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ZAVRŠNI MAGISTARSKI RAD

English Language Education

Project- based learning in EFL classroom aligned with high school students'  
learning outcomes

Projektna nastava engleskog jezika usklađena sa ishodima učenja za učenike  
srednjoškolskog uzrasta

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## Abstract

This action research project investigates the integration of Project-Based Learning (PBL) into an English as a Foreign Language (EFL) classroom setting, targeting high school students in Sarajevo.

The primary objective of this study is to assess the effectiveness of PBL in enhancing students' learning outcomes, with a specific focus on the alignment with the EFL curriculum for the final year of high school. The project involved students collaboratively creating a digital tourist guide titled "Ilidža through Time". The research question of this paper was: "How effectively do Project-Based Learning (PBL) projects align with high school curriculum standards and learning outcomes, including specific language learning objectives and standards, integration with other subject areas and interdisciplinary learning, and the development of 21st-century skills such as critical thinking, creativity, communication, and collaboration?"

The project's methodology included several key components to ensure its success. Firstly, a detailed project plan was developed, outlining the learning objectives, project timeline, and assessment criteria aligned with the EFL curriculum. Students were divided into groups to foster collaboration and were guided through the project by their EFL teacher. Regular progress checks were conducted to provide guidance and support to students as they worked on their digital tourist guide. In addition, students were encouraged to reflect on their learning experiences throughout the project, fostering metacognition and self-assessment. Following the completion of the project, a small-scale survey was administered to the participating students. The survey aimed to gather feedback on their experiences with PBL and assess their perceived learning outcomes. Questions in the survey addressed aspects such as the development of language skills, critical thinking, teamwork, and engagement with the EFL curriculum. Preliminary findings from the survey and careful monitoring of student progress indicate that the integration of PBL in the EFL classroom was successful in meeting the defined objectives. Students reported increased language proficiency, improved critical thinking skills, and heightened engagement with the English language curriculum. Moreover, their ability to work collaboratively and apply their language skills in a real-world context was enhanced through the creation of the digital tourist guide.

In conclusion, this action research project demonstrates the potential of Project-Based Learning as an effective pedagogical approach in high school EFL classrooms. By aligning PBL with the curriculum and carefully monitoring student progress, educators in Sarajevo and similar contexts can create meaningful and engaging learning experiences that prepare students for real-world language use, fostering a deeper understanding of English language and culture in their final year of high school.

## Key concepts in the thesis project:

**Collaboration:** Students work together in teams or groups to plan, execute, and present their projects, fostering teamwork, communication, and interpersonal skills.

**Critical thinking:** Students engage in problem-solving activities, analyze information, evaluate different perspectives, and make informed decisions, promoting higher-order thinking skills.

**Authenticity:** Projects are designed to reflect real-world situations, making language learning relevant and meaningful to students' lives, enhancing their motivation and engagement.

**Language acquisition:** Through project-based learning, students practice and apply language skills in authentic contexts, improving their reading, writing, listening, and speaking abilities in the target language.

**Creativity:** PBL encourages students to think creatively and innovatively when designing and presenting their projects, allowing for self-expression and originality.

**Research skills:** Students conduct research to gather information, evaluate sources, and synthesize findings, developing their research skills and information literacy.

**Problem-solving:** PBL tasks require students to identify and solve problems related to the project, promoting their problem-solving abilities and adaptability.

**Communication:** Students engage in effective communication in various forms, such as presenting their projects, discussing ideas, and giving and receiving feedback, enhancing their oral and written communication skills.

**Self-directed learning:** PBL empowers students to take ownership of their learning process, fostering self-motivation, autonomy, and lifelong learning skills.

**Cultural competence:** Projects can explore cultural topics, allowing students to gain a deeper understanding of different cultures, perspectives, and global issues, fostering intercultural competence.

**Presentation skills:** Students practice presenting their projects to their peers, teachers, or external audiences, improving their presentation and public speaking skills.

**Reflection and self-assessment:** PBL encourages students to reflect on their learning experiences, evaluate their own progress, and set goals for improvement, promoting metacognitive skills and self-assessment.

Multimodal literacy: PBL incorporates various multimedia elements such as visuals, videos, and technology tools, developing students' digital literacy and multimodal communication skills.

Time management: PBL requires students to manage their time effectively to meet project deadlines, enhancing their organizational and time management skills.

Engagement and motivation: PBL taps into students' interests, promotes active participation, and increases motivation, creating a positive and engaging learning environment.

These keywords highlight the key components and learning outcomes associated with implementing project-based learning in an English as a Foreign Language (EFL) classroom for high school students.

