



## INVESTIGATING PROJECT-BASED LEARNING FOR STUDENTS' COLLABORATION IN MOROCCAN HIGHER EDUCATION: STUDENTS' PERSPECTIVES

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### Abstract:

Project-Based Learning (PBL) is an innovative teaching method that enables students to learn 21st-century job market skills, become more efficient and contribute to development. This article examines how students' collaboration is perceived and applied by Moroccan students in the Moroccan higher educational context through the application of the PBL teaching method. It also seeks to explore the challenges they face during its potential implementation. This quantitative study leveraged a questionnaire to collect data from a random sample of university students of English at Moroccan Hassan II University, leading to 90 replies. Utilizing descriptive statistics to analyze the collected data, the study indicates that students hold positive attitudes towards PBL as it helps them understand and remember material better, develop teamwork and collaboration skills, prepare them for real-world problem-solving and increase their motivation and engagement. However, the study detects significant challenges for the surveyed students, such as their professors' unclear guidelines and objectives about PBL, working in mixed-ability groups, managing unequal contributions from their peers and the time-consuming nature of PBL. This may render their experience with PBL rather stressful and frustrating. The research outcomes present key implications for professors, faculty members, students and policy makers to implement effective strategies for PBL adoption.

**Keywords:** higher education, PBL, collaboration, Morocco, EFL

### 1. Introduction

The field of EFL (English as a foreign language) has seen significant advancements in many teaching approaches, and PBL is one of them (EL Moudden & Lamkhanter, 2024; Thomas, 2000; Eyring, 1997). This is because PBL enables students to acquire the 21st-

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century competencies that will make them more efficient in the job market and participate in their nation's development. These competencies include collaboration, self-confidence, problem-solving, communication, critical thinking, and creativity, to name but a few.

While PBL is recognized as an inclusive approach to education and has gained considerable popularity in the global perspective for many years now (Hedge, 1993), its infusion in Moroccan higher education open-access EFL institutions, particularly in the context of fostering students' collaboration skills, remains relatively unexplored. Equally important, when Moroccan higher education students graduate from university, they find difficulties collaborating with their colleagues at work due to a lack of collaboration skills, which negatively affects their employability and, by implication, their contribution to their country's development (Mansouri, 2022).

This study aimed to bridge this gap by examining how students' collaboration is perceived and applied by university students in the Moroccan higher educational context through the potential implementation of PBL. It also sought to identify the common challenges they encounter during the possible implementation of this teaching/learning method to foster their collaboration skills. The significance of this research lies in its ability to offer evidence-based insights and best practices to EFL professors for incorporating PBL to enhance students' collaboration skills in the Moroccan pedagogical setting. Ultimately, this study offers practical suggestions and significant implications for university professors, faculty members, university students and policy makers to enhance students' collaboration skills in the Moroccan educational environment.

In this respect, the scope of this study is limited to Project-Based Learning for students' collaboration in Moroccan higher education. While this study does not cover the other 21<sup>st</sup> century competencies, such as critical thinking, creative thinking and communication, it does explore students' collaboration skills through the assignment of PBL instruction in the Moroccan higher education EFL classrooms.

This research study addressed the following research questions:

- 1) What are Moroccan higher education EFL students' perceptions of the potential use of Project-Based learning to develop their collaboration skills?
- 2) What challenges do Moroccan higher education EFL students encounter in the process of potentially implementing Project-Based Learning (PBL) to foster their collaborative work skills?

These research questions translate into the following hypotheses:

**H1:** Moroccan higher education EFL students hold positive attitudes towards PBL's capacity to enhance their collaboration skills.

**H2:** Moroccan higher education students encounter certain challenges in the process of potentially implementing PBL to foster their collaboration skills.

## 2. Literature Review

Formal education plays a fundamental role in shaping students' intellectual, social and emotional development. The method by which teaching is delivered influences such

development and affects students' learning outcomes. Indeed, PBL unfolds as a promising teaching method that strives to instil the 21<sup>st</sup>-century competencies in today's generation of international learners. Such competencies include, but are not limited to, collaboration, communication, self-confidence, critical thinking, and creativity. This section provides a definition of Project-Based Learning, including its characteristics, benefits, implementation stages, as well as its challenges. It also sheds light on collaboration, comprising its benefits and implementation challenges in PBL. Furthermore, the theoretical framework informing this study is presented.

### **2.1. Definition, Characteristics and Benefits of Project-based Learning**

Most research studies have offered diverse definitions related to PBL, all of which center on its ability to enhance the learners' real-life skills, collaboration skills, interpersonal and intrapersonal communication skills, as well as their autonomy. One definition is provided by Thomas (2000), who defines PBL as a teaching method whereby students gain content knowledge and real-life skills by working on a project for an extended period of time. According to him, PBL has certain features that distinguish it from simple project work. For instance, PBL is characterized by being at the center of the curriculum. Its core component, which is project work, must come at the center of the teaching and learning process, not peripheral to it. Thomas maintains that, *"PBL projects are central, not peripheral to the curriculum.... First, according to this defined feature, projects are the curriculum. In PBL, the project is the central teaching strategy; students encounter and learn the central concepts of the discipline via the project."* (Thomas, 2000, p.3).

