

Research Article

The Effects of Project-Based Learning (PBL) in EFL Context: General Language Development and Personal Empowerment

Zeynep YAPRAK*¹ 

¹ Dicle University, Ziya Gokalp Faculty of Education, yaprakze@gmail.com


* Corresponding Author: yaprakze@gmail.com

Article Info

Received: 16 April 2022

Accepted: 24 June 2022

Keywords: Project-based learning, second language education, human rights, self-development

 10.18009/jcer.1104483

Publication Language: English

Abstract

The study primarily aims to find out the benefits and challenges of project-based learning (PBL) on the learners' general learning experiences, their development in English, and personal growth regarding human rights. This study has one-group post-test only design within the mixed methods research design model. The participants of this study were 30 EFL students and the collected quantitative data was analyzed using descriptive statistics in SPSS. The qualitative data gathered through reflection papers were analyzed through thematic analysis. The results revealed that project-based learning had positive impact on learners' experiences in general and cooperative learning. It was also recorded that in addition to the acquisition of new knowledge and skills in promoting human rights, project-based learning also positively affected learners' language improvement in English. The most challenging point indicated by the participants was related to finding credible sources and identifying reliable information.



To cite this article: Yaprak, Z. (2022). The effects of project-based learning (PBL) in EFL context: General language development and personal empowerment. *Journal of Computer and Education Research*, 10 (20), 415-433. <https://doi.org/10.18009/jcer.1104483>

Introduction

This study provides language learners' learning experiences and perspectives regarding language learning supported with project-based learning (PBL). As one of the main departure points of this study, through working with "equality" themed language projects, learners are aimed to be part of global peace building movement. As a first step, in order to make students envision a world without discrimination, they were familiarized with concepts that were standard threats to equality and human rights. These concepts were determined as sexism, racism, ableism, ageism, and religion and belief discrimination. For sexism, students were informed about gender stereotypes and human right violations based on the gender differences. As regards racism, learners' self and social awareness about the negative effects of the discrimination directed against a person or group of people due to their races or ethnicity was increased and students were encouraged to provide their solutions to fight against racism. For the next discrimination types of ableism and ageism, it

was pointed out that people could also be exposed to discrimination and social exclusion since they had some disabilities that might hinder their full participation to the society or on basis of their age. In addition to all aforementioned inequalities, through this project-based study, learners were also made aware of the fact that individuals' human rights might be violated and they could be treated badly and unfairly because of their religion or beliefs. Firstly, learners were notified with the standards of human rights and then in order to cultivate a sense of responsibility in them as a global citizen and encourage them to take action on inequalities, within the steps of PBL they were given opportunity to actively explore, collaborate, and to suggest their solutions to the one of authentic real-world problems which was discrimination in this context. In summary, this study examines the effect of project-based learning on students' learning and self-growth in the context of human rights and anti-discrimination motivation and their self-efficacy. Two research questions for this study are as follows:

1) What are the views of the student teachers on the benefits of integrating PBL into the topic of human rights?

2) What kind of challenges did the participants experience during the implementation of PBL?

Literature Review

Definition of PBL and Key Phases of PBL Model

Project based learning is a student-centered instructional approach through which students take the control of their learning and design their projects which are the product of their collaboration and research (Bell, 2010). According to Wurdinger et al. (2007:151), PBL can be defined as a teacher-guided method that aims to engage students in the process of creating their projects through the following the steps of "identifying a problem, developing a plan, testing the plan against reality, and reflecting on the plan". While Beckett (2002:54) defines this process as a "long-term activity", Markham et al. (2003) emphasize that projects need to be designed around "complicated" and "authentic" questions. Regarding the features of PBL, Thomas (2000) suggests five criteria as below:

1. PBL projects are essential part of the curriculum.
2. PBL projects are based on questions or problems that include the main concepts and principles of the related discipline.
3. Projects engage students in a purposeful and beneficial inquiry.

