

Enhancing EFL Learner Autonomy through Project-Based Learning: The Case of Secondary School Students

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Received 07 September 2023 | Received in revised form 12 September 2023 | Accepted 18 September 2023

APA Citation:

Khoudri, I., Khoudri, A., & Zeriouh, M. (2023). Enhancing EFL Learner Autonomy through Project-Based Learning: The Case of Secondary School Students. *Journal of English Language Teaching and Linguistics*, 8(3), 2023, 341-352. doi: <http://dx.doi.org/10.21462/jeltl.v8i3.1199>

Abstract

With the 21st century constant changes and demands, heated debate on ways to enhance Moroccan EFL students' autonomy has sparked the interest of stakeholders. Although learner-centered teaching has been recommended in the past few years, teacher-centered instructional styles are; however, predominating in real teaching-learning practices. Autonomous learning skills and self-directed learning are needed in the twenty-first century, and project-based learning is a way to respond to that requirement. The purpose of this paper is to investigate if project-based learning could enhance the autonomy of learners in a Moroccan EFL context. Similarly, this research aims at interviewing the presenters' peers on their performance; a method whereby they could develop critical thinking skills. To achieve this purpose, data was collected through a self-assessment questionnaire and a semi-structured interview. The participants were a classroom of 17 Secondary (2nd baccalaureate) school students. Results demonstrated that project-based learning enhances learner autonomy and responded to the demands of the 21st century skills. Likewise, based on the findings, learners managed to improve their autonomy during the implementation of project-based learning, and levels of autonomy vary among learners. Future researchers need to take into consideration that not all learners maintain a positive view concerning project-based learning perhaps they are accustomed to teacher spoon-fed and hand hold; consequently, they become passive. To deal with this dilemma, teachers had better remind students repeatedly that project-based learning contributes in boosting their autonomy and prepares them for the post-graduation exigencies.

Keywords: learner autonomy, Moroccan EFL students, project-based-learning

1. Introduction

With the rise of global communication and the birth of the information age, English language has undeniably become the lingua franca of the world. Indeed, English has been able to infiltrate into the Moroccan linguistic market. Moroccan students become gradually acquainted with the importance of acquiring English as an international language and are trying to achieve efficiency and autonomy as a means to manage their future affairs. Conversely, the traditional teaching philosophy and the lecturing culture have existed for a considerable time in the Moroccan EFL (English as a foreign language) context. In a teacher-centered instructional model, the teacher is the main authority figure, while students are viewed as empty vessels who inactively receive knowledge from their teachers. Moroccan students at the Secondary level are a case in point. Consequently, students seem demotivated and disengaged. From early times research demonstrated that there is a link between motivation and cognitive processing; if learners feel demotivated, they will not engage themselves in the process of learning. Helping students focus on what they do rather than on having a task done, understand the learning material rather than concentrating merely on passing exams are prerequisite. The need for a shift from teacher-centered mode of teaching to learner-centered instruction is one of the requirements to meet the 21st century exigencies and to fully prepare students for the future. With learner-centered instruction, the focus will be mainly on learners taking charge of their own learning, depending less on their teachers. Throughout this process, learners will develop autonomy and become active and critical thinkers. To foster learner autonomy, teachers need to implement Project Based Learning (PBL) in their classrooms.