Moussaoui and Erguig (2024) agree on this view and argue that PBL, unlike simple project work, requires teacher guidance and team collaboration. Assaf (2018) advocates this argument by asserting that students who work in teams can develop their sense of commitment, responsibility and maturity. Also, through collaborative work, students not only learn certain information about a certain topic, but they also learn a way of behaving, a way of undertaking research and a way of working together. In this regard, Bell (2010) clarifies that the students involved in a PBL activity make most of the choices and voice these during the project work within the pre-approved guidelines. The teacher is often surprised and even delighted with the students' choices.

In addition to its unique characteristics, PBL has certain benefits for its application in EFL education. First, PBL promotes students' active engagement and self-directed learning. For instance, PBL empowers students by engaging them in real-life, authentic projects that grant them ownership of their learning (Woenardi et al., 2022). Second, PBL enables students to bridge the gap between theory and practice by immersing them in real-world, authentic experiences (Sabry et al., 2018). Third, PBL provides an opportunity for students to engage in interdisciplinary collaboration. The latter means that through collaborative projects, students develop interpersonal and communication skills required for their future endeavors (Kapp, 2010). Fourth, PBL can prepare students for the job market as it helps them develop a portfolio of life skills and accomplishments, which render them potential candidates to potential employers (Halonen & Dunn, 2017).

Nonetheless, PBL implementation goes through a series of challenges which the following section will highlight.

## **2.2. Challenges to PBL Implementation**

Incorporating PBL in the higher education classroom can present significant challenges in its implementation, including time constraints, curriculum design, and traditional assessment. For example, given the limited duration of time allocated to PBL in the academic calendar, faculty professors keep grappling with the effective implementation of it while ensuring coverage of required curriculum content (Megayanti et al., 2020). With respect to curriculum design, the current state of affairs shows that faculty do not embrace PBL into the curriculum in its fullest form, nor does it align it with learning objectives (Juandi et al., 2021). In addition to this, traditional assessment may not capture appropriately the multifaceted nature of PBL as the latter stresses the use of group work, problem-solving and application of knowledge. Moreover, students can face difficulties adapting to a PBL environment where group work and collaboration are required. The latter entail the active use of communication, organization, negotiation and collaboration skills, which learners may not favor. Tseng et al. (2013) and Miller and Hadwin (2015) emphasize that the mere designation of groups does not automatically lead to the effective implementation of PBL. They clarify that student groups have to develop their own framework of how collaboration will actually be executed to plan and conduct their project activities. This includes the planning and coordination of activities and the management of resources and work products, as Edelson et al. (1999) suggest.

## **2.3. Collaboration and Its Benefits in PBL**

Collaboration is one of the four competencies that today's generation of students needs to have and develop to transition into 21<sup>st</sup>-century job market (Rahmatiani et al., 2024). Baser, Ozden, and Karaarslan (2017) argue that collaborative project-based learning helps students develop collaborative skills. According to Johnson and Johnson (2017), collaboration skills include five elements, which are 1) positive interdependence among group members, 2) individual and group accountability, 3) social skills, 4) promotive interaction within the group, and 5) group processing. By positive interdependence, Johnson & Johnson (2005) mean that it is a positive behavior based on the belief that each member in the group gives and obtains shared benefits in achieving the set objectives through the understanding of members in the group. Individual and group accountability lie in each member holding a sense of responsibility towards the group, which can produce quality discussions and results. They can also prevent the occurrence of social problems and conflicts in the group because each member feels the duty to strive to achieve common goals. Similarly, Dingel et al. (2013) encourage students to develop social skills to function effectively and avoid internal conflicts, which can lead to members' withdrawal because of misunderstandings among group members. As for promotive interaction within the group, Dingel et al. assert that it should be emphasized through constant discussion, offering support to members, appreciating their efforts, and

encouraging them to show willingness to exchange ideas, opinions, and information. Regarding group processing, the group process of carrying out collaboration requires members to conduct reflection, monitoring and obtaining feedback from each member as well as evaluation and decision-making in defining what needs to be done in the group.

## **2.4. Theoretical Framework**

PBL draws on Social Constructivist Theory, particularly the work of Lev Vygotsky (1978). Social Constructivism posits that individuals construct their knowledge when they engage with their environment, interact with others, conduct investigations, and form new knowledge by building on existing knowledge. In addition, when learners cannot achieve tasks alone but seek assistance and collaboration from their more competent peers, who possess high-order thinking skills, they are considered to be working within their zone of proximal development (ZPD) (Vygotsky, 1978). In this respect, Vygotsky defines ZPD as *"the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers"* (p. 86). According to him, it is through collaboration with the more knowledgeable peers or capable adults that learners learn best, by internalizing new knowledge, skills and psychological tools.

