounds, stress patterns, and intonation.
- Grammar: correct use of grammatical structures during speech.
- Vocabulary: appropriateness and range of word choice.
- Coherence: logical flow and organization of ideas in spoken language.
- Listening skills variables
 - Comprehension: ability to understand spoken language, including identifying main ideas and supporting details.
 - Interpretation: capacity to infer meaning, context, and speaker intent.
 - Response accuracy: correctness of responses to listening tasks and comprehension questions.
- Reading skills variables
 - Comprehension: understanding of written texts, including recognizing main ideas, supporting details, and making inferences.
 - Analysis: ability to critically examine and interpret texts.
 - Information retrieval: efficiency in extracting and synthesizing relevant information from texts.
- Writing skills variables
 - Organization: logical structuring of written texts, including the introduction, body, and conclusion.
 - Grammar: accuracy and appropriateness of grammatical structures in writing.
 - Vocabulary: range and suitability of word choice in written expression.
 - Coherence: clarity and logical progression of ideas within compositions.

In assessing group or collaborative skills, the following variables will be considered:

- Participation variables
 - Engagement: level of active involvement in group activities and discussions.
 - Contribution: quality and quantity of contributions to group tasks.
- Communication variables
 - Clarity: ability to express ideas clearly and understandably.
 - Listening: willingness to listen to and consider others' ideas.
- Cooperation variables
 - Teamwork: ability to work effectively with others towards shared goals.
 - Conflict Resolution: capacity to handle disagreements and reach consensus.
- Responsibility variables
 - Accountability: commitment to assigned tasks and roles within the group.
 - Reliability: consistency in fulfilling commitments and meeting deadlines.
- Student perception variables
 - Intrinsic motivation: internal drive to engage in an activity for its own sake, out of interest or enjoyment. High intrinsic motivation is often associated with greater engagement and persistence in learning.

These variables collectively provided a comprehensive framework for assessing the effectiveness of PBL in raising English language expertise, collaborative skills, and students' perceptions of this learning approach. The data collected through field diaries, conference presentations, and the Likert-scale questionnaire with an open question offered valuable insights into these areas, helping to evaluate the overall impact of PBL in the English classroom.

In summary, linguistic competence was analyzed primarily through quantitative data, comparing the grades obtained by the experimental group (Group B) with those of the control groups (A, C, and E). Additionally, students' ages were considered as a demographic factor, acknowledging that age could influence academic performance and receptivity to different teaching methodologies (Ghaleb et al., 2021).

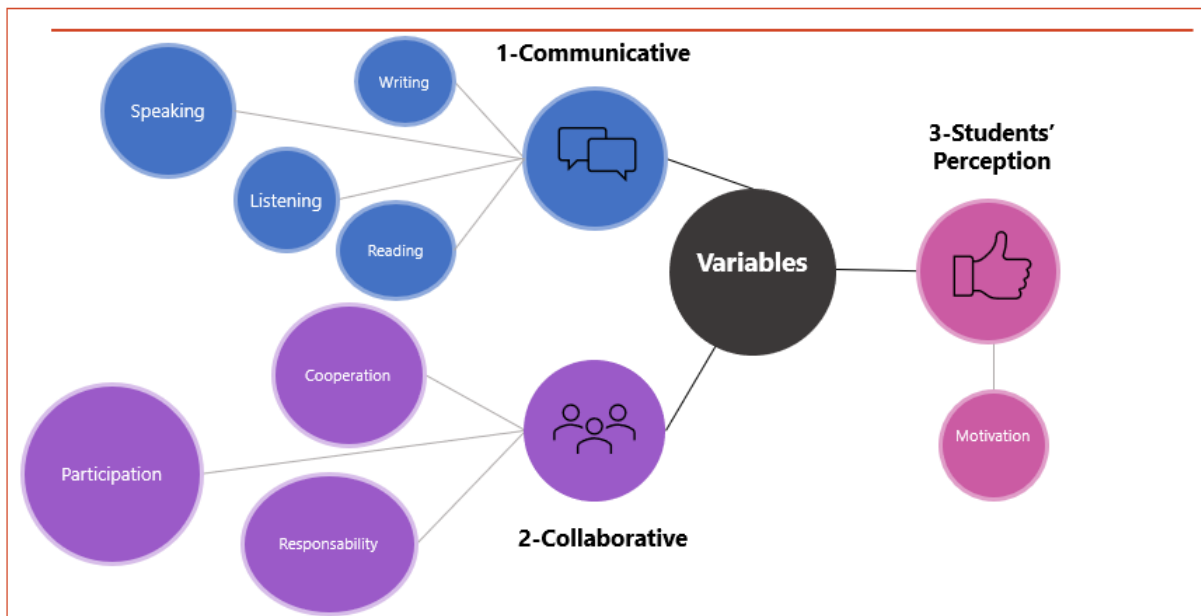


Figure 3. *Variable Analysis*

4.8. Data Collection Techniques and Instruments

In this section, three primary data collection instruments are described to support the assessment of students' experiences and outcomes within a PBL framework. These tools include an oral presentation rubric, a post-presentation questionnaire, and a student field diary, each aiming to capture the key categories of this study: students' English competence, motivation, collaboration and perception.

4.8.1. The Student Field Diary

The first instrument was a student field diary (*Annex 1*), completed by students in small groups to assess cooperative work. Field diaries⁷ serve as reflective tools that encourage learners to document their experiences, thoughts, and learning progress over time (Cohen et al., 2018). In this case, students used the diary to record their impressions, challenges, and successes encountered throughout the project.

Through reflective writing, students deepened their understanding of their own learning processes and were encouraged to think critically about their experiences in a group setting. Furthermore, these diaries provided qualitative data on students' evolving perceptions and motivations regarding PBL. When analyzed, these reflections shed light on the social and cognitive aspects of collaborative learning, providing insights that are often unavailable through traditional evaluation methods.

4.8.2. The Evaluation Rubric

The second instrument⁸ employed was a rubric for assessing students' oral presentations (*Annex 2*). A rubric is a structured assessment tool that provides detailed criteria for evaluation, typically listing specific indicators of performance across various proficiency levels (Brookhart, 2013). This rubric was designed to evaluate multiple dimensions of students' presentations, such as content knowledge, clarity, engagement, and language use.

Clear criteria from the outset allowed the rubric to unify expectations and create a fair, objective assessment of oral communication skills for both students and teachers (Popham,

⁷ Both group work and participation, as well as the student field diary, accounted for 30 percent of the students' evaluation. The remaining 70 percent was based on their oral presentations or lectures.

⁸ The rubric of evaluation for their lectures scored 70 percent of the final grade, while the remaining 30 percent was earned through participation, group work, and field diaries.

2016). Rubrics also facilitate constructive feedback and self-reflection, helping students understand their strengths and areas for improvement.

4.8.3. The Questionnaire

Following the presentations, and as the final evaluation instrument, a questionnaire (*Annex 3*) was administered to gather both quantitative and qualitative data regarding students' learning experiences and perceptions of the PBL approach. Questionnaires are effective tools for collecting numerical data (e.g., Likert scale responses) as well as open answers, offering a broad view of students' insights and attitudes (Creswell & Poth, 2016).

In this study, the quantitative portion of the questionnaire measured specific outcomes related to motivation, confidence, and engagement. Additionally, an open question allowed students to express their individual perspectives on how PBL influenced their learning, providing deeper insights into their motivational drives and perceptions regarding the methodology's effectiveness in enhancing their educational experience (Dörnyei & Taguchi, 2010). This mixed-method approach facilitates data triangulation, ensuring a more comprehensive analysis of students' responses to PBL.

To achieve this, a Likert-scale questionnaire consisting of 15 carefully designed questions was developed, directly reflecting the study's main objective and specific objectives.

- Main Objective – Comparing the effectiveness of PBL versus traditional teaching methods in improving English communicative competence:
 - Question 1 – Evaluates improvements in communicative competence.
 - Question 11 – Examines whether students learned more effectively using PBL.
 - Question 10 – Investigates practical insights gained through PBL that traditional methods might not provide.
- Specific Objectives:

- Objective 1 – To study students’ scores through different methodologies:
 - Question 5 – Assesses students’ prior knowledge of PBL.
 - Question 14 – Evaluates creativity and innovation fostered through PBL.
 - Question 15 – Measures how well theoretical knowledge was applied in practical contexts.
- Objective 2 – To evaluate commitment and motivation levels in learning English under PBL versus traditional methods:
 - Question 2 – Focuses on engagement.
 - Question 3 – Addresses confidence gained through PBL.
 - Question 8 – Explores critical thinking skills developed in tourism-related tasks.
- Objective 3 – To investigate students’ opinions and preferences regarding PBL compared to traditional methods:
 - Question 6 – Examines the exploration of tourism topics beyond the standard curriculum.
 - Question 12 – Checks out the impact of ESP.
 - Question 9 – Evaluates students’ awareness of cultural aspects in English language usage gained through PBL.
- Objective 4 – To understand students’ effectiveness in working collaboratively:
 - Question 4 – Evaluates teamwork and interpersonal skills.
 - Question 7 – Assesses the value of feedback in professional growth.
 - Question 13 – Measures the sense of accomplishment and pride experienced through collaborative tasks.

Through a structured questionnaire based on these objectives, the study makes sure that each aspect of students’ learning experiences and perceptions is systematically addressed. This

comprehensive approach not only facilitates statistical analysis of the responses but also offers rich qualitative insights through the open-ended section, which complements the quantitative findings.

4.9. The Implementation Procedure

This section outlines the methodology designed for the practical implementation of the three evaluation tools previously mentioned: the student's field diary, the evaluation rubric, and the questionnaire. These instruments were developed to systematically collect and analyze data, ensuring that the research objectives are met and that the findings are valid and reliable.

Each tool serves a specific function within the study:

- The student field diary captures weekly observations and reflections.
- The evaluation rubric provides standardized criteria for evaluating students' communicative outcomes during the congress.
- The questionnaire collects targeted feedback from participants, offering both quantitative and qualitative insights into their experiences with PBL.

The following subsections detail the implementation strategies and protocols for each tool:

1. Student field diary: describes the process of recording qualitative data throughout the study, focusing on contextual observations and participant interactions that document the research process.
2. Evaluation rubric: defines the categories used to measure and assess participants' lectures and presentations during the congress, providing a structured approach to evaluating progress.

3. Questionnaire: explains the design, distribution, and data collection methods, emphasizing its role in gathering students' perceptions, motivation levels, and engagement.

Implementing these three evaluation tools in a systematic and integrated manner ensures robust data triangulation, enhancing the credibility and depth of the analysis. A well-defined procedure for implementation is critical, as it establishes a consistent framework for data collection, ensuring reliable insights and a comprehensive evaluation of the research objectives.

4.9.1. Student Field Diary Implementation Procedure

The implementation of the student field diary began at the very start of the PBL experience. As part of the project, students were asked to randomly distribute themselves into different work groups, making their components responsible for specific organizational aspects of the *First Conference of Students of Tourism*. These included the Marketing and Logo Committee, the Organization Committee, the Inauguration Committee, and the Financial and Sponsorship Committee.

To document their learning journey, students were required to complete their field diaries on a weekly basis, recording their progress every two sessions. These diaries served as reflective tools in which students documented their achievements, challenges, and learning experiences throughout the project.

Since the successful organization of the congress depended on the effective distribution of students across departments, the assignment of roles was structured to match individual strengths, interests, and skills. The criteria for selection were designed to help students choose

or be assigned to a department that best matched their abilities, ensuring that their participation contributed meaningfully to both their learning process and the overall success of the event.

The following section presents a detailed description of each department, outlining the skills and responsibilities required for its successful operation:

1. Marketing and Logo Committee

The Marketing and Logo Committee is responsible for creating a visual identity and promotional materials for the congress. This department is essential in shaping the event's public image and drawing in participants.

- Creativity and innovation: students with a strong creative side, especially in design and branding, are encouraged to join this team. Those with experience in or a passion for visual arts, graphic design, or content creation would excel here.
- Communication abilities: marketing involves crafting clear and appealing messages to attract an audience. Students with strong written and verbal communication skills, as well as those interested in social media management, content writing, or public relations, are well-suited for this team. The ability to convey complex ideas in an engaging way would also be valuable.
- Strategic thinking: a successful marketing campaign requires careful planning and an understanding of target demographics. Students who are interested in or have experience with market analysis, planning, or campaign strategy would find this department stimulating.
- Digital marketing knowledge: basic skills or interest in areas such as social media marketing, search engine optimization (SEO), or email marketing would be beneficial. Students with an understanding of digital platforms or the willingness to learn can help expand the congress's visibility.

2. Organization Committee

The Organization Committee serves as the operational backbone of the event, ensuring seamless coordination between different teams while managing logistics and scheduling.

- **Organizational skills:** this team handles scheduling, event planning, and workflow management. Students who are highly organized, detail-oriented, and skilled at creating schedules or project plans would be ideal for this role.
- **Leadership and problem-solving competencies:** this division often manages unforeseen challenges and ensures effective communication between departments. Students who naturally take on leadership roles, enjoy problem-solving, or have strong interpersonal skills will be valuable here.
- **Multitasking abilities:** coordinators will oversee different aspects of the event, such as speaker arrangements, venue setup, and real-time adjustments. Students who excel at managing multiple responsibilities under pressure will thrive in this environment.
- **Diplomacy and conflict resolution:** given that the Coordination Team may need to address conflicts or misunderstandings that arise, students with strong negotiation skills and the ability to mediate effectively would be an asset to this department.

3. Inauguration Committee

The Inauguration Committee is responsible for introducing the meeting and setting the tone for the event. This team ensures that the opening ceremony is engaging, professional, and memorable for all attendees.

- **Public speaking and presentation skills:** since the Opening Department leads the event introduction and welcomes participants, students who are comfortable with public speaking, have a strong stage presence, and can connect with an audience would excel in this role.

- Event planning interest: students with a passion for organizing ceremonies, particularly those with experience in event management, will find this department both rewarding and educational. Attention to detail and the ability to coordinate the event's flow are essential skills for this role.
- Creativity: the opening ceremony often shapes the first impression of a congress. Students who can bring innovative ideas, such as engaging presentations, performances, or thematic introductions, will contribute significantly to making the event impactful.
- Team collaboration and enthusiasm: the Inauguration Committee may work closely with the Marketing Team to maintain consistency with the congress' broader brand identity. Students who are enthusiastic, collaborative, and possess a strong team spirit will help create a welcoming and cohesive event atmosphere.

4. Financial and Sponsorship Committee

The Financial and Sponsorship Committee is instrumental in securing the necessary resources for the conference, ensuring that the event is financially sustainable and well-supported by external partners.

- Numerical and analytical abilities: managing budgets, handling sponsorship deals, and ensuring financial stability require students who are comfortable working with numbers and performing budget analysis. Those with a background in finance or accounting would be particularly well-suited for this role.
- Business and networking competencies: this unit is responsible for securing sponsorships, partnerships, and donations. Students with an interest in business development and strong networking skills will be valuable assets to this department.
- Negotiation skills: securing sponsorships involves convincing companies and organizations of the benefits of supporting the event. Students who are persuasive,

diplomatic, and confident in representing the congress professionally will excel in this role.

- Attention to detail and record-keeping: maintaining accurate records of income, expenses, and sponsorship agreements is essential for financial transparency and accountability. Students who are detail-oriented and capable of meticulous record-keeping will help ensure the meeting achieves financial stability.

Beyond the specific competencies required for each section, several general recommendations were established to ensure the effective organization and management of the congress. These included:

- Weekly progress updates: each department was encouraged to maintain a weekly update system to document achievements and set objectives for the following week. This practice promoted accountability and made certain that all departments stayed focused on the conference key goals. Students were also encouraged to use these updates to reflect on their personal progress, refining their roles and responsibilities as the event planning progressed.
- Interest and motivation: students were advised to choose a department that matched their career aspirations within tourism, whether in marketing, event coordination, finance, or public relations. This connection aimed to increase their engagement and maximize the benefits gained from participating in the congress.

5. Workshops and Topics Committee

The Workshops and Topics Committee played a key role in designing and delivering sessions focused on tourism, artificial intelligence, and other emerging themes. Students assigned to this department were expected to bring certain competencies while also developing new skills throughout their involvement:

1. Technical skills (AI and digital tools)

- Existing competencies:
 - Basic understanding of digital tools such as PowerPoint, Google Slides, or Excel for content organization and presentation.
 - Familiarity with AI tools and platforms relevant to the workshop themes.
- Skills to be developed:
 - Ability to use advanced AI tools for interactive content creation, such as chatbot development or website builders.
 - Competence in designing and coding simple AI-driven websites or tools that support workshop topics.
 - Knowledge of how new technologies integrate with tourism and methods for presenting these innovations in an engaging and accessible manner.

2. Presentation and public speaking

- Existing competencies:
 - Basic public speaking skills and confidence in presenting ideas to an audience.
- Skills to be developed:
 - Advanced presentation skills, including engaging slide design and persuasive speech techniques.
 - Experience in managing Q&A sessions and responding effectively to audience inquiries.
 - Ability to tailor presentations to different audiences, ensuring clarity and accessibility for both experts and non-experts.

3. Problem-solving and critical thinking

- Existing competencies:

- Analytical skills to assess the impact of tourism-related trends such as AI and sports tourism.
- Ability to approach challenges from multiple perspectives and develop creative solutions.
- Skills to be developed:
 - Problem-solving capabilities in addressing technical or logistical challenges related to the workshops.
 - Critical thinking skills to evaluate the broader implications of AI in tourism and propose actionable insights.
 - Creativity in solving problems related to content delivery, audience interaction, and unexpected issues during the congress.

4. Innovation and creativity

- Existing competencies:
 - Openness to new technologies and ideas, particularly those related to tourism and AI.
- Skills to be developed:
 - Ability to generate innovative concepts for workshops, such as interactive AI tools, creative presentations, or unique audience engagement strategies.
 - Competence in applying creative solutions from other fields, such as marketing and technology, to tourism and congress planning.

Students assigned to the Workshops and Topics Committee had the opportunity to develop a diverse range of competencies, including research, teamwork, presentation skills, and technical expertise. Their involvement in creating and presenting workshops on emerging topics such as artificial intelligence and sports tourism provided a valuable professional

learning experience. These skills extended beyond academic settings, preparing students for future career paths in various industries.

Following these selection criteria, students were able to join departments that best suited their strengths and interests. This ensured not only the effective execution of the congress but also provided participants with a meaningful learning experience directly connected to their academic and professional growth in the tourism sector.

4.10. Data Triangulation

Due to the importance of this research, a data triangulation method has been incorporated to strengthen the validity and reliability of the findings. This approach ensures that results are robust, credible, and reinforced through multiple perspectives and sources. To achieve comprehensive data triangulation, this study integrates three distinct tools: the student field diary, the evaluation rubric, and the questionnaire. This strategy examines the research objectives from complementary angles (Carter et al., 2014). Triangulation, which involves cross-verifying data from different sources and methodologies, helps minimize bias and enhance the accuracy of research outcomes (Denzin, 2017).

Firstly, the student field diary captures qualitative, first-person reflections on students' learning experiences, challenges, and motivational levels in real time. This meets with Patton's view of data triangulation (2014), as the diary provides rich, descriptive data reflecting participants' evolving perceptions.

Secondly, the evaluation rubric introduces a structured and standardized measure to assess students' oral presentations. Quantitative consistency across cases guarantees objective comparison and reduces subjectivity in evaluation with this tool (Creswell & Clark, 2018).

Thirdly, the questionnaire gathers both qualitative and quantitative data on students' perceptions of PBL and its effectiveness. Combining a Likert scale questionnaire with an open

question provides a comprehensive perspective on students' engagement, learning experiences, and perceived progress.

Together, these three tools support methodological triangulation, where qualitative insights from the field diary and questionnaire are cross-validated with quantitative data from the evaluation rubric. This integration of subjective and objective data creates a multi-dimensional perspective, strengthening internal validity and enhancing the reliability of the study's conclusions (Yin, 2018).

As Flick (2018) notes, this combination is particularly valuable in educational research, where subjective experiences and measurable learning outcomes are often closely intertwined. For instance, diary reflections on students' engagement can be cross-checked with rubric scores, providing deeper insight into how motivation influences performance.

Furthermore, employing a rigorous triangulation strategy minimizes potential biases that may arise from reliance on a single data source (Flick, 2018). Consistency across diary reflections, rubric scores, and questionnaire responses reinforces the validity of the findings, leading to a well-rounded, data-driven analysis of PBL's impact on English language learning. This multi-method approach ensures a comprehensive evaluation, incorporating both subjective and objective elements to support well-founded conclusions (Carter et al., 2014).

To conclude, triangulating data from the student field diary, evaluation rubric, and questionnaire allows this study to generate nuanced, reliable insights. This robust methodological approach enhances the credibility of the findings, ensuring that results are valid, balanced, and thoroughly substantiated (Denzin, 2017).

CHAPTER 5 - DEVELOPMENT OF THE INSTRUCTIONAL PROPOSAL IN THE CLASSROOM

At this stage of the study, it is essential to provide a detailed account of the development and implementation of the instructional proposal based on PBL within a first-year Degree in Tourism class. As a methodological approach, PBL has gained recognition for its emphasis on active, student-centered learning, where students engage with real-world challenges relevant to their academic and professional fields. This pedagogical strategy is particularly effective in Tourism, where practical skills and critical thinking are essential for success in dynamic, service-oriented environments (Condliffe et al., 2017). This proposal aims to encourage students to develop these competencies through collaborative projects that respond to industry demands, using a PBL framework.

The decision to adopt PBL as the core instructional approach in this study is supported by a growing body of educational research, which highlights the benefits of PBL in fostering engagement, deeper understanding, and skill development. PBL encourages students to take ownership of their learning, resulting in greater motivation and engagement compared to traditional lecture-based methods. According to Lee and Hannafin (2016), when students take responsibility for their own learning, they are more likely to engage deeply and find personal meaning in their academic tasks. This sense of ownership not only enhances motivation but also supports the development of critical thinking and problem-solving skills, as students become active participants in shaping their educational experience.

This student-centered approach is particularly relevant in the field of Tourism, where learning involves both theoretical knowledge and practical competencies, such as communication, cultural awareness, and problem-solving. Through direct involvement in projects related to the tourism industry, students undergo a learning process that is both

challenging and relevant, equipping them with skills and competencies that support their future careers.

With the design and implementation of this didactic proposal, a series of carefully planned activities were developed to address specific objectives within the *English I* course. Each activity was designed to meet the educational needs of Tourism students while matching practical industry skills, such as customer service, event planning, and intercultural communication.

Through PBL, students worked in groups to tackle real-life tasks, such as creating a marketing plan for a local tourism site or developing a sustainability plan for a community-based tourism project. At the beginning of the course, students were introduced to motivational discussions aimed at helping them recognize the importance of solving real-world problems through structured activities. These initial sessions encouraged students to engage with authentic challenges and find solutions relevant to their field of study.

This format promotes collaborative problem-solving and critical thinking while allowing students to experience challenges they may encounter in their professional careers (Condliffe et al., 2017). Furthermore, PBL fits well with the principles of constructivism, which emphasize that teaching methods, learning activities, and assessment tasks should be congruent with intended learning outcomes (Biggs et al., 2022).

In this proposal, the integration of PBL activities with the Tourism curriculum ensures that students engage in meaningful learning experiences that contribute directly to their understanding of course content and objectives. The assessment methods, including rubrics and reflective diaries, are structured to evaluate both the learning process and final outcomes, providing valuable insights into students' practical skills and conceptual understanding.

This chapter proceeds by outlining the structure and phases of PBL implementation in this class, including project selection, team formation, and the assessment criteria used to

evaluate student progress and performance during the congress. It also discusses the pedagogical considerations and challenges found in applying PBL to the Tourism curriculum and explains how these challenges were managed to maintain student motivation and achieve learning objectives. Finally, the chapter reflects on the overall impact of PBL on student learning and commitment, as well as its potential implications for future applications of PBL in Tourism education.

This instructional proposal offers a structured, experiential approach to learning, equipping first-year Tourism students with both academic knowledge and practical skills. Through active engagement in real-world projects, students are expected to gain not only a deeper understanding of tourism strategies but also a greater sense of preparedness for their future careers in the industry.

5.1. Considerations Before Implementing PBL

Before implementing a PBL approach, it is essential to consider the initial stages of preparation, particularly the motivational phase and the clear definition of the problem to be addressed. As noted by Savery (2006), PBL emphasizes real-world problem-solving and requires students to engage in collaborative, meaningful learning experiences. This process not only enhances motivation but also equips learners with skills that are directly applicable to their future professional environments.

In this study, the primary challenge identified among students was their limited understanding of professional opportunities within the tourism sector. This knowledge gap can hinder their ability to envision career paths and make informed decisions about their education and future training. To address this issue, students collaborated to organize the *First Conference of Students of Tourism*, a project designed to expose them to various career

possibilities while simultaneously developing essential skills such as teamwork, communication, and critical thinking.

This initial phase follows the recommendations of Thomas (2000), who emphasizes the importance of clearly defining the problem and confirming its relevance to the learners. Additionally, Larmer et al. (2015) emphasize the significance of student motivation as a key component of PBL, as it fosters engagement and a sense of ownership over the learning process. A real and meaningful challenge at the core of the project makes it more likely that students will take an active role in their learning, investing time and effort to achieve the desired outcomes.

5.1.1. The Motivational Phase

Implementing a student-centered methodology in a course like *English I* presents a considerable challenge. Shifting away from traditional textbook-based instruction to fully immersing students in practical, hands-on activities is an unexpected change, not only for the teacher but especially for the students.

On the first day of class, students often feel a sense of unfamiliarity, as if stepping into an entirely new learning environment. Most have just transitioned from secondary or vocational education, where they spent at least four years in familiar settings, surrounded by familiar teachers and well-established routines.

From the outset, students are surprised to discover that they will not be passive recipients of knowledge. Instead, they will take an active role in shaping their own learning experience, becoming creators of their own content under the teacher's guidance.

The assigned classroom, Room 31, is located on the third floor of the Faculty of Business and Tourism (*Universidad Complutense de Madrid*, UCM), with sessions scheduled for Mondays and Wednesdays from 9 to 11 a.m. This space served as the designated

environment for the project, running from September 18th, 2023, to December 18th, 2023. The first step in introducing the methodology was to conduct a quick oral survey, asking students to raise their hands if they were familiar with PBL. Out of 45 students, none had previous knowledge or experience with this approach. Regarding teamwork, all had either participated in group activities before or were familiar with the concept, but not in the structured, cooperative manner they would later experience, one that involved designated roles such as spokesperson, motivator, and team coordinator.

- As a starting point, students were asked to define *tourism*, *being a tourist*, and *going on a trip*. While all students provided answers, their responses lacked precision and depth. At this stage, their concentration and motivation began to unify, creating a quieter, more focused learning environment. A brainstorming session (*Annex 4*) was conducted using the digital whiteboard, where questions were displayed for students to reflect on and answer in class, such as: *What was your idea of the tourism sector and the job opportunities it offers?*, *What were the first career options you considered when choosing this Degree?*, etc.

During the following session, the same questions were revisited. This time, responses flowed more naturally, and the group demonstrated greater confidence in discussing the topic in English. Near to the end of the two sessions, it became clear that students lacked a strong understanding of the career's professional prospects. This realization led to the proposal of a unique, motivating, and innovative challenge: organizing and launching the *First Conference of Students of Tourism*.

At this point, student motivation was already high, yet significant work remained, and time was limited.

Before proceeding further, it is essential to define the concept of *motivation*. According to the Cambridge Dictionary (2024), *motivation* is: enthusiasm for doing something. It is central to the success of PBL, as it encourages student engagement, persistence, and overall achievement.

Recent studies emphasize that embedding motivational strategies within PBL enhances students' learning experiences and outcomes. Shin (2018) highlights that PBL, when structured using frameworks such as Keller's ARCS model (1987), attention, relevance, confidence, and satisfaction, significantly increases motivation in language learning. Specifically, students exhibit greater engagement when real-world problems capture their interest. However, long-term motivational factors, such as confidence and satisfaction, often require extended implementation periods before measurable improvements become evident.

Additionally, the integration of technology and collaborative elements within PBL is consistent with the demands of 21st-century education. Silva et al. (2021) argue that PBL engages students in real-world projects that require them to collaborate, communicate, and think critically. This approach not only enhances motivation but also fosters essential skills for the modern workforce. Working on meaningful and contextually relevant tasks, students experience a sustained sense of engagement that connects to their academic and professional aspirations.

Finally, motivation in PBL is closely linked to self-efficacy, as demonstrated in Shin's research. Students with higher self-efficacy tend to approach PBL challenges with greater enthusiasm and resilience, ultimately leading to better learning outcomes. The study found a positive correlation between self-efficacy and project performance, suggesting that motivated students are more likely to engage deeply with PBL tasks. This cycle of engagement and achievement underscores the importance of structuring learning experiences that build both confidence and competence in students.

5.1.2. Defining the Challenge

A significant element in applying PBL is defining a real-world challenge that students can actively explore and work on throughout the course. In this case, the issue identified is students' limited awareness of the professional opportunities available within the tourism sector. Many students begin their studies with only a general understanding of tourism, lacking a clear vision of the specific careers they can pursue. This uncertainty can impact their motivation and limit their ability to make well-informed decisions about their education and future employment.

This lack of clarity has significant consequences, as it can prevent students from fully engaging with their field of study. Without a clear understanding of career pathways, they may struggle to see the relevance of the skills they are developing. As Savery (2006) highlights, PBL is most effective when students are encouraged to investigate and propose solutions to challenges that directly impact their academic and professional development. Providing a meaningful, real-world context enhances engagement and allows students to take an active role in their own learning process.

As was described before in section 5.1, at the beginning of the project, students participated in a brainstorming session (*Annex 4*) where they were asked to reflect on their future career options. The responses revealed a general lack of clarity, with many students admitting that they had no concrete idea of the range of positions available or the specific tasks they might be expected to perform in a professional setting. Through further reflection and discussion, students recognized that one of the most effective ways to gain knowledge about the sector and its career possibilities was to organize a student congress on tourism. This initiative would allow them to engage with industry professionals, explore different career paths, and develop essential skills such as teamwork, communication, and leadership.

The importance of defining a relevant, real-world challenge in PBL has been widely emphasized in educational research. Thomas (2000) notes that effective projects push students beyond simple memorization, requiring them to actively engage with the subject matter in a meaningful way. Larmer et al. (2015) similarly point out that motivation is a key factor in PBL, as students are more likely to dedicate time and effort when they perceive a tangible connection between their learning activities and their future careers.

When students see education as more than just passing exams, when they recognize it as a pathway toward real-world opportunities, their level of participation and commitment increases significantly.

Beyond academic benefits, this project is also expected to enhance students' confidence and independence. The responsibility of organizing a congress requires initiative, problem-solving skills, and teamwork, all of which contribute to a deeper understanding of the subject matter. Shin (2018) argues that PBL not only increases motivation but also strengthens students' sense of achievement and connection with their studies.

To summarize, the primary challenge identified in this project is students' lack of clarity regarding career pathways in tourism. Through a dynamic, hands-on approach, they are encouraged to explore different possibilities, interact with professionals, and develop essential competencies. This project is expected to provide them with a clearer perspective on their future careers while simultaneously equipping them with practical skills that will support their professional growth.

5.2. Implementation of PBL

The implementation of PBL in an English-language tourism course required a fundamental shift in their approach to learning. Moving away from traditional textbook-based instruction, they entered an active learning environment where they were responsible for

constructing their own knowledge through research, collaboration, and hands-on experiences. This transformation was not solely about acquiring new content; it also involved developing main skills, such as critical thinking, teamwork, problem-solving, and professional communication. Throughout the project, students used English as their primary language of communication, reinforcing their linguistic proficiency in real-world contexts.

To structure this transition effectively, students were divided into five specialized teams, each tasked with critical responsibilities that contributed to the success of the final project: the *First Conference of Students of Tourism*. These teams worked collaboratively over the semester, addressing various logistical challenges and research projects while significantly influencing the shape of the congress.