4. Projects are student-centered to a certain extent.
5. Projects are real-life tasks.

In addition to above features, Stoller (2006) adds more standards to define PBL for language education as: 1) it integrates skills; 2) it combines the learning of both language and content; 3) it promotes both individual and collaborative learning; 4) it makes students responsible for their learning and giving account of their gathered information; 5) it gives new roles and responsibilities to both students and teacher. According Sart (2014), PBL entails learners' "awareness, observation, reflection and analysis" which promote their independency and autonomous learning. Additionally, Ergül and Kargin (2014) also emphasize that encouraging students to embrace more active role in learning process through individually or collaboratively working with projects provides them with the optimum conditions to take responsibility for their learning. Bell (2010) states that while learners are dealing with the complex questions, they can benefit from the innovative application of technology and digital tools. There are a number of steps that can be suggested as a path to a successful project design. According to Lam (2011), this path can be summarized as ten phases. In the first step, teacher and students make a decision about the topic of the project. The degree of the students' participation into each step of the project is determined by the teacher. In the second step, students and teacher decide what is expected as a product at the end of this project. In this step, to whom the presentation of the project products would be carried out is also determined. The third step is related to "structure" of the project. The roles and responsibilities that students are going to have are also negotiated in this phase. In the fourth step, based on the students' levels and needs, teacher sets criteria for the information essential for the projects, the instructional activities, and other project related procedures. The fifth step is about the process, the modes, and the tools that students can use to collect information. In the sixth phase, students are made ready for the analysis of the gathered information in terms of "language, skills, and strategies". In the next step, individually or in group students gather information and analyze the compiled data. In the eighth step, teacher helps students to improve their language that they need to present and report their projects. In the next step and the last step, students present their projects and they get feedbacks from their peers and their teachers regarding the content, language that they use and the project that they have designed. For Farouck (2016), in language education, these phases are listed as:

- Phase 1: Designing curriculum for PBL: Students are informed about what they are supposed to do to complete their projects. In this step, they are also provided with details about assessment process.
- Phase 2: Describing the tasks and related resources: In order to make students ready for the project, teacher helps student to choose a topic and driving question that they need to determine the scope of their project.
- Phase 3: Deciding about driving questions: This step is regarded as one of the most important phases of the project as students need to show commitment both mentally and emotionally.
- Phase 4: Supplying the essential tools: In this step, students are given the required technological and other online tools.
- Phase 5: Building knowledge and presentation skills: Students participate in communicative tasks and present their projects with newly learned vocabulary and grammar. The groups that present their projects are evaluated by their peers. In this stage, students are also given further instruction for grammar and language functions essential for the project completion.
- Phase 6: Revising presentation: Based on the feedbacks from their peers regarding the use of body language, organization, and language use, presenter revise their project presentations.
- Phase 7: Presenting the revised product: Students present their final product and the best group is selected for further contests.

Human Rights and PBL

One of the primary missions of higher education is to empower students to be fair, thoughtful, open-minded, and democratic global citizen. Developing individuals as a global citizen entails purposeful, critical, and innovative education which promotes students' active engagement in learning and collaboration with their peers and other people. According to Forrester (1999), democratic citizenship education aims to make young people and adults "participate actively in democratic life by assuming and exercising their rights and responsibilities in society". Ensuring democratic life in global peacefulness essentially depends on the building culture of human rights and its education for all people. In this respect, human rights education values and "protect human dignity" and requires the involvement of the learners in the process (Tibbitts, 2005). For Mihr (2009), human rights

education can be defined as “a set of educational and pedagogical learning methods to inform people of and to train them in their human rights”. In a broad sense, human rights education covers three aspects of its training as about, through, and for human rights (Tibbitts, 2005). About human rights education is about the transmission of knowledge related to human rights norms, principles, ethics, and standards. Through human rights education is concerned with the learning and teaching process that promotes the recognition and appreciation of the rights of educators and learners. Lastly, for human rights training involves enabling other people to live their rights and respect other people’s rights. The whole approach to human rights education needs to encompass all these aspects in order to be successful and reach its goal. Building an acceptable human rights culture through education necessitates more than providing knowledge and experience; it is also essential for educators to “have a deeply felt commitment to human rights” (Flowers et al., 2000:23). In this sense, adopting project-based learning this study mainly aimed to involve both educators and students in the whole theory and practice process. As the understanding is the first step of defending one’s rights (UNESCO, 2011), within this project-based learning framework, students were encouraged to have a comprehensive understanding of human rights and develop a critical eye in evaluating, living, respecting, and protecting the others’ rights. For each concept of human rights violations, in this study context they are sexism, racism, ableism, ageism, and religion and belief discrimination, students were guided to search, analyze, and figure out the concepts and principles related to inequality. According to Merryfield and Remy (1995:8), as an educator if we want to gain our students educational experience, overloading students with information is not an effective way; they also need to engage in “a reflective process”. For this reflective process, students actively involved project based assignments and then they were asked to reflect on their project products, feelings, and thoughts. As human rights concern all people, students were exposed to outside world and be part of their near community. For their projects, they collected their data through conducting interviews and surveys with other university students, instructors, and local people. Then, they embodied these data through videos, animations, posters, and other project based artifacts.