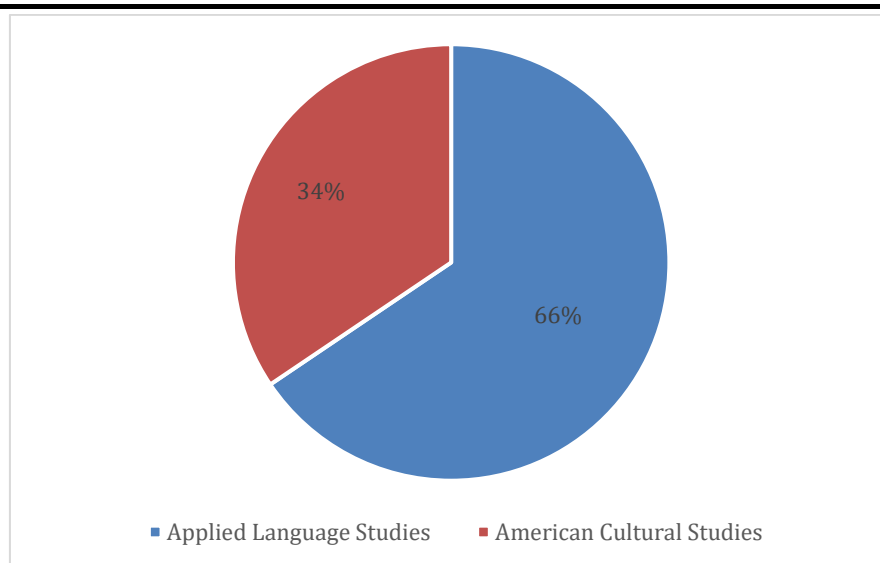
## **3. Material and Methods**

The present study sought to gauge the students' perspectives towards PBL for students' collaboration and the challenges they encounter in the course of implementing this teaching approach to promote students' collaboration skills.

### **3.1. Sample / Participants**

This study comprises Moroccan open access students of English from Ben M'sik faculty, Department of English. A simple random sampling method was utilized to collect data. This sample was chosen randomly to allow for wider representativeness (Creswell & Creswell, 2023). The total number of university students who participated in the questionnaire was 90.

Figure 1 below represents the year stream distribution of participating students. Out of 90 students, 66% of them were from the Applied Language Studies stream, whereas 34% students belonged to the American Cultural Studies one.



**Figure 1:** Year Stream Distribution

Table 1 below shows the gender distribution of the participants. Out of 90 students, 62 of them were female (68.9%), and 25 were male (27.8%), whereas 3 of them preferred not to say (3.3%).

**Table 1:** Gender Distribution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	25	27.8	27.8	27.8
	Female	62	68.9	68.9	96.7
	Prefer not to say	3	3.3	3.3	100.0
	Total	90	100.0	100.0	

### 3.2. Data Collection Procedures and Quantitative Instrument(s)

The data was collected from the participating students in a face-to-face encounter using a paper-based questionnaire. This was mainly due to the usefulness of this data collection method as it guarantees higher response rates, immediate clarification of questions, reduced technological barriers, and better control over the data collection environment (Creswell & Creswell, 2023). Furthermore, the survey design provides an opportunity to observe students' non-verbal feedback, which may signal confusion or hesitation, prompting useful clarification of certain survey constructs. Also, the face-to-face administration of the students' questionnaires was time-saving and convenient because it allowed easy access to the participants on the spot without having to move from one place to another or wait for their online responses, which could last weeks or even months to collect the data.

To measure the students' questionnaire's reliability, the questionnaire was piloted in a sample size of 14 participants. Moreover, explanations of certain items in the two questionnaires were given, upon the respondents' requests, to remove ambiguities and doubts about their meanings. The initial number of items in the questionnaire was 41, but it was reduced to 39 items after piloting. After piloting the students' questionnaire for a

period of one week, it was then shared with students belonging to two classes of S6 higher education level from the English department at Ben M'sik Faculty of Letters.

**Table 2: Initial Cronbach's Alpha Result**

Cronbach's Alpha	N of Items
.823	41

Table 2 above shows that for the sum of 41 items, the Cronbach's alpha analysis result is .82, indicating a "Good" reliability level, bearing in mind that the coefficient of Cronbach's Alpha must range between 0.80 and 0.98.

The process of piloting the questionnaire resulted, as shown in Table 3 below, in a Cronbach's Alpha reliability figure of .87 after deletion of two items from section five, indicating a "Good" reliability level, bypassing the previous figure by .50 points.

**Table 3: Final Cronbach's Alpha Result**

Cronbach's Alpha	N of Items
.873	39

The students' questionnaire is composed of six sections. The first section is related to personal demographics, which are designed to collect basic information about the participants. This includes information about their year stream, age and gender.

The second section relates to the students' experience with PBL. It consists of 4 questions. They were carefully designed to gauge students' experience with PBL in terms of PBL learning activities, their understanding of this concept, as well as their awareness of its objectives and learning outcomes. This section will help answer the first research question.

The third section is related to students' engagement and motivation towards PBL activities. It consists of 5 items whose aim is to collect data about not only their motivation and engagement towards PBL, but also their confidence using this teaching/learning approach and whether they are granted a choice in selecting project topics. This section will help answer the first research question.

The fourth section is focused on answering the first research question by collecting data related to students' perceived benefits in learning through the use of PBL to foster collaboration skills. This section is composed of six questions, which are all centered on capturing PBL's benefits to students, which can help them develop other 21<sup>st</sup> century skills in addition to collaboration skills, namely critical thinking skills, communication skills and problem-solving skills. A 5-point Likert scale was used, ranging from 1) Strongly disagree, 2) Disagree 3) Neutral 4) Agree, to 5) Strongly Agree. The fifth section is based on students' perception of the challenges raised by PBL during their learning process through the use of this teaching/learning method. To avoid any bias towards favoring or disfavoring the use of PBL as a teaching method, the researcher has designed an equal number of questions (6 questions) as compared to the previous section related

to benefits. A 5-point Likert scale was used, ranging from 1) Strongly disagree, 2) Disagree 3) Neutral 4) Agree to 5) Strongly Agree.