- The Workshops and Topics Committee was responsible for designing and structuring meaningful discussions, ensuring that the congress included relevant and engaging topics related to tourism.
- The Organization Committee focused on efficient scheduling, coordinating the different components of the event to ensure smooth execution.
- The Inauguration Committee managed the planning and coordination of the opening ceremony, setting the tone for the congress.
- The Financial and Sponsorship Committee was in charge of securing resources, managing the budget, and establishing partnerships with sponsors.
- The Marketing and Logo Committee developed the event's visual identity and promotional materials, creating an impactful public image for the congress.

Each of these groups faced unique challenges that required adaptability, negotiation, and continuous refinement of their work. Throughout the semester, students had to collaborate closely, apply their problem-solving skills, and develop strategies to overcome obstacles

encountered in their respective roles. This real-world application of teamwork and project management allowed them to bridge the gap between theoretical learning and professional practice.

Ultimately, their collective efforts culminated in the execution of *the First Conference of students of Tourism*, a final project that not only demonstrated their understanding of tourism but also served as a testament to their ability to apply their knowledge in a professional setting. The congress provided a tangible result of their work, reinforcing their academic and career readiness with skills directly applicable to the tourism industry.

5.2.1. A Paradigm Shift

To carry out a PBL in an English-language tourism course marks a significant departure from traditional, teacher-centered education, shifting towards a learner-driven model. This transformation, often described as a paradigm shift, influences both teaching methodologies and the student learning experience in multiple ways.

However, this transition was neither immediate nor effortless. Adapting to this new methodology required effort, openness, and perseverance from both students and the teacher. Initially, the change was particularly challenging because students were not accustomed to taking an active role in their own learning. No longer passive recipients of information, they had to become active participants in constructing their knowledge, requiring initiative, creativity, and a willingness to step outside their comfort zones.

In many ways, this shift resembled an artist confronting a blank canvas. At first, students hesitated, unsure of how to begin and questioning their ability to shape their own educational journey. But as the project progressed, they embraced the challenge, experimented, and gained confidence in their ability to create. Just as a painter transforms an empty canvas

into a meaningful work of art, students gradually took ownership of their learning, developing their understanding through research, collaboration, and problem-solving.

This methodological transformation redefined several key aspects of the learning process:

1) From passive learning to active participation.

In conventional classroom settings, students are accustomed to passively receiving information, listening to lectures, memorizing content, and completing structured exercises. However, in this course, PBL required students to take an active role in their learning. Rather than simply studying theoretical concepts of tourism, they engaged in real-world tasks, such as organizing a student congress on tourism. This approach required them to:

- Conduct research on tourism trends and career opportunities.
- Collaborate in structured teams with defined roles.
- Communicate effectively in English in real-life contexts.
- Solve problems and make decisions independently.

2) The evolving role of the teacher.

Traditionally, teachers act as the primary source of knowledge, delivering structured lessons and assessing students based on standardized criteria. In PBL, however, the instructor serves as a facilitator, mentor, and guide, rather than a lecturer. Instead of simply providing answers, the teacher:

- Guided students in discovering information through research and discussion.
- Encouraged critical thinking with open-ended questions.
- Supported teamwork, helping students manage group dynamics.
- Provided feedback rather than dictating solutions.

This shift helped students develop autonomy and self-direction, both of which are essential skills for academic and professional success.

3) From individual work to collaborative learning.

Another major transformation was the shift from individual work to teamwork, mirroring real-world professional environments. While traditional education often evaluates students based on individual performance, PBL emphasizes collaborative learning. In this study, students were assigned specific team roles such as spokesperson, motivator, and coordinator. Through structured teamwork, they not only strengthened their communication skills but also experienced both the challenges and benefits of collaboration, an essential aspect of the tourism industry.

4) From theoretical knowledge to real-world application.

In many traditional courses, students learn theories but rarely apply them in practical scenarios. The introduction of the *First Conference of Students of Tourism* radically changed this dynamic, closing the gap between academic content and professional practice. Instead of just reading about tourism concepts, students:

- Interacted with industry professionals.
- Developed organizational and leadership skills, planning a real event.
- Practiced public speaking and networking in English.
- Explored career opportunities and industry trends firsthand.

Real-world challenges enabled students to deepen their understanding of the tourism industry and improve their employability.

5) From short-term learning to lifelong skills development.

This paradigm shift extended beyond academic success. The skills students developed (critical thinking, communication, problem-solving, adaptability, and leadership) are all needed in modern careers. As studies by Shin (2018) and Silva et al. (2021) suggest, PBL not

only reinforces motivation but also cultivates skills that contribute to long-term academic and professional achievement.

Students did not just complete a course but gained hands-on experience that prepared them for real-world challenges.

The adoption of PBL in this course represented a major shift from traditional teaching to an interactive, student-centered approach. Through active participation, collaborative teamwork, real-world application, and self-directed learning, students were not only more engaged but also better prepared for their future careers in tourism.

Initially, this change required significant effort from both students and the teacher. However, over time, it became evident that students were not merely learning about tourism, they were actively shaping their own educational journeys, much like an artist transforming a blank canvas into a masterpiece. More than just a new teaching method, this transformation redefined how students perceived learning, their role in the classroom, and their future professional pathways.

5.2.2. Assigned Tasks

With the transition from a traditional, textbook-based approach to active learning, students faced the challenge of taking responsibility for their own learning process. To guarantee a structured and well-organized application of PBL, the class was divided into five specialized teams. Each group was assigned specific tasks that contributed to the successful planning and execution of the *First Conference of Students of Tourism*.

These teams worked throughout the semester on organizing, researching, content development, technical implementation, and logistics management, progressively transforming theoretical concepts into practical applications. The following sections describe the work

carried out by each team, detailing their roles, responsibilities, and the steps they took to secure the success of the event.

a) Workshops and Topics Committee

One of the fundamental components of the congress was the development of workshops that would engage participants in discussions about artificial intelligence (AI) in tourism and sports tourism. Additionally, this team was responsible for gathering, advising, and scheduling the topics that the different student groups would present in their talks. The Workshops and Topics team was responsible for researching, structuring, and organizing these sessions to ensure they were informative, interactive, and connected to the congress' objectives.

Their work spanned several weeks and involved multiple phases, including selecting topics, developing content, implementing technical features, and rehearsing their final presentations. The team's work began with a brainstorming session to determine the most relevant themes for their workshop. After careful consideration, they decided to focus on two main areas:

- Artificial Intelligence in Tourism – Examining how AI can improve the travel experience through tools such as chatbots, QR codes, and digital platforms. The group proposed creating a website that would provide travelers with essential information about destinations, accommodations, and activities.
- Sports Tourism – Analyzing the impact of major sporting events on travel and tourism, specifically exploring how people travel to attend sports events across Spain.

Once these topics were established, the team split into two subgroups, each dedicated to one of the themes. This division allowed for a more thorough investigation and a structured approach to developing their respective sessions.

To guarantee an efficient workflow, each subgroup assigned specific responsibilities to its members. The AI team concentrated on designing the website, creating content, and developing interactive elements, while the sports tourism team focused on gathering case studies, investigating the effects of sporting events on travel trends, and preparing video materials to illustrate their findings.

During this stage, they also evaluated the budget necessary for their workshops. The AI team calculated the costs associated with building the website and generating QR codes, while the sports tourism team outlined the expenses related to research, video production, and workshop materials. This financial assessment helped them allocate resources wisely and establish a timeline for each stage of development.

As they progressed, the team refined the structure of their sessions and integrated interactive components to enhance audience engagement.

- The AI group worked on designing the website, ensuring that it was both functional and user-friendly. At the same time, the sports tourism group defined the key concepts they wanted to emphasize, selecting real-life examples to illustrate their discussion points.
- To make their sessions more dynamic, the AI team incorporated QR codes into their materials, allowing participants to quickly access additional resources related to different travel destinations.
- The sports tourism team focused on producing multimedia content, such as short videos, to showcase how sporting events influence tourism flows.

Throughout this phase, both groups continuously refined their presentation materials, ensuring that their content was not only well-organized but also engaging for the audience.

With the workshop framework in place, the AI group began drafting their speech. They structured their session into different sections, including:

1. An introduction to AI in tourism.
2. A demonstration of the website and QR code functionality.
3. An explanation of how chatbots can assist travelers.
4. A discussion on the future role of AI in the tourism sector.

As they were preparing their presentations, they also worked on improving the PowerPoint slides and rehearsed their delivery to ensure fluency and coherence. Special attention was given to smooth transitions between speakers and the clarity of their explanations.

The AI team developed a chatbot using Botpress to answer frequently asked questions from tourists about attractions, transportation, and accommodation.

- The chatbot was programmed with key variables to make interactions intuitive and efficient.
- Once integrated into the website, they tested its functionality and designed supporting slides to explain how it worked.

Meanwhile, the sports tourism team continued fine-tuning their presentation, incorporating feedback from peers and refining their materials to ensure a compelling delivery.

Throughout this phase, both teams rehearsed extensively, testing their content in front of classmates and making necessary modifications based on feedback. They focused on improving both the clarity of their message and the overall structure of their sessions.

As the congress date approached, the team concentrated on polishing every aspect of their presentations.

- They revised their speeches and adjusted the structure of their sessions to guarantee a well-paced and coherent experience for participants.

- The final rehearsals focused on refining their timing, ensuring each segment flowed naturally into the next.
- Last-minute adjustments were made to the chatbot, website, and multimedia materials, ensuring that all interactive components functioned correctly.

To conclude, the Workshops and Topics Committee played an important role in designing and executing engaging workshops that combined theoretical knowledge with practical application. Their sessions on AI in tourism and sports tourism offered participants a hands-on learning experience, supported by digital tools and real-world examples. Through collaborative research, technical development, and ongoing improvements, they successfully created informative and interactive presentations.

This experience not only enriched their understanding of the tourism industry but also helped them develop beneficial skills in teamwork, problem-solving, and digital tool integration, skills that will be highly useful in their future careers.

b) Organization Committee

This team ensured that the event's timetable was efficient, balanced, and adapted to the availability of participants. Additionally, they worked on preparing their own speeches while collaborating with other teams to integrate all aspects of the event smoothly. The group was also responsible for collecting, advising, and scheduling the topics that different student groups would present during their sessions, ensuring coherence and variety in the congress program.

The first major task of the Organization Committee was the creation of the event timetable. After drafting an initial version, they reviewed and refined it by taking into account essential factors such as session durations, rest breaks, and the availability of presenters.

- The first draft of the schedule was completed and compared with other models to ensure a well-balanced structure.

- After reviewing the initial version, the teacher provided suggestions for modifications, prompting the team to adjust certain time slots.
- As the planning progressed, they made further refinements, particularly adjusting the timetable to accommodate students who could not attend the morning sessions.
- Once a stable version was finalized, it was submitted to the coordination team for approval and integration into the overall event plan.
- Final adjustments included adding the names of the presentations to each time slot, ensuring that all sessions were properly organized.

Alongside their scheduling duties, the team was responsible for developing their own speeches, which required careful research, drafting, and revision.

- They began by gathering ideas and analyzing different sources to ensure well-supported content.
- After completing an initial draft, they presented a preliminary version of their speeches to the teacher, receiving feedback to improve clarity and coherence.
- They continued refining their speeches, working both individually and collaboratively to enhance the presentation flow.
- Changes were made to adapt their speeches to fit the congress objectives, making the language and content engaging for the audience.
- Bibliographic references were compiled to support their arguments and provide credibility to their presentations.

As the conference date approached, the Organization Committee focused on the final details of both the event schedule and their own presentation.

- They carefully reviewed the entire timetable, ensuring that all speeches were correctly listed and allocated the necessary time.
- The final PowerPoint presentation was created, incorporating key visuals and references to enhance audience engagement.
- Last-minute refinements were made, including adjusting times, checking photo references, and polishing the speech content.

In summary, the Organization Committee played a vital role in ensuring the successful realization of the congress. Their work in structuring the timetable, coordinating speech topics, and preparing their own presentations was essential to the event's success. Through effective task management, they developed key organizational, problem-solving, and time management competencies, which will be valuable in their future professional endeavors.

c) The Inauguration Committee

This team was responsible for organizing and coordinating the opening ceremony, preparing an engaging speech, and managing logistical arrangements for the first moments of the event. Additionally, they handled the arrival of guest speakers, ensuring that the event's launch was both professional and well-coordinated. Their work required detailed planning, teamwork, and constant collaboration with other departments to guarantee that everything was ready.

The group was officially established at the beginning of the project, with its members tasked with handling the reception of attendees, introductory speeches, and overall management of the opening ceremony. Once roles were assigned, the team's efforts focused on defining their main objectives and responsibilities, aiming to coordinate effectively with all other teams. After setting up the framework for their work, they began brainstorming speech ideas for the inaugural presentation. The main theme chosen was environmental sustainability

in tourism, specifically the impact of biodiversity loss caused by tourism-related activities. Each member was responsible for researching different aspects of the topic, gathering reliable data, and structuring their findings into a coherent and engaging speech.

As the weeks progressed, the group refined their presentation structure, ensuring that their speech was clear, informative, and accessible to a diverse audience. Special attention was given to:

- Pronunciation and coherence, making sure that each section transitioned smoothly into the next.
- Tone and style, ensuring that the speech resonated with both local and possible Erasmus participants.
- Use of visuals, incorporating PowerPoint slides to complement the presentation without overwhelming the audience with excessive text.

Rehearsals were an essential part of their preparation. After their first practice session, they received feedback from their professor, which helped them improve their delivery and refine key points. The speech was also adjusted to include a formal introduction, welcoming attendees and setting the tone for the activity.

Apart from their speech, the team took on a logistical planning role, ensuring that all technical and organizational aspects of the inauguration were handled effectively.

- They finalized the schedule for the opening ceremony, assigning each member a specific role.
- Coordination with Faculty personnel was essential to reserve spaces, confirm room availability, and arrange seating for the event.
- They ensured that all technical requirements (audio-visual equipment, microphones, and lighting) were in place for a smooth presentation.

- They worked closely with the Faculty staff (clerks, etc.) to guarantee that everything was functioning correctly on the day of the event.

As the date approached, the team concentrated on finalizing all logistical details, including:

- Organizing the arrival and reception of keynote speakers.
- Preparing a playlist of international music to be played during the opening ceremony, reflecting the diversity of the student group.
- Making last-minute refinements to the presentation materials, slides, and scripts.

In the final days, the Inauguration Committee conducted multiple rehearsals to ensure that every aspect of their presentation was polished and well-coordinated.

- They practiced their speeches several times to gain confidence and improve their public speaking skills.
- The final run-through included testing the AV equipment, ensuring that all visual elements were properly displayed.
- A walk-through of the event space was conducted to review seating arrangements, signage, and overall event flow.

On the day before the lectures, they completed a full rehearsal, checked all logistical elements, and ensured that the team was fully prepared for the inauguration.

The Inauguration Committee played a critical role in setting the tone and professionalism of the event. Their experience in event planning, teamwork, public speaking, and logistical coordination provided them with valuable skills that will serve them well in their future careers in the tourism industry.

d) Financial and Sponsorship Committee

The responsibilities of the Financial and Sponsorship Committee included fundraising, coordinating sponsorships, distributing financial resources among departments, and overseeing expenditure to maintain a balanced budget. Moreover, this team was in charge of advising, assisting, and scheduling financial requests from various groups to ensure that all essential resources were allocated efficiently. Their work required meticulous planning, collaboration, and continuous adjustments to ensure that the event ran smoothly without disruptions.

The team began by brainstorming creative ways to generate funds for the congress. Among the ideas proposed were:

- Organizing a small market where they would sell homemade products such as biscuits, brownies, coffee, and cookies.
- Hosting a lottery game to engage participants and encourage contributions.

Once these ideas were approved, the team divided responsibilities to streamline execution. They also reached out to other committees to coordinate efforts and maximize participation, ensuring the best possible outcome for their fundraising initiatives.

At the same time, the committee started collecting budget proposals from various teams, allowing them to assess the financial requirements of different conference activities. They collaborated closely with the rest of the committees to use resources effectively and prevent unnecessary expenses.

Once all committees submitted their financial needs, the team began compiling a detailed budget breakdown, making sure every request was accounted for. Among their key tasks were:

- Estimating costs for flyers, posters, and invitation cards in collaboration with the Marketing and Logo Committee.

- Gathering information on the materials needed for workshops, including supplies requested by the Workshops and Topics Committee.
- Reviewing the Inauguration Committee's list of required items for the opening ceremony.

To secure additional financial support, they drafted a formal request to the vice-chancellor, outlining the importance of the congress and the necessity of funding. At the same time, they contacted formally by e-mail the teacher to obtain authorization for their fundraising activities, ensuring compliance with university regulations.

As they refined their financial plan, the team recalculated the total estimated expenses and postponed their funding request to the vice-chancellor until they had a more precise projection of the budget. This decision allowed them to avoid unnecessary revisions and submit a well-prepared proposal.

As preparations advanced, the team turned their attention to the logistical aspects of managing finances. They:

- Developed a structured timeline for allocating funds to different activities.
- Evaluated the financial feasibility of the sessions, ensuring all expenses were covered.
- Confirmed possible guest speakers, managing any costs associated with their participation.

A meaningful part of their work also involved reviewing financial plans for workshops, presentations, and shared resources across departments. This ensured that money was spent wisely and that every team had the necessary funding to carry out their respective tasks.

Furthermore, the committee played a role in the academic aspect of the conference by preparing a speech on ecological tourism and coordinating their financial planning with the event's theme.

In the lead-up to the meeting, the team focused on:

- Ensuring that the budget summary was clear, accurate, and easy to present.
- Attending other committees' presentations to stay informed about their progress and identify areas where financial support was still required.
- Providing feedback and financial advice to ensure that spending remained within limits.

In the final days before the event, they rehearsed their presentation, refining their explanations of budget distribution and fundraising efforts. They incorporated feedback from classmates and Faculty to ensure their message was conveyed effectively. Additionally, they finalized visual materials to support their presentation, ensuring clarity and professionalism.

The last rehearsal focused on:

- Perfecting speech transitions and confirming financial allocations.
- Finalizing documents that would be used during the session.
- Verifying meeting points and schedules to ensure that financial transactions and sponsorship-related activities ran efficiently during the event.

Through their meticulous financial planning, fundraising strategies, and organizational skills, the Financial and Sponsorship Committee was key to the successful execution of the *First Conference of Students of Tourism*. Their work provided them with practical experience in budget management, negotiation, and resource allocation, essential skills for careers in tourism and event management.

e) Marketing and Logo Committee

This committee was divided into two teams due to the large volume of work the students had to manage. Their responsibilities included creating a recognizable logo, designing flyers and posters, managing digital promotions, and ensuring the effective placement of marketing materials throughout the Faculty of Business and Tourism. Additionally, they played a key role in coordinating with Faculty authorities, securing approval for promotional activities, and ensuring that the project was well-publicized.

The committee was structured into two subgroups: one focusing on logo and branding, while the other concentrated on flyers, posters, and overall marketing efforts. Despite their distinct tasks, both teams worked closely together to guarantee that all promotional elements were cohesive and in harmony with the conference's theme of sustainability and global tourism.

The team began by organizing roles, ensuring that each member contributed to different aspects of the project. One subgroup brainstormed logo concepts, while the other researched effective ways to promote the event through flyers, posters, and digital platforms. A dedicated communication channel was established to facilitate coordination and feedback among team members.

From the outset, the Logo Design Team explored various visual concepts, incorporating themes such as global connectivity, travel, and environmental responsibility. Meanwhile, the Marketing Team developed a promotional plan, which included printed materials, digital displays, and social media campaigns.

As the weeks progressed, the Logo Design Team refined their initial sketches, experimenting with colors, typography, and imagery that best represented the meeting's identity. Several logo drafts were presented to the Organization Committee, who provided constructive feedback. Eventually, one design was selected as the official logo, with minor adjustments made to enhance clarity and impact.

Simultaneously, the Marketing and Logo Committee worked on designing posters and flyers to capture attention and provide essential event details. Their work included:

- Submitting an official request to the Vice Dean of Students for permission to place promotional materials in high-traffic areas.
- Coordinating with the others committees to display digital posters on Faculty screens, ensuring visibility across campus.
- Outlining a distribution strategy for printed materials, targeting institution noticeboards, entrances, and common areas.

After receiving approval from Faculty authorities, the team moved forward with printing and distributing posters, while also finalizing digital versions for online and screen-based promotion.

As the preparations advanced, the team received feedback from both Faculty and students regarding the flyers, posters, and logo design. Adjustments were made to improve visual appeal and readability, ensuring that key information was easily accessible.

At the same time, the Marketing Team worked on additional elements to enhance the conference's visibility:

- QR codes were integrated into flyers to provide instant access to the conference schedule and details, reducing the need for printed materials.
- Directional signage was designed and strategically placed to guide attendees to workshops, presentations, and the registration desk.
- The team collaborated with the Financial and Sponsorship Committee to confirm the budget for marketing expenses, ensuring efficient use of resources.

Meanwhile, the Logo Design Team finalized the branding elements and ensured a consistent visual identity across all promotional materials.

In addition to their marketing responsibilities, the committee was also tasked with preparing a 15-minute speech on the importance of marketing in tourism. Their presentation highlighted:

- The role of branding and advertising in promoting tourism destinations.
- How marketing strategies influence consumer behavior and travel decisions.
- The integration of sustainable practices into tourism marketing campaigns.

To ensure a polished delivery, the team:

- Developed PowerPoint slides featuring real-world marketing examples.
- Practiced their speech multiple times, receiving feedback from peers and Faculty to improve clarity and engagement.
- Refined their presentation style and timing, making necessary adjustments based on rehearsal sessions.

As the day approached, the Marketing and Logo Committee focused on finalizing all promotional materials and logistical details. Their last tasks included:

- Ensuring that all printed materials were correctly placed in designated areas within the facilities.
- Coordinating the last-minute placement of digital advertisements on Faculty screens.
- Conducting a final review of signage placement, confirming that all directional signs were clear and easy to follow.

The team also participated in final speech rehearsals, incorporating last-minute refinements to enhance the flow and impact of their presentation. They worked closely with other committees to guarantee that all marketing efforts matched the event schedule.

On the eve of the conference, they conducted a final walkthrough of the venue and verified that everything was in place for a smooth and professional event experience.

The Marketing and Logo Committee played an essential role in establishing the visual identity and promotional reach of the congress. Their efforts in logo design, flyer and poster creation, digital marketing, and signage placement ensured that the event was effectively publicized and easy to navigate. Through their work, the team developed valuable skills in graphic design, strategic communication, event promotion, and teamwork, necessary competencies for future careers in Tourism.

5.2.3. Teacher and Student Roles in PBL

The implementation of PBL represents a great departure from traditional teacher-centered approaches, shifting the dynamic between instructors and students. Unlike conventional methods, where the teacher serves as the primary source of knowledge and students are passive recipients, PBL fosters an interactive, student-driven learning environment. In this model, the teacher assumes the role of a facilitator, while students take ownership of their learning process, promoting active engagement, critical thinking, and collaboration.

However, this transformation does not come without challenges, particularly in higher education, where studies on the practical effects of PBL remain limited. This is even more evident in ESP courses, where the application of PBL is still in its early stages. Implementing this learner-centered approach in a university setting required both students and instructors to adapt to a model that emphasizes autonomy, problem-solving, and real-world application.

Despite initial difficulties, the experience provided valuable insights into how redefining traditional roles enhances engagement and learning outcomes.

To better understand this shift, it is essential to examine two key aspects: the teacher's role as a facilitator, and the students' role as active participants.

1) The Teacher as a Facilitator

In PBL, the teacher does not act as the only source of knowledge but as a guide, mentor, and support, assisting students as they progress. Aksela and Haatainen (2019) state that teachers in PBL create an environment that encourages inquiry, problem-solving, and independent learning. Instead of giving direct answers, they are expected to:

- Lead discussions and ask questions that push students to think in a critical way.
- Offer structured assistance at the start of the project and reduce it step by step as students gain confidence and work on their own (scaffolding approach, as explained by Habók and Nagy, 2016).
- Motivate students to strengthen teamwork, communication, and project management skills, which are important for success in academic and professional fields.

2) Students as Active Participants

Students in PBL are no longer passive learners but rather active creators of knowledge. They are responsible for researching, collaborating, and producing meaningful outcomes, which, according to Aksela and Haatainen (2019), and it fosters motivation and engagement. Unlike traditional learning models that focus on exams and written assignments, PBL requires students to demonstrate their understanding through tangible projects, presentations, and real-world applications.

Donnelly and Fitzmaurice (2005) focus on the importance of addressing student needs in curriculum design, which is a key aspect of learner-centered approaches. However, this shift

in responsibility brings challenges. Students must learn to manage their time, work with peers while handling group dynamics, and find ways to solve problems when unexpected situations arise (Donkoh & Amoakwah, 2024).

Initially, this level of independence can be overwhelming, but with the right guidance from teachers, students gradually build confidence and autonomy in their learning process. Habók and Nagy (2016) further highlight that PBL enhances self-efficacy, or the belief in one's ability to succeed. As students progress through the project, they develop stronger decision-making and problem-solving skills, reinforcing a cycle of learning and achievement.

In conclusion, the transition to PBL requires a fundamental redefinition of traditional classroom roles. Teachers shift from being knowledge transmitters to facilitators, guiding students rather than dictating information. Students, in turn, take on greater responsibility, developing autonomy, teamwork skills, and critical thinking abilities. Research by Aksela and Haatainen (2019), Habók and Nagy (2016), and Donnelly and Fitzmaurice (2005) suggest that this approach stimulates engagement, motivation, and the development of essential skills, preparing students for real-world professional challenges.

Furthermore, the application of PBL in higher education presents a valuable opportunity, as research on its practical application at the university level remains limited, particularly in ESP courses. While PBL has been widely explored in primary and secondary education, its effects on university students remain an area of ongoing study. This gap in research made the adoption of PBL in this course both an innovative opportunity and a challenge, requiring careful planning and adaptation from both teachers and students.

5.3. The Day of the Conference

The *First Conference of Students of Tourism* was a carefully structured event, divided into two key phases: the preparatory stage and the day of the activity⁹. Each step was meticulously organized to ensure a meaningful experience for all participants.

In the lead-up to the congress, selecting a relevant and motivating theme was a priority (*Annex 5*). The chosen topic was designed to reflect current trends in tourism and to appeal to students, professionals, and enthusiasts alike. Another vital aspect was finding a suitable venue that met the necessary requirements in terms of accessibility, properly equipped classrooms, and modern facilities for an event of this nature. While other activities such as a city tour were considered an enriching option, they were not meaningful for the main program. The date was also carefully chosen to avoid scheduling conflicts with public holidays, extended weekends, or major local events, ensuring maximum attendance. Given its timing at the end of the semester, it coincided with the regular academic assessment period within the Faculty, allowing students to integrate this experience into their academic journey.

One of the main challenges in organizing the activity was the lack of an official budget. However, thanks to the dedication, creativity, and resourcefulness of the students, the event was successfully carried out without external financial support. This collective effort demonstrated the potential of student-led initiatives and their ability to manage complex projects through determination and teamwork.

In the days preceding the event, this gained visibility through a promotional campaign displayed on the Faculty Hall screens (*Annex 6*). This initiative added credibility and a sense of anticipation, creating a vibrant atmosphere that reinforced the authenticity of the work.

⁹ The Conference took place on December 11th, 2023.

On the day of the event, the Vice Dean of Student Affairs attended the opening ceremony, underscoring the importance of student engagement in academic and professional settings. Two professors specializing in English for Specific Purposes, Dr. Azucena Barahona Mora and Dr. Daniel Martín González, also contributed to the academic dimension of the congress by delivering online presentations connecting attendees with scholarly insights

Students played a central role in the event, delivering their own presentations (*Annexes 7 and 8*) with evident enthusiasm and motivation. Their dedication was apparent throughout the sessions, creating a dynamic and interactive learning environment.

The congress took place over the course of a full day, with a scheduled lunch break. Although official catering services could not be provided due to administrative restrictions, a casual lunch gathering was organized in the small garden adjacent to the Faculty, a free-access space frequently used by students. This alternative setting encouraged informal discussions and networking in a relaxed, outdoor environment.

Alongside the scheduled presentations and workshops, attendees participated in a Faculty visit and cultural experience, which included an informal share-coffee session conducted in English. This activity provided a natural setting for conversation and exchange while encouraging students to practice their communicative skills in a professional yet approachable context. The emphasis on spoken English context allowed participants to further develop their language competences in real-world interactions.

The workshops proved to be an outstanding success, with participants fully engaged in discussions and interactive activities. The diversity of perspectives and the practical approach of the sessions were particularly well received, reinforcing the value of active participation in professional development.

Throughout the day, the Organization and Inauguration Committees managed attendee registration verification, ensuring a smooth check-in process for all participants. The whole schedule gave the conference a sense of structure and formality.

A short and emotional closing ceremonies finish these sessions, setting the tone for the event and summarizing key insights at its conclusion. The teacher thanks the participants, the Faculty and all the staff involved in the organization of the event.

Although no actual hotel bookings or travel arrangements were necessary, the event was designed as if students from other institutions were expected to attend, allowing the organizing team to experience the logistics of a possible international event. This simulation added an additional layer of realism to the event planning process and strengthened the students' ability to manage complex academic gatherings.

In conclusion, the *First Conference of Students of Tourism* successfully combined academic discourse, practical experience, and professional networking. Despite the absence of financial backing, the collaborative spirit and proactive approach of the students made it possible to deliver a well-organized and engaging event. The enthusiasm and positive response from both students and Faculty members reflected the impact of this experience and its potential as a model for future editions.

CHAPTER 6 – RESULTS

This chapter presents the results obtained from both quantitative and qualitative analyses conducted in this study. The statistical tools used were carefully selected based on the nature of the data and the research objectives, ensuring a comprehensive examination of the effectiveness of PBL in developing communicative competence among first-year Tourism students.

The first section focuses on the quantitative analysis of students' academic outcomes, beginning with descriptive statistics to summarize general trends in the data. This is followed by inferential statistical tests to determine significant differences between groups. Given the quasi-experimental nature of this research, statistical tests such as ANCOVA, *t*-tests, ANOVA, and the Tukey test were applied to assess the impact of PBL on students' performance, while also accounting for potential confounding variables.

The second section examines the quantitative analysis of students' responses to the questionnaires, evaluating their perceptions of the methodology. The internal consistency of the questionnaire is measured using Cronbach's Alpha, while correlations between different variables are explored through Pearson and Spearman correlation tests. These analyses aim to identify possible relationships between students' engagement, motivation, and academic performance.

The final section presents the qualitative analysis, offering a deeper understanding of students' experiences, opinions, and reflections regarding PBL. This qualitative perspective complements the statistical findings, providing a broader view of the impact of this methodology on learning dynamics, teamwork, and communicative competence development.

Through this analysis, the chapter seeks to provide a solid empirical foundation for assessing the effectiveness of PBL compared to traditional teaching methods, contributing to ongoing discussions on innovative pedagogical approaches in higher education.

6.1. Quantitative Analysis of Student Outcomes

Quantitative methodology refers to a systematic investigation that primarily focuses on quantifying relationships, behaviors, and phenomena through numerical data and the application of statistical techniques (Creswell & Creswell, 2017). This research approach is characterized by its objectivity, replicability, and potential for generalization, making it a valuable tool in educational research (Muijs, 2010).

Several key characteristics define quantitative research. In the first place, it relies on numerical data, which is collected through methods such as surveys, experiments, and secondary data analysis (Field, 2018). The numerical nature of the data allows for precise measurement and statistical analysis. Secondly, statistical analysis is central to quantitative research, using descriptive and inferential techniques to analyze data, test hypotheses, and make predictions (Trochim et al., 2016). Besides, hypothesis testing is fundamental, as researchers formulate and test hypotheses using theoretical frameworks and statistical methods to validate findings. (Creswell & Creswell, 2017). Finally, generalizability is one of the strengths of quantitative research, with appropriate sampling techniques and sufficiently large sample sizes, findings can often be extended to larger populations (Muijs, 2010).