Learner autonomy is vital in language learning, for it promotes students' achievement. Due to this, different approaches were recommended, and project-based approach was suggested to boost learners' autonomy. In the twenty first century, project-based learning and self-directed learning are chief as much as learning language is. Project based learning is an instructional model based on constructivism and learner-centered approach whereby learners develop questions, name a problem, and think critically to find solutions (Fajra & Novalinda, 2020; Simonton et al., 2021; Fisher et al, 2020). Sutarto et al., (2022) argue that PBL is an activity accomplished either individually or in groups for a specific period of time with an output at the end (such as a performance with a portfolio). Project based learning is an outlet to gain knowledge about the world individually or with the presence of others, to move from being novice to expert. Project based learning is based on practical experience in learning (Sharma et al., 2020), in small groups, students collaborate with one another to carry out academic tasks, they investigate topics relevant to fields of study for an outcome over a specific period of time. To do this, learners start by asking and refining questions, debating, developing predictions, collecting data, analyzing it, then drawing conclusions before having results communicated to their peers. To implement a project-based learning, stages to be followed are three; they are planning, creating, and reflecting the project (Hidayatulloh, 2020). Vasiliene-Vasiliauskiene et al. (2020) argue that the role of teachers in PBL changes according to the stages suggested. That is, in the pre-project stage, teachers seem to be the holders of knowledge; they assist students in picking up a topic and define the mode of working besides the objectives of the project topic. In the during project stage, the teacher is a co-learner and facilitator while students' role is to gather information from different sources, make changes at the level of the objectives of learning, content, and tasks, as well as respond to their peers' inquiries. However, teachers interfere only in case the presenters and their peers go astray. In the post-project stage, the teacher provides feedback on both the strength and weaknesses and suggests recommendations for future projects; in addition to that, the teacher relies on the presenters' peers to comment on their performance.

In a project-based learning context, the role of students changes from receivers of knowledge to constructors of personalized and individualized knowledge. Learners, through personalized learning instruction, can meet their needs and goals (Shemshack & Spector, 2020). Likewise, individualized learning instruction fosters self-directed and lifelong learning skills (Robinson & Persky, 2020). Through

PBL strategy, Teachers' role shifts from being transmitters of knowledge or task-masters to facilitators and guiders in the classroom. PBL attempts to promote students' engagement and curiosity by immersing students in complex similar real-life situations to challenge their abilities and skills. Students get engaged when they are dealing with authentic issues such as real-life problems. Thus, project-based learning raises their interest, engages them in the process of learning, helps them develop life skills, and builds their personality as well.

Project based learning enhances critical and analytical thinking (Listiqowati & Ruja, 2022), promotes collaboration and teamwork (Andriyani & Anam, 2022), increases communication skills (Owens & Hite, 2022), promotes problem solving skills (Puangpungsi, 2021), develops organization, visual and fine art skills (Kupaysinovna, 2021), time management and planning skills (Belwal et al., 2020; Sakulviriyakitkul et al., 2020), teaches decision making (Khandakar et al., 2020), knowledge transfer (Granado-Alcón et al., 2020), enable ownership and control over learning (Hussein, 2021), promotes autonomy and self-directed learning (Saad & Zainudin, 2022).

Project based learning impacts learners positively by making them autonomous and at the center of the teaching learning process. PBL construct creative and independent learners. Likewise, the basis of learner autonomy is the notion control over learning. To better understand ways of promoting learner autonomy, Benson and Lor (1998) introduced three versions of learning strategies that autonomous learners employ. they are technical strategies, psychological strategies, and political strategies. Similarly, Littlewood's (1999) self-regulation proposed two main principles which are proactive and reactive autonomy. Proactive learners determine the learning objectives, select the methods and techniques to check their progress. However, reactive autonomy takes place when learners endure feelings of motivation to take initiatives concerning the learning of vocabulary, self-assess through putting themselves in unfamiliar situations and take decisions to find solutions. The difference lies in that proactive learner make things happen, while reactive learners wait for things to happen and then react on them. Likewise, Scharle and Szabo (2000) represented learner autonomy in three main categories. First, raising awareness; second, changing attitudes; third, transferring roles. Further, Nunan (2014) identified five characteristics of autonomous learners; they are awareness, involvement, intervention, creation and transcendence. Awareness is an attribute whereby learners admit their recognition of their role as independent and responsible learners. Not only awareness of their role, but also awareness of the learning goals, the content and tasks. Besides awareness, learners need to be involved in decision making, and given the freedom to makes changes at the level of the learning goals, the content and tasks. The next step requires learners to create their own learning by themselves without the help of the teacher. Meanwhile, the last step involves learners transcending the classroom boundaries by making use of what they learn in the classroom in their daily life practices. Albeit terms change and ways of describing autonomous learning vary, obviously learner autonomy is directly linked to students' mindset and the responsibility they assume for their learning. Put simply, there is a huge need for the learner to hold a positive view about education and have an awareness about his/ her role. Despite the fact that there is less consensus on how to define learner autonomy, some prominent scholars share common principles; especially, ability (Holec, 1981 Little, 2007; Benson, 2014; Nguyen, 2014), willingness (Hsu, 2015; Nguyen, 2014; Sinclair, 2009), responsibility and control (Tran, 2020; Little, 2007), dependence and independence (Little, 2007; Jianfeng, 2018; Jacobs & Shan, 2016) as well. The Constructive theory chiefly contributed to the development of learner autonomy, for it revolves around the active construction of learning. Herman (1995) claimed that the constructivist approach to learning is one of the notable theories in cognitive science that originate in Piaget's cognitive developmental theories, and Vygotsky's sociocultural view of learning. Through knowledge construction, the man shifts from being the product of his society to a man just as the producer of his society (Little, 2007).