The last section is related to project-based learning and collaboration. It consists of 8 questions, all of which intend to draw a link between PBL and collaboration to see whether implementing PBL is automatically conducive to developing collaboration skills.

### 3.3. Data Analysis

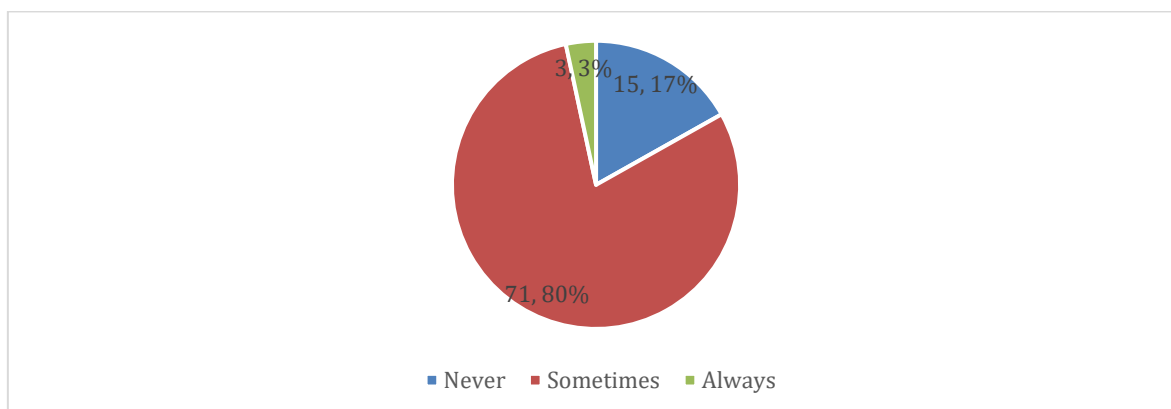
To code the questionnaire's data, SPSS Statistical Package software was leveraged to calculate descriptive statistics and to identify significant patterns, trends and relationships for easy data interpretation.

## 4. Results and Discussion

One of the two research questions which the present research study sought to answer was the following: What are Moroccan higher education EFL students' perceptions of the potential use of Project-Based learning to develop their collaboration skills?

The hypothesis was that Moroccan higher education EFL students hold positive attitudes towards PBL's capacity to enhance their collaboration skills.

Figure 2 is concerned with gauging students' participation in PBL activities. A large proportion of students (71.80 %) sometimes participate in PBL activities, less than a fifth (15.17 %) never participate in PBL activities, whereas an insignificant number (3.3 %) always participate in such activities.



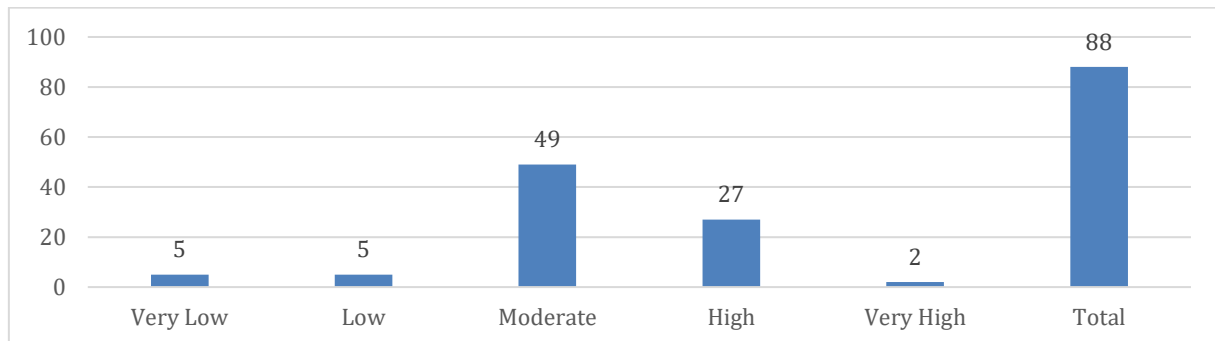
**Figure 2:** Students' Participation in PBL Activities

This moderate level of participation indicates that PBL is not a regular and well-established pedagogical practice within these educational settings, reflecting the need for a strong institutional commitment to using this teaching/learning method.