Quantitative research can be categorized into four primary types. In the first place, descriptive research aims to accurately document and describe a population, situation, or phenomenon without attempting to establish causal relationships (Trochim et al., 2016). Secondly, correlational research identifies and measures the strength and direction of relationships between two or more variables, though it does not imply causation (Muijs, 2010). Also, experimental research involves manipulating an independent variable to determine its effects on a dependent variable, usually in a controlled setting to establish causal relationships (Creswell & Creswell, 2017). Lastly, quasi-experimental research, the approach used in this study, is similar to experimental research but lacks random distribution to groups. This design

is commonly applied in educational and social science research where random assignment is not feasible (Trochim et al., 2016).

In this study, a part from the open question used to collect qualitative data, a Likert-scale questionnaire was administered to gather data on three main aspects: learning-related aspects, motivation, and group work.

The next section presents the quantitative analysis of students' academic outcomes, focusing on the impact of PBL compared to traditional methodologies. The goal is to determine whether students who participated in PBL demonstrated big improvements in communicative competence.

To achieve this, various statistical techniques were applied to examine distribution, trends, and relationships within the dataset. Field (2018) emphasizes the importance of using SPSS for statistical analysis in quantitative research, highlighting its ability to efficiently handle large datasets, facilitate hypothesis testing, and support data visualization and interpretation. These capabilities make it an essential tool for researchers seeking accurate and replicable results.

The analysis begins with descriptive statistics, which provide an overview of central tendencies, variability, and distribution patterns within the data. These initial findings serve as a foundation for the application of inferential statistical tests, which help determine whether the observed differences between groups are statistically significant. Through these methods, this study ensures a thorough and evidence-based evaluation of the effectiveness of PBL in the context of first-year Tourism students.

6.1.1. Descriptive Statistical Analysis

The descriptive statistical analysis serves as the initial step in examining the data collected on students' academic outcomes. This section provides an overview of key statistical

measures, including mean, standard deviation, and distribution patterns, to assess overall performance trends in both the experimental and control groups. Through the analysis of these indicators, variations in student achievement can be identified as well as determine whether any preliminary differences emerge between the groups before conducting inferential statistical tests.

This exploratory analysis not only establishes a foundational understanding of the dataset but also ensures that subsequent inferential tests (such as ANCOVA and *t*-tests) are applied to data that meet the necessary assumptions for validity and reliability. Identifying trends at this stage helps contextualize the later statistical analyses and provides insights into the impact of PBL on communicative competence over students.

a) Group B (Experimental) – 45 Students

Median Age of Group B

The median age of Group B was calculated as 19.47 years. This value is slightly below the overall median age of all groups, which is 19.65 years. In comparison, Group A had a median age of 19.81 years, Group C had 18.85 years, and Group E had 20.45 years. Table 1 summarizes these findings.

Table 1*Summary of Median Age for Experimental Group B*

		Value
Standard Attributes	Position	2
	Label	Student Age
	Type	Numeric
	Format	F8.2
	Measurement	Scale
	Role	Input
N	Valid	45
	Missing	0
Central Tendency and Dispersion	Mean	19.4667

As shown in Table 1, the experimental group consisted of 45 students. The variable *Student Age* was measured on a numerical scale, with no missing values (N = 45, valid = 45, missing = 0). The mean age of the participants was 19.47 years (M = 19.47), indicating that most students were recent secondary or vocational school graduates. This demographic factor is relevant to the study, as age can influence language acquisition, cognitive development, and adaptability to innovative methodologies such as PBL.

A relatively homogeneous age range within the experimental group increases comparability with the control groups, minimizing the impact of external variability related to age differences. Additionally, younger learners may demonstrate greater adaptability to interactive and collaborative learning approaches, which is particularly relevant when

assessing the effectiveness of PBL in improving communicative competence in English as a second language.

Table 2

Summary of Median Age of All Participants Across All Groups

		Value
Standard Attributes	Position	3
	Label	Student age
	Type	Numeric
	Format	F8.2
	Measurement	Scale
	Role	Input
N	Valid	182
	Missing	1
Central Tendency and Dispersion	Mean	19.6538

On the other hand, as shown in Table 2, the average age of all participants, including both the experimental and control groups, was 19.65 years ($M = 19.65$). This indicates a relatively homogeneous sample in terms of age distribution, as most students were recent secondary or vocational school graduates. Compared to the mean age of the experimental group (Table 1), which was 19.47 years ($M = 19.47$), the difference is minimal and not substantial.

Additionally, an examination of the control groups, particularly Control Group A, reveals that the average age remains within a similar range. This suggests that age is not a significant differentiating factor between groups. Such consistency across groups is relevant,

as it reduces potential biases related to cognitive development and prior educational experiences, which could otherwise influence the effectiveness of different teaching methodologies, such as PBL versus traditional approaches. The small variations in mean age further reinforce the comparability of the study sample, ensuring that observed differences in learning outcomes can be more confidently attributed to the instructional methods rather than demographic discrepancies.

Grade Distribution in Group B

The grade distribution in Group B indicated a strong academic performance, with the majority of students achieving grades in the *notable* (28.9%) (good) and *sobresaliente* (57.8%) (outstanding) categories. A smaller proportion (13.3%) fell into the *aprobado* (pass) category, demonstrating that only a minority of students achieved the minimum passing grade.

Table 3

Grade Distribution for Group B

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	<i>Aprobado</i> (Pass)	6	13.3	13.3	13.3
	<i>Notable</i> (Good)	13	28.9	28.9	42.2
	<i>Sobresaliente</i> (Outstanding)	26	57.8	57.8	100
	Total	45	100	100	100

Table 3 presents the grade distribution for the experimental group (Group B). The results indicate that out of 45 students, 6 (13.3%) received a passing grade (*aprobado*), 13 students (28.9%) obtained a good grade (*notable*), and 26 students (57.8%) achieved an

outstanding grade (*sobresaliente*). The cumulative percentage suggests that the majority of students performed at a high academic level, with nearly 86.7% achieving grades in the *notable* or *sobresaliente* categories.

Grades by Age in Group B

A detailed breakdown of grades by age reveals that younger students (ages 18 to 20) in Group B tended to perform well, making up a substantial portion of high-achieving students. This trend suggests potential age-related factors in adaptability to the experimental teaching method, as younger learners may have demonstrated greater flexibility and responsiveness to the PBL approach.

Table 4

Grade Distribution by Age for Group B

Grade		Frequency	Percentage	Valid Percentage	Cumulative Percentage
<i>Aprobado</i>	Valid	18	1	16.7	16.7
		22	2	33.3	50.0
		24	3	50.0	100.0
		Total	6	100.0	100.0
<i>Notable</i>	Valid	18	6	46.2	46.2
		19	4	30.8	76.9
		20	3	23.0	100.0
		Total	13	100.0	100.0
<i>Sobresaliente</i>	Valid	18	12	46.2	46.2
		19	7	26.9	73.1
		20	4	15.4	88.5
		22	1	3.8	92.3
		23	1	3.8	96.2
		24	1	3.8	100.0
		Total	26	100.0	100.0

Table 4 presents the distribution of students' ages across different grade categories in the experimental group (Group B). Among students who received a passing grade (*aprobado*), ages ranged from 18 to 24 years old, with the majority (50%) being 24 years old. For students who achieved a good grade (*notable*), the most common age was 18 years (46.2%), followed by 19 years (30.8%) and 20 years (23.1%). Among students who obtained an outstanding grade (*sobresaliente*), 46.2% were 18 years old, 26.9% were 19 years old, and smaller percentages were observed for ages 20 to 24.

This distribution suggests that younger students, particularly those aged 18, are more prevalent in the higher-grade categories, while older students appear more frequently in the *aprobado* category. These results indicate a possible correlation between age and adaptability to the Project-Based Learning (PBL) methodology, with younger students demonstrating stronger academic outcomes under this approach.

b) Control Groups

This research involves the implementation of a Project-Based Learning (PBL) approach with a group of first-year Tourism students. This group, identified as the experimental group (Group B), was the primary focus of the intervention. To establish a valid comparison, three control groups (A, C, and E) were also included in the study. These groups followed a traditional teaching methodology, providing a basis for evaluating the differences between PBL and conventional approaches.

The inclusion of multiple control groups allows for a more comprehensive examination of the impact of PBL in this academic setting. The descriptive statistical analysis of these control groups is now carried out, following the same methodological approach previously applied to the experimental group.

b.1) Group A – 57 Students

Median Age of Group A

The median age of Group A was calculated to be 19.8070 years, slightly higher than that of Group B. This corresponds with the general age distribution in the study.

Table 5

Summary of Median Age for Group A

		Value
Standard Attributes	Position	2
N	Valid	57
	Missing	0
Central Tendency and Dispersion	Mean	19.8070

Table 5 presents the descriptive statistics for Control Group A regarding the variable *Age*. The variable is in the second position in the dataset, with a sample size of 57 valid cases and no missing data. The mean age is 19.8070 years, indicating that the average age of participants in Control Group A is approximately 19.81 years, with complete data availability. This table also shows that the mean age of Control Group A (19.8070 years) is slightly higher than the overall mean age reported in Table 2 (19.6538 years across 182 valid cases). The difference between these two mean values is 0.1532 years, which is minimal, suggesting that the age distribution in Control Group A is highly comparable to that of the overall study population.

The grade distribution for Group A indicates that a significant number of students achieved a passing grade (*aprobado*, 43.9%) or a good grade (*notable*, 29.8%). Fewer students attained outstanding (*sobresaliente*, 1.8%) or the highest distinction, honors, *matrícula de honor* (3.5%).

Table 6*Grade Distribution for Group A*

Standard Attributes	Position	Value	Frequency	Percentage
		4		
Valid Values	1	Fail (<i>Suspense</i>)	12	21.1%
	2	Pass (<i>Aprobado</i>)	25	43.9%
	3	Good (<i>Notable</i>)	17	29.8%
	4	Outstanding (<i>Sobresaliente</i>)	1	1.8%
	5	Honours (<i>Matrícula de Honor</i>)	2	3.6%

Table 6 presents the variation in grade performance by age, showing that higher-performing students were predominantly within the 18 to 20 age range. This trend suggests that younger students achieved better results overall.

Table 7*Grade Distribution by Age for Group A*

Grade for Group A	Age	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Fail (<i>Suspense</i>)	Valid	18	2	16.7%	16.7%
	19	2	16.7%	16.7%	33.3%
	20	1	8.3%	8.3%	41.7%
	21	1	8.3%	8.3%	50.0%
	22	4	33.3%	33.3%	83.3%
	23	1	8.3%	8.3%	91.7%
	24	1	8.3%	8.3%	100.0%
	Total	12	100.0%	100.0%	

Grade for Group A	Age	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Pass (<i>Aprobado</i>)	Valid	18	13	52.0%	52.0%
		19	1	4.0%	56.0%
		20	4	16.0%	72.0%
		21	3	12.0%	84.0%
		22	3	12.0%	96.0%
		23	1	4.0%	100.0%
		Total	25	100.0%	100.0%
Good (<i>Notable</i>)	Valid	18	7	41.2%	41.2%
		19	5	29.4%	70.6%
		20	3	17.6%	88.2%
		22	1	5.9%	94.1%
		25	1	5.9%	100.0%
		Total	17	100.0%	100.0%
Outstanding (<i>Sobresaliente</i>)	Valid	20	1	100.0%	100.0%
Honours (<i>Matrícula de Honor</i>)	Valid	20	1	50.0%	50.0%
		26	1	50.0%	100.0%
		Total	2	100.0%	100.0%

Table 7 presents the distribution of age and grades for students in Control Group A. As in the previous graphs, this dataset categorizes academic performance levels into *suspensó* (fail), *aprobado* (pass), *notable* (good), *sobresaliente* (outstanding), and *matrícula de honor* (honors).

In the *suspensó* category, student ages range from 18 to 24 years, with the most frequent age being 22, representing 33.3 percent of failing students. In the *aprobado* category, the most common age is 18, comprising 52 percent of passing students, followed by ages 20, 21, and 22, which account for lower but still significant percentages. In the *notable* category, the

predominant age is 18, making up 41.2 percent of students, followed by 19-year-olds at 29.4 percent. The *sobresaliente* category includes only one student, aged 20. In the *matrícula de honor* category, two students are listed: one aged 20 and the other 26, each representing 50 percent of this group.

The data suggests that younger students, particularly those aged 18, are more prevalent in the passing categories, while a broader age distribution is observed in the failing category. Additionally, the number of students achieving higher academic performance (*sobresaliente* and *matrícula de honor*) is significantly smaller than in other categories.

b.2) Group C – 40 Students

Median Age in Group C

This group had the youngest median age, calculated at 18.85 years. This agrees with the observation that Group C consisted of relatively younger students compared to the other groups.

Table 8*Summary of Median Age for Group C*

		Value
Standard Attributes	Position	2
	Label	Student age
	Type	Numeric
	Format	F8
	Measurement	Scale
	Role	Input
N	Valid	40
	Missing	0
Central Tendency and Dispersion	Mean	18.85

Table 8 illustrates the descriptive statistics for Control Group C, showing a mean age of 18.85 years with 40 valid cases and no missing data. This suggests that the students in this group are slightly younger on average compared to other groups. When compared to Table 2, which represents the overall mean age of all groups, including the experimental and control groups, the mean age of Control Group C is lower. Table 2 reports a mean age of 19.6538 years with 182 valid cases. The difference between the mean age of Control Group C and the overall mean is approximately 0.80 years, indicating that Control Group C has a younger population compared to the total sample.

Grade Distribution in Group C

The grade distribution in Group C follows a similar pattern to that of Group A, with the majority of students achieving *aprobado* (40%) or *notable* (27.5%).

Table 9*Grade Distribution for Group C*

Standard Attributes	Position	Value	Frequency	Percentage
		4		
Valid Values	1	Fail (<i>Suspense</i>)	10	25.0%
	2	Pass (<i>Aprobado</i>)	16	40.0%
	3	Good (<i>Notable</i>)	11	27.5%
	4	Outstanding (<i>Sobresaliente</i>)	1	2.5%
	5	Honours (<i>Matricula de Honor</i>)	2	5.0%

Table 9 shows the grade distribution for Control Group C. Most students fall into the *aprobado* category, with 16 students representing 40 percent of the group. The second-largest category is *notable*, with 11 students accounting for 27.5 percent. The *suspense* category includes 10 students, making up 25 percent of the total. Only a small number of students achieved higher academic performance, with one student (2.5 percent) receiving a *sobresaliente* grade and two students (5 percent) obtaining *matricula de honor*.

This data indicates that most students in Control Group C performed at a passing level, with a significant proportion achieving *notable* grades. However, the number of students receiving the highest distinctions is relatively low, while a quarter of the group failed.

Grades by Age in Group C

Students aged 18 and 19 dominated the higher grades, a pattern that was consistent across this group and the other control groups (A and E).

Table 10*Grade Distribution by Age for Group C*

Grade for Group C	Age	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Fail (<i>Suspense</i>)	Valid	18	10	100.0%	100.0%
		18	8	50.0%	50.0%
Pass (<i>Aprobado</i>)		19	1	6.3%	6.3%
		20	1	6.3%	6.3%
	Valid	21	2	12.5%	12.5%
		22	3	18.8%	18.8%
		23	1	6.3%	6.3%
		Total	16	100.0%	100.0%
Good (<i>Notable</i>)	Valid	18	6	54.5%	54.5%
		19	5	45.5%	45.5%
		Total	11	100.0%	100.0%
Outstanding (<i>Sobresaliente</i>)	Valid	18	1	100.0%	100.0%
Honours (<i>Matrícula de Honor</i>)		18	1	50.0%	50.0%
	Valid	21	1	50.0%	50.0%
		Total	2	100.0%	100.0%

Table 10 shows the distribution of grades by age for Control Group C. The data reveals that students aged 18 are the most represented across all performance categories. Among those who failed, all were 18 years old. The *aprobado* category shows a more diverse age distribution, with 50 percent of students aged 18 and the remaining distributed among ages 19 to 23. *Notable* grades were awarded to students aged 18 and 19, with a slight majority (54.5 percent) being 18 years old. In the *sobresaliente* category, the only student was 18 years old. For the *matrícula de honor* category, the two students were aged 18 and 21, each representing 50 percent of this group.

This statistic points that younger students, particularly those aged 18, form the majority in all grade levels. While there is some variation in the *aprobado* category, higher-performing students tend to be younger, with very few older students achieving the highest grades.

b.3) Group E – 40 Students

Median Age of Group E

The median age of Group E was 20.45 years, the highest among all groups. This corresponds with a more mature demographic in this group.

Table 11

Summary of Median Age for Group E

		Value
Standard Attributes	Position	2
N	Valid	40
	Missing	1
Central Tendency and Dispersion	Mean	20.45

Table 11 displays the descriptive statistics for Control Group E, showing a mean age of 20.45 years with 40 valid cases and one missing value. This suggests that the students in this group are, on average, older compared to the other control groups. When compared to Table 2, which represents the overall mean age of all groups, including the experimental and control groups, Control Group E has a higher mean age. Table 2 reports a mean age of 19.6538 years with 182 valid cases. The difference between the mean age of Control Group E and the overall mean is approximately 0.80 years, indicating that this group consists of relatively older students compared to the total sample.

Grade Distribution in Group E

The grade distribution in Group E reveals the following trends: 37.5 percent of students achieved *notable*, while 30 percent received *aprobado*. Smaller proportions of students attained the highest distinctions, with 5 percent earning *sobresaliente* and 2.5 percent obtaining *matrícula de honor*. Additionally, 25 percent of students fell into the *suspense* category.

This distribution indicates that a significant portion of students performed at a passing level, with *notable* being the most common grade. However, the number of students achieving *sobresaliente* and *matrícula de honor* remains relatively low, similar to the trends observed in other control groups.

Table 12

Grade Distribution for Group E

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	<i>Suspense</i> (Fail)	11	27.5	27.5	27.5
	<i>Aprobado</i> (Pass)	12	30.0	30.0	57.5
	<i>Notable</i> (Good)	15	37.5	37.5	95.0
	<i>Sobresaliente</i> (Outstanding)	1	2.5	2.5	97.5
	<i>Matrícula de Honor</i> (Honours)	1	2.5	2.5	100.0
	Total	40	100.0	100.0	

Table 12 presents the grade distribution for Control Group E. The highest proportion of students falls into the *notable* category, with 15 students representing 37.5 percent of the group. The *aprobado* category follows closely, with 12 students accounting for 30 percent. The *suspense* category includes 11 students, making up 27.5 percent of the total. Only a small

number of students achieved higher academic performance, with one student (2.5 percent) receiving a *sobresaliente* grade and another (2.5 percent) obtaining *matrícula de honor*.

This distribution indicates that most students in Control Group E performed at a passing level, with the majority achieving *notable* grades. However, a significant portion (more than a quarter of the group) failed. The number of students receiving the highest distinctions is minimal, suggesting that outstanding academic performance is rare within this group.

Grades by Age in Group E

Older students in Group E (ages 20 and above) were distributed more broadly across grade categories.

Table 13

Grade Distribution by Age for Group E

Grade for Group E	Age	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Fail (<i>Suspense</i>)	Valid	18	3	27.3%	27.3%
	19	2	18.2%	18.2%	45.5%
	20	3	27.3%	27.3%	72.7%
	23	3	27.3%	27.3%	100.0%
	Total	11	100.0%	100.0%	100.0%
Pass (<i>Aprobado</i>)	Valid	21	2	16.7%	16.7%
	22	7	58.3%	58.3%	75.0%
	24	1	8.3%	8.3%	83.3%
	25	1	8.3%	8.3%	91.7%
	26	1	8.3%	8.3%	100.0%
	Total	12	100.0%	100.0%	
Good (<i>Notable</i>)	Valid	18	5	33.3%	33.3%
	19	3	20.0%	20.0%	53.3%
	20	5	33.3%	33.3%	86.7%
	21	2	13.3%	13.3%	100.0%
	Total	15	100.0%	100.0%	

Grade for Group E	Age	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Outstanding (<i>Sobresaliente</i>)	Valid 18	1	100.0%	100.0%	100.0%
Honours (<i>Matrícula de Honor</i>)	Valid 19	1	100.0%	100.0%	100.0%

Table 13 shows the distribution of grades by age for students in Control Group E. The *suspense* category includes students aged 18 to 23, with the highest frequencies at ages 18, 20, and 23, each representing 27.3 percent of failing students. The *aprobado* category presents a wider age range, with most students being 22 years old, making up 58.3 percent of this group, followed by smaller proportions of students aged 21, 24, 25, and 26. In the *notable* category, students aged 18 and 20 each constitute 33.3 percent, while ages 19 and 21 are less represented. The *sobresaliente* category includes only one student aged 18, while the *matrícula de honor* category consists of a single student aged 19.

This distribution indicates that students with lower grades tend to be more evenly spread across different ages, whereas higher-performing students are fewer and generally younger. The *aprobado* and *notable* categories include a wider range of ages, but the concentration of students at specific ages, particularly 18 and 22, suggests that certain age groups may have a stronger presence in the population.

c) Combined Students' Grades

Histogram and Normal Distribution of Grades

Table 14 illustrates the mean grade distribution across all groups. The dataset consists of 182 valid cases, with one missing value. The overall average grade is 6.5742, providing a benchmark for academic performance across both the experimental and control groups. This

mean serves as a reference point for evaluating individual group performance, helping to identify any significant deviations from the general trend.

Table 14

Mean Grade of All Groups in the Project

Final Grade		
N	Valid	182
	Missing	1
Mean		6.5742

Figure 4 illustrates the distribution of final grades across all groups using a histogram. The horizontal axis represents student grades, while the vertical axis indicates the frequency of each grade range. The distribution appears approximately normal, with most grades clustering around the mean of 6.57, as shown in Table 14. However, some dispersion is evident, with grades ranging from approximately 2.00 to 10.00. The presence of multiple peaks suggests variability in student performance, possibly influenced by differences between groups. The overlaid density curve visually represents the overall trend, highlighting the concentration of grades around the central values while also showing the presence of both lower and higher scores.

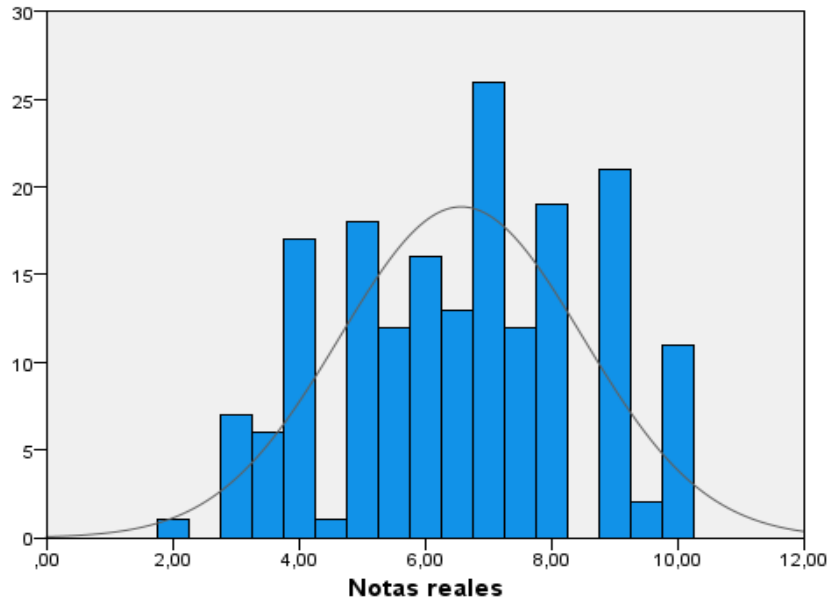


Figure 4. *Histogram of Final Grades with Normal Distribution Curve*

The dataset presented in Table 15 includes final grades ranging from 2 to 10, with the highest frequency observed at 7, which appears 26 times. The distribution is fairly spread out, with notable peaks at scores 5, 7, 8, and 9, indicating common performance levels. Lower scores, ranging from 2 to 4.5, represent the lowest-performing students, with a total of 32 occurrences. The lowest score, 2, appears only once. Mid-range scores between 5 and 7.5 are the most populated, encompassing many students. Specifically, scores of 5, 6, and 7 have significant frequencies, with 18, 16, and 26 occurrences, respectively. High scores between 8 and 10 indicate stronger academic performance, with a total of 53 occurrences. Score 9 is particularly frequent, with 21 students achieving this grade, while the highest score, 10, appears 11 times. This distribution suggests a slightly right-skewed pattern, indicating that a significant number of students achieved higher grades, though lower scores are still present in smaller frequencies. The data reinforces the histogram in Figure 4, where grades are centered around 6.57, with variability in both directions.

Table 15

Final Grades of All 182 Students Across the Four Study Groups

Final Grade	Total
2	1
3	7
3.5	6
4	17
4.5	1
5	18
5.5	12
6	16
6.5	13
7	26
7.5	12
8	19
9	21
9.5	2
10	11

Average Grade by Group

When comparing groups, the following average grades were observed (Tables 16-19):

- Group B (Experimental): 8.46
- Group A: 5.95
- Group C: 5.86
- Group E: 6.06

Group B's average grade is significantly higher than all control groups, indicating a notable difference in academic performance.

Table 16

Mean Grade for Group B (Experimental)

Student Grade		
N	Valid	45
	Missing	0
Mean		8.46

Table 17

Mean Grade for Group C (Control)

Student Grade		
N	Valid	40
	Missing	0
Mean		5.86

Table 18

Mean Grade for Group A (Control)

Student Grade		
N	Valid	57
	Missing	0
Mean		5.95

Table 19

Mean Grade for Group E (Control)

Student Grade		
N	Valid	40
	Missing	0
Mean		6.0625

Pairwise Comparison of Students' Grades

Using *t*-tests, significant differences in grades were observed:

- Group B vs. Group C: A mean difference of 2.6 points was found, favoring Group B.
- Group B vs. Group A: A mean difference of 2.5 points was found, favoring Group B.
- Group B vs. Group E: A mean difference of 2.4 points was found, favoring Group B.

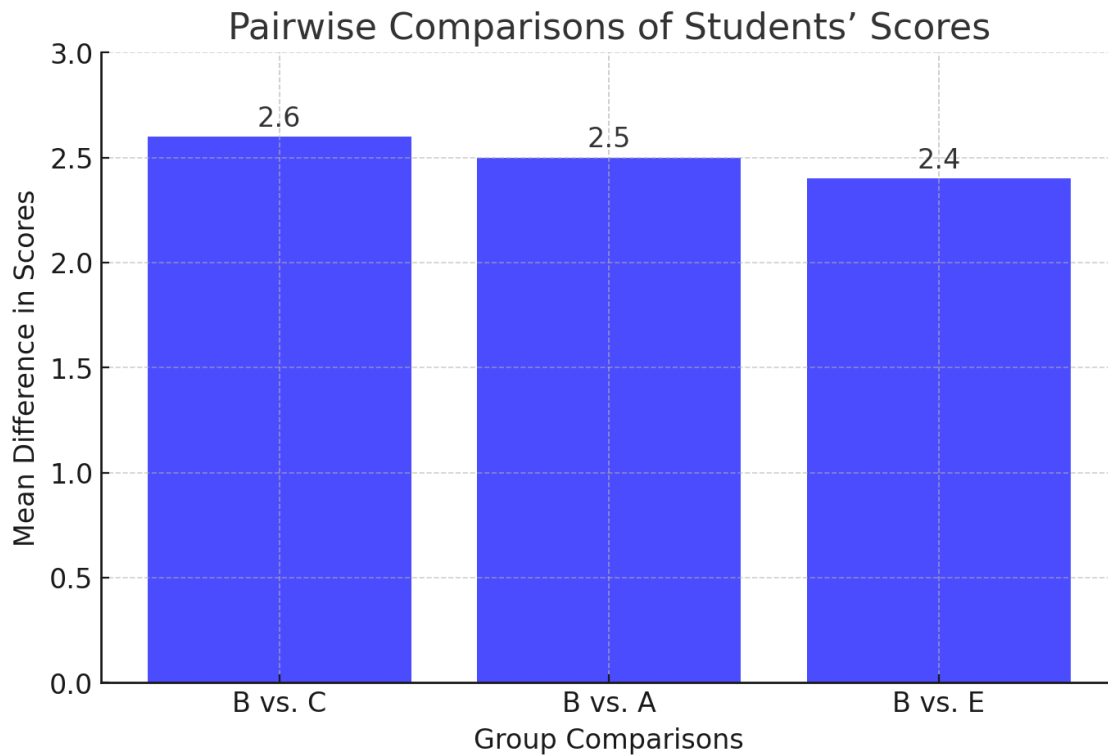


Figure 5. *Pairwise Comparison of Student Grades*

Figure 5 illustrates the pairwise comparisons of students' grades using *t*-tests, highlighting the mean differences between the experimental Group B and the control Groups A, C, and E. The results indicate that students in Group B consistently outperformed their peers, with mean differences of 2.6 points compared to Group C, 2.5 points compared to Group A, and 2.4 points compared to Group E. While these differences confirm the superior performance of Group B, the relatively small variations suggest a stable gap across comparisons.

The slightly larger difference between Group B and Group C (2.6 points) compared to Group B and Group E (2.4 points) may indicate that students in Group C performed slightly worse than the other control groups. However, these differences remain minimal, meaning that Groups A, C, and E had relatively similar academic outcomes when compared to Group B. The bar heights in the figure visually reinforce this trend, emphasizing Group B's advantage over the control groups.

These findings suggest that factors such as learning strategies, engagement levels, or other variables unique to Group B may have contributed to its higher performance. Further statistical tests could determine whether these differences hold practical significance beyond their statistical relevance.

6.1.2. Statistical Test Analysis

6.1.2.1. Covariance (ANCOVA)

First, an analysis of covariance (ANCOVA) was applied to achieve three main objectives:

1. Control for extraneous variables – In this case, students' age could be a variable influencing grade. ANCOVA allows us to control this factor and examine the effect of the teaching method on grades while adjusting for age differences.
2. Compare adjusted groups – Accounting for variations in the covariate (age) allows for more precise comparisons between groups, ensuring that any notable differences observed are attributed to the teaching method rather than age.
3. Increase precision – Controlling for covariates enhances the precision of the analysis, reducing error and improving the ability to detect significant effects of the teaching method.

The study was conducted with the following groups:

- Group B (Experimental): 45 students.
- Group A (Control): 57 students.
- Group C (Control): 40 students.
- Group E (Control): 40 students.

After performing the ANCOVA using SPSS, Figure 6 presents the confidence intervals for each group comparison. Each point represents the mean difference for the specified group, while the red dashed line at 0 represents no difference between the groups.

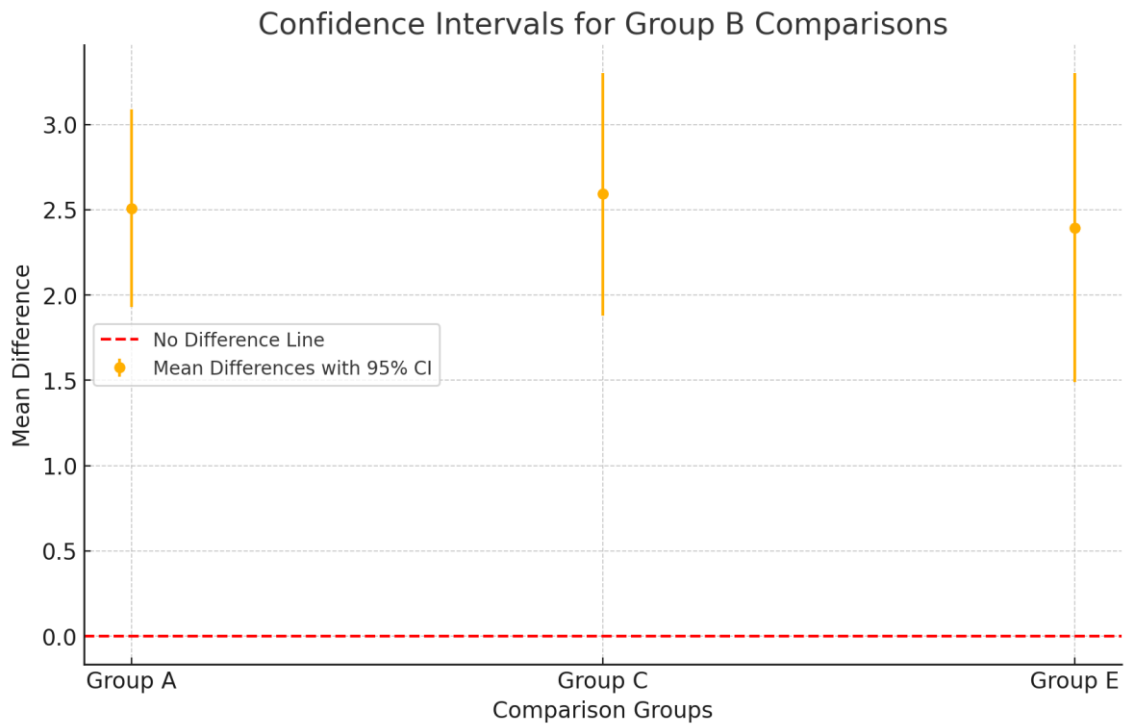


Figure 6. *Confidence Intervals.*

Continuing with the ANCOVA analysis, Figure 7 provides another representation of the results, showing the average scores across groups with error bars indicating standard error. In this case, Group B (Experimental) stands out significantly, achieving the highest average grade, while the control groups (A, C, and E) show comparatively lower averages.