Learner autonomy is sustained through project-based learning (Maaz, 2020) a reason why the researcher seeks to develop knowledge about the nature of impact project-based learning has on learner autonomy. Similarly, this paper is meant to investigate students' level of autonomy through the

implementation of project-based learning. Reviewing the literature, there is lack of research concerning this issue in some areas such as Morocco. Most studies are devoted to teachers' perception of learner autonomy while teaching some skills through project-based learning. To fill this gap, this study attempts to investigate whether or not project-based learning could enhance the autonomy of learners in a Moroccan EFL context as well as train them to think critically towards the performance of one another. Similarly, this research aims at teaching the subject matter content through PBL integrated curriculum.

The researcher developed a questionnaire of learner autonomy based on research conducted and adapted some principles of autonomous learning from Nunan's (2014) theory; for it demonstrates levels of autonomy step by step and this research is meant to develop knowledge of whether or not PBL can enhance learner autonomy. The research questions are:

1. To what extent Project Based Learning enhances learners' autonomy?
2. How Secondary students perceive PBL and their friends' level of autonomy?

2. Research Methods

2.1. Research Design

This study aims to investigate whether the implementation of Project-Based Learning can enhance the level of autonomy among secondary school students. The research approach employed in this study is a mixed-method one. The study focused on a group of Moroccan students, specifically 17 second-year baccalaureate students majoring in physics at Al Ahd Al Jadid Secondary School in the Taoumat region. The research design used for this study involved correlation research using a questionnaire created by the researchers. Additionally, a case study design was used for interviews, specifically targeting students majoring in physics.

The questionnaire utilized a 5-point Likert scale, requiring participants to select responses that best suited them (see appendix). During the administration of the questionnaire, one of the researchers was present to provide assistance and clarify any challenging terms or questions that participants may have encountered.

The interview portion of the study consisted of open-ended questions, where two students were interviewed together. The aim was to stimulate their critical thinking skills by asking questions such as, "What are your thoughts on your friend's presentation?" "Did your friend adhere to the allotted presentation time?" "Why do you believe that is the case?" The discussion naturally evolved from these questions.

2.2. Instruments

The researchers developed the questionnaire based on review of the literature integrating insights from Nunan's (2014) theory of learner autonomy. In this study, a convenience sampling method was employed, primarily chosen due to the easy accessibility of participants to the researcher and the relatively small number of participants. This approach facilitated the effective implementation of an extended project-based teaching approach. The main goal of the questionnaire was to evaluate the extent to which project-based learning contributes to the enhancement of learners' autonomy. It was administered to students who were presenting their projects, with the aim of encouraging self-assessment. Participants were asked to select the response choices that best reflected their experiences after engaging in project-based learning. Google Forms were employed as the survey tool to administer to students who were in the process of presenting their projects, with the primary objective of promoting self-assessment. Participants were tasked with choosing response options that most accurately portrayed their experiences following their involvement in project-based learning. Following data collection, researchers utilized Microsoft Excel to create the diagram depicted below (see Figure 1). Before administering the questionnaire to the target group, it underwent a testing phase with a separate group of

first-year baccalaureate students. This testing phase was conducted to validate the data and assess the questionnaire’s reliability.

The interview was conducted as a discussion, with the aim of eliciting feedback from the classmates of the project presenters regarding their performance. The purpose of this interview was to train learners in developing critical thinking skills, enabling them to recognize both the strengths and weaknesses of their peers. The goal was to create opportunities for learning from mistakes and enhancing their overall learning abilities.