As far as rating the extent to which the students understand the PBL concept, figure 3 below illustrates that just over half of the participants (n= 49; 54.4 %) has a moderate understanding of PBL, followed by just under a third of them (n= 27; 30 %) having a high understanding of PBL concept, followed by two small minorities of



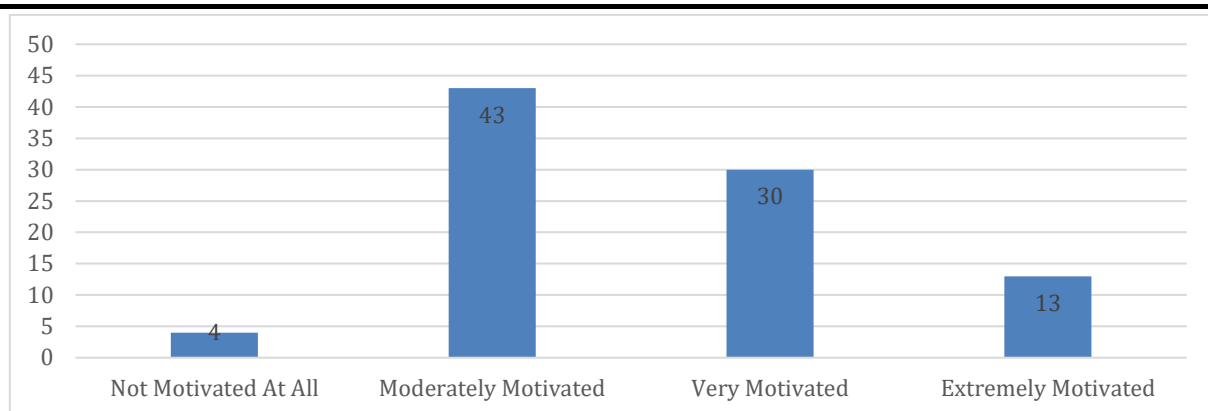
students (n= 5; 5.6 %) having a low and a very low understanding of PBL concept, respectively. However, only an insignificant number of students (n=2; 2.2 %) have a very high understanding rate.



**Figure 3:** Students' Understanding of PBL

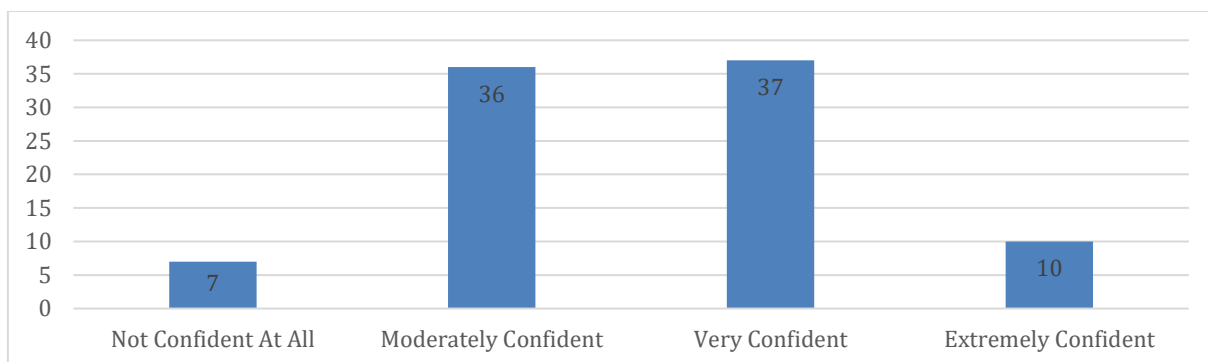
This indicates that a large majority of students have a solid grasp of what PBL entails. This suggests that the educational institutions are successful in conveying the basic principles and goals of PBL to their students. However, these figures also highlight an area for potential improvement. While the majority of students are familiar with the basic concepts of PBL, there is still a need for deeper comprehension and clearer communication regarding its methodologies and intended learning outcomes. This can be achieved through ensuring that students understand not just what PBL is, but also how it functions and what specific skills and knowledge they are expected to gain from each project, which can enhance their learning experience.

Regarding students' motivation and engagement in Project-Based Learning activities, figure 4 below shows that approximately half of the surveyed participants (n=43; 47.8%) is moderately motivated to engage in Project-Based Learning activities, just over a third (n=30; 33.3 %) is very motivated, less than a fifth (n= 13; 14.4 %) is extremely motivated, whereas a small minority of students (n= 4; 4.4 %) is not motivated at all to engage in PBL activities. This high degree of motivation is critical for the success of PBL, as it often requires sustained effort, perseverance, and active participation over extended periods. Motivated students are more likely to engage deeply with their projects, collaborate effectively with peers, and invest the necessary time and energy to achieve meaningful learning outcomes. This finding can be corroborated by the findings of Bell (2010), who clarifies that when students bring their part of the work or contribution to the project work, they feel more motivated than if they are obliged to do so if instructed by their teacher. This can lead to a greater student achievement in academic performance, which can be measured through higher attendance in the classroom, increased interest and improvement in grades.