The ANCOVA chart offers a summary of the statistical significance of key factors, such as age and teaching method, on students' grades. The elements of the chart are as follows:

- Horizontal Axis (Groups): it displays the different study groups (B, A, C, and E), where Group B represents the experimental group using the PBL methodology, and the others serve as control groups.
- Vertical Axis (Grades): it represents the average grades of students in each group.
- Error Bars: each data point is accompanied by error bars representing the 95% confidence interval for the group's mean grade. These intervals provide a range within which the true mean grade for each group is likely to fall, offering a measure of variability and reliability in the results.

This visualization reinforces the statistical evidence supporting PBL as an effective teaching method, as the experimental group achieved significantly higher grades compared to the control groups.

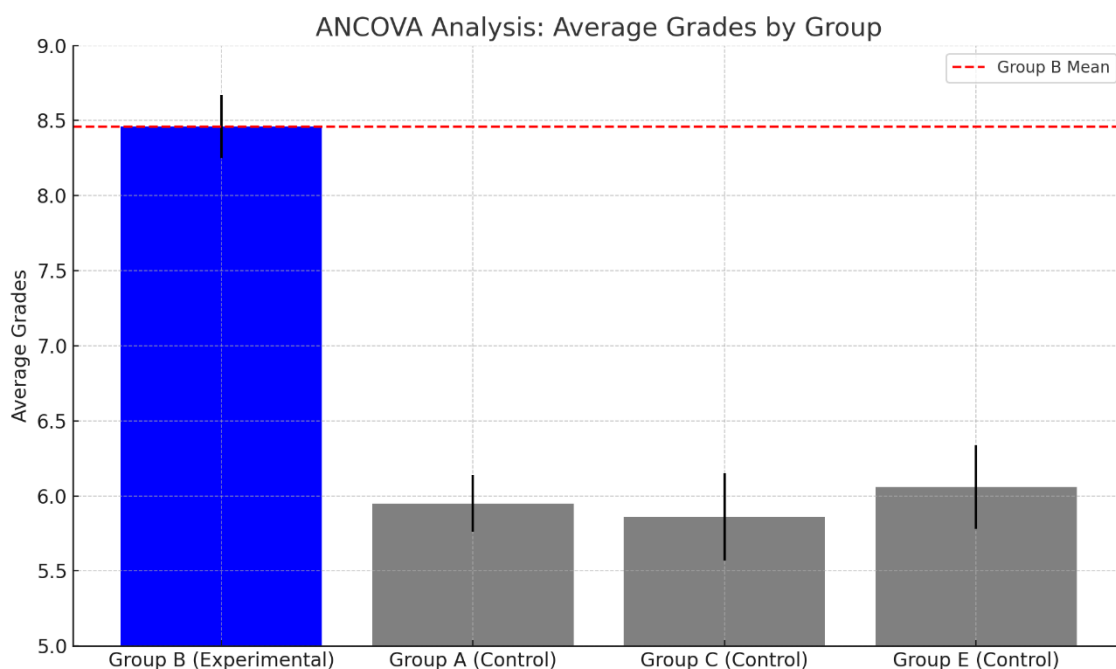


Figure 7. Error Bar Plot for ANCOVA

Another finding from the ANCOVA analysis, as shown in Figure 8, is the relationship between age and group assignment. For the covariate age, a p -value of 0.884 was calculated. Since this value is far above the commonly accepted threshold of 0.05, it indicates that age has no statistically significant impact on students' grades.

This result suggests that differences in academic performance between groups were not influenced by students' age but were instead more likely driven by the teaching methodology applied. Consequently, the effectiveness of PBL in Group B cannot be attributed to age-related factors, reinforcing the validity of the observed improvements in student outcomes.

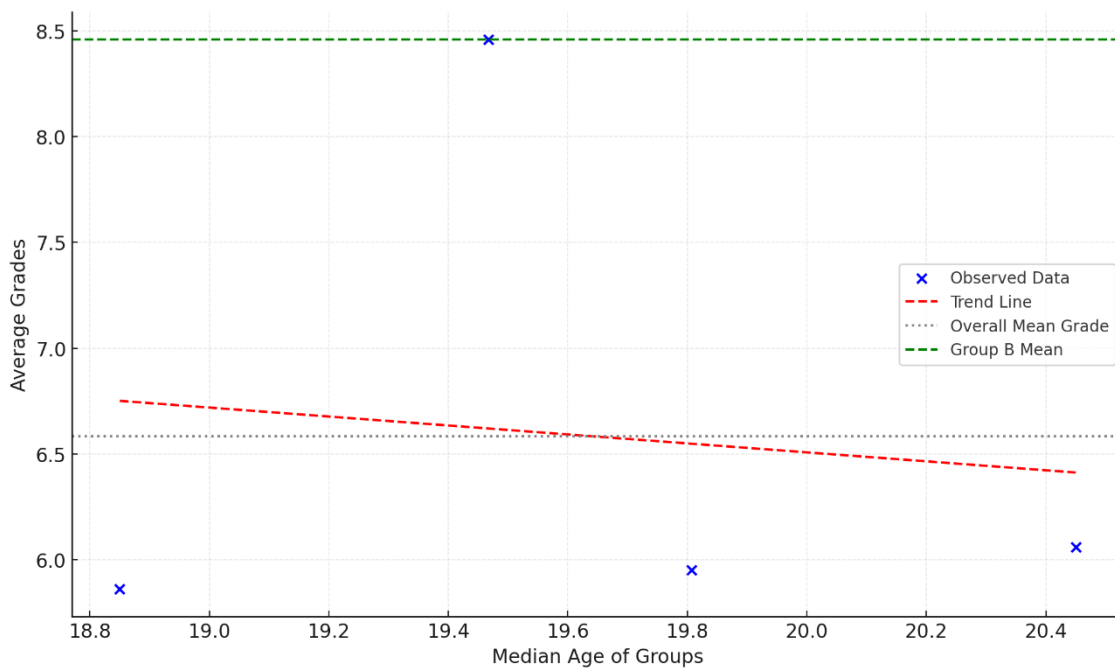


Figure 8. ANCOVA Analysis: Age vs Grades.

6.1.2.2. t -Tests for Pairwise Comparisons

The Student's t -test was applied to compare grades between groups and determine whether the differences in academic performance between the experimental group (B) and the control groups (A, C, and E) were statistically significant.

Although both the Student's t -test and ANOVA are used to compare group means, they serve different purposes. Below is a brief explanation of their differences and when to use each in SPSS:

a) Student's t -Test

- Objective: to compare the means of two independent groups (independent samples t -test) or two related groups (paired samples t -test).
- Application: used when comparing the means of two groups only.

b) ANOVA (Analysis of Variance)

- Objective: to compare the means of three or more groups simultaneously.
- Application: used when analyzing more than two groups to determine if at least one group's mean differs significantly from the others.

Since this study involved multiple groups, t -tests were used for pairwise comparisons to evaluate differences in students' grades.

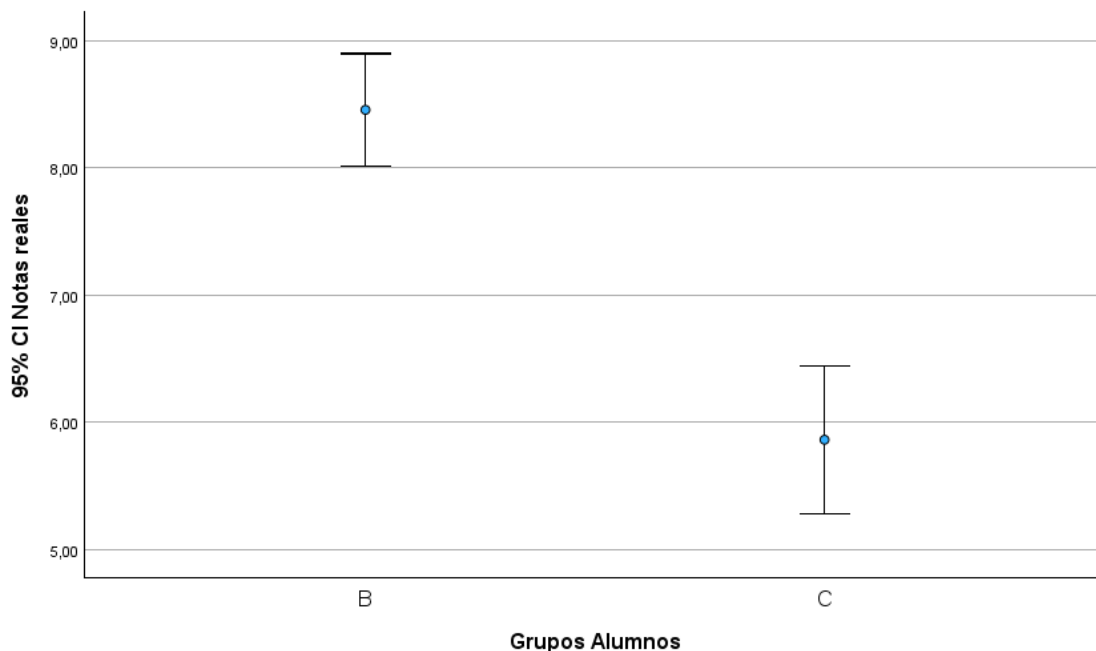


Figure 9. *Error Confidence Intervals.*

The error graph in Figure 9 visually represents the differences in mean grades across groups. The 95% confidence interval for the mean of Group 1 (B) does not overlap with that of Group 2 (C), indicating a significant difference between the two means. This confirms that Group B achieved a higher mean score than Group C, which followed the traditional method.

Following this visual analysis, SPSS software was used to perform a student's *t*-test to statistically determine whether the differences between the means of the experimental group (B) and the control group (C) (Group 2) are statistically significant.

Table 20

Error Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
		<i>F</i>	<i>Sig.</i>	<i>t</i>	<i>df</i>	Significance		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						1-Tailed P	2-Tailed P			Lower	Upper
Final Grade	Equal Variances Assumed	3.291	0.073	7.266	83	< 0.001	< 0.001	2.59306	0.35687	1.88326	3.30285
	Equal Variances Not Assumed			7.177	75.139	< 0.001	< 0.001	2.59306	0.36129	1.87334	3.31277

As observed in Table 20, it can be confirmed—just as in the error graph—that the *p*-value or significance level is very small, below 0.05. This indicates that there are significant differences in the means of the obtained grades.

Next, table 21 shows that the same Student's *t*-test was applied but this time comparing the experimental Group B with the control Group A.

Table 21*Student's t-Test Comparing Groups B and A*

	Student Group	N	Mean	Std. Deviation	Standard Error of the Mean
Final Grade	B	45	8.4556	1.47163	0.21938
	A	57	5.9474	1.45775	0.19308

Table 22*Error Test*

		Levene's Test for Equality of Variances		t-test for Equality of Means							
		<i>F</i>	<i>Sig.</i>	<i>t</i>	<i>df</i>	Significance		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						1-Tailed P	2-Tailed P			Lower	Upper
Final Grade	Equal Variances Assumed	0.031	0.861	8.592	100	< 0.001	< 0.001	2.50819	0.29192	1.92903	3.08734
	Equal Variances Not Assumed			8.592	94.172	< 0.001	< 0.001	2.50819	0.29225	1.92794	3.08844

In Table 22, the same pattern observed between Group B and Group C now appears between Group B and Group A. As shown, it can be confirmed—just as in the error graph—that the *p*-value or significance level is very small, below 0.05. Therefore, there are significant differences in the means of the obtained grades, as can be seen in coming Figure 10, between experimental group B and control groups A and C, so far.

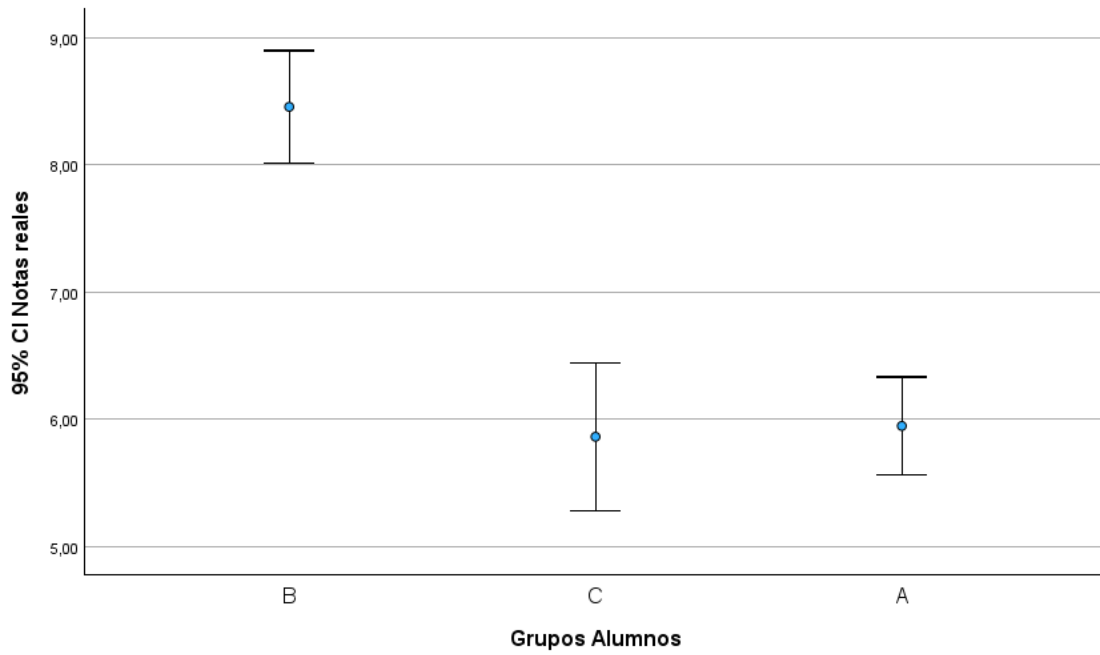


Figure 10. *Error Confidence Intervals.*

Finally, as Table 23 demonstrates, the student's *t*-test is applied to compare Group B with Group E.

Table 23

Student's t-test Comparing Groups B and E

	Student Group	N	Mean	Std. Deviation	Standard Error of the Mean
Final Grade	B	45	8.4556	1.47163	0.21938
	E	40	5.8625	1.81556	0.28706

Table 24

Error Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
		<i>F</i>	<i>Sig.</i>	Significance				95% Confidence Interval of the Difference			
				<i>t</i>	<i>df</i>	1-Tailed P	2-Tailed P	Mean Difference	Std. Error Difference	Lower	Upper
Final Grade	Equal Variances Assumed	3.291	0.73	7.266	83	< 0.001	< 0.001	2.59306	0.35687	1.88326	3.30285
	Equal Variances Not Assumed			7.177	75.139	< 0.001	< 0.001	2.59306	0.36129	1.87334	3.31277

As we can see in Table 24, the *p*-value is again less than 0.05, confirming that there are significant differences in the means of the obtained grades.

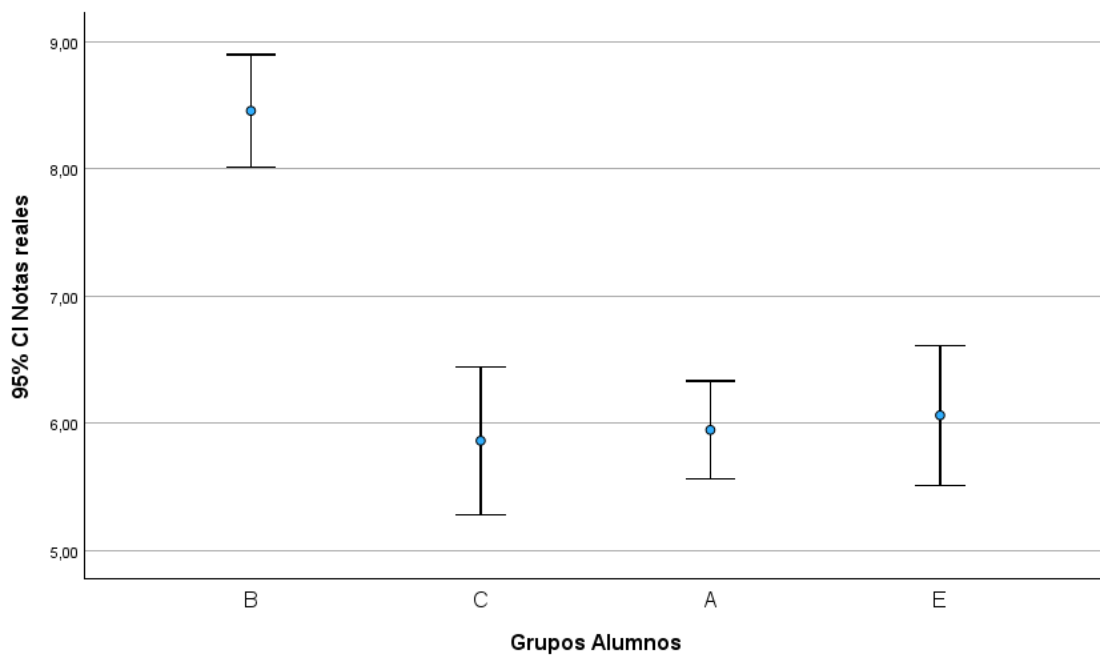


Figure 11. *Error Confidence Intervals.*

Figure 11 shows the final grade averages of the different groups. The graph presents the mean final grades of students in each group along with their 95 percent confidence intervals. Group B, the experimental group, has a notably higher mean grade compared to the control groups A, C, and E. The confidence interval for Group B is positioned well above those of the control groups, indicating a clear performance advantage.

The control groups have similar mean grades, all clustering within the same range. Their confidence intervals overlap, suggesting that performance differences among them may not be statistically significant. In contrast, the confidence interval for Group B does not overlap with those of the control groups, reinforcing the idea that the experimental group performed significantly better.

The confidence intervals also provide insight into grade variability within each group. Group B shows a relatively narrow confidence interval, indicating more consistent grades among its students. The control groups exhibit wider confidence intervals, reflecting greater variability in student performance.

In conclusion, the intervention applied to Group B (PBL) likely had a positive impact on student grades. The distinct gap between Group B and the control groups supports the conclusion that the experimental group outperformed the others in a meaningful way.

6.1.2.3. ANOVA Test: Test for Multiple Samples in SPSS, as in the Student's *t*-Test.

The ANOVA test (Analysis of Variance) in SPSS is used to determine whether there are significant differences between the means of three or more independent groups.

Table 25*ANOVA Test*

Final Grade	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.
Between Groups	212.408	3	70.803	27.539	< 0.001
Within Groups	457.641	178	2.571		
Total	670.049	181			

Table 25 presents the ANOVA analysis of final grades across the different student groups. The sum of squares between groups is 212.408, with three degrees of freedom, resulting in a mean square of 70.803. The sum of squares within groups is 457.641, with 178 degrees of freedom, leading to a mean square of 2.571. The *F*-statistic is 27.539, and the significance value (*p*-value) is less than 0.001.

These results indicate a statistically significant difference in grades among the groups. The high *F*-value suggests that the variance between groups is substantially greater than the variance within groups, supporting the conclusion that at least one group's mean grade differs significantly from the others. Given the very low *p*-value, the null hypothesis, assuming no difference in mean grades among the groups, can be rejected with high confidence. This finding reinforces previous observations that the experimental group (B) performed significantly better than the control groups (A, C, and E).

Table 26*Effect Size Estimates in ANOVA Population**

		Point Estimate	95% Confidence Level	
			Lower	Upper
Final Grade	Eta Squared	0.317	0.201	0.406
	Epsilon Squared	0.305	0.188	0.396
	Fixed-Effects Omega Squared	0.304	0.187	0.395
	Random-Effects Omega Squared	0.127	0.071	0.179

* Eta squared and epsilon squared are estimated based on the fixed-effect model.

Table 26 presents the effect size estimates for the ANOVA test, which measure the proportion of variance in final grades explained by group differences. These values help assess the practical significance of the findings beyond statistical significance.

Eta squared is estimated at 0.317, indicating that 31.7 percent of the variance in grades is attributable to group differences. This suggests a large effect size, meaning that the grouping variable has a substantial impact on student performance. The 95 percent confidence interval for eta squared ranges from 0.201 to 0.406, reflecting the possible variation in this estimate.

Epsilon squared is slightly lower at 0.305, with a confidence interval between 0.188 and 0.396. This measure serves as a more conservative estimator of explained variance, yet it still indicates a strong effect.

Omega squared for the fixed-effects model is 0.304, with a confidence interval ranging from 0.187 to 0.395. This statistic adjusts for sample size and provides a more reliable estimate of explained variance, yielding results similar to eta and epsilon squared. In contrast, omega squared for the random-effects model is lower at 0.127, with a confidence interval from 0.071

to 0.179. This suggests that if the study were generalized to different groups beyond this sample, the proportion of variance explained would be smaller.

In general, the effect sizes confirm that the differences among groups account for a meaningful portion of the variance in students' grades, with eta squared, epsilon squared, and fixed-effect omega squared indicating a strong effect.

Since the significance value is less than 0.05, the results confirm the presence of significant differences in mean grades among the groups. Although the ANOVA test does not specify which groups differ greatly. Staring back to Figure 11, it visually highlights these differences, particularly between the experimental group (B) and the control groups (A, C, and E). It presents the confidence interval plot for the mean final grades of students across different groups. The error bars represent the 95% confidence intervals for each group's mean grade. Group B has a higher mean grade than the control groups (A, C, and E), with its confidence interval positioned well above the others.

The overlap of confidence intervals among the control groups suggests that their differences may not be statistically significant. In contrast, Group B's confidence interval does not overlap with those of the control groups, indicating a significant difference in performance.

This type of plot is commonly used in ANOVA *post-hoc* analysis to visually assess group differences. It is often paired with statistical tests, such as Tukey's HSD, to confirm whether these differences are statistically meaningful.

6.1.2.4. Tukey Test

At this moment, the Tukey test at a 95% confidence level was carried out to analyze the differences between group means. This *post-hoc* test is conducted after ANOVA to identify which specific groups show statistically significant differences. It is particularly useful when

comparing three or more groups, as it pinpoints exactly which pairs of groups differ from each other.

Table 27

Tukey HSD Test

(I) Student Group	(J) Student Group	Mean Difference (I-J)	Standard Error	Sig.	95% Confidence Level	
					Lower Limit	Upper Limit
B	C	2.59306*	0.34844	< 0.001	1.6894	3.4967
	A	2.50819*	0.31975	< 0.001	1.6789	3.3374
	E	2.39306*	0.34844	< 0.001	1.4894	3.2967
C	B	2.59306*	0.34844	< 0.001	-3.4967	-1.6894
	A	-0.08487	0.33073	0.994	-0.9426	0.7729
	E	-2.20000	0.35854	0.944	-1.1299	0.7299
A	B	-2.50819*	0.31975	< 0.001	-3.3374	-1.6789
	C	0.08487	0.33073	0.994	0.7729	0.9426
	E	0.11513	0.33073	0.985	-0.9729	0.7426
E	B	-2.39306*	0.34844	< 0.001	-3.2967	-1.4894
	C	0.20000	0.35854	0.944	-0.7299	1.1299
	A	0.11513	0.33073	0.985	-0.7426	-0.9729

Note. The dependent variable is *Final Grade*. * The difference in means is significant at the 0.05 level

As shown in Table 27, the Tukey HSD (Honestly Significant Difference) test indicates that when the significance level is below 0.05, the mean differences between Group B and the other groups (C, A, and E) are statistically significant. Specifically, the comparison between Group B and Group C shows a significance level of less than 0.001, confirming a substantial difference in means. However, Group C does not exhibit a statistically significant difference compared to Groups A and E, as reflected in their significance values of 0.994 and 0.944, respectively.

It is important to note that the ANOVA results already indicated a p -value < 0.05 (where *Sig.* in the SPSS output refers to the p -value), confirming the existence of significant differences among the means and, consequently, among the teaching methods.

6.2. Quantitative Analysis of the Students' Questionnaires

Following the statistical examination of students' performance through descriptive statistics and inferential tests, the next stage of the analysis focuses on students' responses to a questionnaire. This section aims to explore students' perspectives, attitudes, and experiences, complementing the objective evaluation of academic outcomes with self-reported insights. Both performance data and questionnaire responses are used in this study to offer a clearer understanding of the learning process.

The quantitative analysis of the questionnaires begins with an assessment of descriptive statistics, offering an overview of response distributions and measures of central tendency. Subsequently, statistical tests are conducted to evaluate the reliability and internal consistency of the questionnaire items using Cronbach's Alpha, followed by correlation analysis employing Pearson and Spearman tests. These statistical procedures allow for a deeper investigation into relationships between variables, contributing to a more robust interpretation of the collected data.

The findings from this section will be contrasted with the results of the students' performance analysis, paving the way for the qualitative assessment in the following section.

6.2.1. Descriptive Statistics Analysis

The dataset consists of responses from 45 participants, with all questions having a complete set of responses ($N = 45$). Each question uses a Likert scale ranging from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). The minimum value recorded for several questions is 1, while

the maximum value for all questions is 5. This indicates that the full range of the Likert scale was utilized by participants across all questions, as shown in Table 28.

Table 28

Descriptive Statistics of Likert Scale Items

Question	N	Minimum	Maximum	Mean	Std. Deviation
Question 1	45	1	5	3.93	0.863
Question 2	45	3	5	4.58	0.621
Question 3	45	3	5	4.20	0.694
Question 4	45	2	5	4.24	0.773
Question 5	45	1	5	3.78	1.042
Question 6	45	3	5	4.36	0.609
Question 7	45	3	5	4.22	0.765
Question 8	45	3	5	4.20	0.588
Question 9	45	2	5	4.09	0.701
Question 10	45	2	5	4.58	0.723
Question 11	45	2	5	4.47	0.694
Question 12	45	3	5	4.44	0.624
Question 13	45	2	5	4.27	0.751
Question 14	45	3	5	4.71	0.549
Question 15	45	3	5	4.47	0.548
Valid N by list	45				

Note. N refers to the number of valid responses for each item. The mean and standard deviation values represent the central tendency and variability of responses on a Likert scale ranging from 1 to 5 or 1 to 6, depending on the item.

Summary of Questionnaire Responses

- Question 1: *The process of planning and executing a congress improved my English communicative competence.*
 - Mean: 3.93 | Standard Deviation: 0.86 | Min: 1 | Max: 5
- Question 2: *I found the activity of organizing a congress more engaging than traditional methods for learning in English.*
 - Mean: 4.58 | Standard Deviation: 0.62 | Min: 3 | Max: 5

- Question 3: *Working on a congress project increased my confidence in using English within a professional context.*
 - Mean: 4.20 | Standard Deviation: 0.69 | Min: 3 | Max: 5
- Question 4: *The collaborative nature of the congress project improved my teamwork and interpersonal skills in English.*
 - Mean: 4.24 | Standard Deviation: 0.77 | Min: 2 | Max: 5
- Question 5: *I did not know anything about the methodology (Project-Based Learning, PBL) before setting up the the First Conference of students of Tourism.*
 - Mean: 3.78 | Standard Deviation: 1.04 | Min: 1 | Max: 5
- Question 6: *PBL and organizing a congress allowed me to explore specific tourism topics beyond standard curriculum materials.*
 - Mean: 4.35 | Standard Deviation: 0.61 | Min: 3 | Max: 5
- Question 7: *The feedback received during the congress project was valuable for my English language development and professional growth.*
 - Mean: 4.22 | Standard Deviation: 0.77 | Min: 3 | Max: 5
- Question 8: *Organizing a congress improved my critical thinking skills related to tourism duties in English.*
 - Mean: 4.20 | Standard Deviation: 0.59 | Min: 3 | Max: 5
- Question 9: *I believe the congress project made me more aware of cultural aspects in English language usage within the tourism industry.*
 - Mean: 4.09 | Standard Deviation: 0.70 | Min: 2 | Max: 5
- Question 10: *The congress project provided practical insights into the English communicative skills that traditional textbooks might not have offered.*
 - Mean: 4.58 | Standard Deviation: 0.72 | Min: 2 | Max: 5

- Question 11: *I have learned better and more English content using the Project-Based Learning approach, such as organizing congresses, for future learning in tourism instead of classic methods in learning English.*
 - Mean: 4.47 | Standard Deviation: 0.69 | Min: 2 | Max: 5
- Question 12: *The experience of organizing a congress helped me see the practical applications of English language skills in the tourism industry.*
 - Mean: 4.44 | Standard Deviation: 0.62 | Min: 3 | Max: 5
- Question 13: *I felt a sense of accomplishment and pride in organizing a congress as part of my tourism studies.*
 - Mean: 4.27 | Standard Deviation: 0.75 | Min: 2 | Max: 5
- Question 14: *Organizing a congress in English provided opportunities for creativity and innovation in expressing tourism concepts.*
 - Mean: 4.71 | Standard Deviation: 0.55 | Min: 3 | Max: 5
- Question 15: *Organizing a congress as part of my studies helped me apply theoretical knowledge to practical situations.*
 - Mean: 4.47 | Standard Deviation: 0.55 | Min: 3 | Max: 5

In general, the range mean, and standard deviation provide a detailed summary of participants' responses. These results offer a quantitative overview of the dataset without interpretation, which will be addressed in later sections.

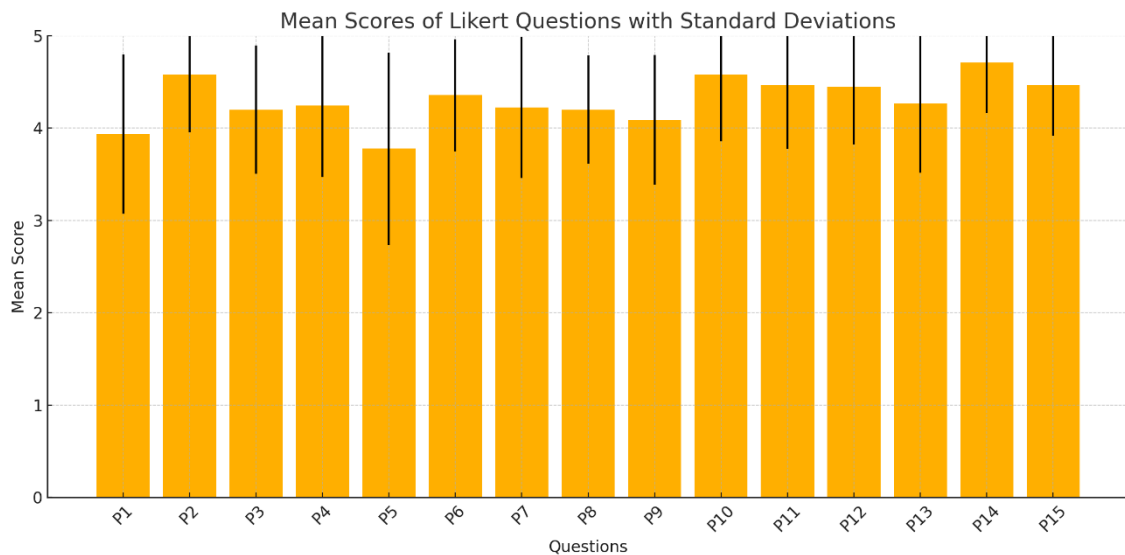


Figure 13. Mean Likert Scale Scores with Standard Deviations.