Method

Research Design

In order to find out the impact of PBL on human rights education, both quantitative and qualitative research tools were used. Research data was collected through survey and reflection papers. Project planning was framed around 5 phases. In the first step, learners were informed about the principles of PBL and project topic. Then, learners were asked to form their project groups and design their projects planning and schedule in which they were going to decide how they gathered their information and data. After participants' presenting their planning to the teacher, getting the confirmations, and fulfilling the essential changes, learners were given enough time to conduct their research and collect their data. Learners who needed technological support were also guided and informed about the related online tools. In the fourth stage, learners presented their research results and project products and they received feedbacks from their friends and teacher. In the last stage, learners did the essential changes and reported their revisions to the teacher. At the end of the training and presentations, participants were asked to complete a mini survey and reflection paper related to the impact of PBL.

Instruments

Mini PBL survey

A mini questionnaire (Essien, 2018) with 5 point Likert scale was implemented in order to see the impact of PBL on learners' learning process. The questionnaire involves 10 questions aiming to measure the roles of PBL on collaborative learning, language learning, and learners' motivation for learning English.

Reflection papers

For the purpose of giving learners the chance of reflecting upon their experience and sharing their thoughts related to the PBL, learners were asked to complete reflection papers at the end of the study. In this reflection paper, in order to get more details, reflection paper was designed around three sub points as the impact of PBL on students' general learning, language development, and personal empowerment.

Participants

30 EFL learners were recruited for the study. The number of participants kept limited due to technical, practical, and data quality reasons. For the sampling technique, convenience sampling was adopted as the implementation of PBL on large population and

regularly reaching entire community would not have been practical. Moreover, since the qualitative data collection requires full commitment from the participants, accessibility and proximity are important factors for the participant recruitment. All subjects responded the questionnaire. For the project groups, based on their choice of project problem that they would like to work on, students selected their group members.

Table 1. Subject distribution according to project themes

Project Problem	Number of Groups	Number of Participants
Sexism	3	7
Racism	3	6
Ageism	1	3
Ableism	3	9
Religion Discrimination	2	5

In order to formally record the participants' voluntary participation into study, each participant was asked to give their written consent to take part in the study.

Project Design

For each violation of human rights such as sexism, racism, ageism, ableism, and religion discrimination, students formed their groups of 2-3. Then, each group carried out a comprehensive research on their topics. Next, they analyzed the gathered information through breaking the concept and its norms into logical simple parts and reached a consensus on which parts they would like to focus on. After they shared their decisions related to content of their problem with their teacher, they had group meetings and discussions on how to present their problem and which methods they could employ to gather further information and publicly report their solutions to their peers. Some of the groups preferred to design printed projects like posters and leaflets while some of them created animations through which they shared their anti-discrimination slogans. On the other hand, the other groups contributed to the anti-discrimination movement through community involvement and they conducted interview with the local people.

Some of the projects designed by the participants:

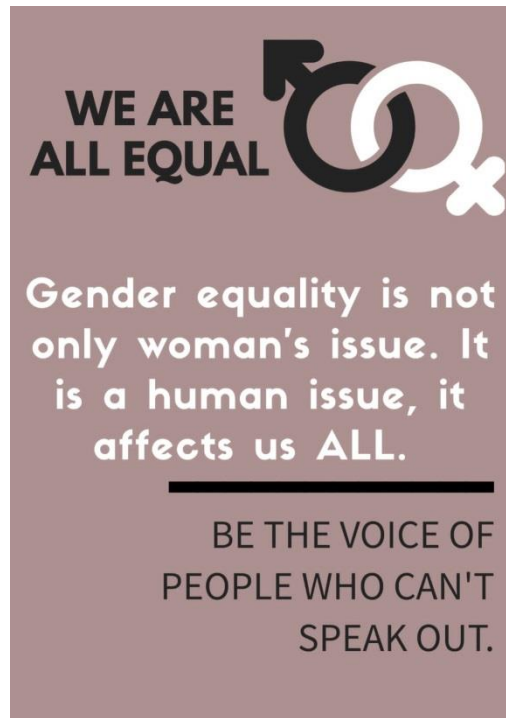


Image 1. Poster related to sexism

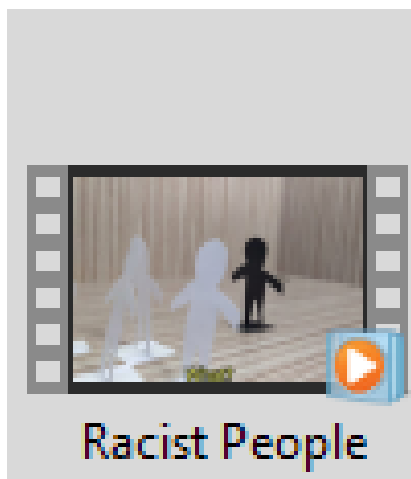


Image 2. Animations related to racism



Image 3. Animations related to racism



Image 4. Poster related to ableism



Image 5. Poster related to ageism



Image 6. Interview about religion discrimination

Data Analysis

The analysis of the survey was carried out through SPSS and descriptive statistics were used to interpret the quantitative data. The reflection data were analyzed within the qualitative content analysis. The Cronbach's alpha test was run for the test reliability and the coefficient value was calculated with high value of $\alpha = .84$. For the reflection data classification, themes and categories were built. These themes were recorded as benefits and positive effects of PBL on language improvement, and personal empowerment through attitude change, and its challenges. Some extracts from the participants' written reflections were used as quotes and representations of their utterances related to each label emerged from the reflection data were also used to support qualitative data.

Findings

The exploration of the teacher candidates' views and learning experiences related to the advantages and challenges of PBL are the main focus of this study. Referring to the general organization and display of the research findings, the results related to the participants' responses to the mini-survey were given in the first part. Next, the comparative analysis of instructor and students' evaluation was tabulated in order to indicate the level of agreement and disagreement between the evaluations of two different groups. Then, the findings related to the student teachers' views about the benefits and challenges of PBL were given in the following parts.

Table 2. Post-test mean scores of the PBL survey

Questionnaire Items	Mean Score
1. I found being able to collaborate in my group in practical sessions very helpful.	4.36
2. I prefer PBL to traditional method of teaching.	3.93
3. I am actively engaged in group discussions.	4.36
4. By discussing with my group members, I understood better about what I was learning.	4.66
5. The instructional methodology provided me with enough scope to display my English language skills.	4.16
6. PBL increased my interest in learning English.	4.33
7. The instructional methodology in this course suited the way I like to learn.	4.2
8. I found being able to collaborate in my group in practical sessions very helpful.	3.4
9. I am able to evaluate my own, and, my group's learning outcomes at the end of the PBL tutorial.	4.2
10. There are enough opportunities to discuss, and provide feedback, on how my group functions during PBL tutorials.	4.66

According to the statistics obtained through the descriptive analysis carried out in SPSS that the most effective feature of project-based learning recorded by the participants was its opportunities for group discussions that facilitated learners' learning and understanding with ($M=4.66$). The next questionnaire statements scored with higher mean by the learners were related to collaborative learning and its positive impact on the students' motivation in learning English with $M=4.36$ and $M=4.33$, respectively.

Table 3. Mean scores distribution according to project themes

Project Themes	Mean
Sexism	3.76
Racism	4.22
Ageism	4.43
Ableism	4.50
Religious Discrimination	4.26

Even though there were not any significant differences between the project topics, the mean scores showed that PBL had positive impact on all learners' learning process. Based on the students' ratings, the project groups that were most positively affected and changed in this study were the ones studying on ableism and ageism.

Table 4. Comparative Analysis of Peer and Instructor Feedback

	Project Problem	Peer Evaluation out of 30	Instructor Evaluation out of 30	Agreement (+;-2)
Sexism	1st Group	26	26	√
	2nd Group	26	27	√
	3rd Group	24	22	√
Racism	1st Group	28	26	√
	2nd Group	27	22	
	3rd Group	27	21	
Ageism	1st Group	26	27	√
Ableism	1st Group	29	27	√
	2nd Group	25	23	√
	3rd Group	28	27	√
Religion Discrimination	1st Group	28	26	√
	2nd Group	27	21	

Before the students were asked to participate in peer assessment, they were informed about the feedback form and its sub-criteria. Then, each student was given a feedback form and asked to attentively listen to their friends and be objective while providing their feedback. In order to conduct the assessment of the sub-points such as collaboration, creativity, positive thinking & attitude change, having fun, use of language, and organization, analytic assessment was applied and students were told to rate each point with 5-point rating scale (1 as totally dissatisfied and 5 as totally satisfied). Based on the findings related to peer and teacher feedback, in quantitative sense it can be seen that they are mostly in agreement. With 75% out of 12 project groups, both teacher and other fellow students share similar opinions for the 9 groups. Involving students in the assessment process in project-based learning is another way of engaging students in learning the assigned topic.