**Figure 4:** Students' Motivation towards PBL Activities

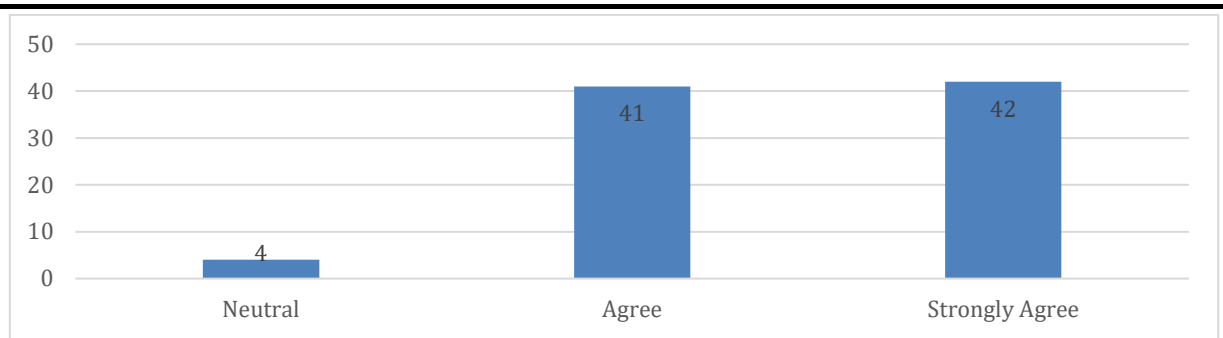
Insofar as how confident the students are in their ability to work collaboratively on PBL projects, figure 5 below demonstrates that more than two fifths ( $n=37$ ; 41.1 %) are very confident, two fifths ( $n=36$ ; 40 %) are moderately confident, a small minority ( $n=10$ ; 11.1 %) is extremely confident, whereas a small number of the students ( $n=7$ ; 7.8 %) is not confident at all.



**Figure 5:** Students' Confidence in PBL Collaborative Work

This confidence is essential, as PBL heavily relies on group dynamics and collaborative efforts to solve problems, create projects, and learn from one another. High levels of confidence can lead to more effective teamwork, better communication, and a greater willingness to take on leadership roles or contribute unique ideas during group activities.

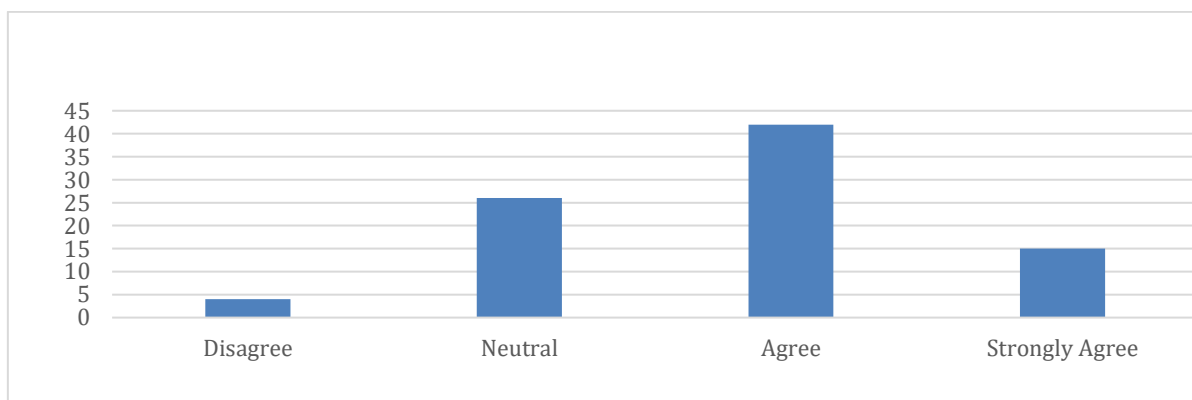
Additionally, PBL is viewed as highly beneficial for developing teamwork and collaboration skills. This is evidenced by Figure 6 below, which demonstrates that an exceptionally high rate of students agree or strongly agree that PBL fosters these skills, indicating its effectiveness in promoting a collaborative learning environment. Approximately half of the students ( $n=42$ ; 46.7%) strongly agree that PBL does so, and more than two-fifths ( $n=41$ ; 45.6 %) agree on this statement, whereas a small number of students ( $n=4$ ; 4.4%) are neutral on that.



**Figure 6:** PBL and Students' Teamwork and Collaboration

Through PBL, students are often required to work in groups, which necessitates communication, coordination, and cooperation. These activities not only help students learn to work together but also prepare them for real-world professional environments where teamwork is crucial. The emphasis on teamwork in PBL means that students frequently engage in activities that require collective problem-solving, role distribution, and the integration of diverse perspectives. Such experiences help students develop essential interpersonal skills, such as active listening, conflict resolution, and consensus-building. These skills are invaluable not only in academic settings but also in their future careers, where the ability to collaborate effectively can significantly impact their success and productivity.

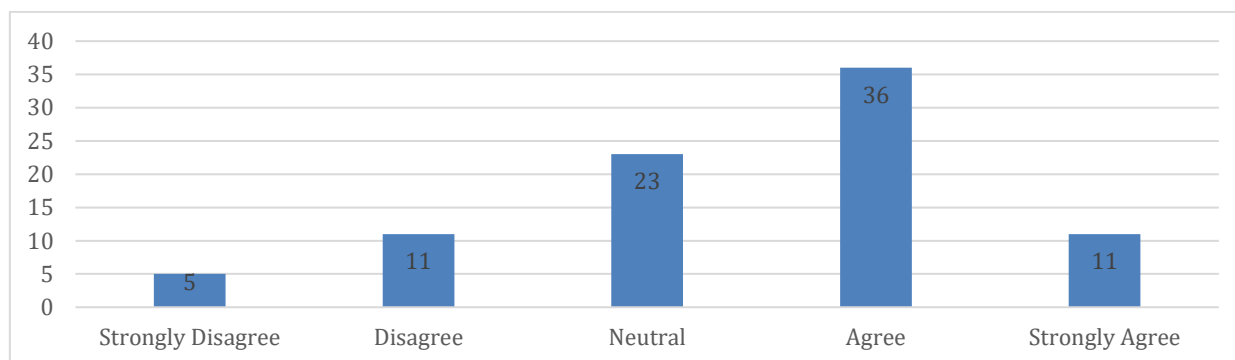
As for PBL's ability to prepare students for real-world problem-solving, Figure 7 below shows that more than two-fifths ( $n=42$ ; 46.7 %) agree on this statement, while less than a fifth ( $n=15$ ; 16.7%) strongly agree on that. Additionally, a small number ( $n=4$ ; 4.4%) disagrees on that, while slightly more than a quarter ( $n=26$ ; 28.9%) is neutral to this statement.