Figure 13 presents a bar chart displaying the mean scores of the 15 Likert-scale questions included in the descriptive statistics outlined previously. Each bar represents a question (P1 to P15), with the vertical axis indicating the mean scores ranging from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*) and the horizontal axis displaying the question numbers.

The error bars extending above and below each bar represent the standard deviation, providing insight into response variability. Smaller error bars (e.g., for questions P8 and P15) indicate more consistent responses, whereas larger error bars (e.g., for Question P5) suggest greater variability in participant opinions.

The chart shows that most questions have a mean score above 4, reflecting a general trend of agreement among participants. Question 14 has the highest mean score, followed closely by Questions 10 and 2, indicating the strongest agreement. In contrast, Question 5 has the lowest mean score and the highest standard deviation, suggesting more diverse responses.

This visualization complements the numerical results by offering a clear graphical summary of the data, illustrating both central tendencies (mean scores) and variability (standard deviations) for each question.

6.2.2 Statistical Test Analysis

Following the descriptive analysis of students' questionnaire responses, this section applies statistical tests to assess the reliability, consistency, and relationships among the dataset variables. These tests provide deeper insights into response patterns and ensure the validity of the collected data for further interpretation.

Two statistical tests were conducted:

1. Cronbach's Alpha – This test evaluates the internal consistency of the questionnaire items, measuring the reliability of the instrument. A high Cronbach's Alpha value indicates strong coherence among the items, reinforcing the credibility of the responses.
2. Pearson and Spearman Correlation Analyses – Pearson's correlation assesses linear associations between variables, while Spearman's correlation examines non-parametric relationships. These analyses provide a broader understanding of potential connections between questionnaire responses.

These statistical tests confirm the robustness of the data and support a clearer interpretation of the findings.

6.2.2.1. Cronbach's Alpha Test

The Cronbach's Alpha test is a statistical measure used to assess the internal consistency and reliability of a set of items within a scale. It determines whether individual questionnaire items are correlated and collectively measure the same construct. In other words, it evaluates how well the items work together to assess a single concept or variable.

Cronbach's Alpha values range from 0 to 1, with higher values indicating greater internal consistency. A commonly accepted threshold for acceptable reliability is 0.7 or higher, though this may vary depending on the context and purpose of the study.

In this research, the Cronbach's Alpha test is particularly important as it ensures the reliability of the Likert-scale questions designed to evaluate communicative learning outcomes. Given that the study compares the effectiveness of PBL versus traditional teaching methods in enhancing first-year English students' communicative competence, it is crucial to confirm that the selected items consistently measure this construct.

A high internal consistency score strengthens the credibility of the study by confirming that the questionnaire reliably captures students' perceptions of their communicative learning improvement under the PBL methodology. If the items lack coherence, the conclusions drawn about students' learning outcomes may be unreliable.

The Cronbach's Alpha test in this study was conducted using Likert-scale Questions 1, 7, 10, 11, and 12, as these items are directly related to Specific Objective 1: *To study students' scores through different methodologies.*

These questions were carefully selected because they focus on key aspects of communicative learning outcomes, ensuring a robust evaluation of the effectiveness of PBL versus traditional methods.

The selected questions assess the following:

- Question 1 – Whether planning and executing a congress improved students' English communicative competence.
- Question 7 – The value of feedback received during the PBL activity for English language development and professional growth.
- Question 10 – Whether PBL provided practical insights into communicative skills not covered in traditional textbooks.
- Question 11 – Whether students perceive they learned English better using the PBL approach compared to traditional methods.

- Question 12 – Whether organizing a congress helped students apply English skills in the tourism industry.

These five items collectively address the core components of communicative competence in English and provide a comprehensive analysis of how PBL influences students’ learning outcomes. Focusing on these specific questions, the Cronbach’s Alpha test ensures that the most relevant data points are used to evaluate this research objective, reinforcing the validity and reliability of the study’s findings.

Table 29

Cronbach’s Alpha Test Part I: Reliability Statistics

Cronbach’s Alpha	Number of Elements
0.761	5

The value of 0.761 for Cronbach’s Alpha, as shown in Table 29, indicates a good level of internal consistency, confirming that these five items reliably measure the same construct. This strengthens the validity of the results and ensures that the findings related to students’ communicative learning outcomes under PBL are statistically sound and meaningful.

This reliability test is a crucial step in validating the questionnaire’s ability to provide accurate and insightful data on the effectiveness of PBL in enhancing communicative competence in English through Questions 1, 7, 10, 11, and 12 (Table 30).

Table 30*Cronbach's Alpha Test Part II: Total Item Statistics*

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Question 1	17.71	4.437	0.489	0.739
Question 10	17.07	4.700	0.555	0.709
Question 11	17.18	5.059	0.455	0.742
Question 12	17.20	4.936	0.591	0.703
Question 7	17.42	4.477	0.586	0.696

6.2.2.2. Pearson and Spearman Correlation

The Pearson and Spearman correlations are statistical tools used to measure the strength and direction of the relationship between two variables. These methods are essential for understanding how changes in one variable are associated with changes in another, providing insights into potential patterns or trends in the data.

The Pearson correlation is a parametric test that measures the linear relationship between two continuous variables. It assumes that the data are normally distributed and free of significant outliers. The Pearson correlation coefficient (r) ranges from -1 to 1:

- A value close to 1 indicates a strong positive linear relationship, meaning that an increase in one variable corresponds to an increase in the other.
- A value close to -1 indicates a strong negative linear relationship, meaning that an increase in one variable corresponds to a decrease in the other.
- A value near 0 suggests little to no linear relationship between the variables.

This method is particularly useful when analyzing data that meets the assumptions of normality and linearity, providing clear insights into direct proportionality.

The Spearman correlation, on the other hand, is a non-parametric test that measures the monotonic relationship between two variables. Unlike Pearson’s method, it does not assume normality or linearity, making it suitable for data that may contain outliers or is ordinal in nature. The Spearman correlation coefficient (ρ) also ranges from -1 to 1, with similar interpretations to Pearson’s correlation. However, instead of examining the actual values, Spearman’s method ranks the variables and evaluates their association, allowing it to capture relationships that are not strictly linear but still exhibit consistent ranking trends.

Both correlation methods serve different purposes in research:

- The Pearson correlation is valuable for confirming linear associations and is often used in hypothesis testing and predictive models.
- The Spearman correlation is particularly useful for exploratory analyses or when Pearson’s assumptions are not met, offering a more flexible approach to identifying relationships in the data.

Together, these methods provide a comprehensive understanding of the associations between variables, enabling researchers to draw meaningful conclusions about the relationships being studied.

Table 31

Pearson Correlation I

		Question 4	Question 11
Question 4	Pearson Correlation	1	0.333*
	Sig. (two-tailed)		0.025
	N	45	45
Question 11	Pearson Correlation	0.333*	1
	Sig. (two-tailed)	0.025	
	N	45	45

* The correlation is significant at the 0.05 level (two-tailed).

Table 32*Pearson Correlation II*

			Question 4	Question 11
Spearman's Rho	Question 4	Correlation Coefficient	1.000	0.300*
		Sig. (two-tailed)		0.045
		N	45	45
	Question 11	Correlation Coefficient	0.300	1.000
		Sig. (two-tailed)	0.045	
		N	45	45

* The correlation is significant at the 0.05 level (two-tailed).

Tables 31 and 32 present the correlation analysis results between Question 4, which evaluates collaborative teamwork, and Question 11, which measures perceived learning improvement through PBL. Both Pearson and Spearman correlation coefficients were calculated to provide a comprehensive understanding of the relationship between these variables.

The Pearson correlation coefficient (r) is 0.333, indicating a moderate positive relationship between teamwork improvement and perceived learning improvement through PBL. This suggests that students who reported greater development of teamwork and interpersonal skills (Question 4) also tended to perceive higher learning benefits in English using the PBL approach (Question 11). The p -value for this correlation is 0.025, which is below the 0.05 threshold, confirming that the relationship is statistically significant and unlikely to be due to chance.

The Spearman correlation coefficient (ρ) is 0.300, also reflecting a positive relationship, albeit slightly weaker than the Pearson result. This measure accounts for ordinal relationships and is particularly useful in cases where the data may not meet the assumptions of linearity.

The p -value for Spearman's correlation is 0.045, confirming that this relationship is also statistically significant.

Figure 14 illustrates the frequency distribution for Question 4 (collaborative teamwork) filtered by Question 11 (perceived learning improvement through PBL). The X-axis represents the responses to Question 4, ranging from *Strongly Disagree* to *Strongly Agree*, while the Y-axis shows the number of participants selecting each response.

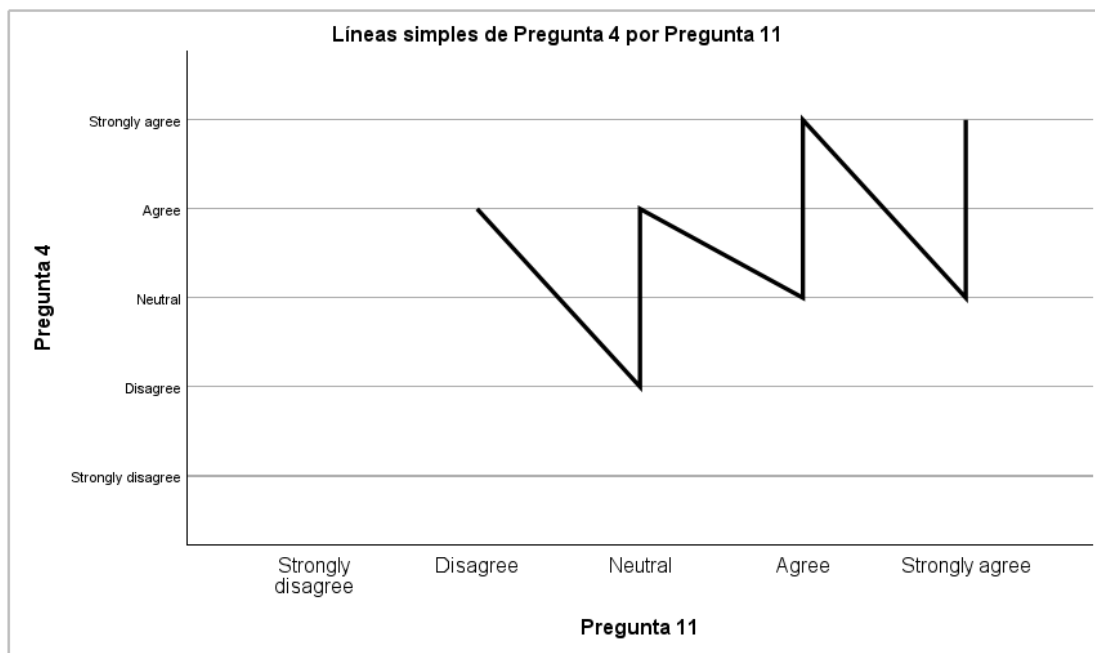


Figure 14. Questions 4 and 11 frequency distribution.

Although the graph shows some fluctuations, we can notice that the lines tend to rise in key areas, especially when participants agree or strongly agree with both questions. This indicates that, in general, those who believe the collaborative nature of the project improved their teamwork and interpersonal skills in English (Question 4) also tend to value the PBL approach for learning English in the context of tourism (Question 11). In other words, a positive perception of teamwork is connected to a higher appreciation of this approach for learning English.

Looking at the responses in the higher categories of "Agree" and "Strongly agree," Many people see improvement in their English learning by using the PBL. These participants also seem to believe that their teamwork and communication skills in English have been strengthened due to the collaboration during the project. The relationship between the responses to both questions can be viewed positively by seeing that students who enrich their team work competence in English also value learning practical and useful English through this active method.

In conclusion, the quantitative analysis conducted in this research has provided a comprehensive examination of students' academic performance and their questionnaire responses through descriptive statistics and inferential tests. While there are some differences in responses, the positive analysis suggests that there is a remarkable bond between collaborative teamwork and the perception of better English learning using the PBL. The statistical analysis of students' grades revealed significant differences among groups, with the experimental group B consistently achieving higher results than the control groups. ANOVA results confirmed that these differences were statistically significant, and *post-hoc* Tukey tests further identified specific contrasts between groups. Effect size calculations, including η^2 (eta squared) and ω^2 (omega squared), indicated that a substantial proportion of the variance in scores was attributable to group differences, reinforcing the impact of the intervention applied to group B.

At the same time, the quantitative evaluation of students' questionnaire responses complemented the analysis of academic results. Descriptive statistics provided an overview of response trends, while statistical tests ensured the validity and reliability of the data. The Cronbach's Alpha test confirmed the internal consistency of the questionnaire items, and correlation analyses using Pearson and Spearman coefficients explored relationships between

key variables. These results contribute to a broader understanding of the factors influencing students' experiences and learning outcomes.

To conclude, while the statistical findings offer valuable insights into measurable differences and associations, they do not fully capture the details of students' perceptions, attitudes, and learning experiences. To complement this numerical analysis, the next section focuses on qualitative data, offering a deeper exploration of students' perspectives through their open-ended responses. This qualitative approach will help contextualize the statistical results, providing a more holistic interpretation of the overall findings.

6.3. Qualitative Analysis

The qualitative analysis of students' responses regarding PBL in the English for Tourism course reveals several key themes that provide insight into their learning experiences. The responses strongly highlight the perceived benefits of PBL, particularly in contrast to traditional learning methods. Many students emphasized that PBL not only facilitated language acquisition but also enhanced essential skills such as teamwork, problem-solving, and real-world application. The interactive and collaborative nature of the methodology was frequently praised, with students expressing higher levels of engagement and motivation compared to conventional textbook-based learning. Below are direct responses from students, followed by an analysis of the dominant themes that emerged from the qualitative feedback.

The qualitative research process is characterized by the absence of strictly consecutive phases during its development. In methodologies such as Grounded Theory (GT), (Glaser & Strauss, 2017), the focus is placed on executing a sequence of actions rather than adhering to a rigidly defined research process. This approach allows researchers to explore and develop an understanding of the subject matter in a more flexible and iterative manner. These qualitative

research processes often emerge from researchers' reflections following their initial engagements with the study's reality.

To provide a systematic view, scholars have described the qualitative research process in terms of four fundamental phases. These phases are not necessarily sequential but serve to structure and facilitate the progression of the study. Each phase further comprises various stages. The figure below illustrates these phases and their corresponding stages.

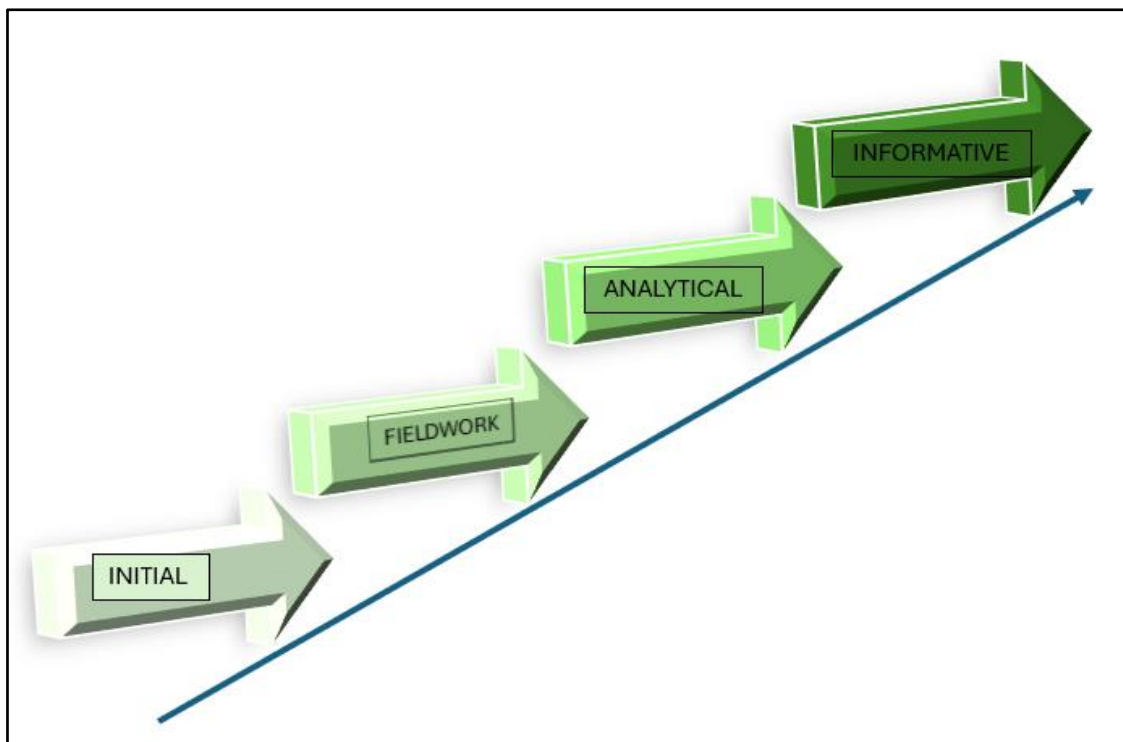


Figure 15. *Phases of the qualitative research (adapted from Rodríguez Gómez et al., 1996, pp.63-64.)*

When examining Figure 15, each phase overlaps with both the preceding and subsequent phases, illustrating the fluid and iterative nature of qualitative research. Work on the next phase often begins before the current phase is fully completed. This principle also applies to the various stages within each phase.

Scholars have outlined the research process in the social sciences to provide an initial framework before engaging specific research details. However, it is important to acknowledge

that this framework represents a theoretical model and may not fully correspond to actual research practices.

Furthermore, the methodological perspective of GT is central to the design and development of this research. It states that theoretical propositions emerge from data obtained through research rather than being derived from pre-existing theories. In this approach, the research process itself generates an understanding of the phenomenon under study. This substantive theory enriches interpretation and provides novel insights into various phenomena.

A key debate in qualitative research, particularly within GT, concerns the distinction between emergent designs and projected or systematic designs. Emergent designs evolve during data collection and preliminary analysis, whereas projected designs are established before the research begins. While scholars acknowledge the advantages of emergent designs in qualitative research, they also argue that projected designs offer practical benefits in many investigations, where a structured approach is necessary. Decisions made by researchers at the outset (such as defining the research problem, selecting cases, and specifying timeframes and contexts) are integral to shaping the research process.

In this research, data collection included an open question aimed at gathering students' opinions regarding their experience with PBL. Rather than presenting all individual responses, the collected data have been systematically analyzed and categorized into key themes, which reflect the most prominent aspects highlighted by the students. The thematic analysis provides insight into how PBL impacted their engagement, communication skills, teamwork, and overall learning experience.

Following that collection of student responses, it becomes evident that PBL was widely appreciated for its dynamic and engaging nature. Many students expressed a preference for this approach over traditional textbook-based learning, highlighting its ability to foster communication, teamwork, and real-world application. The following section categorizes and

analyses the key themes that emerged from the feedback obtained through the open question asked in the Likert-test (*Annex 3*). Below, the key themes that emerged from the feedback are described:

1. Engagement and motivation: many students underlined how PBL made learning more motivating and enjoyable compared to conventional textbook-based learning. They expressed that the interactive nature of PBL helped maintain their interest and motivation throughout the course. Two examples illustrate this sentiment:
 - *This way of learning English was much more fun than just doing exercises in a book. In the end, you learn without realizing it, and you even gain more confidence in speaking publicly. They should use this method in more subjects¹⁰.*
 - *Honestly, this way of learning was far more useful than normal classes. I became more confident when speaking, and I learned how to work in a team. It was much more engaging than just doing exercises.*
2. Improvement in communication and confidence: one of the most frequently mentioned benefits was the improvement of communication skills. Students noted that speaking English became more natural due to the practical application of the language. Several responses also pointed out that PBL increased their confidence when speaking in public, a crucial skill in the tourism industry. The following examples reflect this:
 - *I think PBL is the best way to learn English for two reasons, and in general as well. You learn English little by little every day by speaking with your classmates and teachers, and you gain confidence in public speaking too.*

¹⁰ Sentences in italics are examples of students' answers.

- *In my opinion, this methodology greatly improved my communicative skills in English and helped me speak in public with confidence during the congress. I believe this methodology provided many opportunities, such as working in groups with students from different backgrounds and improving our English skills in real situations. I am very satisfied with this project, and I strongly recommend it.*

3. Teamwork and collaboration: some students pointed out the value of teamwork in the learning process. They highlighted how working in groups allowed them to share ideas, learn from one another, and experience a collaborative learning environment. However, some also acknowledged challenges related to unequal participation, where certain group members contributed more than others. The following examples illustrate these perspectives:

- *In general, I think that Project-Based Learning is a very important approach for us. We learned how to work in a group, listen to the ideas of our group members, and reach agreements. These cooperative activities will help us in the future when we need to successfully complete other projects.*
- *This congress was a creative way to learn instead of the classical method. We all worked in a group, and each person contributed their part, learning something new in the process. In general, it was a great experience at the university. However, one issue I noticed was that some people did not attend class and did not fulfill their responsibilities. As a result, other group members had to work harder while those who contributed little or nothing benefited equally. Nevertheless, I found this activity very interesting as a way of learning more about English and tourism.*

4. Practical and real-world application: a recurring theme was the practicality of PBL. Students appreciated the opportunity to apply English in real-world situations, such as organizing a congress. They viewed this as a more effective way to prepare for their professional careers compared to traditional learning methods. The following examples highlight these insights:

- *I personally believe that organizing a congress using this methodology has taught me a lot about the practical use of English. Working in groups was really useful because I learned how to apply English in real situations, to communicate and collaborate with my team, plan our work, and achieve good results in the tourism industry.*
- *I think this project was a very innovative way of learning English and applying the knowledge we need to use in our professional lives. This method is far better than a typical class. I enjoyed this subject much more than the classic English lessons, and I also believe it helped me improve my communication skills.*

5. Creativity and autonomy: several responses spotlighted the creative freedom provided by PBL. They valued the autonomy they had in organizing projects and deciding how to approach tasks. This aspect contributed to their sense of ownership over the learning process and made them feel more actively involved. The following examples illustrate this perspective:

- *I really liked it and appreciated the effort from the teacher for trying to make something unique and different for us. For the very first time in my whole academic life, I had the chance to do something off the book and the freedom to create and learn communicative English with the help of my teacher and group instead of following the classic book, which had given us nothing but boredom*

my entire life. In my opinion, this way of teaching provides us with a more joyful way to learn and challenges us to grow.

- *I liked the fact that we were autonomous in the project while following the rules set by our teacher, Vicente. We were free to organize our subject, and the creative aspect was the most interesting part. Moreover, working in groups helped us improve our English communication as well as vocabulary. We learned in a more enjoyable way instead of relying on the boring classic textbook. To conclude, the project was both interesting and challenging.*

6. PBL vs. traditional textbook methods: they directly compared PBL to traditional learning and expressed a clear preference for the former. Many described textbook-based learning as *boring* and *ineffective* in contrast to the dynamic and interactive nature of PBL. These responses highlight the contrast:

- *In general, the methodology for learning English with a textbook is very boring. Instead, with Project-Based Learning, we put everything into practice through teamwork.*
- *I think this way of learning is the future. The old-school method of just reading a book and doing exercises is boring. With this project, I learned more and had fun at the same time.*

7. Role of the teacher: it was frequently mentioned as an important factor in the success of PBL. Students appreciated the teacher's guidance and enthusiasm, which they felt played a key role in making the project engaging and effective. The following examples emphasize this point:

- *I think the method we used was very innovative and more functional than the traditional one. I really enjoyed participating in it. Our teacher guided us through every step of the project.*

- *I think this has been an innovative, creative, and unique method of learning, and the teacher knew how to teach with love and passion. He made me enjoy the subject like never before. This approach breaks away from traditional methods and provides a truly original way to learn English. Through this project, we improved our knowledge of tourism in English, learned more communicative aspects, and worked effectively in groups. It was a great experience, and I hope to have the opportunity to do it again in other subjects.*

CHAPTER 7 - DISCUSSION

After presenting the results obtained from both students' academic performance and questionnaire responses, this chapter provides a critical interpretation of the findings. The discussion aims to contextualize the statistical outcomes within the framework of the research objectives and existing literature. By analyzing the significance of both quantitative and qualitative results, this section seeks to offer a deeper understanding of the impact of the implemented methodology and its implications for foreign language learning.

The chapter begins by examining students' academic performance, evaluating both descriptive statistics and inferential analyses, including ANCOVA, *t*-tests, ANOVA, and Tukey *post-hoc* comparisons. This discussion assesses the extent to which the experimental methodology influenced student outcomes and whether the differences observed between groups hold practical significance beyond statistical relevance.

The second section focuses on students' questionnaire responses, interpreting trends in descriptive statistics and reliability measures such as Cronbach's Alpha, along with correlation analyses. These results help evaluate the relationship between students' perceptions, engagement, and learning achievements.

Finally, the discussion incorporates qualitative analysis, providing a more comprehensive interpretation of the findings. With the integration of both quantitative and qualitative perspectives, this chapter explores potential explanations for the observed patterns, considering factors such as motivation, learning strategies, and student engagement. This discussion serves as a bridge to the final conclusions of the study, highlighting key findings and their pedagogical implications through explicit examples from students' responses.

7.1. Discussion of the Quantitative Results on Student Outcomes

The quantitative results provide a strong foundation for understanding how different teaching methods impact student performance, particularly when compared to the traditional textbook-based approach and considering variables such as age. This section thoroughly analyzes the findings from descriptive statistics, ANCOVA, *t*-tests, ANOVA, and Tukey *post hoc* analysis to explore their implications within the context of the research objectives.

This discussion aims to give out deep insights into the effectiveness of the experimental teaching method, PBL, implemented in Group B, compared to the traditional methodologies used in control groups A, C, and E.

The findings highlight the importance of adapting teaching approaches to optimize student learning outcomes. The clear differences observed between groups state that the innovative methodology, PBL, improves the students' academic performance as suggested by the research of Song et al. (2024). From an educational perspective, these results support the adoption of student-centered pedagogies as a means to more effectively address learning needs at the university level.

7.1.1. Discussion of Descriptive Statistics

The descriptive statistics indicate that the median age of students across all groups was 19.6538 years, with minor variations among groups. Group B (experimental) had a median age of 19.4667 years, which was slightly lower than that of Group A (19.8070 years) and Group E (20.4500 years). Notably, Group C exhibited the youngest median age at 18.85 years. While these age differences are relatively small, they warranted further investigation to assess whether age could influence academic performance.

The age distribution within each group highlights subtle demographic distinctions that may reflect differences in prior educational experiences or personal maturity. Although not

directly measured in this study, these factors could contribute to variations in academic preparedness and responsiveness to different teaching methods. For instance, the younger median age in Group C might correlate with different engagement levels compared to the older Group E, potentially affecting learning receptiveness and performance. These demographic trends underscore the importance of tailoring pedagogical strategies to accommodate diverse student populations effectively.

The histogram of grades for the entire cohort of 182 students displayed a normal distribution, with an overall mean grade of 6.5742. This normal distribution validates the use of parametric tests, such as ANCOVA and t-tests, for statistical analysis. Furthermore, the grades ranged from a minimum score of 2 to a perfect score of 10, with modal scores clustering around 7 and 9. This wide grade distribution reflects diversity in student performance, which may be influenced by the teaching methodologies employed.

These findings suggest that age, as a proxy for maturity, could indirectly influence motivation, discipline, and engagement with course material. Older students, as seen in Group E, may demonstrate greater intrinsic motivation and responsibility, potentially affecting their adaptability to different teaching styles. Conversely, the younger median age in Group C may indicate a greater need for structured or engaging pedagogical approaches to optimize their learning potential.

7.1.2. Discussion of Statistical Tests

The interpretation of statistical tests provides deeper insight into the differences observed between the experimental and control groups. Thanks to the results of the tests, ANCOVA, *t*-tests, ANOVA, and Tukey *post-hoc* comparisons, it is possible to determine whether the variations in students' academic performance are both statistically significant and meaningful within the context of this study.

The ANCOVA test was conducted to control potential confounding variables, particularly age, and to assess the adjusted differences in student performance. *t*-tests for pairwise comparisons offered a more granular examination, identifying how the experimental group (B) differed from each control group (A, C, and E). The ANOVA test confirmed the overall significance of differences among groups, while Tukey's *post-hoc* analysis pinpointed the specific group comparisons where these differences were most pronounced.

These findings contribute to a more comprehensive evaluation of the effectiveness of the PBL methodology implemented with first-year students. Moreover, they provide a foundation for further interpretation, particularly in relation to students' perceptions of learning and the pedagogical impact of the experimental approach.

7.1.2.1. Covariance (ANCOVA)

Conducting an Analysis of Covariance (ANCOVA) is a fundamental step in any rigorous study, as it allows for the control of potential confounding variables, thereby providing a clearer understanding of the main effects under investigation. In this quasi-experiment, ANCOVA was particularly relevant as it ensured that age, a potential influencing factor, was accounted for, thereby enhancing the reliability and validity of the findings.

The ANCOVA results offer critical insights into the relationship between age and student grades. As indicated in Figures 6, 7, and 8, the *p*-value for age is 0.884 ($p > 0.05$), demonstrating that age does not have a statistically significant effect on student performance. This finding is essential, as it eliminates age as a possible source of bias, thereby confirming that the observed differences in grades are attributable to teaching methods rather than demographic factors.

Furthermore, since all confidence intervals exclude the value 0, the differences in students' scores are statistically significant. The value for groups was < 0.001 ($p < 0.05$),

indicating that teaching methods had a substantial impact on student performance. This result supports the hypothesis that the experimental teaching method PBL implemented in Group B had a notable greater effect on student outcomes compared to the traditional methods used in the control groups (A, C, and E).

A critical consideration is whether age (the covariate) influenced students' grades. As previously stated, the significance value for age ($p = 0.884$) is well above the commonly accepted threshold of 0.05, confirming that there is no significant relationship between age and grades. In other words, differences in scores cannot be attributed to variations in student age. This further strengthens the conclusion that age does not influence academic performance across any of the groups.

ANCOVA Results for Teaching Method

To assess the probability of a student belonging to a specific group based on the teaching methodology used, ANCOVA was conducted for groups. The significance value for groups ($p < 0.001$) is much lower than 0.05, confirming that significant differences exist between the groups. This suggests that the teaching methodology (PBL in Group B vs. traditional methods in Groups A, C, and E) has a direct and meaningful impact on student grades in English.

The pairwise comparisons across groups further support this conclusion (Figure 5):

- Group B vs. Group A: Mean difference = 2.5; Confidence Interval = (1.93, 3.09)
- Group B vs. Group C: Mean difference = 2.6; Confidence Interval = (1.88, 3.30)
- Group B vs. Group E: Mean difference = 2.4; Confidence Interval = (1.49, 3.30)

Since all confidence intervals exclude 0, the differences between Group B and the control groups are statistically significant, reinforcing the effectiveness of PBL methodology used in Group B.

Visual Representation of Results

As illustrated in Figure 7, Group B (Experimental) achieved the highest mean grade, as indicated by its position on the vertical axis. The error bars for Group B do not overlap with those of Groups A, C, and E, providing a visual confirmation of a statistically significant difference. This confirms that differences in grades are attributable to the teaching method (PBL in Group B) and not to age, as the ANCOVA results show no significant effect of age ($p = 0.884$).

7.1.2.2. *t*-Tests for Pairwise Comparisons

t-tests for pairwise comparisons are vital in analyzing differences between groups in quasi-experimental designs. This statistical method is particularly useful for identifying specific group disparities and assessing the effectiveness of interventions. In this study, *t*-tests were instrumental in detecting significant differences between the experimental and control groups, providing robust evidence of the impact of teaching methodologies.