2.3. Participants

The research was conducted within a group of Moroccan students, with a specific focus on 17 second-year baccalaureate students who were majoring in physics at Al Ahd Al Jadid Secondary School in the Taounat region. Among these participants, there were 6 males and 11 females, aged between 17 and 19 years old.

3. Results

3.1. The Questionnaire

In this section, we present results that the researcher collected in order to investigate the extent to which project-based learning can enhance learners’ autonomy.

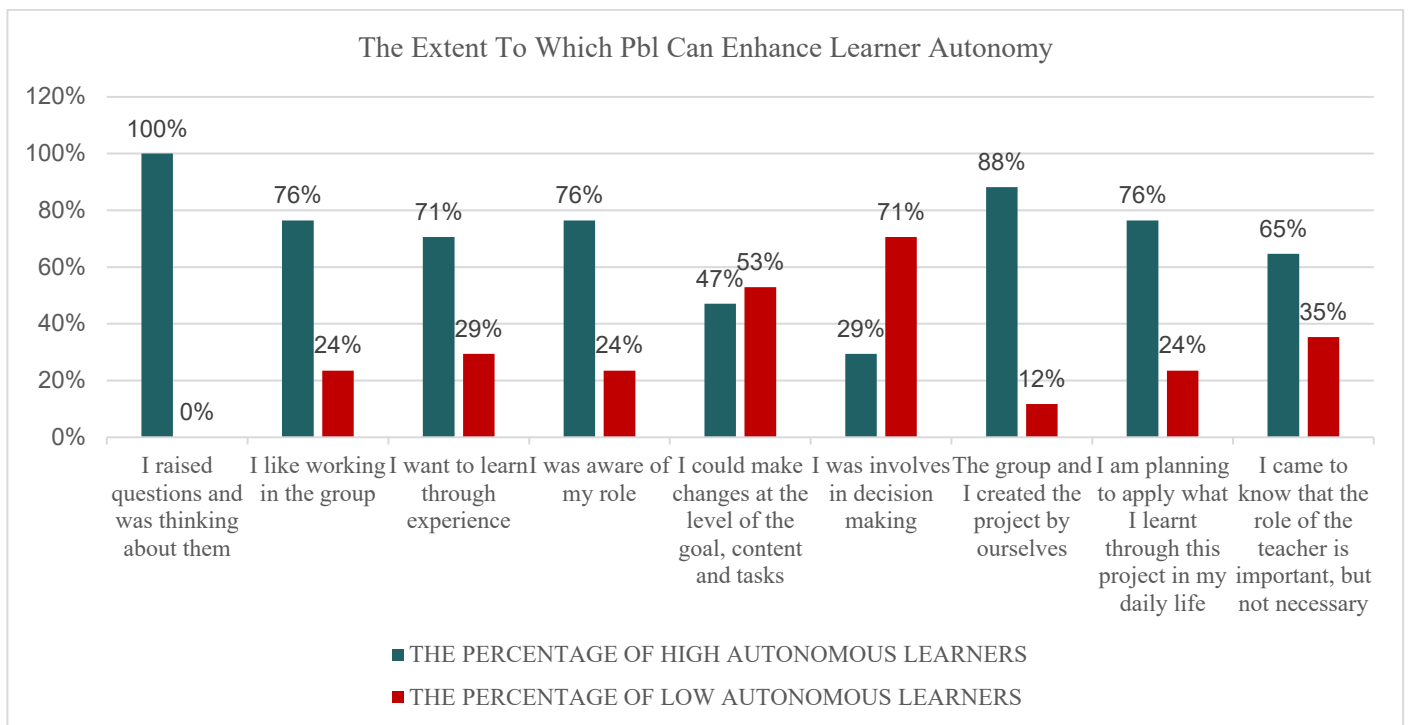


Figure 1: the extent to which PBL can enhance learner autonomy

To investigate the extent to which PBL can enhance learner autonomy, participants, after they have delivered their project work in front of their peers, were administered a questionnaire with nine questions. In each question, they were almost given two choices, the first reflects the characteristics of autonomous learners, the second choice characterizes non-autonomous learners. According to the first question, results demonstrated that all (100 %) participants were able to name problems and think critically about them. Meanwhile, no one opted for the second choice; it was about looking for ready-made answers for questions in the book to avoid embarrassment in front of their peers. The second