Table 5. Analytic analysis of sub-points included in feedback form

		Sub-criteria					
		Collaboration: Every role was shared equally.	Creativity: The use of imagination, resources, and the ideas were original and creative.	Positive Thinking & Attitude Change: The given social message was really impactful and effective. It touched my mind and heart.	Having Fun: The activities and the overall presentations were engaging and fun.	Use of Language: The language use was clear and native-like.	Organization: The presentation was well organized. The transitions were smooth.
		Peer/Instructor	P/I	P/I	P/I	P/I	P/I
Sexism	1st Group	5/5	4/4	5/4	4/5	4/4	4/4
	2nd Group	5/5	4/4	4/4	4/5	4/4	5/5
	3rd Group	5/5	3/3	4/3	3/3	4/4	5/4
Racism	1st Group	5/4	5/4	4/5	4/4	5/4	5/5
	2nd Group	4/3	5/4	5/4	4/3	4/4	5/4
	3rd Group	5/4	5/4	4/3	4/3	4/3	5/4
Ageism	1st Group	4/4	4/5	4/4	5/5	4/4	5/5
Ableism	1st Group	5/5	5/5	5/4	5/4	4/4	5/5
	2nd Group	5/4	4/3	4/3	4/4	5/4	5/5
	3rd Group	5/5	5/5	5/4	4/4	4/4	5/5
Religion Discrimination	1st Group	5/5	5/4	4/4	5/4	4/4	5/5
	2nd Group	5/3	4/4	4/3	4/3	5/4	5/4

The ratings collected through peer and teacher assessment indicated that the sub-criteria of collaboration and organization were the ones highly appreciated by the students and teacher. It can be stated that groups were thought to be successful in delegating the roles and sharing the responsibilities among group members. Additionally, project groups were noted to be good at presenting the problem, content and organizing the project-tasks in a logical sequence. The points need to be improved by the group members were creating and delivering an impactful message about anti-discrimination and doing this in a more fun way.

General Benefits and Challenges of Project-Based Learning

This section provides the findings related to the students' academic and general skills gained through PBL. The functions of PBL reported by the participants in their reflections were in line with the aims of higher education. Participants working on the topic of racism indicated that the most effective and enjoyable part of PBL was collaborating with the other students, gathering resources, collecting information, and exchanging ideas with other people. Besides cooperative learning, group members of sexism pointed out that presenting the synthesis of information and using creative skills to design thought-provoking artifacts were the most engaging parts. Working with projects can improve students' both "cognitive and interpersonal skills". Participants involved in ableism groups reported that through PBL they enjoyed sharing their opinions and beliefs and they also thought that they improved their negotiating and speaking skills. Based on their experiences of PBL, participants working on the topic of anti-ageism and religious discrimination stated that they also liked to participate within group learning.

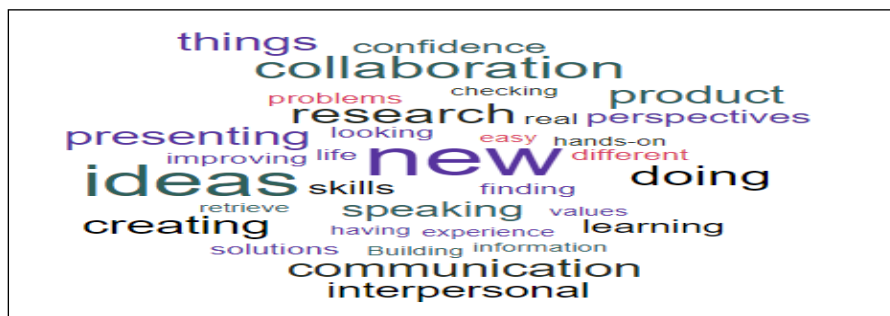


Figure 1. Word cloud related to the participants' views on the benefits of PBL

"Thanks to this approach, we have acquired deeper knowledge related to our topic and we also had fun while preparing our presentation and listening to others' presentations" (Sexism; Ableism; Ageism; Religious Discrimination)

"Related to our project, I liked most to talk with different people to learn their opinions" (Sexism; Racism; Religious Discrimination)

"We worked as a team and this helped us to hear our friends' perspectives" (Racism)

"Another thing related to this learning type is to produce ideas and projects which made me feel productive and content" (Racism; Ableism; Religious Discrimination)

"Working with projects and having discussions with our group members let us practice speaking in English" (Sexism; Racism; Ableism; Ageism)

"At first I thought that I knew everything related to ableism but then I realized that I was wrong and still I have more things to learn" (Ableism)

"Working with other students helped you to identify your strengths and weaknesses" (Ageism)

Language Improvement

For PBL in foreign language development, all participants working on anti-discrimination topics reported that they learned new words, phrases, and idiomatic expressions while searching for the information, comprehending the topic, and preparing the presentation and project. Some of the words and expressions learned by the participants were:

"I learned new things that I didn't even know before that it was sexist language" (student comment-Sexism)

"Men also cry" was the slogan that affected me most" (Sexism)

"Sexism is a social disease" (Sexism)

"Racism has all barriers to prevent people from enjoying dignity" (Racism)

"Black men have no superiority on white men; white men have no superiority on black men" (Racism)

"I don't have disability. I have a different ability" (Ableism)

"Being disabled is not problem; preventing people with disabilities is a problem" (Ableism)

"age-friendly; healthy aging" (Ageism)

In their reflection papers, students also provided some motivational and inspirational quotes which enhanced their understanding, promoted their creativity, and reflected their ideas related to their project topics. Participants also stated that they improved their language skills with the opportunities offered by PBL. During the project preparation stage, the participants stated that they enhanced their reading and writing skills and during the presentation stage while presenting their presentation and listening to other presentations they noted that they developed their speaking and listening skills. As noted in this study, concerning the improvement of language skills, PBL provides real life situations and natural process of language integration (Stoller, 2006).

Personal Empowerment: Positive Attitude Change

In addition to the improvement of thinking skills and foreign language, the development of positive attitude towards human rights and differences was another mostly emphasized positive outcome of PBL. Participants' reflections pointed out that their engagement with real-world challenges not only helped them to have a deeper knowledge but also increased their self-consciousness and awareness. Being human rights defenders and active in fighting for anti-discrimination and a more equal world, students stated that they found PBL enjoyable, motivating, and enlightening.

"I learned that every color, every person, every culture is important and part of the whole" (Sexism)

"While gathering information, I put myself in women's shoes and try to understand how they feel when they are exposed to sexism" (Sexism)

"I have learned to empathize with people and understand them" (Racism)

"We think that disability is an illness; but now, we learned that it was not. One day we may also be disabled; this project helped us to be more sensitive" (Ableism)

"I started to believe that we as young people can change discrimination for more beautiful world" (Ableism)

"My level of awareness on the subject has doubled. Now I believe that we can combat discrimination and change people's beliefs and attitudes through education and effective campaigns" (Ageism)

"We have learned to view our topic from different perspectives" (Religious Discrimination)

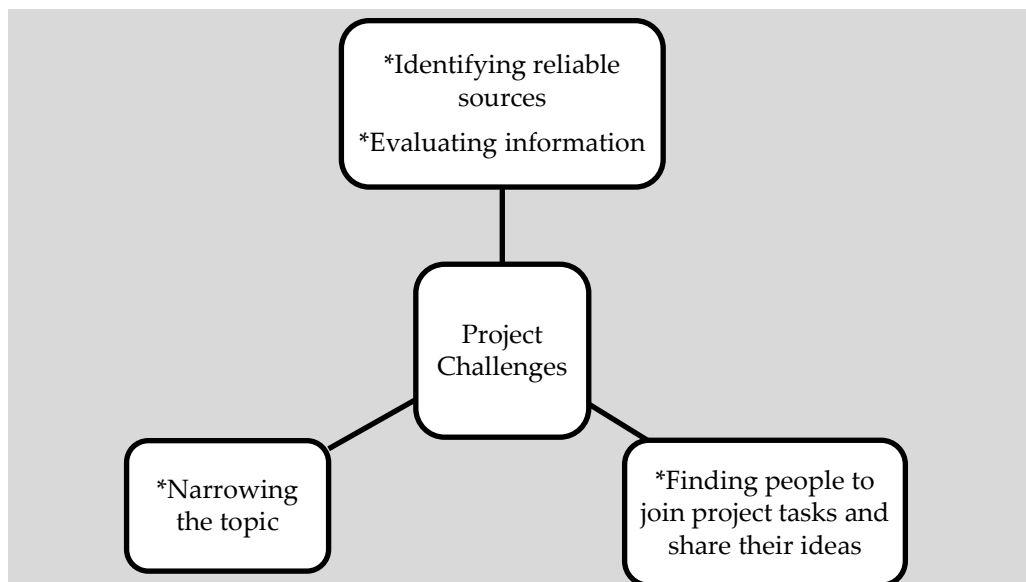


Figure 2. Challenges of PBL stated by the student teachers

Regarding the challenges related to the project management that group members went through while designing their projects, finding the reliable and sufficient information, and narrowing down a broad topic were the mostly reported problems. In addition to these challenges, some of the groups reported that finding volunteers from local people for interview was also a challenging process. In this study, participants indicated that with teacher support and through working as a team with other group members they tried to eliminate problems and overcome the challenges.