Pairwise comparisons between Group B and the control groups (C, A, and E) revealed significant differences in mean grades, with *p*-values consistently less than .05. These findings underscore the enhanced ability of Group B students to communicate in English, demonstrating greater competency and learning effectiveness because of the PBL method. Specifically, the data showed the following:

1. Group B vs. Group C

- The mean grade for Group B was 2.6 points higher than that of Group C, a difference that is both statistically significant and practically meaningful. This result reflects the tangible benefits of the experimental teaching method.
- The non-overlapping 95% confidence intervals for the two groups provide additional visual confirmation of this disparity.
- Moreover, this finding highlights the adaptability of the PBL method in fostering critical skills such as language proficiency and problem-solving, both of which are key objectives in modern education. Group C's outcomes suggest a potential need for additional scaffolding to achieve similar levels of effectiveness.

2. Group B vs. Group A

- Consistent with the comparison with Group C, Group B exhibited significantly higher mean grades than Group A, further supporting the efficacy of the PBL method.
- This comparison highlights the advantages of student-centered approaches over textbook-focused methods, particularly in improving practical communication skills and engagement with course materials. The reliance of Group A on traditional methods may indicate limitations in addressing diverse learning needs.

3. Group B vs. Group E

- The results for Group B compared to Group E also demonstrated a statistically significant difference, with Group B outperforming Group E. This finding reinforces the conclusion that the traditional teaching methods employed in Group E were less effective than the PBL approach.

- These findings emphasize the necessity of modernizing instructional strategies to keep up with evolving educational goals. The outcomes for Group E suggest the importance of incorporating more interactive and application-based learning techniques to bridge competency gaps.

7.1.2.3. Group Comparison (ANOVA)

The results of the analysis of variance (ANOVA) confirm significant differences among the means of all groups, with a p -value of $< .05$. ANOVA is a crucial statistical tool in experimental research, as it enables the simultaneous comparison of multiple groups, providing a broad perspective on the data. This test establishes that at least one group's mean grade differs from the others, making it essential for identifying general patterns before conducting more detailed pairwise analyses. However, while ANOVA highlights overall differences, it does not specify which groups differ significantly. This limitation necessitates a subsequent post hoc analysis to delineate pairwise differences.

The ANOVA results support the central hypothesis that the teaching method has a significant impact on academic performance. The higher mean grades observed in Group B suggest a pronounced deviation from the performance trends of the control groups. These findings justify a closer examination of specific group differences to identify patterns in the effectiveness and adaptability of the PBL method.

Additionally, ANOVA's ability to analyze multiple groups simultaneously offers a comprehensive overview of the data, highlighting the broader impacts of different teaching methodologies. Future research can build on this approach by exploring contextual factors that may mediate or moderate these effects.

7.1.2.4. Tukey Test

The Tukey *post hoc* analysis provides a deeper understanding of the specific pairwise differences that ANOVA alone cannot elucidate. The Tukey test revealed that Group B's mean grades were significantly different from those of Groups C, A, and E, with all comparisons yielding significance levels below .05.

Notably, the difference between Group B and Group C was particularly pronounced, with a *p*-value of $< .001$. This finding highlights the substantial benefits of problem-based learning (PBL) over traditional teaching methods, particularly in contexts that emphasize engagement and critical thinking. However, comparisons among Groups C, A, and E did not yield significant differences, suggesting that these control groups, which relied on traditional pedagogical approaches, achieved similar outcomes.

The Tukey analysis underscores the necessity of targeted interventions to enhance teaching effectiveness. The clear advantages observed in Group B indicate the potential for PBL to drive significant improvements in educational outcomes. Future research should focus on optimizing the PBL framework for broader application across various subjects and educational contexts.

The statistical analyses conducted using SPSS confirm that Group B, which employed the PBL method, consistently outperformed the control groups in terms of learning and competency. Additionally, while age differences were present, they did not significantly influence the results, as verified through the ANCOVA analysis. The statistical tests performed, including *t*-tests, ANOVA, and the Tukey *post hoc* test, provide strong evidence that the PBL approach had a measurable and positive effect on student performance. These findings underscore the potential of innovative, student-centered teaching methods to enhance educational effectiveness and drive meaningful improvements in academic achievement.

The success of Group B highlights the importance of adopting adaptable teaching strategies that prioritize critical thinking, engagement, and real-world problem-solving skills. Further investigations should explore how PBL can be refined and expanded for use across diverse educational settings.

7.2. Discussion of Quantitative Results from Student Questionnaires

The analysis of students' questionnaire responses provides valuable insights into their perceptions, attitudes, and experiences regarding the implemented methodology. While the previous section focused on academic performance, this discussion examines how students' self-reported experiences correspond to their learning achievements. This section aims to interpret the responses through statistical measures in order to identify potential relationships between students' perceptions and their actual performance. The discussion begins with an overview of the descriptive statistics, summarizing response distributions and highlighting key trends. It then evaluates the results of statistical tests, including Cronbach's Alpha for internal consistency and Pearson and Spearman correlation analyses to examine associations between different questionnaire variables. These analyses offer a deeper understanding of how students perceived the learning process and the reliability of the questionnaire itself.

This section takes these aspects into account to contribute to a more complete evaluation of the intervention's effectiveness. The findings will later be integrated with the qualitative analysis in Section 7.3, where students' open-ended responses will provide further context and depth to the statistical results.

7.2.1. Discussion of Descriptive Statistics

The descriptive analysis of the Likert-scale questionnaire provides key insights into the effectiveness of PBL in achieving both the main objective and the specific objectives of this

study. The data reveal trends in participants' responses that are in accordance with the study's objectives, demonstrating strong levels of agreement with statements related to communicative competence, engagement, preferences for PBL, and collaboration. The results strongly support the main objective: evaluating the effectiveness of PBL compared to traditional teaching methods in improving first-year English students' communicative competence.

Questions 1, 10, 11, and 12, which directly assess aspects of communicative competence, show mean scores above 4.0, indicating a high level of agreement. For example, Question 11, which evaluates whether students learned better using PBL compared to traditional methods, has a mean score of 4.47 ($SD = 0.69$), suggesting that participants generally perceive PBL as a more effective method for improving their English communicative competence. Similarly, Question 10, with a mean score of 4.58 ($SD = 0.72$), highlights the practical benefits of PBL in developing communicative skills that extend beyond textbook learning. The high scores across these items affirm that PBL is perceived as a transformative approach to language learning, particularly in the context of professional and real-world applications.

The descriptive data provides strong evidence of favorable outcomes associated with PBL-based learning, addressing the first specific objective: examining students' performance under different teaching methodologies. For instance, Question 14, which addresses creativity and innovation, has the highest mean score (4.71, $SD = 0.55$), indicating a strong consensus among participants. This finding reflects how PBL fosters innovative thinking and creative problem-solving. Similarly, Question 15, which examines the application of theoretical knowledge to practical situations, also scores highly (4.47, $SD = 0.55$), suggesting that students achieve strong learning outcomes through PBL methodologies.

However, Question 5, which has a lower mean score of 3.78 ($SD = 1.04$), highlights variability in students' prior knowledge of the methodology. This suggests that some students

may initially struggle to adapt to PBL without adequate preparation, underscoring the importance of providing structured guidance during the transition to this learning approach.

PBL significantly enhances student engagement and motivation, fulfilling the second specific objective. Question 2, which compares engagement in PBL versus traditional methods, has a mean score of 4.58 ($SD = 0.62$), reflecting a strong consensus among participants. The absence of disagreement on this item suggests that organizing a congress was universally perceived as more engaging than traditional teaching approaches. Furthermore, Question 3, which evaluates confidence gained through PBL, has a mean score of 4.20 ($SD = 0.69$), indicating that participants felt more self-assured using English in professional contexts after engaging in PBL activities. These results confirm that PBL effectively fosters higher levels of engagement and motivation.

The descriptive statistics also reveal a clear preference for PBL among participants, addressing the third specific objective. Question 6, which examines whether PBL allowed students to explore topics beyond the standard curriculum, has a mean score of 4.35 ($SD = 0.61$), suggesting that participants appreciated the exploratory and flexible nature of PBL. Similarly, Question 9, which measures cultural awareness gained through PBL, has a mean score of 4.09 ($SD = 0.70$), indicating that students found the methodology valuable for understanding cultural aspects of language use in professional contexts. These results demonstrate the effectiveness of PBL in broadening learning experiences and resonating with student preferences.

Collaboration is a central element of PBL, and the data confirm that students perceive PBL as fostering teamwork and interpersonal growth, fulfilling the fourth specific objective. Question 4, which evaluates improvements in teamwork, has a mean score of 4.24 ($SD = 0.77$), reflecting strong agreement despite some variability. Additionally, Question 7, which assesses the value of feedback received during the project, scores 4.22 ($SD = 0.77$), indicating that

participants found the collaborative aspects of PBL beneficial for their professional and linguistic development. Question 13, which measures the sense of accomplishment from collaborative efforts, has a mean score of 4.27 ($SD = 0.75$), demonstrating that students felt proud of their achievements within the PBL framework. These results confirm that PBL promotes effective collaboration and supports teamwork-related objectives.

The descriptive analysis strongly supports the effectiveness of PBL in achieving the main and specific objectives of the study. The high mean scores across most questions indicate that participants view PBL as a superior methodology for fostering communicative competence, engagement, collaboration, and exploratory learning. While variability in some items, such as Question 5, suggests areas for improvement (e.g., better preparing students for PBL), the overall findings validate the benefits of this innovative teaching approach. These results provide a robust foundation for further discussion and interpretation of how PBL impacts first-year English students' learning experiences and outcomes.

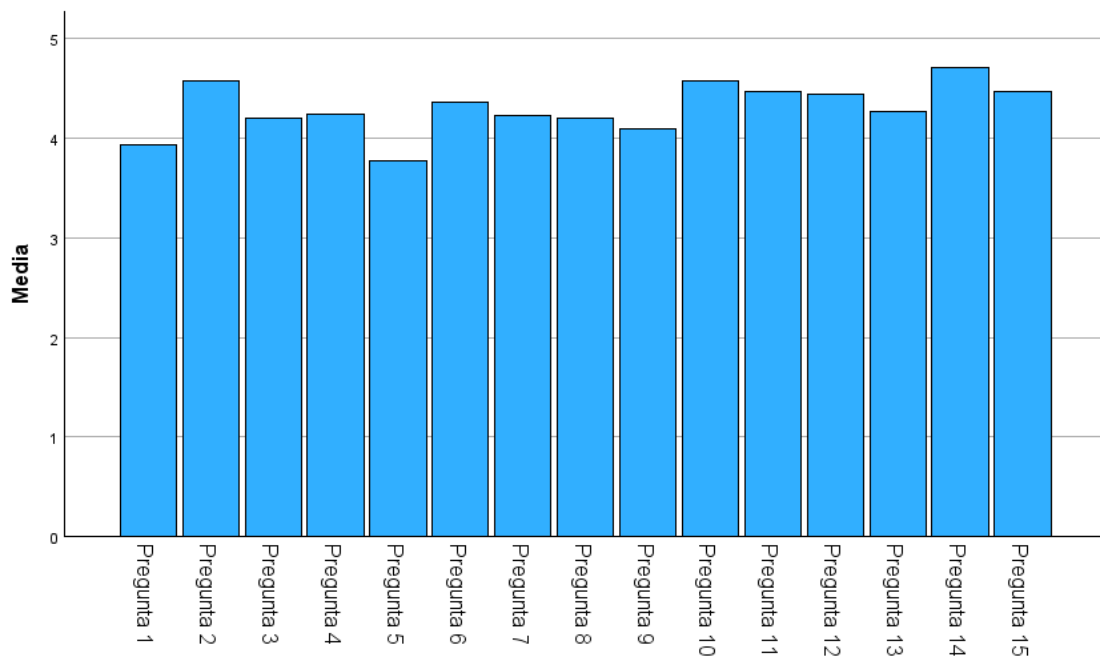


Figure 16. Mean Scores for Likert-Scale Questions

Figure 16, which displays the mean scores for each of the Likert-scale questions, directly complements the discussion of the descriptive analysis by visually reinforcing key findings and trends. It shows that most questions have mean scores above 4.0, corresponding to *Agree* on the Likert scale. This lines up with the main finding that participants perceive PBL as an effective methodology. The visual representation of high mean scores supports the textual discussion, demonstrating strong agreement with statements related to communicative competence, engagement, collaboration, and exploratory learning.

The chart highlights high scores corresponding to specific objectives. Regarding the main objective, questions such as Q11 and Q10, with mean scores above 4.4, indicate strong agreement that PBL improves communicative competence, as discussed in the analysis. For Specific Objective 2, related to engagement, Q2 has one of the highest mean scores, emphasizing the high level of engagement PBL provides. For Specific Objective 4, concerning collaboration, questions such as Q4 and Q13, with mean scores slightly above 4.0, confirm the effectiveness of PBL in fostering teamwork.

The image also visually depicts differences in mean scores across questions. For example, Q5 has a noticeably lower mean compared to others, which corresponds to the discussion of variability in students' prior knowledge of PBL. This lower score reinforces the need for better preparation or orientation before introducing PBL activities. Additionally, the highest mean score, observed in Q14, highlights creativity and innovation as a particularly well-received aspect of PBL. This finding directly supports the analysis, which identified creativity as one of the most positively perceived elements of the methodology under Specific Objective 1.

With the appropriate emphasis on specific bars corresponding to key findings, the chart effectively reinforces the conclusions derived from the descriptive analysis and provides a clear summary of participants' responses.

7.2.2. Discussion of Statistical Tests

The analysis of statistical tests provides a deeper understanding of the differences observed between the experimental and control groups. This section discusses the results of ANCOVA, *t*-tests, ANOVA, and Tukey *post hoc* comparisons to determine whether variations in student performance are statistically significant and meaningful within the context of this investigation.

ANCOVA was conducted to account for covariates and assess the adjusted differences in student performance. The *t*-tests for pairwise comparisons enabled a detailed examination of how the experimental group differed from each control group. The ANOVA results confirmed meaningful differences between groups, while Tukey's *post hoc* analysis identified where those differences occurred.

Overall, this discussion serves as a bridge to the analysis of questionnaire responses in the following section, allowing for a connection between statistical performance measures and students' perceptions of their learning process.

7.2.2.1. Cronbach's Alpha Test

The Cronbach's Alpha value of 0.761, calculated for the selected items (Questions 1, 7, 10, 11, and 12), demonstrates a good level of internal consistency. This result is significant as it confirms that these items effectively measure the construct of communicative competence in English, fulfilling the study's main objective. These specific questions were deliberately chosen because they focus on different facets of communicative learning outcomes achieved through PBL. Their consistent measurement ensures that the findings regarding students' perceptions and learning outcomes are valid and reliable.

A Cronbach's Alpha value exceeding the threshold of 0.7 indicates that the items are sufficiently correlated and function as a cohesive scale. This is particularly important given the

study's focus on evaluating the effectiveness of PBL compared to traditional methodologies. The high reliability of this subset of questions ensures that the differences observed in responses are not due to inconsistencies in the questionnaire but rather reflect genuine differences in students' perceptions and experiences. Furthermore, this level of reliability provides confidence in the results derived from both the descriptive and inferential analyses associated with these questions.

The internal consistency revealed by this test also underscores the effectiveness of the questionnaire design in capturing the construct of communicative competence. For example, the selected questions address various dimensions, such as improvement in communicative skills (Q1), the practical application of knowledge (Q12), and perceived learning effectiveness (Q11). The relatively high Cronbach's Alpha value confirms that these dimensions are interrelated and contribute to a cohesive understanding of how PBL impacts English learning outcomes. Moreover, the absence of items that significantly detract from the reliability of the scale suggests that the questions were well-constructed and relevant to the study's specific objectives.

In summary, the Cronbach's Alpha test confirms that the questionnaire is a reliable instrument for evaluating students' perceptions of their communicative competence under the PBL methodology. This finding strengthens the credibility of the statistical results and supports the broader conclusions regarding the effectiveness of PBL in enhancing communicative learning outcomes. It also establishes a solid foundation for integrating these results into the overall discussion of the study's objectives and contributions to educational research.

7.2.2.2. Pearson and Spearman Correlation

The tables below present the results of the correlation analysis between Question 4 (collaborative teamwork) and Question 11 (perceived learning improvement through PBL).

Both Pearson and Spearman correlation coefficients were calculated to provide complementary insights.

1. Pearson Correlation Results

- The Pearson correlation coefficient (r) is 0.333, indicating a positive but moderate relationship between the two variables. This suggests that as students perceive greater improvement in teamwork and interpersonal skills (Question 4), their perception of learning more and better English through PBL (Question 11) also tends to increase.
- The significance value (p) is 0.025, which is below the standard threshold of 0.05. This indicates that the observed correlation is statistically significant, meaning there is a reliable relationship between the two variables in the population represented by the sample.

2. Spearman Correlation Results

- The Spearman correlation coefficient (ρ) is 0.300, which also indicates a positive but slightly weaker relationship. As a non-parametric test, Spearman's correlation accounts for ordinal relationships, complementing Pearson's results by considering potential non-linear associations.
- The significance value (p) is 0.045, which is also below 0.05. This confirms that the relationship between the two variables is statistically significant.

These results indicate a positive relationship between teamwork skills and the perception of improved learning through PBL, as evidenced by both Pearson and Spearman correlation analyses. While the correlation is moderate, its statistical significance suggests that the association is meaningful and not due to chance. This reinforces the idea that collaboration is key to students' learning experiences. Understanding this connection provides valuable

insights into how teamwork contributes to perceived learning outcomes, demonstrating the advantages of strengthening collaborative activities within the PBL framework.

Summary of Key Findings:

1. **Positive Relationship:** Both Pearson and Spearman correlations indicate a positive association between teamwork skills and the perception of improved learning through PBL. Students who feel that the collaborative nature of the congress improved their interpersonal skills are more likely to believe that PBL helped them learn English more effectively.
2. **Moderate Strength:** While the relationship is significant, the correlation coefficients (0.333 for Pearson, 0.300 for Spearman) suggest a moderate association. This implies that while teamwork is an important factor, other variables may also contribute significantly to perceived learning improvement.
3. **Statistical Significance:** The statistically significant p -values indicate that the observed relationship is unlikely to be due to chance, reinforcing the validity of the findings.
4. **Implications for PBL:** The results highlight the importance of collaboration in the PBL approach. Emphasizing teamwork within PBL activities could enhance students' perception of learning outcomes, as these two factors appear to be closely linked.

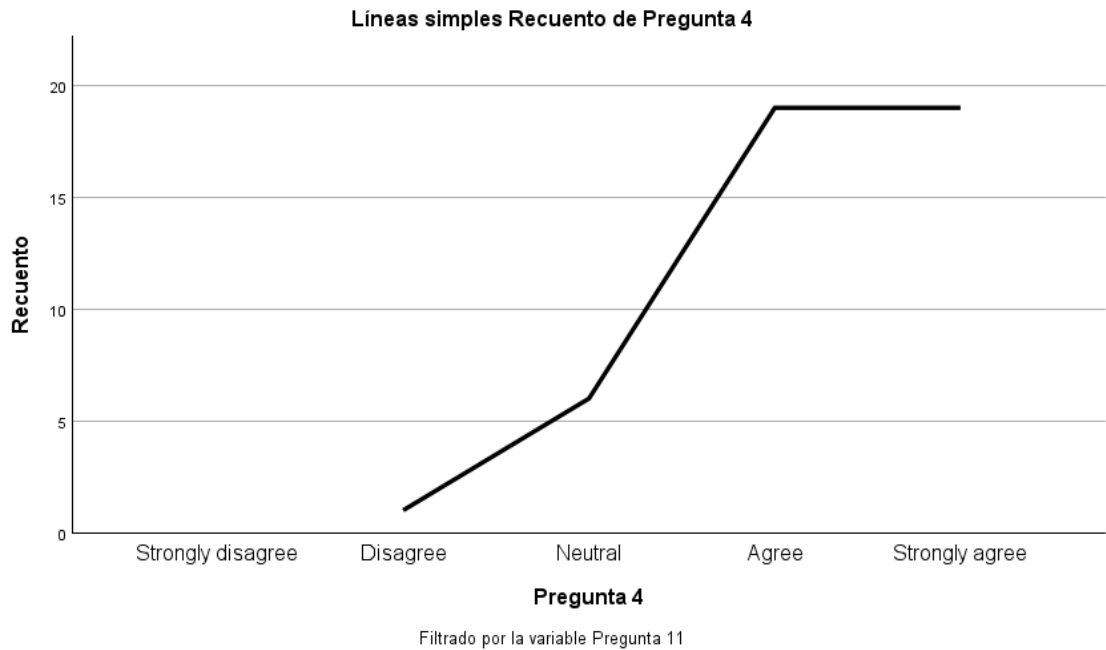


Figure 17. *Correlation Between Likert-Scale Questions 4 and 11.*

As shown in Figure 17, there is a positive relationship between the two variables. As participants express stronger agreement with Question 4, their responses to Question 11 also show a higher frequency. The upward slope from *Disagree* to *Agree* indicates that participants who felt their teamwork and interpersonal skills improved during the PBL activity were more likely to perceive that PBL enhanced their English learning experience. The plateau at *Strongly Agree* suggests consistency in responses, with many participants strongly agreeing with both questions.

This visual trend supports the earlier correlation results, which demonstrated a positive, moderate relationship between teamwork (Q4) and perceived learning improvement (Q11). While the chart does not directly depict statistical correlation, it reinforces the idea that collaboration in PBL activities contributes to students' perceptions of improved learning outcomes.

7.3. Discussion of Qualitative Results

The qualitative evaluation of student responses confirms that project-based learning (PBL) is an effective methodology for improving the communicative competence of first-year English students compared to traditional teaching methods (Thomas, 2000; Stoller, 2006). This finding supports the main objective of this research, which aims to assess the effectiveness of PBL in enhancing students' communicative skills.

Students' testimonies reflect a more practical and natural use of English, emphasizing that the methodology allowed them to improve their fluency and gain confidence in oral expression. One particularly illustrative comment states, *I never learned English like this before, but I really liked it. I felt like I was doing something real and not just studying grammar rules.* Another student reinforces this perspective, saying, *This method was way better than just memorizing things from a book. We actually used English in real situations, and that helped a lot.* These perceptions confirm that PBL fosters a more authentic environment for language learning, encouraging real communication rather than the mere repetition of structures.

Regarding the first specific objective, which seeks to analyze students' performance under different methodologies, the qualitative data suggests that PBL may lead to better language acquisition. While this section focuses on qualitative analysis rather than numerical scores, students reported developing key competencies, such as oral and written production (Ellis, 2003; Hutchinson & Waters, 1987). One student expressed this by stating, *With this project-based methodology, I just can say it was excellent because I learned a lot about how to write a formal text, improving my communicative skills.* These statements suggest that if measured, students' performance within a PBL framework might reflect stronger language competencies than those developed through traditional methods (Richards & Rodgers, 2014).

The second specific objective aims to evaluate students' motivation and engagement levels when learning English through PBL versus traditional approaches. In this regard, the

qualitative data are conclusive: students found that PBL provided a higher level of interest and enjoyment in learning the language (Bonwell & Eison, 1991; Krashen & Terrell, 1983). One student highlighted, *This way of learning English was way more fun than just doing exercises in a book. In the end, you learn without realizing it and even gain more confidence to speak in public.* Another participant commented, *At first, I didn't know what to expect, but I ended up really enjoying it. This method makes learning feel natural, and you actually improve your English while having fun.* The interactive and practical application of the language played a significant role in maintaining students' enthusiasm, as evidenced by another student's reflection: *With this project, I learned more and had fun at the same time.* These responses reinforce the idea that PBL fosters greater motivation, which is essential for long-term language acquisition.

Concerning the third specific objective, which investigates students' opinions and preferences regarding PBL compared to traditional teaching methods, the results indicate a clear preference for project-based learning. Students described conventional textbook-based classes as monotonous and ineffective, whereas PBL provided a more active and enriching learning experience. One student highlighted this contrast by stating, *Traditional English classes do not provoke anything in students, but this project gave us the opportunity to learn actively and practically.* This idea increases the importance of adopting more dynamic, student-centered approaches that better address learners' needs.

The fourth specific objective, which focuses on assessing the effectiveness of students' collaborative work, is also reflected in the responses. Most students emphasized the value of teamwork (Johnson & Johnson, 1999), noting how it allowed them to exchange ideas, learn from peers, and feel more engaged in the learning process. One student stated, *I think this methodology is one of the best ways to learn not only English but everything. I enjoyed it so much, and it gave me more confidence to speak in public. Also, it helped me and my classmates*

spend more time talking and doing teamwork. Another participant explained, *Organizing a congress using this methodology taught me many things about using English in practical situations and working in groups.* However, some students pointed out challenges related to unbalanced participation in group tasks. One participant noted, *Some people didn't come to class and didn't do anything they should have. As a result, the other members of the group worked more than the others.* This suggests that while PBL encourages collaboration, structured group work strategies should be implemented to ensure balanced contributions from all participants.

The findings indicate that PBL not only improves communicative competence but also fosters a more engaging and meaningful learning experience. Traditional textbook-based methods were repeatedly described as ineffective (Richards & Rodgers, 2014) and tedious compared to the interactive nature of PBL. Moreover, students' motivation and engagement levels were significantly higher when they were allowed to work on projects and apply the language in real-world contexts. The collaborative dimension was also a key factor in learning success (Bonwell & Eison, 1991), although challenges in task distribution suggest that additional strategies may be needed to ensure fairness. Ultimately, the data collected in this study support the effectiveness of PBL as an innovative and highly beneficial methodology in English language teaching.

Over the study's specific objectives, the analysis of the qualitative results revealed additional themes relevant to the discussion. Students' responses were grouped into several key aspects, including the engagement and motivation, improvement in communication and confidence, teamwork and collaboration, practical and real-world application, creativity and autonomy, PBL against traditional text book and finally, role of the teacher.

First, regarding engagement and motivation, many students expressed that the interactive nature of PBL made learning more enjoyable and meaningful. Unlike textbook-

based methods, which they found monotonous, PBL encouraged active participation. One student remarked, *This way of learning English was way more fun than just doing exercises in a book. In the end, you learn without realizing it and even gain more confidence to speak in public.* Another student reflected on their initial uncertainty but ultimately found the method highly engaging, stating, *At first, I didn't know what to expect, but I ended up really enjoying it. This method makes learning feel natural, and you actually improve your English while having fun.* Other students felt this experience more encouraging, saying, *This was the first time I learned English like this, and I loved it. I like going to work with my classmates and actually speak English instead of just read or complete sentences.* This sense of active involvement led to greater motivation (Larsen-Freeman & Anderson, 2011), reinforcing the idea that students learn best when they are genuinely interested in the material.

Secondly, concerning the improvement in communication and confidence. A major benefit of PBL, according to students, was its positive impact on their communication skills and confidence in speaking English. Many students mentioned that the methodology provided them with more opportunities to speak in English, which made them feel more comfortable and proficient. One student highlighted this by stating, *I think PBL is the best way to learn English because you practice speaking with your friends and the teacher every day, which helps you gain confidence.* Other participant elaborated on how PBL facilitated authentic language use: *This methodology helps me to improve my English in different aspects. To learn a language, it is important to think in the language itself rather than just memorizing rules from a book.* This shift from theoretical knowledge to practical application allowed students to develop their speaking abilities in a natural and stress-free manner. As one student appropriately states, *Learning in groups every day with an objective is the best way to gain confidence in speaking in public.*

Thirdly, on regards the Teamwork and Collaboration. It was another key factor that students appreciated. Many expressed that working in groups helped them learn from one another and develop essential teamwork skills. One student remarked, *I think this methodology is one of the best ways to learn not only English but everything. I enjoyed it so much, and it gave me more self-confidence when I speak English in public.* However, while most students had a positive experience with group work, some pointed out challenges related to unequal participation. One student noted, *Some people didn't come to class, and they did not do anything they should have. As a result, the other members of the group worked more than those who did nothing or very little.* This highlights the need for clear structures to ensure balanced participation. Despite this, most responses reflected a strong appreciation for the opportunity to collaborate, with one student explaining, *I liked working in groups because you help each other and learn without even noticing. It's way better than just studying from a book.*

Practical and Real-World Application

Many students emphasized that PBL was highly valuable because it allowed them to apply their English skills in real-world situations. Instead of merely learning grammar and vocabulary, they were able to use the language in practical contexts. One student expressed this sentiment clearly: *I think this Project was a very innovative way of learning English and applied the knowledge we have to put into practice in our professional lives. This way is a better method than the typical class. I really enjoyed this subject much better than the Classic English class. And I also think that it helped me with my communication skills.*

The hands-on nature of PBL made the learning process feel more meaningful, as another student noted, *With this project-based methodology, I just can say it was excellent because I learned a lot about how to write a formal text, improving my communicative skills.* The organization of the conference was a real professional scenario to students, making the learning process more relevant to their future careers. As one student put it, *For the very first*

time in my whole academic life, I had the chance to do something off the book this year and learn English in a practical way instead of following a classic book, which gave us nothing but boredom.

In the fourth place, it comes the Practical and Real-World Application. Another topic that came out from the was the practical and real-world applicability of the skills students developed through PBL. Many students noted that, unlike traditional textbook approaches, the project allowed them to engage in authentic tasks that mirrored real-life professional contexts. One student reflected, *I personally believe that organizing a conference in this methodology has taught me lots of things and contents about the use of English in practical situations.* This reinforces the notion that learning becomes more meaningful when students can apply their knowledge to realistic scenarios. Students appreciated how the methodology fostered a more dynamic learning environment. As one participant observed, *I had the chance to do something off the book this year and learn communicative English contents with the help of my teacher and group.* This sense of freedom and relevance contributed to a deeper engagement with the subject matter. Another student explained, *I was able to learn more English and at the same time enjoy the process of the project,* underlining the connection between enjoyment and real-world application.

Furthermore, several students pointed out that PBL encouraged them to think beyond standard exercises and focus on effective communication. One student shared, *Learning English with projects is super useful because it makes you actually use the language pursuing Tourism goal, as the conference,* emphasizing the value of practical usage over rote memorization. Another added, *I learnt how to put English into practice in order to communicate and organise in group getting good results in the real tourism world.* These testimonies demonstrate how the new methodology can bridge the gap between academic learning and professional readiness. These examples reveal that PBL not only enriches

language acquisition but also prepares students for real-life challenges by immersing them in tasks that require active use of English. This practical learning was consistently described as more engaging, enjoyable, and effective than conventional classroom methods.

As key theme number 5, it is the Creativity and Autonomy. Many students valued the autonomy they had in organizing their projects and selecting their approach to tasks. One student described how this method encouraged innovation: *I think this method was very innovative. It was not just about following a book, but about being creative and thinking beyond standard exercises.* Similarly, another student highlighted how PBL encouraged them to think outside the box: *This method breaks with traditional ways of learning and allows us to develop our own ideas and solutions to the initial problem.* The ability to take ownership of their learning process made students feel more invested in their education. As one participant put it, *The fact that we were giving our ideas in this project made learning much more enjoyable and meaningful.*

Sixthly, the category PBLvs. Traditional Textbook Methods was found. A recurring theme in student feedback was the comparison between PBL and traditional textbook-based learning. Most students strongly preferred PBL, describing traditional methods as uninspiring. One student stated, *In general, the methodology for learning English with the book is very boring. Instead, with project-based learning, we put everything into practice in teamwork.* Another echoed this sentiment, explaining, *This methodology is better than others based on books because, with PBL, you work in groups, and your brain thinks in English naturally, rather than just translating from the book.* Furthermore, several students expressed that PBL made learning more enjoyable and effective. One student concluded, *This way of learning is the future. The old-school way of just reading a book and doing exercises is heavy. With this project, I learned more and had fun at the same time.* This demonstrates the importance of adopting innovative teaching methods that meet students' needs and expectations.

And finally, the Role of the Teacher. Students repeatedly mentioned the role of the teacher as a crucial element in the success of PBL. They appreciated the guidance, enthusiasm, and support provided by their instructor. One student noted, *Our teacher helped us every step of the way, making sure we were engaged and understanding everything.* Another expressed gratitude, stating, *I really liked and appreciated the effort from the teacher in trying to make something unique and different for us.* The teacher's role in fostering a positive learning environment was a key factor in students' motivation. As one student explained, *The teacher's attitude helped a lot because the classes were more active and fun than traditional English lessons.* This suggests that while PBL is an effective methodology, its success also depends on the educator's ability to facilitate and support student learning.