question was devoted to the mode of working, participants were asked to choose according to their preferences between learning in groups or alone; 76% opted for learning inside the group, while only 24% went for working alone. In the third question, participants were asked to choose the convenient way to learn best, 71% chose through experience, yet, 29% claimed that lectures from my teacher is the best way to learn. Furthermore, the fifth question investigates students' awareness of their role, 76% stated that they know their role; however, 29% were not aware of their role as independent and responsible learners. Based on the sixth question, 47% claimed that they could interfere to make changes at the level of the content, yet, 53% could not. When it comes to the seventh question, 88% claimed that they could create the content by themselves; but, merely 12% could not. Besides, answers from the eighth question revealed that 76% of the respondents were planning to apply what they learnt through their project work in their daily life; nonetheless, only 24% claimed the opposite. In the last (ninth) question, participants were asked about the role of their teacher, 65% claimed that the role of their teacher is important, but not necessary; meanwhile, 35% believed that the teacher's role is necessary and that learning almost impossible to occur unless the teacher is present.

3.2. The Interview

To develop in students the sense of critical thinking, they were informed at the beginning of the introduction of the project mode of working that their opinion towards their peers' performance is needed and that it will be anonymous; no one of their friends will discover their feedback; consequently, they should be honest. After each project, the teacher calls the presenters' peers to give their feedback towards their classmates' performance in terms of time management, voice, task division between members of the group, the content, the psychological factors such as self-confidence, stress management, and mistakes and errors, as well as the amount of the use of the mother tongue during their presentation. The purpose of the interview was not only that to comment on their friends' performance, but also, to learn from their friends' mistakes and to try to avoid them in the presentation of their project.

4. Discussion

Our motivation for the present study was to investigate whether project-based learning was able to enhance the autonomy of 2nd year baccalaureate students and to help them develop the critical thinking skills needed to meet global educational needs. Overall, the results revealed that project-based learning succeeded in promoting learners' autonomy. Instead of just manipulating what is scheduled in their textbook, all participants manifested that the project was conducted through research using ICT drawing on different sources. During the process, questions came to their minds and the fact that they did not try to ignore them, but, as they declared, they stopped every now and then to think carefully and critically about them to find solutions suggests that they are self-directed learners (Saad & Zainudin, 2022) and critical thinkers (Fajra & Novalinda, 2020; Simonton et al., 2021; Fisher et al, 2020). Additionally, a large number of participants acknowledged their awareness of their self-independence or better say interdependence (Little, 2007) because they prefer to land a hand to others and receive help as well. Conversely, Arabai (2017) investigated 319 Saudi learners' readiness for EFL independent learning, results demonstrated that participants believe that teaching is the responsibility of the teacher only or a shared responsibility between the teacher and the learner, while no one acknowledged that teaching is the responsibility of the learner. Hence, inability to accept one's role depicts teacher' dependency and lack of autonomy. Similarly, owing to some of the participants' indolence, some of them preferred learning through lectures from their teacher. They claimed that the teacher usually does the work perfectly and they could understand better when the teacher explains the lesson herself. In spite of that, a large number opted for the other choice which is learning by experience and by themselves, for they believe it promotes their self-responsibility and direct their learning. Similarly, Pherson-Geysler et al., (2020) conducted a study in four public high schools (one urban, one peri-urban, one township and one rural school) with eight Life Sciences teachers (two from each school) in Johannesburg, Gauteng (a