Discussion and Conclusion

The purpose of this study to investigate the views of teacher candidates related to the advantages and challenges of PBL within the context of anti-discrimination. According to

Blumenfeld et al. (1991), PBL encourages students to be part of real life problem solving process. While they are dealing with the real world problems like inequality, they also get the opportunity of learning the content through real life experiences. Based on their learning experiences, student teachers stated that PBL was useful and effective in learning new knowledge and skills. When we think about the notion of effective learning in higher education, students' active participation into "understanding and building up of meanings and skills" which is also promoted by PBL like in this study is one of the main ingredients (Aslanides et al., 2016). As it promoted collaboration with their peers, participants reported that searching and presenting ideas and creating a new product which embodied their ideas became more enjoyable and achievable. In this respect, they indicated that they enjoyed the process of constructing new information through analyzing the online sources and finding their own solutions through these searches, which are also in parallel with Mihic and Zavrski's (2017) positive consequences of PBL. Regarding their improvement in English, all teacher candidates noted that in order to be more competent in their project works, they dealt with a rich literature and theory before putting them into practice. By this way, they reflected that they learned new vocabulary, definitions, opinions, and new expressions depicting different perspectives related to their topics. This finding also complies with a number of studies (Haines, 1989) in which it is indicated that in addition to enhancing students' content knowledge and thinking skills, PBL involves meaningful activities for the students to use authentic language and hone their language skills. For Blumenfeld et al. (1991) and other scholars (Thomas, 2000), integrating PBL into teaching and learning process not only has positive impact on teachers through promoting professional development but also enhances students' confidence and attitudes. Within this sense, student teachers stated that they felt more confident while sharing their learning experiences and presenting their artifacts as they felt more active, responsible, and free while designing their projects. According to Lenz et al. (2015), PBL is "an act of creation over time". This process can be challenging both for teachers and students, which may be facilitated with teacher support as "they marshal, generate, and sustain student motivation and thoughtfulness" (Aksela & Haatainen, 2018). One of the challenges articulated by the participants was finding up-to-date and credible sources. Participants stated that they paid special attention to the authenticity and reliability of the information they accessed on the Internet in order to determine whether the information accurate or not. The other challenge that was essential for

them to overcome in order to complete their project works was to find more people from local area. As the project problems were real-world problems, they preferred to collect data from the people with different life styles and background. However, they reported that some people did not want to talk or be part of the project and at those points they needed to look for new participants for their interview and surveys.

This study explored learners' experiences and opinions about the integration of PBL into language learning process based on the theme of human rights. It did not only investigate learners' development in language skills but also put forward learners' attitude change towards building more equal world. The analysis of students' questionnaire data showed that the use of project in language learning had positive impact on the students' general learning. Students stated that PBL was more effective than traditional learning methods because of the cooperation, negotiation, creativity, and practical learning opportunities it provided. Additionally, students' reflections revealed that the implementation of projects helped them to become active in learning new knowledge, develop new life and critical thinking skills. Students also indicated that working on collaborative projects with other students let them show shared intellectual and physical effort to solve their joint problem, to see the problem from other perspectives, and be more creative in completing their tasks. Another conclusion drawn from the study was that students' attitudes changed positively towards anti-discrimination. Through developing understanding of human rights and discrimination types, learners reflected that their awareness pertaining to fair and equal treatment of all people regardless of age, race, gender, disability, and religion improved. Learners indicated that even though they were not racist, sexist, ageist, or ableist against any person, they realized that unintentionally sometimes they could execute some behavior or use some discriminatory language that might expose any person to unfair treatment. With study, they reported that PBL empowered them in human rights and they became more sensitive to the differences and promoting human rights.

Nevertheless, this study has one main limitation. PBL is new learning and challenging approach for the learners. While they need to be equipped with theoretical knowledge, they are also supposed to be critical and critical for creating their projects. Because of this, teachers need to be more patient and supportive in this process in order to acquire more positive results. For the pedagogical implications; first, it is important to integrate critical thinking skills in PBL to help learners to make more logical and fair

inferences, judgment, and decisions. Second implication could be suggested for PBL is the use of technology and online sources. Future studies may provide more analysis related to the impact of technology in creating projects.