In conclusion, the qualitative analysis of student feedback strongly supports the effectiveness of PBL in the English for Tourism course. Students appreciated the methodology for its attractive nature, its ability to improve communication and teamwork, its real-world application, and its encouragement of creativity. Their preference for PBL over traditional textbook-based learning was evident, reinforcing the need for more dynamic and interactive teaching approaches. Finally, the role of the teacher was seen as a key factor in the success of this learning experience.

PART III. CONCLUSIONS OF THE INVESTIGATION

This final part of the thesis presents a reflection on the outcomes of the study, offering key insights into the effectiveness of PBL as a methodology for enhancing communicative competence in ESP. Based on both quantitative and qualitative data, the conclusions consolidate the central findings of the research, providing an integrated analysis of how this new innovative methodology influences language development, student motivation, engagement, and the acquisition of practical, real-world communication skills. The Chapter begins with a synthesis of the main conclusions, highlighting how students who participated in the implementation achieved notably better results in terms of communicative competence compared to their peers who followed traditional textbooks. The data also show a strong correlation between the PBL methodology and increased motivation, greater involvement in learning tasks, and improved confidence in using English in professional contexts. These conclusions are supported not only by statistical analyses, including ANCOVA, ANOVA, and t-tests, but also by students' own reflections on their learning experiences, which provide a rich, human dimension to the findings. This part also critically addresses the limitations encountered during the study. These offer valuable considerations for interpreting the results and pave the way for refining future research. Moreover, suggestions for future lines of investigation are explored.

Together with the conclusions, the limitations, and future research directions provide a strong basis for further exploration of PBL's role in language learning. They also stress out the potential of this methodology not only to improve linguistic outcomes but to foster the professional competencies essential in today's globalized and communicative work environments.

CHAPTER 8 - CONCLUSIONS AND OTHER CONSIDERATIONS

This chapter presents the conclusions drawn from the research, focusing on the effectiveness of PBL in improving communicative competence among first-year English students in the Degree of Tourism. The results confirm that this methodology not only augments language skills but also strengthens students' ability to apply English in real-world contexts, particularly in professional settings. Other advantages were observed, such as increased student motivation and engagement, as participants expressed a greater willingness to communicate and collaborate when involved in practical tasks.

Despite these positive results, some challenges emerged during the research. For example, one limitation was the lack of random assignment of students to experimental and control groups, as institutional constraints required students to remain in their pre-existing groups. This factor may have introduced external influences, such as prior language proficiency and individual motivation, which were not entirely controlled. While statistical techniques were applied to minimize these effects, future research would benefit from a more structured assignment process to ensure greater reliability in comparing learning outcomes.

Looking ahead, further investigation is needed to determine whether the benefits of PBL are sustained over time. Conducting longitudinal studies that track students across multiple semesters or years would provide a clearer understanding of whether improvements in communicative competence persist and continue to influence academic and professional success. Additionally, expanding the research to other disciplines beyond Tourism would help assess whether this approach is equally effective in fields where language skills are critical for professional success.

8.1. Conclusions

This study set out to evaluate the effectiveness of PBL compared to traditional teaching methods in improving communicative competence among first-year English students of the Degree of Tourism. Through a combination of quantitative and qualitative analyses, the findings confirm this learning approach is a more effective methodology, fostering higher engagement, motivation, and real-world application of language skills.

The quantitative analysis provides strong evidence that students in the experimental PBL, group (Group B) significantly outperformed their peers in the control groups (A, C, and E), who followed a traditional methodology. Statistical tests such as ANCOVA, ANOVA, *t*-tests, and Tukey *post hoc* analysis consistently revealed statistically significant differences in their performance, with Group B achieving higher mean scores in communicative tasks. These results support the primary research hypothesis that ones who engage in PBL improve their English communicative competence more effectively than those following conventional textbook-based instruction.

The Likert-scale questionnaire results further reinforce this conclusion. A significant majority of students reported greater confidence in speaking English, enhanced problem-solving skills, and an increased ability to use English in real-world professional contexts. These findings suggest that PBL contributes not only to language acquisition, but also to the development of practical skills highly relevant to students' field of study.

One of the most striking findings of this study is the high level of student engagement and motivation fostered by PBL. Traditional methods were frequently described as monotonous and ineffective, whereas PBL provided an interactive, hands-on learning experience that encouraged participation. Students repeatedly expressed that they felt more involved, motivated, and enthusiastic about learning English when they were actively engaged in a real-world task, such as organizing a conference with international students on it.

The qualitative data reinforced this point. Students frequently noted that learning through projects felt natural and enjoyable, allowing them to apply English in meaningful ways rather than simply memorizing grammar rules or completing textbook exercises. As one student stated, *This method was way better than just memorizing things from a book. We actually used English in real situations, and that helped a lot.* This sense of engagement and practical application likely contributed to the improved academic outcomes observed in the quantitative analysis, demonstrating that motivation significantly impacts on language learning success.

Beyond linguistic improvement, this study highlights a key advantage of PBL: its strong connection to real-world professional skills. Tourism students not only developed their English proficiency, but also gained valuable experience in teamwork, organization, public speaking, and problem-solving, essential skills for their future careers. The conference was an opportunity for students to collaborate, manage responsibilities, and use English in practical contexts. One participant reflected on the experience, stating, *Learning in groups every day with an objective is the best way to gain confidence in speaking in public.* This finding suggests that PBL is particularly effective in ESP courses, where language acquisition must be combined with industry-relevant skills. Unlike traditional classroom exercises, PBL prepares students for real-world communication challenges, making it a valuable approach in higher education.

Despite the strong results, this study also revealed some challenges in implementing PBL effectively. While most students found group work beneficial, some reported issues with unequal participation, noting that not all team members contributed equally. This suggests that more structured group management strategies, such as peer evaluations or designated leadership roles, may be necessary to ensure fair workload distribution. Besides, some of them initially struggled with adapting to a more autonomous learning model, particularly those accustomed to more passive, teacher-centered instruction. This indicates that proper

preparation and guidance are essential to help students transition smoothly into PBL environments.

The findings of this research support the broader adoption of PBL in ESP, such as tourism, business, fashion, etc., where language proficiency must be complemented by real-world communication skills. This approach strengthens language learning through increased engagement, stronger linguistic competence, and the development of practical professional skills. So, it better prepares students for their future careers. While some challenges related to group work and student autonomy need to be addressed, the benefits of this methodology far outweigh its drawbacks, reinforcing the need to shift away from purely textbook-based instruction toward more interactive, student-centered approaches. This study confirms that PBL is not merely an alternative to traditional methods but a more effective approach to language education, particularly in professional and industry-focused academic settings.

Moving forward, teachers and institutions should consider expanding the use of PBL to advance both language acquisition and employability skills, ensuring that students graduate with the linguistic and professional competencies needed for success in a globalized workforce.

8.2. Limitations of the Research

While the findings of this study provide strong evidence in favor of PBL as an effective methodology for improving communicative competence in first-year English students, several limitations must be acknowledged. These drawbacks should be considered when interpreting the results and designing future research on the topic.

One of the main limitations of this study is the lack of random assignment of students to experimental and control groups. Due to institutional constraints, students remained in their pre-assigned course sections, meaning that external factors such as individual motivation, prior language proficiency, and personal engagement could have influenced the results. Although

statistical methods were applied to account for differences among groups, randomization would have strengthened the reliability of the findings by eliminating potential selection biases.

Another limitation is the relatively short duration of the study. The research was conducted over a single semester, focusing on one major PBL experience (namely, the student conference). Although the results indicate significant benefits in terms of communicative competence and student engagement, a longer study would provide deeper insights into the long-term effects of PBL on language retention and overall proficiency. Longitudinal studies following students over multiple semesters or years would help determine whether the observed improvements are sustained over time and whether PBL contributes to long-term academic and professional success.

The study's discoveries are also limited in their generalizability, as the research was conducted with first-year Tourism students at a single university. While the results strongly support the effectiveness of PBL in this context, it is unclear whether similar outcomes would be observed in students from other academic disciplines, institutions, or educational systems. Comparative studies across different programs or universities would help determine whether the benefits of PBL are universal or more specific to certain fields of study. Moreover, it is not only that there are no studies in other universities with first-year Tourism students, but also that, in general, there is a notable lack of research at more advanced stages of education.

Challenges related to group work also emerged as a limitation in this study. While most students found collaboration beneficial, a few reported some difficulties in balancing participation and ensuring equal workload distribution. Some of them noted that not all team members contributed equally, leading to frustration among more active participants. This issue suggests that while collaborative learning is a key advantage PBL, it also requires structured group management techniques, such as clearly defined roles, peer evaluations, or mechanisms

for ensuring accountability. Addressing these challenges could further enhance the effectiveness of PBL as a teaching methodology.

In the same way, the study relied in part on self-reported data collected through Likert-scale questionnaires student's reflections. While these sources provided valuable insights into student perceptions, self-reported data can be influenced by factors such as individual biases, social desirability, or differences in self-assessment skills. Some students may have overestimated or underestimated their learning progress, making it difficult to measure improvements with complete objectivity. Future research could complement qualitative feedback with more objective measures, such as standardized language proficiency tests conducted before and after the intervention, to provide a more precise evaluation of linguistic development.

Another factor that was not controlled in this study was students' exposure to English outside the classroom. Individual differences in personal engagement with English, such as travel experiences, media consumption, or previous educational background, were not accounted for in the analysis. These external influences could have played a role in students' learning progress, making it difficult to attribute improvements solely to PBL. Future studies should consider incorporating pre-tests and post-tests to assess baseline proficiency levels and better isolate the impact of the methodology itself.

Furthermore, the study could have benefited from the implementation of a pre- and post-sociolinguistic questionnaire to gather additional information about students' exposure to English in different social contexts, their attitudes toward language learning, and their experiences using English outside the classroom. This type of instrument would have provided a more comprehensive view of the factors influencing language development and could have contributed to a deeper understanding of the external variables affecting student outcomes.

Future research should consider integrating such a tool to refine the analysis of communicative competence and its contributing factors.

Despite these limitations, the findings of this study provide compelling evidence for the advantages of PBL in ESP education. While certain aspects require further refinement, such as structured group work strategies and a broader scope of investigation, the study offers valuable insights into how this methodology can enhance communicative competence, student engagement, and professional preparedness. Future research addressing these limitations would contribute to a more comprehensive understanding of the long-term effectiveness of PBL in language education.

Finally, another relevant area for future research is the role of age in PBL. In this study, age differences were minimal, as all participants were first-year Tourism students. The average age of the four groups (Table 2) was slightly over 19 and a half years. However, it would be useful to examine whether this teaching approach yields similar results in learners from other age groups, such as high school students, adult learners, or professionals engaged in lifelong learning. Exploring how age influences engagement, language development, and teamwork within PBL could provide a broader understanding of how to adjust this methodology for different educational stages. Moreover, the lack of the knowledge of the English initial training of Erasmus students before the research should also be considered for future studies. Although the number of Erasmus students per class was fewer than two, knowing whether different English proficiency levels are required in their home countries could contribute valuable insights for future research.

Comparative studies across age groups could help determine whether adaptations are needed to make this approach more suitable for various learning contexts.

8.3. Future Research Directions

The findings of this study support the effectiveness of PBL in improving communicative competence and increasing student engagement in ESP education. However, several areas remain open for further research to expand the understanding of its long-term impact, adaptability to different academic disciplines, and potential enhancements. Future studies should explore how PBL can be optimized to address the challenges identified in this research and how its benefits can be extended across different educational contexts.

One important area for future investigation is the long-term impact of PBL on language retention and professional skill development. This study focused on a single semester, and while the results indicate a significant improvement in communicative competence, it remains unclear whether these benefits persist over time. Longitudinal research tracking students over multiple semesters or academic years could provide insights into how well the language skills acquired through PBL are retained and whether they continue to benefit students in their future academic and professional careers.

Further research is also needed to examine the effectiveness of PBL across different academic disciplines. While this study focused on first-year Tourism students, it is important to investigate whether similar benefits are observed in fields such as business, engineering, health sciences, or other areas where English proficiency is essential for professional success. Comparative studies across multiple disciplines and universities would help determine whether PBL is universally effective or whether its impact varies depending on the subject matter and the specific needs of students.

Another promising area for future research is the integration of digital tools and hybrid learning models within PBL. The increasing availability of virtual learning environments, artificial intelligence-based language assistants, and interactive multimedia resources offers new possibilities for enhancing language learning. Investigating how digital technologies can

complement PBL, particularly in online or blended learning settings, could provide valuable insights into ways to further improve student engagement, collaboration, and accessibility.

Given the challenges identified in group work dynamics, future studies should also focus on refining collaborative learning strategies within project-based learning (PBL). Research could explore different approaches to structuring teamwork, such as peer evaluation systems, rotating leadership roles, or reward mechanisms that ensure more balanced participation. Understanding how to optimize group dynamics would help improve the overall effectiveness of PBL and make it a more equitable experience for all students.

While this research employed a robust mixed-methods approach, combining qualitative insights from open-ended student responses with quantitative data from Likert-scale surveys and exam scores, future research could further expand on this methodology. Incorporating additional data collection methods, such as standardized language assessments or observational studies, could provide even more nuanced insights into how PBL influences language acquisition and professional readiness. Additionally, exploring employer feedback or conducting longitudinal follow-up studies could reveal how the skills developed through this methodology translate into real-world success.

Another area worth exploring is the role of teacher training in the successful implementation of PBL. This study highlighted the importance of student autonomy, but the teacher's role as a facilitator remains crucial in guiding students through the process. Investigating how professional development programs can better prepare educators to design, implement, and assess PBL projects would contribute to the more effective adoption of this methodology across different educational institutions.

Cross-cultural studies could also provide valuable insights into how PBL is perceived and implemented in different countries and educational systems. Since language learning is deeply connected to cultural and contextual factors, understanding how students from diverse

backgrounds respond to PBL could help refine its design and make it more adaptable to different learning environments.

Addressing these areas, future investigations can provide deeper insights into how PBL can be further refined and expanded to maximize its impact on language acquisition and professional development. Research in these directions will help educators and institutions make informed decisions about implementing more dynamic, student-centered approaches that better prepare students for the demands of a international job market.

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10. ANNEXES

Annex 1 - Student Field Diaries¹¹

Field Diary: Marketing and Logo Committee – I Group

Tuesday, September 26, 2023

Initial

Organization:

Our group held the first meeting today to clarify roles and outline our responsibilities. We decided to focus on creating a cohesive logo and marketing plan for the congress. Tasks were divided among team members: one subgroup worked on brainstorming logo concepts, while another subgroup researched effective ways to promote the event. We also discussed communication with Faculty authorities to ensure institutional support for our plans.

Tuesday, October 3, 2023

Exploring

the

Faculty

Authorities:

We began drafting an official email to the Vice Dean of Students to request permission for using spaces for posters and events. Additionally, we contacted the Technology Services Department to explore displaying promotional materials on the Faculty's digital screens. Meanwhile, we continued working on logo drafts, incorporating themes such as tourism, global connections, and sustainability.

Tuesday, October 10, 2023

Design

and

Institutional

Coordination:

The team focused on refining logo designs and drafting content for promotional posters. We held a productive meeting with the Vice Dean of Students to present our initial ideas and received approval for using noticeboards and screens. At the same time, we discussed reserving specific areas for workshops and event registration during the congress.

¹¹ All excerpts are students' original responses from their class diaries.

Tuesday, October 17, 2023
Logo Presentation and Feedback:

Our group submitted three logo options to the organizing committee for feedback. We also had a follow-up meeting with the Technology Services Department to coordinate the display schedule for digital promotions. The organizing committee suggested simplifying one of the designs, which became our primary focus moving forward.

Tuesday, October 24, 2023
Poster Design and Approvals:

The team began designing posters that included the finalized logo and key congress details. We created layouts that were clean, professional, and visually appealing. After submitting the drafts to the Vice Dean's office, we received approval to print and distribute the posters. At the same time, we ensured digital versions were formatted correctly for display on screens.

Tuesday, October 31, 2023
Printing and Distribution Plans:

Today, we sent posters for printing and received confirmation of their delivery timeline. We coordinated with the Financial and Sponsorship Department to confirm the budget for printing costs. Additionally, we outlined a strategic plan for distributing posters to high-traffic areas within the Faculty, such as entrances, common areas, and classroom corridors.

Tuesday, November 7, 2023
Flyer Development and Scheduling Spaces:

The team worked on designing flyers to complement the posters, ensuring consistency in branding and information. We also finalized room bookings for congress-related activities, such as workshops and keynote speeches. This involved working closely with the university administration to secure suitable spaces.

Tuesday, November 14, 2023
Digital Screen Implementation:

We submitted finalized digital posters to the Technology Services Department, which began displaying them on screens. The team also distributed printed posters across campus and monitored their visibility in key locations. This week, we shifted focus to creating directional signage for the event venue to ensure a seamless experience for attendees.

Tuesday, November 21, 2023
Monitoring Progress and Field Diary Compilation:

The team conducted a mid-project review to evaluate the effectiveness of our marketing efforts. Feedback from Faculty and students indicated positive reception of the promotional materials. Additionally, we began compiling our field diary to document the processes and challenges encountered during the preparation phase.

Tuesday, November 28, 2023
Final Preparations for Printed Materials:

This week, we double-checked all printed materials to confirm accuracy and consistency with the event schedule. We also coordinated with the organizing committee to finalize the placement of directional signs and prepared a checklist to avoid last-minute issues.

Monday, December 4, 2023
Final Flyers and Signage Placement:

Flyers were distributed directly to classrooms to maximize outreach. We also finalized the placement of directional signage throughout the Faculty, ensuring it would guide attendees to workshops, presentations, and the registration desk efficiently.

Tuesday, December 5, 2023
Rehearsals and Marketing Checks:

The team rehearsed our roles for the congress, including delivering speeches and guiding participants. We conducted a final walkthrough of all promotional materials to confirm they were ready for use during the event.

Thursday, December 7, 2023

Last-Minute

Adjustments:

With the congress just days away, we confirmed all logistical arrangements with the organizing committee and Faculty administration. This included verifying room bookings and ensuring signage was prominently displayed.

Monday, December 11, 2023

Pre-Congress

Day:

On the day before the congress, we held a final meeting to review all tasks and responsibilities. Digital and printed marketing materials were checked one last time to guarantee everything was in place. Collaborating closely with university authorities throughout the process ensured the smooth execution of our marketing strategy.

Conclusion

The Marketing and Logo Department – I Group played a pivotal role in the success of the Tourism Students’ University Congress. From coordinating with authorities to designing impactful promotional materials, the team demonstrated strong organizational and creative skills. This project provided valuable experience in event marketing, institutional collaboration, and teamwork, which we will carry into our future careers.

Field Diary: Marketing and Logo Committee – II Group

Tourism Students’ University Congress

Tuesday, September 26, 2023

Initial Meeting and Task Assignment:

Today we started by dividing the group into two smaller teams to handle specific responsibilities. Our group decided to focus on designing the flyer, while the other group concentrated on creating the logo. We set up a group chat for better communication, where we can share designs and provide feedback on the flyer and logo prototypes. This initial organization gave us a solid foundation for the weeks ahead.

Tuesday, October 3, 2023
Design Beginnings:

This week, we began using Canva to develop the flyer. We experimented with various design elements, like layouts and themes, while another team worked on the logo. After reviewing multiple ideas, we decided on a flyer style that reflects the congress theme. We also debated the fonts and essential elements to include, ensuring the flyer would effectively convey key information about the event.

Tuesday, October 10, 2023
Refining the Flyer and Budget Discussions:

With the flyer's basic structure in place, we started adding content and fine-tuning the design. We finalized most details, although the logo is still in progress and will be incorporated later. The Financial and Sponsorship Department reached out to inquire about our budget needs. We informed them that we required modest funds for materials but emphasized that quality was important to delivering impactful visuals.

Tuesday, October 17, 2023
Speech Topic Selection and Continued Design Work:

Today, the teacher assigned us the task of preparing a 15-minute speech related to tourism. Our group decided to focus on the importance of marketing in modern society, especially its role in tourism. Two team members continued refining the flyer, while the other two began researching and outlining the speech. Collaborating on both tasks allowed us to make steady progress while maintaining focus on quality.

Tuesday, October 24, 2023
Integrating Feedback and Speech Development:

This week, we presented parts of our flyer and speech draft to the teacher for feedback. The teacher suggested some adjustments to the flyer's visuals to make it more cohesive. For the speech, We were advised to include specific examples and adjust the content to fit the congress

themes, such as sustainability. The team divided tasks to incorporate this feedback while ensuring both projects stayed on track.

Tuesday, October 31, 2023
Reviewing and Revising Work:

We shared progress on the flyer and speech within our group and with the teacher. The teacher loved both flyer designs and suggested combining elements from each to create the final version. For the speech, we added more detailed information and linked it to broader congress topics, like eco-tourism. The feedback session was productive, helping us refine our work further.

Tuesday, November 7, 2023
PowerPoint Preparation and Flyer Completion:

This week, we began designing a PowerPoint presentation for our speech. We included examples of successful marketing strategies to demonstrate their relevance to tourism. Meanwhile, the flyer was nearly complete, with the final design incorporating our newly created QR code for easy access to event details. The teacher provided additional guidance to finalize the visuals.

Tuesday, November 14, 2023
Speech Practice and Flyer Finalization:

The team prepared individually for the upcoming speech rehearsal scheduled for next week. This allowed us to refine our delivery and identify areas for improvement. Meanwhile, we officially finalized the flyer, incorporating the QR code to make it more sustainable by reducing the need for printed materials. We sent the final design to the teacher for approval and feedback.

Tuesday, November 21, 2023
Review and Class Presentations:

Today, we began compiling our field diary to document the progress of our tasks over the weeks. Additionally, we presented our speech in class, receiving constructive feedback from

peers and the teacher. Other groups also presented their work, giving us valuable insights into the congress's overall preparation and encouraging collaboration across departments.

Tuesday, November 28, 2023
Reflections and Final Adjustments:

We continued finalizing our field diary, integrating reflections from earlier weeks and feedback from the teacher. The team also made final tweaks to the speech based on peer suggestions, ensuring it was polished and engaging. This step helped us feel more confident and prepared for the congress.

Monday, December 4, 2023
Logistics and Final Marketing Details:

As the congress approached, we coordinated with other departments to ensure all marketing materials were properly placed within the Faculty of Business and Tourism. We also reviewed the directional signage to ensure participants could easily navigate the venue.

Tuesday, December 5, 2023
Rehearsals and Speech Refinement:

We rehearsed our presentation to practice timing and delivery. The teacher gave us some final pointers, helping us fine-tune the tone and pacing. This rehearsal boosted our confidence and helped us feel ready for the congress day.

Thursday, December 7, 2023
Last Preparations Before the Break:

Before the national holidays, we ensured that all marketing and visual materials were ready and accessible. The team finalized plans for the meeting point and checked the setup for workshops and presentations.

Monday, December 11, 2023
Final Preparations and Reflections:

On the day before the congress, we completed a final review of all materials and logistics. Reflecting on the process, we felt proud of our teamwork and creativity in delivering high-quality visuals and a compelling speech. This experience taught us valuable lessons in marketing, collaboration, and event organization.

Conclusion

The Marketing and Logo Department II Group contributed significantly to the success of the Tourism Students' University Congress. Through collaboration, creativity, and effective planning, we produced impactful visuals and presentations. This project provided us with hands-on experience in marketing and organization, skills we will carry into our future careers.

Field Diary: Financial and Sponsorship Department

Day 1 – Tuesday, September 26, 2023
Initial Planning and Fundraising Ideas:

Today, our department brainstormed ideas to raise funds for the congress. We discussed organizing a street market where we could sell products such as biscuits, brownies, coffee, and cookies, as well as hosting a lottery game to engage participants. These ideas were well-received by the group, and we started assigning roles to each member to ensure smooth execution. Additionally, we explored ways to collaborate with other departments to maximize outreach.

Day 2 – Tuesday, October 3, 2023
Budget Review and Departmental Coordination:

This week, we began collecting budget proposals from the other departments to get a clear picture of the overall financial requirements. At the same time, we discussed initial plans with the Travel Agency Department, aiming to coordinate and allocate resources effectively. These discussions helped us understand the scope of funding needed to meet the congress's goals.

Day 3 – Tuesday, October 10, 2023
Budget Compilation and Material Preparation:

We continued gathering detailed budgets from all departments, ensuring that every item was accounted for. While compiling this data, we worked with the Logo and Marketing Department to estimate costs for creating flyers, posters, and invitation cards. The Workshops Department requested cardboard materials, and the Inauguration Team listed specific items needed for the opening ceremony. Our department focused on organizing these requests to make informed decisions.

Day 4 – Tuesday, October 17, 2023
Fund Requests and Proposal Submission:

Today, we drafted an email to the vice-chancellor to request financial support for the congress. We also collaborated with other departments to finalize their proposals, ensuring our funding request was comprehensive and justified. In addition, we sent an email to Vicente to outline our department’s plans and seek permission for the proposed fundraising activities.

Day 5 – Tuesday, October 24, 2023
Budget Adjustments and Regional Presentation:

Our focus was on compiling an accurate estimate of the required budget for each department. We also reviewed the presentation on the main tourist activities of Galicia, adapting it to the conference theme. After a thorough discussion, we decided to pause the vice-chancellor funding request to ensure all financial details were precise. We finalized drafts and prepared for the next steps.

Day 6 – Tuesday, October 31, 2023
Planning for Congress Day and Speaker Selection:

With the congress scheduled for December 12th, we outlined a tentative schedule, noting the morning and afternoon session times. We discussed the financial aspects of hosting the sessions and confirmed the chosen students as speakers for the event. Finally, we finalized and sent the email to the vice-chancellor, clearly detailing our funding needs and the significance of the event.

Day 7 – Tuesday, November 7, 2023
Main Activities and Final Decisions:

This week, we worked on the financial outline for the main activities that will take place during the congress. To ensure seamless execution, we reviewed the budget allocation for workshops and presentations. Our collaboration with other departments helped refine plans, particularly those involving shared resources, such as visuals and materials.

Day 8 – Tuesday, November 14, 2023
Speech Preparation on Ecological Tourism:

Our team began drafting a speech on ecological tourism to support the congress theme. Meanwhile, we reviewed the finalized budgets for the departments to ensure there was no overspending. We also collaborated with the Marketing Department on strategies to make the event as cost-effective as possible without compromising quality.

Day 9 – Tuesday, November 21, 2023
Presentation Refinement and Updates:

We revisited our presentation to ensure the financial data was accurate and easy to understand. By working closely with other departments, we streamlined the budget breakdown to present it effectively during the congress. This week also involved attending presentations from other groups to stay updated on their progress.

Days 10, 11, 12 – November 28–30, 2023
Observing Class Presentations and Feedback:

These days were dedicated to observing presentations from classmates, learning about their work, and providing constructive feedback. Watching other departments present helped us identify potential overlaps and opportunities for collaboration, which we noted for further discussion.

Day 13 – Monday, December 4, 2023
Rehearsals and Final Adjustments:

We started rehearsing our department’s presentation, focusing on clearly communicating the budget allocation and fundraising efforts. Feedback from peers during practice sessions helped us refine our delivery and ensure all aspects of the financial plan were covered.

Day 14 – Tuesday, December 5, 2023
Fine-Tuning Rehearsals:

Our team continued to rehearse, incorporating feedback from previous sessions. We also finalized the visual materials to accompany our speech, ensuring clarity and professionalism. Discussions with other departments clarified any outstanding financial questions, which we addressed promptly.

Day 15 – Thursday, December 7, 2023
Last Rehearsal and Preparations:

During our final rehearsal, We polished our presentation, focusing on transitions between speakers and making sure our financial proposals matched the congress’s objectives.. We also double-checked all documents and materials to be used during the event.

Day 16 – Monday, December 11, 2023
Final Preparations for the Congress:

On the day before the congress, we reviewed last-minute details, such as the distribution of funds and coordination with other departments. We also ensured all logistical elements, like meeting points and schedules, were clear. This step was great to guarantee a successful event.

Conclusion

This project was a valuable experience in understanding financial management and sponsorship coordination for large-scale events. It taught us how to manage budgets effectively, collaborate with multiple teams, and ensure every department had the resources needed. The lessons learned will be invaluable in future works, both academic and professional.

Field Diary: Inauguration Committee

Tourism Students' University Conference

Tuesday, September 26, 2023
Group Formation and Initial Meeting:

In today's class, the reference groups for the conference management were formed. Our group, the Inauguration Department, is responsible for overseeing the opening portion of the event, including the reception of guests and speakers. We will also be giving a presentation related to the theme of the conference. We discussed the goals of the conference and set the tone for the first steps, establishing roles and expectations within the team.

Tuesday, October 3, 2023
Objective Clarification and Team Coordination:

We gathered as a group to discuss the overall objectives of the conference. Our main task is to organize and coordinate the opening ceremony, while also presenting an introductory speech related to tourism and environmental sustainability. We divided the responsibilities, assigning each member specific tasks related to the event's logistics and our presentation content. We made sure to include all voices, considering ideas from all members, including our Erasmus students, Sara and Julius.

Tuesday, October 10, 2023
Initial Research and Speech Planning:

We held a meeting after class to brainstorm ideas for our speech. Our main topic revolves around environmental tourism, specifically the issue of biodiversity loss caused by tourism.

Each group member took responsibility for different aspects of this theme. We then researched relevant data and statistics, ensuring we had accurate and authoritative sources to back our points. In parallel, we discussed the tone and structure of our speech, aiming for an accessible yet informative presentation for a diverse audience.

Tuesday, October 17, 2023
Speech Structure and Refinement:

During today's session, we reviewed the structure of our opening speech and refined the content to make it engaging. We focused on coherence, flow, and clarity of the message, ensuring that all subtopics were well-integrated into the speech. We also focused on the tone, discussing how to address the audience appropriately and which specific language would resonate best with both local and international participants.

Tuesday, October 24, 2023
Refining and Reviewing the Speech Draft:

The team made significant progress in fine-tuning our speech drafts. Each member presented their section to the group for feedback, focusing on coherence and consistency in the messaging. We also finalized the visual elements for our presentation, with each member contributing PowerPoint slides to complement their sections of the speech. The review session allowed us to clarify our points, smooth transitions between topics, and ensure that the content was both informative and captivating.

Tuesday, October 31, 2023
First Rehearsal of the Speech:

We rehearsed our speeches during class, practicing the timing, transitions, and delivery. We also had the opportunity to present our speech drafts to the professor for feedback, which was incredibly valuable in identifying areas for improvement. As a group, we revised our opening speech to include an introductory welcome for the conference participants, ensuring it was welcoming and professional.

Tuesday, November 7, 2023
PowerPoint and Presentation Preparation:

Today, we focused on the visual aspect of our presentation. Each group member worked individually to create their section of the PowerPoint presentation using a shared Google Document file. This collaboration allowed us to maintain a cohesive design throughout the presentation. We discussed how to make the slides visually appealing, ensuring they complemented the content without overwhelming the audience with excessive text.

Tuesday, November 14, 2023
Logistical Planning for the Conference:

In addition to refining the presentation, today's focus was on the logistical aspects of the event. We confirmed the schedule for the opening ceremony, including roles for each team member. We worked closely with Faculty staff to coordinate the availability of the necessary rooms and spaces for the event. We also checked technical requirements for the event, including audio-visual equipment needed for our presentation.

Tuesday, November 21, 2023
Final Revisions and Last-minute Checks:

As the conference date approaches, we held another rehearsal of our speeches. We reviewed our PowerPoint slides one final time, making sure there were no issues with text, images, or technical elements. The professor provided feedback, highlighting areas where we could improve clarity and engagement. We also coordinated with the Technology Services Department to ensure the correct functioning of the AV equipment for the day of the event.

Tuesday, November 28, 2023
Final Preparations and Coordination with Other Departments:

This session was dedicated to final preparations. We did a last check of all the logistical details, from the setup of the conference space to the registration desk. Additionally, we discussed how to coordinate the arrival of keynote speakers, ensuring smooth transitions from one section to the next. We also finalized our playlist of music from different countries represented in our class, which will play during the opening ceremony.