**Figure 7:** PBL for Problem Solving

While many students see the connection between PBL and improved problem-solving abilities, there is an indication that some projects could be better aligned with real-world scenarios to maximize this benefit. By incorporating real-world problems into PBL projects, educators can help students apply theoretical knowledge in practical contexts, further strengthening their problem-solving skills.

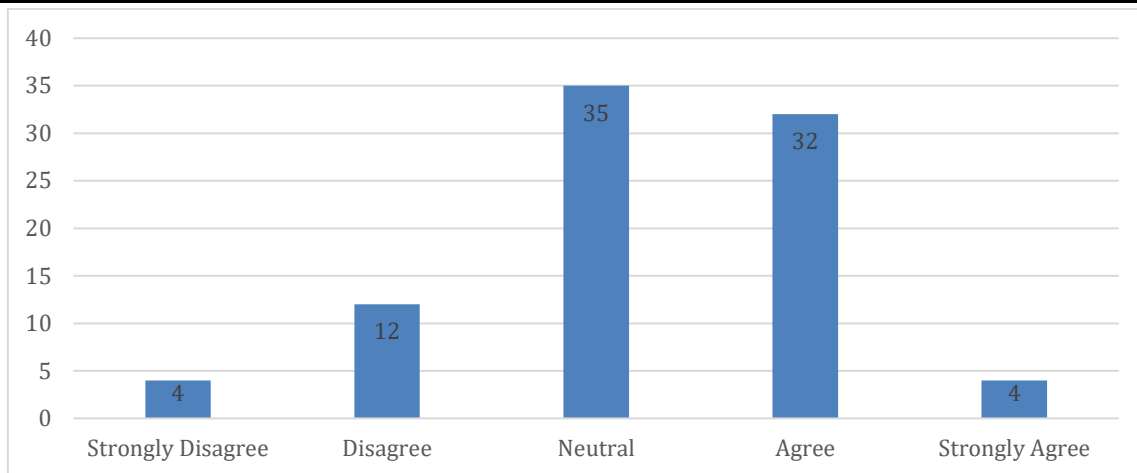
As for research question 2, which asked what challenges Moroccan higher education EFL students encounter in the process of implementing Project-Based Learning (PBL) to foster their collaborative work skills, the hypothesis was that Moroccan higher education students certainly encounter challenges in the process of implementing PBL to foster their collaboration skills. For example, Figure 8 below shows that PBL can be time-consuming. Two-fifths of the surveyed students (n=36; 40 %) agree that PBL is time-consuming, while less than a fifth (n=11; 12.2 %) strongly agree on that. Nevertheless, less than a fifth (n=11; 12.2 %) disagrees on this statement, a small number (n=5; 5.6 %) strongly disagrees on that, while a quarter (n=23; 25.6 %) is neutral.



**Figure 8:** PBL and Time Consumption

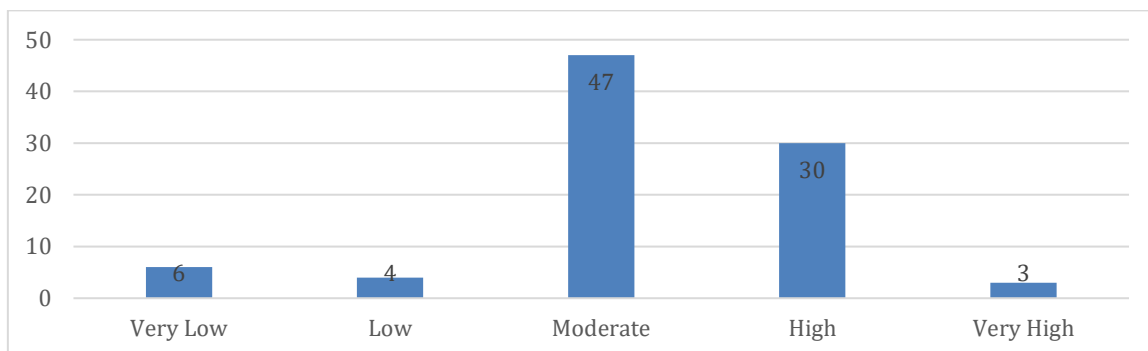
To solve this issue, Cattani et al. (2011), in their findings, suggest breaking down the projects into manageable tasks and setting clear timelines to facilitate students' progress and optimize their learning experience.