Ethics Committee Permit Information

Name of the board that carries out the ethical evaluation: Dicle University Ethics Committee

The date of the ethical assessment decision: 04.03.2022

Ethical assessment document number: 55

Author Contribution Statement

Zeynep YAPRAK: *Literature review, conceptualization, methodology, implementation, data collection and analysis, interpretation, writing, editing*

References

- Aksela, M., & Haatainen, O. (2018, November). Project-based learning (PBL) in practice: Active teachers' views of its advantages and challenges. *International STEM in Education Conference, Australia*.
- Aslanides, C. D., Kalfa, V., Athanasiadou, S., Ganelos, Z. & Karapatsias, V. (2016, September). Advantages, disadvantages and the viability of project-based learning integration in engineering studies curriculum: the Greek case. Paper presented at the meeting of *44th SEFI Conference, Finland*.
- Beckett, G. H. (2005). Academic language and literacy socialization through project-based instruction: ESL student perspectives and issues. *Journal of Asian Pacific Communication, 15* (1), 191-06. <https://doi.org/10.1075/japc.15.1.12bec>
- Bell, S. (2010). Project-based learning for the 21st century: skills for the future, *The clearing house, 83*(2), 39-43, <https://doi.org/10.1080/00098650903505415>.
- Blumenfeld, P. C., Soloway, E., Marx, R. W., Krajcik, J. S., Guzdial, M., & Palincsar, A. (1991). Motivating project-based learning: Sustaining the doing, supporting the learning. *Educational Psychologist, 26*(3-4), 369-398.
- Essien, A. M. (2018, March). The effects of project-based learning on students' English language ability (pp. 438–443). *The 2018 International Academic Research Conference, Vienna*
- Ergül, N. R., & Kargın, E. K. (2014). The effect of project based learning on students' science success. *Procedia - Social and Behavioral Sciences, 136*.
- Farouck, I. (2016). A project-based language learning model for improving the willingness to communicate of EFL students. *Journal of Systemics, 14*(2), 11-18.
- Flowers, N., Bernbaum, M., Rudelius-Palmer, K., & Tolman, J. (2000). *The human rights education handbook: Effective practices for learning, action, and change*. Minneapolis, MN: The Human Rights Resource Center and the Stanley Foundation.

- Forrester, K. (1999). *Guidelines for a site report*. Strasbourg: Council of Europe DECS/EDU/CIT (99)6.
- Haines, S. (1989). *Projects for the EFL classroom: resource material for teachers*. Walton-on-Thames, UK: Nelson.
- Lam, N. T. V. (2011). Project-based learning in teaching English as a foreign language VNU *Journal of Science, Foreign Languages*, 27, 140-146.
- Lenz, B., Wells, J., & Kingston, S. (2015). *Transforming schools using project-based learning, performance assessment, and common core standards* (1st ed.). CA: Jossey-Bass.
- Markham, T., Mergendoller, J., & Ravitz, J. (2003). *Project based learning handbook*. New York: Buck Institute for Education.
- Merryfield, M. M., & Remy, R.C. (1995). Choosing content and methods for teaching about international conflict and peace. In *Teaching about International Conflict and Peace*, edited by M. M. Merryfield and R. C. Remy, pp. 3–40. Saratoga Springs: State University of New York Press.
- Mihić, M., & Završki, I. (2017). Professors' and students' perception of the advantages and disadvantages of project based learning. *International Journal of Engineering Education*, 33(6), 1737–1750.
- Mihr, A. (2009) Global Human Rights Awareness, Education and Democratization, *Journal of Human Rights*, 8(2), 177-189, <https://doi.org/10.1080/14754830902939080>
- Sart, G. (2014). The effects of the development of metacognition on project-based learning. *Procedia - Social and Behavioral Sciences*, 152 (2014), 131-136.
- Stoller, F. (2006). Establishing a theoretical foundation for project-based learning in second and foreign language contexts. In G. H. Beckett, & P. C. Miller, Eds., *Project-based second and foreign language education: Past, present, and future* (pp. 19-40). Greenwich, CT: Information Age.
- Thomas, J. W. (2000). *A review of research on project-based learning*. San Rafael, CA Autodesk Foundation.
- Tibbitts, F. (2005) Transformative Learning and Human Rights Education: Taking a Closer Look, *Intercultural Education*, 16 (2), 107-113.
- UNESCO (2011). *Contemporary issues in human rights*. Paris, France.
- Wurdinger, S. D., Haar, J., Hugg, B., & Bezon, J. (2007). A qualitative study using project based learning in a mainstream middle school. *Improving Schools*, 10, 150–61.

Copyright © JCER

JCER's Publication Ethics and Publication Malpractice Statement are based, in large part, on the guidelines and standards developed by the Committee on Publication Ethics (COPE). This article is available under Creative Commons CC-BY 4.0 license (<https://creativecommons.org/licenses/by/4.0/>)