province in South Africa) to identify how experiential learning influences the teaching and learning of Life Sciences (biology). The findings demonstrated that learning through experience contributes in developing learners' skills; hence, they highly recommend all schools to integrate it in their classroom practices. Basically, learning through experience requires the presence of others around the learner. That is, exchanging knowledge is fruitful because through this process, learners can correct their erroneous information or make it rich. In a similar manner, Matriano (2020) conducted a study using a mixed-method approach to evaluate the effectiveness of the Exploration, Research, Interaction and Creation (ERIC) Learning Model on two groups of college students during the 2018-2019 academic year at Columban College. The first group consisted of 32 students in the Tourism Management Program, while the second group had 28 students enrolled in BST 323 (Ecotourism). The findings indicated that the implementation of the ERIC Learning Model had a positive impact on students' mastery of learning skills and strategies. This was achieved by allowing teachers to create more opportunities for enhancing these skills and strategies through active learning experiences. The ERIC Learning Model promoted student-centered, constructivist-based, project-oriented, experiential, multisensory, reflective, participatory, interactive, cooperative, collaborative, and active learning approaches. It emphasized the importance of engaging students in exploration, research, interaction, and creative activities to enable them to adapt these skills and strategies, ultimately fostering responsible and lifelong learning. However, few participants in this study stated that they prefer to work alone. Based on the researcher's observer experience with the population, they could be described as excellent students; however, they selected this choice because members of the group with whom they were working were either careless, excessively count on others, or perhaps their work was not convincing enough; therefore, they believe that their peers' efforts were worthless. Accordingly, they think that if they did it by themselves, the performance would seem different. According to Situmorang (2021), group work has both its advantages and drawbacks. While it can foster collaboration and learning, it also comes with its share of weaknesses. These shortcomings include situations where certain students try to dominate the group, where some individuals contribute more than others yet receive equal recognition, instances where students may prefer working with their friends and exclude others, and some individuals may be resistant to taking orders from their peers. Additionally, issues such as noise can also be a concern in group work settings.

Along with having awareness of their role as independent learners; they also acknowledged their responsibility to teach their peers according to suggested goals, content, and tasks. Furthermore, they were able to make changes at the level of materials suggested in the textbook, 88% stated that they created the whole content by themselves, and the majority plan to use what they learnt in the classroom through the project work outside the classroom boundaries. Hence, they demonstrated that PBL was able to promote their autonomy and boost their self-managerial skills. Nevertheless, 53% admitted their inability to take decisions at the level of time devoted to each project because if the teacher does not control time, one project may take three to four hours for one lesson. In addition to that, they were unable to make a total change at the level of the content because the targeted group was 2nd year baccalaureate and they have to focus on specific items; thus, the teacher insists on what to focus on (such as vocabulary needed in each unit). Similarly significant, a research study carried out by Khouidri and Zerouh (2023) to evaluate the autonomy of Moroccan EFL undergraduate students in the midst of the Covid-19 pandemic revealed that a considerable number of participants exhibited the capability to modify the content and did not solely depend on the materials provided by the teacher.

Additionally, a significant number of participants in this study, following their engagement with project-based learning, came to realize that while the teacher's role is valuable, it is not indispensable. It means that they can learn by themselves, still the teacher's presence is important to direct and moderate the process. Participants going through this process claimed that project work is new to them and that it is an effective method whereby they were able to use ICT to translate difficult words given that they are required to explain them to their peers; as a result, they were able to acquire vocabulary. This experience affects the participants' personality positively; they tried to challenge and overcome their fear

and anxiety. Hence, they ended up by developing self-confidence and the ability to face the audience and explain the lesson to them.