Concerning the possibility of Project-Based Learning being hindered by mixed ability groups, Figure 9 below shows that just over a third (n=32; 35.6%) agree on this statement, whereas only a small number of students (n=4; 4.4 %) strongly agree on this statement. However, less than a fifth (n=12; 13.3 %) disagree on this hindrance, and only a small minority of students (n=4; 4.4 %) strongly disagree on that. Just over a third (n=35; 38.6%) is neutral to that. These figures show that a significant source of frustration for students is working in mixed-ability groups and managing unequal contributions from their peers. Group projects can be challenging, especially when the skill levels and engagement of group members vary widely. This often leads to feelings of frustration, as some students feel they are doing more than their fair share of the work, which highlights how group dynamics can affect student satisfaction and success.



**Figure 9:** PBL and Mixed Ability Hindrance

Additionally, moderate knowledge of objectives or unclear guidelines further exacerbates students' difficulties. When the expectations and goals of a PBL project are not clearly defined, students can struggle to understand what is required of them. This ambiguity can lead to confusion and decreased confidence in their ability to complete the project successfully. According to Figure 10 below, the statistics show that 47% of students have moderate knowledge and only 30% have high knowledge of PBL objectives and guidelines, which makes it difficult to navigate PBL environments.



**Figure 10:** Knowledge of PBL Objectives

To conclude, students' challenges with PBL stem from the time-consuming nature of the projects and the stress they create. The frustrations from working in mixed-ability groups and dealing with unequal contributions complicate their experience further. Additionally, unclear guidelines and objectives exacerbate these issues, making it harder for students to succeed. Addressing these concerns is essential for creating a more supportive and effective PBL environment for students. Hence, hypothesis 2 is confirmed.

## **5. Recommendations**

The study findings carry significant recommendations for professors, the faculty as an institution, students, and policymakers.

### **5.1 Professors**

To begin with, professors need more training programs such as workshops, seminars and conferences to help prepare them for employing this teaching method. Next, enhanced institutional support could include furnishing professors with adequate resources, providing them with more structured guidance and establishing a supportive administrative environment that encourages the use of PBL. Besides, professors need to develop new assessment strategies and assessment methods that align better with the goals of PBL, such as adopting portfolios and rubrics. Moreover, professors can share expertise across disciplines and leverage digital resources to maximize students' learning outcomes. Also, professors need to ensure that students understand not just what PBL is, but also how it functions and what specific skills and knowledge they are expected to gain from each project, which can enhance their learning experience.

### **5.2 The Faculty**

As for the faculty, its members need to ensure that professors have access to the necessary tools and support to implement PBL successfully. By the same token, the members need to establish partnerships with external organizations to get funding opportunities as well as seek PBL-oriented grants to support projects and enhance their quality. Faculty members could also implement strategies aimed at maintaining and boosting motivation and confidence across the student and the professor bodies. This could involve personalized mentoring programs where more motivated and confident students support their peers, creating a more inclusive and encouraging learning environment.

### **5.3 Higher Education Students**

Regarding students, based on Edelson et al.'s (1999) recommendation, they should develop their own framework of collaboration by planning and coordinating their activities and managing their resources.

### **5.4 Policy Makers**

As for policymakers, they need to set up meaningful and engaging projects that align with students' learning outcomes in collaboration with faculty members, instructional designers and experts in the field. In fact, they are required to establish a whole infrastructure that incorporates PBL as an effective teaching approach to foster not only students' collaboration skills, but also to enable them to integrate into the job market with the requisite 21st-century skills.

## 6. Conclusion

In conclusion, the findings reveal that students are familiar with the basic concepts of PBL. This is depicted in their occasional participation in PBL activities, their moderate understanding of the objectives and outcomes of PBL projects, as well as their relatively moderate levels of motivation and confidence. Yet, the findings also exhibit students' resistance to working in mixed-ability teams, the stress and frustration that PBL projects can bring, as well as the unclear guidelines and objectives shared by their professors, which can hinder the effectiveness of PBL.

### Conflict of Interest Statement

The author declares no conflicts of interest.

### About the Author(s)

**Jalil Abdelilah** is an enthusiastic high school English language teacher with experience spanning over two decades in ELT. He has participated in many national conferences organized by MATE and other public and private institutions. His completion of the MOOC online program on "Teaching English to Young Learners Spring 2019" from George Mason University, Virginia, USA, marked a new beginning in his professional life, as it opened his eyes to innovative student-centered approaches such as Project-Based Learning (PBL). Most importantly, his participation in training programs focused on ICT integration in the English language classroom has fueled his interest in technology-enhanced teaching approaches. Notably, Jalil has been a certified Cambridge speaking examiner for the YLE exams since 2018. At Hassan II University, he is currently registered as a doctoral student, fully immersed in Applied Linguistics, where he is further researching the Project-Based Learning teaching method as an extension to his master's degree.

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**Mohamed Mouhalij** is a passionate high school teacher of English with more than ten years of experience in English Language Teaching (ELT). In addition to his classroom practice, he has dedicated four years to working at a Personal Development Center for Education and Training, where he contributed to enhancing students' soft skills through extracurricular activities and learner-centered initiatives. He is also an active researcher affiliated with the Language, Society, and Culture Studies Laboratory at Hassan II University, where his work explores the intersections of artistic and cultural extracurriculars and higher-order skill development. Over the years, he has participated in numerous national and international conferences on topics such as learner development, ICT integration in education, and soft skills teaching. Committed to lifelong learning, Mouhalij has also completed several online professional development courses offered by reputable American universities, strengthening his expertise in



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