Monday, December 4, 2023
Final Practice and Coordination of Roles:

Today, we practiced our speeches one last time, ensuring each member was confident in their delivery. We also reviewed the roles of each team member for the event day, from greeting attendees to guiding them to their seats. We had a final meeting with the Vice Dean and other staff to confirm the last details and ensure everything was in order for the inauguration.

Tuesday, December 5, 2023
Day Before the Conference – Final Rehearsal:

With the conference just a day away, we held a final rehearsal to review our speeches and ensure that all materials were in place. We tested the AV equipment and checked that the correct slides were loaded for the event. We also reviewed the schedule, confirming the roles of everyone involved and ensuring smooth coordination for the opening ceremony.

Thursday, December 7, 2023
Logistical Finalizations and Confirmation:

This day was dedicated to the final logistical confirmations. We confirmed room reservations, speaker arrivals, and technical setups with the relevant Faculty staff. All of the opening speeches and the PowerPoint presentations were reviewed once more, and each group member ensured that their section was polished and ready for the conference.

Monday, December 11, 2023
Pre-conference Final Preparations:

On the eve of the congress, we had a final meeting to review the day's schedule and ensure everything was prepared. We confirmed the roles of each group member, checked the signage for the event, and made sure the team was fully ready for the conference. We also had a final walk-through of the venue to ensure that all logistical and technical elements were in place for a seamless inauguration the following morning.

Conclusion

The Inauguration Department – I Group played an essential role in preparing for the Tourism Students' University Conference. From organizing the opening ceremony to creating engaging speeches and coordinating logistics, the team demonstrated strong planning and teamwork. This experience has provided valuable lessons in event management, communication, and cross-departmental collaboration, preparing us for future work in the tourism industry.

Field Diary - Organization Committee¹²

MONTH	DAY	
OCTOBER	9	Completed and reviewed the first draft of the conference timetable.
	10	The professor reviewed our timetable and suggested modifications.
	16	Began planning our speeches, researching ideas, and evaluating sources.
	17	Started writing our speeches.
	23	Made the first changes to the timetable, adjusting hours and break times.
	24	Continued modifying the timetable to accommodate classmates who were unavailable in the morning session.
	30	Continued writing speeches and submitted the timetable to the coordination team.

¹² All excerpts are students' original responses from their class diaries.

	31	Collected and organized speech bibliographies.
NOVEMBER	6	Presented the first draft of our speeches to the professor.
	7	Continued working on speeches.
	13	Adjusted speech times in the timetable with the professor's guidance.
	14	Finalized the timetable and assigned speech topics.
	20	Worked on the presentation and speeches (Paty at home, Oscar in class).
	21	Oscar delivered our speech (Paty was sick).
	27	Completed the presentation and reviewed photo references.
	28	Finalized details.

Field Diary: Workshops and Topics Committee – Artificial Intelligence Workshop

Monday, September 25, 2023
Selection of Topics:

In our first meeting, we discussed the broad themes for our workshop. The group decided to focus on two primary topics: Artificial Intelligence (AI) and Sports Tourism. For the AI workshop, we envisioned creating a website that would provide tourists with essential information about destinations, including hotels, flights, and activities. For the sports tourism part, we would explore how sports events influence travel, with a focus on how people travel to watch different sports events across Spain.

Tuesday, September 26, 2023
Formation of Groups:

We finalized the team structure today. We agreed that one half of the group would handle the AI topic, and the other half would tackle sports tourism. This division allowed each team to focus on specific aspects of the workshop, ensuring we would have a comprehensive and engaging session on both topics. The AI team started discussing the idea of creating a digital platform, while the sports group began outlining how sports affect travel patterns.

Monday, October 2, 2023
Team Division and Role Assignment:

We divided our group into two smaller teams. The AI team's goal was to build a website that would provide tourists with a range of information about their travel destinations, while the sports team would focus on tourism related to sporting events. Within the AI group, we began assigning specific tasks, including website design, content creation, and the development of an interactive element, such as QR codes linking to information about tourist attractions.

Tuesday, October 3, 2023
Discussion on Budget and Planning:

We held a discussion on the budget needed to carry out our ideas. The AI team discussed how much we would need for creating the website and QR codes, while the sports team outlined the costs for research, video production, and materials related to their part of the workshop. We also began formulating a rough timeline for developing each section of the workshop.

Monday, October 9, 2023
Role Organization and Idea Development:

Each member of our group took charge of different elements of the project. The AI team focused on the technical side of the website development, including how we would gather and organize information for different destinations. Meanwhile, the sports team worked on outlining the key concepts for their section of the workshop, focusing on the relationship between sports events and tourism.

Tuesday, October 10, 2023

Developing the Workshop Content and Information Delivery:

We started discussing how we would present our workshop's content. The AI group brainstormed the best way to use QR codes to allow participants to access information about the destinations featured in the workshop. We also explored creating videos to introduce the various components of our website. The sports group started drafting content for their video presentation on the impact of sports tourism in Spain.

Monday, October 16, 2023

AI Group – QR Code Creation and Digital Poster Design:

The AI group began working on the QR code functionality. We researched the best tools for creating and embedding QR codes into our workshop materials. Additionally, we started working on the design of digital posters that would be used to advertise the workshop and guide participants through our website's features. We began testing the user experience to ensure it was intuitive and engaging.

Monday, October 23, 2023

AI Group – Speech Writing and Workshop Organization:

Today, the AI group began drafting the speech that would be presented during the workshop. We outlined key points, including the goals of the AI tool and how it would benefit tourists. We also began organizing the schedules for the workshop sessions, deciding who would present which parts of the AI and sports tourism content.

Tuesday, October 24, 2023

AI Group – Finalizing the Speech and Presentation Structure:

The AI group continued refining the speech and began preparing the slides that would accompany the workshop presentation. We ensured that the speech matches with the overall theme of the congress and focused on how AI can enhance the travel experience. The group also practiced the delivery of our parts to ensure smooth transitions between topics and to ensure clarity during the presentation.

Monday, October 30, 2023

Completion of the Speech for AI Group:

Today, the AI group finalized the speech content. We reviewed all the sections and made final edits to ensure consistency in tone and language. We also polished the PowerPoint slides, ensuring that all visual elements matched the speech content. Everyone practiced their part of the speech to ensure confidence and clarity during the workshop.

Saturday, November 4, 2023

AI Group – Chatbot Preparation and Programming:

The AI group began focusing on chatbot development using the Botpress program. The chatbot was designed to answer common tourist questions, such as information about attractions, transportation, and services available at different destinations. We defined variables that the chatbot would use to interact with users, ensuring that it was intuitive and user-friendly.

Monday, November 6, 2023

Explanation of Chatbot and Slide Preparation:

We spent the day explaining how the chatbot works, discussing its functionality and how it would be integrated into the website. Each member of the AI group worked on creating slides that would explain how the chatbot can enhance the travel experience by providing instant information to users. We also prepared demonstrations for the workshop, making sure the chatbot's features were clearly explained to the audience.

Tuesday, November 7, 2023

Workshop Presentation Development:

The AI group continued to work on the presentation for the workshop. We discussed the most effective way to present the website, the chatbot, and how the QR codes would function as part of the interactive experience. We also made sure to rehearse our parts and fine-tune the content based on feedback from peers.

Monday, November 13, 2023
Workshop Presentation to the Class:

We presented our workshop to the class for the first time. This was an opportunity to practice our delivery, test our slides, and receive feedback on the content. The class provided constructive criticism, which we used to improve our presentation. The feedback was invaluable, allowing us to adjust the content and delivery for the final workshop session.

Tuesday, November 14, 2023
No Classes:

There were no classes today, so the group focused on reviewing the feedback from our class presentation. We made some final adjustments to the presentation materials, incorporating suggestions from our classmates.

Monday, November 20, 2023
Final Revisions Based on Feedback:

We spent the day refining the presentation, focusing on incorporating the teacher's constructive criticism. We also reviewed the AI group's section, focusing on the chatbot and website to make sure everything was working smoothly. We discussed how to manage the flow of the workshop and organized our content to ensure that all key points were covered clearly and concisely.

Tuesday, November 21, 2023
Workshop Topics Division and Progress:

The AI team continued dividing the topics to be addressed during the workshop. We assigned specific sections to each member, ensuring that everyone was on track and moving forward efficiently. We also discussed the final details for the workshop structure and how to handle questions from the audience during the presentation.

Monday, November 27, 2023
Final Modifications to Support Materials:

We made some final modifications to the materials used in the workshop, including updating slides and ensuring that the website and chatbot were fully functional. We tested all interactive components and ensured they were working properly, and we also adjusted the presentation to make sure it was engaging and informative.

Tuesday, November 28, 2023

Completion of Speech and Workshop Explanation:

Today, we completed the speech for the workshop and the introductory explanation that would be given at the beginning of the congress. We ensured that the speech clearly communicated the objectives of the AI workshop and outlined the activities participants could expect.

Monday, December 4, 2023

Final Presentation and Workshop Rehearsal:

The AI group held a final rehearsal today, ensuring that all presentation components were in place. We reviewed the chatbot's functionality one last time and made sure the PowerPoint was up-to-date. We also rehearsed the flow of the presentation to ensure smooth transitions between topics.

Tuesday, December 5, 2023

Editing and Refining the Presentation:

Although there were no classes today, we spent the day editing the final details of our speech and refining the presentation. We focused on making our message clear, engaging, and relevant to the conference's theme of sustainability and tourism.

Monday, December 11, 2023

Pre-Conference Final Preparations:

On the eve of the event, we reviewed everything one last time. We confirmed the timing and order of our workshop session and finalized the division of roles during the event. We also conducted a final run-through of the presentation to ensure we were fully prepared for the big day.

Conclusion

The Workshop and Topics Department focused on Artificial Intelligence (AI) and Sports Tourism for the Tourism Students' University Conference. The preparation process included detailed research, creating a functional website, developing a chatbot, and crafting an engaging presentation. Through collaboration and feedback, we were able to refine our content and deliver a well-organized and informative workshop. This experience has strengthened our project management, technical, and presentation skills, which will be valuable for our studies and jobs.

Annex 2 - The Evaluation Rubric

Criteria	1 - Deficient	2 - Needs Improvement	3 - Satisfactory	4 - Good	5 - Excellent
Clarity and Structure (Organization, introduction, development, and conclusion)	Lacks organization; no clear intro or conclusion; confusing ideas.	Some structure, but unclear ideas and weak transitions.	Clear intro/conclusion; basic structure; transitions need work.	Well-structured; logical flow and smooth transitions.	Excellent structure; engaging intro/conclusion; seamless transitions.
Content Mastery (Accuracy, depth, and relevance)	Irrelevant or inaccurate content.	Limited understanding; some inaccuracies.	Adequate knowledge; mostly accurate; some depth.	Strong understanding; accurate and in-depth content.	Exceptional mastery; deep analysis; fully accurate.
Use of Visual Aids (Slides, materials, and integration)	No visual aids or poorly used.	Present but unclear or poorly integrated.	Adequate use; minor issues.	Effective aids; well-integrated.	Outstanding, seamless, and highly effective.
Audience Engagement (Capturing attention and responding to questions)	No engagement; does not answer questions.	Limited engagement; weak responses.	Some engagement; superficial answers.	Engages well; effective responses.	Captivating; insightful responses and strong interaction.
Verbal and Non-Verbal Expression (Voice, posture, gestures)	Monotone; poor posture; distracting gestures.	Inconsistent voice; awkward body language.	Acceptable voice and gestures.	Good vocal variety; confident presence.	Excellent delivery; expressive and confident.
Argumentative Skills (Logic and defense of ideas)	Incoherent; lacks logical argumentation.	Unclear or weak defense.	Coherent but could be more persuasive.	Strong, well-defended arguments.	Exceptional coherence and persuasive defense.

Total Score (/30): _____

Grading Scale:

- 9.0 – 10.0: Excellent
- 7.5 – 8.9: Good

- 6.0 – 7.4: Satisfactory
- 4.0 – 5.9: Needs Improvement
- 0 – 3.9: Deficient

Annex 3 - Likert Test

Student data

Course: _____ Age: _____

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

Question	1	2	3	4	5
1. The process of planning and executing a conference improved my English Communicative Competence.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I found the activity of organizing a conference more engaging than traditional methods for learning in English.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Working on a conference project increased my confidence in using English within a professional context.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. The collaborative nature of the conference project improved my teamwork and interpersonal skills in English.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I did not know anything about the methodology (Project Based Learning, PBL.) before setting up the <i>First Conference of Students of Tourism</i> .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. PBL and organizing a conference allowed me to explore specific tourism topics beyond standard curriculum materials.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. The feedback received during the conference project was valuable for my English language development and professional growth.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Organizing a conference improved my critical thinking skills related to tourism duties in English.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. I believe the conference project made me more aware of cultural aspects in English language usage within the tourism industry.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. The conference project provided practical insights into the English communicative skills that traditional textbooks might not have offered.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. I have learnt better and more English contents using the Project-Based Learning approach, such as organizing conferences, for future learning in tourism instead of classic methods in learning English.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. The experience of organizing a conference helped me see the practical applications of English language skills in the tourism industry.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. I felt a sense of accomplishment and pride in organizing a conference as part of my tourism studies.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Organizing a conference in English provided opportunities for creativity and innovation in expressing tourism concepts.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Organizing a conference as part of my studies helped me apply theoretical knowledge to practical situations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OPEN QUESTION: In general, what is your opinion about the methodology (Project Based Learning) for learning English for Tourism?					

Annex 4 - Brainstorming Questions



QUESTIONNAIRE ON PERCEPTIONS AND EXPECTATIONS IN TOURISM

1. Previous Knowledge About the Tourism Sector

Before starting the degree, we reflected on our initial ideas and expectations about tourism and its career opportunities:

- What was your idea of the tourism sector and the job opportunities it offers?
- What were the first career options you considered when choosing this degree?
- Did you know anyone working in the tourism industry before starting your studies? What was their job?
- Do you think tourism offers many job opportunities? Why or why not?

2. Career Opportunities in Tourism

To explore future career possibilities, we considered the following questions:

- What types of jobs do you think a tourism graduate can do?
- Which areas of tourism interest you the most? (e.g., travel agencies, event management, sustainable tourism, etc.)
- What do you think the main responsibilities of a tourism professional are?
- Have you researched potential employers or companies where you could work in the future? If so, which ones?
- Would you like to work abroad? Why or why not?
- Do you prefer working directly with clients or behind the scenes in management and planning?

3. Skills and Competencies in Tourism

The tourism industry requires a combination of technical knowledge and interpersonal skills.

We explored the key competencies needed for success:

- What skills do you think are essential for a successful career in tourism?
- What personal qualities do you believe a tourism professional should have?
- How important do you think communication skills are in the tourism industry?
- How do you see the role of foreign languages, especially English?
- Do you feel confident using English in a professional tourism context? If not, what aspects would you like to improve?

Annex 5 - Work Phases

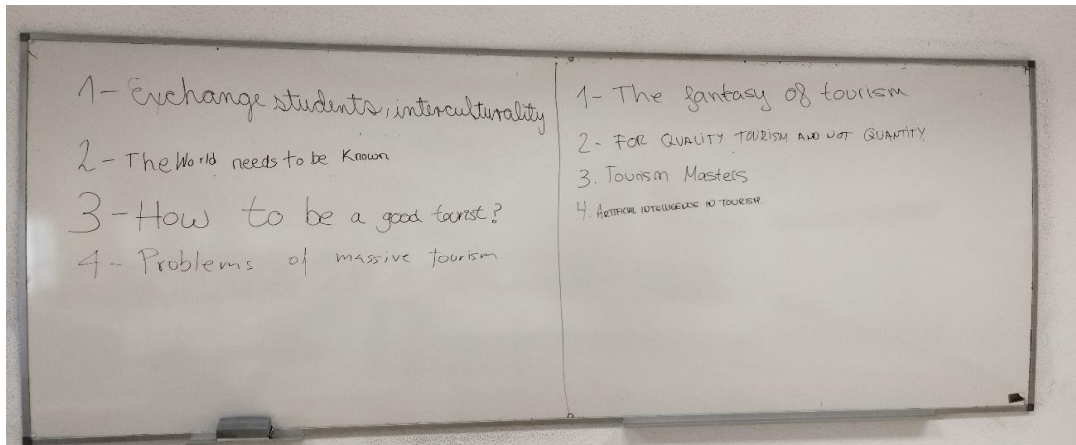


Figure 17. Students brainstorming while selecting a research topic for the conference.

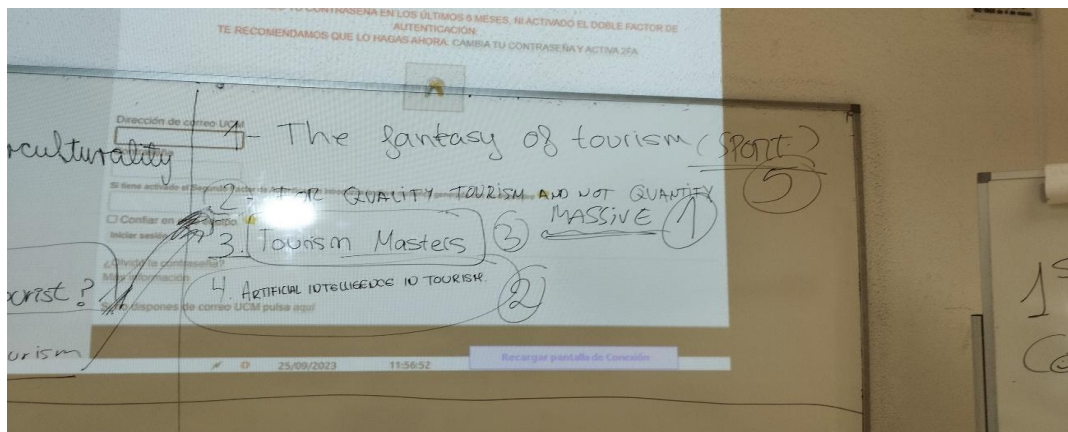


Figure 18. Phase of selecting the most engaging topics for future conference lectures.

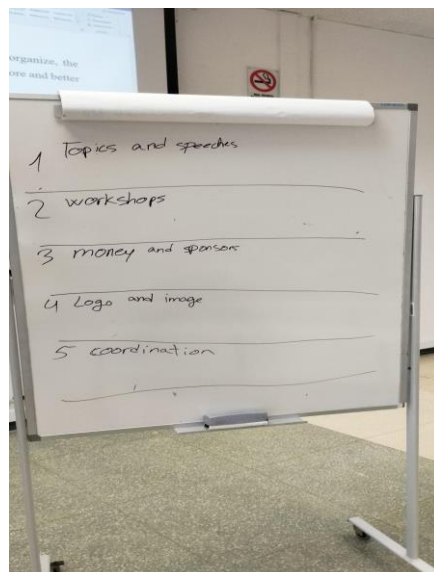


Figure 19. A moment of reflection in class during the selection of the Conference Committee.

Annex 6 - Publicity for the Conference



Figure 20. Faculty hall screens displaying publicity for the Conference.



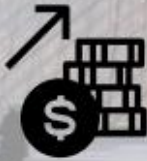
¹³ All possible errors in the slides have been retained to accurately reflect the students' original presentations.

What does tourism bring to Paris

- New jobs created



- This activity brings money to the city



French culture shines all around the world

- Gastronomy



- Luxury Brand



What does tourism brings to Paris

- Tourism allows the museums to continue living.
- The presence of so many tourists means that the infrastructure has to be maintained and improved.



Consequences for the city

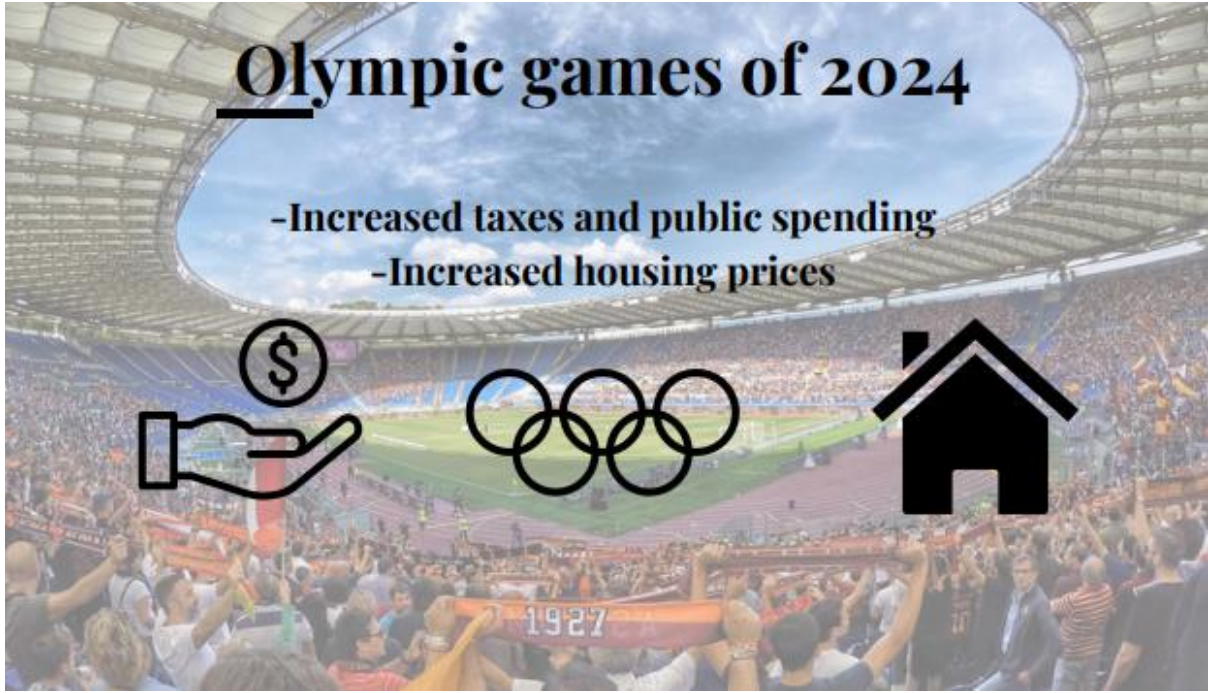


A lot of traffic into the city



Olympic games of 2024

- Increased taxes and public spending
- Increased housing prices

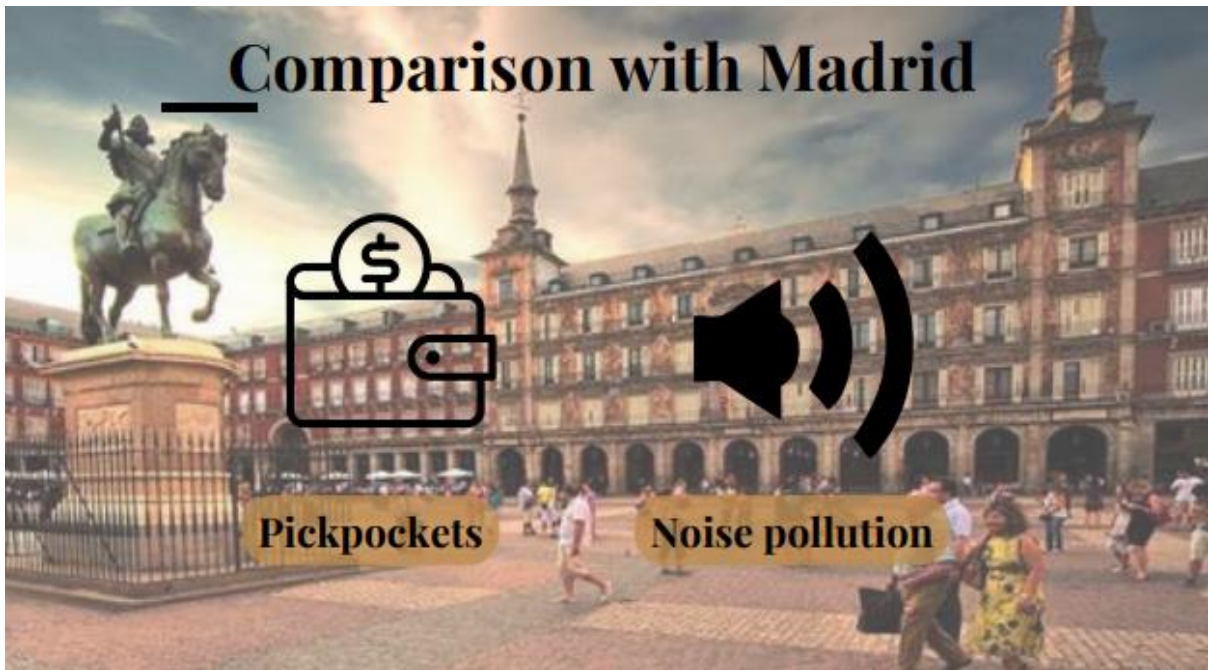


Comparison with Madrid



Pickpockets

Noise pollution



HOW COULD WE IMPROVE TOURISM?

- ° *Tourists to avoid massive tourism*
- ° *For the tourists: avoid the high seasons*
- ° *Avoid the amount of garbage int the streets*
- ° *Improve the lifestyle of parisians*

Conclusion



Annex 8 - Second Example of Student Presentations



Image. Marketing in the tourism sector. https://www.comunicare.es/wp-content/uploads/2021/02/b2ap3_large_marketing-turistico.jpg. Checked the 2nd of December



Image. Marketing in the tourism sector. <https://www.brandinfinity.sg/our-work/getting-cruises-hotel-transylvania-a-monster-vacation/>. Checked the 2nd of December



Image. Marketing in the tourism sector. <https://www.adsoftheworld.com/campaigns/book-a-stay-have-a-give-away>



Image. Marketing in the tourism sector. <https://opposite-lock.com/topic/23060/rms-queen-mary-pt-3>

Marketing

"The management of process responsible for identifying , anticipating and satisfying customer requirements profitably".



Image Marketing

WHAT OBJECTIVES DO WE HAVE?

- **To catch people's attention**
- **To sell our project or our services**
- **To be different in what we offer**

12/12/2023

5

- **Doing an special and unique marketing**
- **Simplicity, not a lot of text, the most important information**
- **We want the reader to be interested in what they read, not to throw it away**

HOW CAN WE GET IT?

WHERE CAN WE FIND MARKETING? EXAMPLES

- **There is marketing everywhere, from subway stations to the roads where we drive.**
- **Good promotion of a country or a region is essential for tourism.**
- **Catching the viewers attention is crucial.**



12/12/2023

Image, Marketing on the roads. <https://bika.lumoadvertising.com/wp-content/uploads/2021/03/Amreslon-gran-formato-publicidad-exterior.jpg> Checked the 2nd of December

7

CONCLUSION

- **As we have seen, marketing is everywhere and above all it is important in tourism, making a good logo, a good advertisement can have incredible results and get people's attention.**
-

Annex 9 - Personal Data Processing Form

MODELO DE DOCUMENTO A SUSCRIBIR POR EL/LA TUTOR Y EL/LA ESTUDIANTE, PARA EL TRATAMIENTO DE DATOS PERSONALES CON OCASIÓN REALIZACIÓN, ELABORACIÓN Y DEFENSA DE UNA TESIS DOCTORAL, O UN TRABAJO FIN DE GRADO O MÁSTER

Datos del estudiante autor/a de la tesis o del trabajo:

Nombre y apellidos	Vicente Campos de la Torre
Datos Tesis Doctoral/TFG/TFM	El Aprendizaje Basado en Proyectos (ABP) y su eficacia en la Enseñanza del Inglés en la Etapa de la Educación Superior. Project-Based Learning (PBL) and Its Effectiveness in Teaching English at the Higher Education Level
Departamento/Instituto/Facultad	Facultad Filología/Dpto. Estudios Ingleses
Director/a – Tutor/a	Juan Pedro Rica Peromingo

Primero: Para la realización de la tesis doctoral o el Trabajo fin de titulación a que se ha hecho referencia es imprescindible y necesario el acceso a ciertos datos de carácter personal por parte del/a estudiante de cuyo tratamiento es responsable final la UNIVERSIDAD COMPLUTENSE DE MADRID, y responsable directo el/la estudiante y su Director/a o Tutor/a.

Segundo: El/la doctorando/a estudiante se compromete a adoptar y a implantar las medidas técnicas y organizativas de seguridad adecuadas al nivel de riesgo, de conformidad con lo indicado por su Director/a o Tutor/a, así como a no comunicar datos personales a terceros ajenos a la elaboración de la Tesis doctoral o del trabajo fin de titulación.

Asimismo el estudiante se obliga a generar la documentación acreditativa del cumplimiento de las obligaciones del responsable del tratamiento y a facilitar y a ponerlas a disposición de la Universidad a través del director o del tutor (en particular, la constancia del consentimiento y el haber facilitado la información del art. 13 del RGPD).

Tercero: El/la estudiante se obliga a cumplir la obligación de secreto y confidencialidad respecto a los datos de carácter personal objeto del tratamiento.

Cuarto: Una vez finalizada la Tesis Doctoral o el trabajo fin de titulación, los datos de carácter personal serán bloqueados por el tiempo necesario para responder de la veracidad de los resultados de su investigación y lo que resulte necesario para el ejercicio de posibles acciones jurídicas.

Quinto: El/la estudiante asistirá al Director/a o Tutor/a en el cumplimiento de la obligación de responder las solicitudes de ejercicio de derechos de los interesados del capítulo III del RGPD, comunicando a la Universidad que se ha ejercitado un derecho y colaborando para su atención y respuesta.

Sexto: No se prevén transferencias internacionales.

Séptimo: En el caso de la existencia de una violación de la seguridad de los datos que constituya un riesgo para los derechos y las libertades de las personas físicas, el/la estudiante y/o el/la Director/a o Tutor/a lo notificarán a la Universidad, sin dilación indebida, y en cualquier caso antes del plazo más breve posible, y a través de la dirección de correo electrónico ofi.dpd@ucm.es. Dentro del plazo indicado, deberán notificar las violaciones de la seguridad de los datos personales a su cargo de las que tenga conocimiento, juntamente con toda la información relevante para la documentación y comunicación de la incidencia; inclusive, cuando sea posible, las categorías y el número aproximado de interesados afectados, y las categorías y el número aproximado de registros de datos personales afectados; así como las posibles consecuencias de la violación de la seguridad de los datos personales. La información se comunicará con la descripción de las medidas adoptadas o propuestas para poner remedio a la violación de la seguridad de los datos personales, incluyendo, si procede, las medidas adoptadas para mitigar los posibles efectos negativos.

Octavo: Una vez finalizado y evaluado el trabajo fin de titulación (TFG o TFM), el estudiante procederá a devolver a la Universidad por conducto de su director/a o tutor/a los datos de carácter personal y, si procede, los soportes donde consten. La devolución debe comportar el borrado total de los datos existentes en los equipos utilizados por el estudiante. En el supuesto de tesis doctorales, una vez leída y evaluada la Tesis Doctoral, el nuevo doctor podrá conservar la información debidamente bloqueada, durante el tiempo que precisar para demostrar la veracidad de los resultados de su investigación.

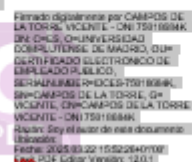
El/la estudiante declara conocer el tratamiento de datos personales para la realización de la tesis doctoral o trabajo fin de titulación del que es autor/a y que se describe más arriba, y declara conocer todas las obligaciones y deberes de confidencialidad resultantes de la aplicación del Reglamento (UE) 2016/679 del Parlamento Europeo y del Consejo, de 27 de abril de 2016, relativo a la protección de las personas físicas en lo que respecta al tratamiento de datos personales y a la libre circulación de estos datos (Reglamento General de Protección de Datos –RGPD-) y de la Ley Orgánica 3/2018, de 5 de diciembre, de Protección de Datos Personales y garantía de los derechos digitales

Fecha, 22/03/2025.

Firmado: (Lo que proceda)

EL/LA DOCTORANDO/A
EL/LA ESTUDIANTE

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DNI
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18/03/2025

EL/LA DIRECTOR/A
EL/LA TUTOR/A

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