After providing their presentation, their peers were summoned to comment on the presenters' performance. The feedback is meant to develop in participants the critical thinking skills by reasoning, and analyzing (Sarigoz, 2012), as well as spotting their classmates mistakes to avoid them in their presentations. In a study conducted by Sari and Prasetyo (2021), the focus was on investigating the utilization of Project-Based Learning (PjBL) for improving critical reading and enhancing critical thinking skills among students. The study also aimed to gather insights into the students' reactions to the implementation of PjBL in the context of critical reading. According to the findings, data derived from interviews revealed that a significant majority, specifically 88.89% of the learners, felt motivated when assigned tasks were based on the PjBL model. Additionally, it was observed that 54% of the students who received instruction through the PjBL model exhibited excellent critical thinking skills. Furthermore, most of the remarks, in this study, were first on the issue of time management. The presenters' peers could notice that most of the presenters took too much time to deal, for example, with one exercise and they ended up by wasting more than three hours in one lesson; thus, they suggested that they have to plan next time and determine specific time for each activity. Second, participants noticed that few presenters could not speak with a clear voice; they attributed their inaudible or unclear voice to the anxiety they experience since they were aware of the presence of others around them and because they were trying a novel experience; hence, they still doubt themselves and their information too. However, not only the presenters, but also their peers acknowledged that through project-based learning their personality changed since, during performance, they were able to find ways to manage their stress and boost their self-confidence. However, they claimed that their source of doubt and stress was due to their limited repertoire of vocabulary; as a result, they found difficulty in communicating ideas. Likewise, Kim (2021) conducted a study in Korea by applying Project-based learning methods in clinical practice to see its impact on 34 participants' personality, findings demonstrated that PjBL positively affects the participants personality, teamwork competency, and self-regulation efficacy. Third, the interviewee reported that tasks were not divided equally between members of the group; in one group one seemed to have done much effort in comparison to the other group members; as a result, absence of group coherence was prominent. In terms of the content, almost all students commented that the lesson was clear, for whenever the teacher notice that the students feel confused, she tried to interfere every now and then to clarify some parts of the lesson. Likewise, due to their low vocabulary knowledge, presenters try to resort to standard Arabic or Moroccan Arabic (mother tongue) which minimizes opportunities to be exposed to the target language. Beisenbayeva (2020) investigated a population of 296 from three middle schools in Astana, Kazakhstan on the reasons why students resort to the use of the mother tongue in foreign language classrooms, he founded out that they fear making mistakes at the level of word pronunciation, fear teacher correction or criticism, fear being mocked by classmates, textbooks do not encourage or train learners to speak, and one's weak level in foreign language. Accordingly, learners' anxiety is a result of their sense of self, mindset, and high-level self-esteem. Nevertheless, allowing students more freedom and control over their learning, project-based learning train learners to speak, face the audience, and changes the mindset of students who are unwilling to learn foreign languages.

5. Conclusion

In an attempt to meet the requirements of the 21st century, learner autonomy is an important key teachers need to raise students' awareness of. To do that, project-based learning is a learning strategy that enable the autonomy of learners and their critical thinking skills to grow and flourish. In this paper, the researcher tried to investigate whether or not project-based learning could enhance the autonomy of learners as well as to interview the presenters' peers on their feedback towards their performance. Overall, results demonstrated that project-based learning affects learners learning positively and

contributes in promoting their autonomy and self-confidence. In addition to that, the interview with the presenters' peers enabled learners to develop critical thinking skills and assessment techniques; they could highlight many issues, they were able to express their disagreement towards their friends' waste of time and their inaudible voice and especially their resort to the mother tongue. However, not all their comments were negative, but they showed respect and professed appreciation because some were clear, concise and to the point due to their outstanding preparation of the lesson too. Accordingly, to cater for learners' needs and the 21st century requirements, project-based learning should be implemented in every classroom.

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Appendix (the questionnaire)

A. Which of the following statements best describes you ?

A- During my preparation of the project,

- I tried to name problems related to issues in my project, apart from questions in the book, think critically to find solutions and understand what I am doing.
- I tried to look for ready-made answers to questions in the book just to avoid embarrassment in front of my peers.

B- In terms of the mode of working,

- I liked to learn inside the group, lend a hand and also receive help as well.
- I usually prefer working alone and I hate the presence of others around me.

C- I find it more convenient to learn through

- Lectures from my teacher.
- Experiencing things by myself and try to understand learning items in my own way.

B. Please choose the option(s) that best reflect your experience during the project work. You may cross out any choice(s) that you find convenient.

D- During the project work,

- I was aware of my role (as an independent and responsible learner as well as the goal, the content, and tasks).
- I could interfere to make changes at the level of the goals of learning, the content, and tasks.
- I was involved in decision making concerning time devoted to each section, what to include and exclude, which activities to use to facilitate understanding for my classmates.
- My group and I created the project work by ourselves, through full cooperation and better management.
- I am planning to apply what I learnt, in general, through the project work in my daily life.

C- Please cross out the option that best reflects your view.

E- After the project work, I came to know that the role of my teacher is

Necessary

Important, but not necessary