## Sažetak

Ovaj akcioni istraživački projekat istražuje integraciju učenja zasnovanog na projektima (PBL) u nastavi engleskog kao stranog jezika (EFL) u radu sa srednjoškolcima u Kantonu Sarajevo. Primarni cilj ove studije je procijeniti efikasnost projektnog učenja u procesu poboljšanja ishoda učenja učenika, sa posebnim fokusom na usklađenost nastave engleskog jezika sa nastavnim planom i programom za završnu godinu srednje škole u Kantonu Sarajevo. Projekat je uključivao učenike koji su radili na kreiranju digitalnog turističkog vodiča pod nazivom „Iliđza kroz vrijeme“. Istraživačko pitanje ovog rada glasilo je: „Koliko su uspješni nastavni projekti koji integrišu metodologiju projektnog učenja (PBL) u svoju nastavu i koliko su usklađeni sa standardima nastavnog plana i programa srednjih škola i ishodima učenja, uključujući specifične ciljeve i standarde učenja jezika, integraciju s drugim predmetnim područjima i interdisciplinarnim učenjem, te razvoj vještina 21. stoljeća kao što su kritičko mišljenje, kreativnost, komunikacija i saradnja?". Metodologija projekta uključivala je nekoliko ključnih komponenti kako bi se osigurao njegov uspjeh. Prvo, razvijen je detaljan plan projekta, koji navodi ciljeve učenja, vremenski okvir projekta i kriterijume ocjenjivanja usklađene sa nastavnim planom i programom nastave engleskog jezika. Učenici su podijeljeni u grupe kako bi se podstakla saradnja, a kroz projekat ih je vodio njihov nastavnik engleskog jezika. Provođene su redovne provjere napretka kako bi se učenicima pružila smjernica i podrška dok su radili na svom digitalnom turističkom vodiču. Pored toga, učenici su podstaknuti da razmisle o svojim iskustvima učenja tokom projekta, što je rezultiralo stimulacijom metakognicije i samoprocjene. Nakon završetka projekta, učenici su anketirani. Istraživanje je imalo za cilj prikupljanje povratnih informacija o njihovim iskustvima sa projektnim učenjem i procjenu percipiranih ishoda učenja. Pitanja u anketi odnosila su se na aspekte kao što su razvoj jezičkih vještina, kritičko mišljenje, timski rad i angažman u nastavnom planu i programu nastave engleskog jezika. Preliminarni nalazi ankete i pažljivo praćenje napretka učenika ukazuju da je integracija projektnog učenja u nastavi engleskog jezika bila uspješna u ispunjavanju definisanih ciljeva. Učenici su izvijestili o povećanom poznavanju jezika, poboljšanim vještinama kritičkog mišljenja i povećanom angažmanu u nastavnom planu i programu engleskog jezika. Štaviše, njihova sposobnost da rade zajedno i primjenjuju svoje jezičke vještine u kontekstu stvarnog svijeta poboljšana je stvaranjem digitalnog turističkog vodiča. U zaključku, ovaj akcioni istraživački projekat pokazuje potencijal učenja zasnovanog na projektima kao efikasnog pedagoškog pristupa u nastavi jezika u srednjoj školi. Usklađivanjem projektnog učenja sa nastavnim planom i programom i pažljivim praćenjem napretka učenika, edukatori u Sarajevu i sličnim kontekstima mogu stvoriti vrijedna i zanimljiva iskustva učenja koja pripremaju učenike za upotrebu jezika u stvarnom svijetu, podstičući dublje razumijevanje engleskog jezika i kulture u posljednjoj godini njihovog srednjoškolskog obrazovanja.

## Ključni koncepti u radu:

**Saradnja:** Učenici rade zajedno u timovima ili grupama kako bi planirali, izveli i predstavili svoje projekte, podstičući timski rad, komunikaciju i međuljudske vještine.

**Kritičko mišljenje:** Učenici se uključuju u aktivnosti rješavanja problema, analiziraju informacije, procjenjuju različite perspektive i donose informirane odluke, promovišući vještine razmišljanja višeg reda.

**Autentičnost:** Projekti su dizajnirani tako da odražavaju stvarne situacije, čineći učenje jezika relevantnim i značajnim za život učenika, povećavajući njihovu motivaciju i angažman.

**Usvajanje jezika:** Kroz učenje zasnovano na projektu, učenici vježbaju i primjenjuju jezičke vještine u autentičnom kontekstu, poboljšavajući svoje sposobnosti čitanja, pisanja, slušanja i govora na ciljnom jeziku.

**Kreativnost:** PBL podstiče studente da razmišljaju kreativno i inovativno kada dizajniraju i predstavljaju svoje projekte, omogućavajući samoizražavanje i originalnost.

**Istraživačke vještine:** Učenici sprovode istraživanje kako bi prikupili informacije, procijenili izvore i sintetizirali nalaze, razvijajući svoje istraživačke vještine i informatičku pismenost.

**Rješavanje problema:** PBL zadaci zahtijevaju od učenika da identifikuju i riješe probleme u vezi sa projektom, promovišući svoje sposobnosti rješavanja problema i prilagodljivost.

**Komunikacija:** Učenici se uključuju u efikasnu komunikaciju u različitim oblicima, kao što su predavljanje svojih projekata, diskusija o idejama, te davanje i primanje povratnih informacija, poboljšavajući svoje vještine usmene i pismene komunikacije.

**Samousmjereno učenje:** PBL osnažuje učenike da upravljaju svojim procesom učenja, podstičući samomotivaciju, autonomiju i vještine cjeloživotnog učenja.

**Kulturna kompetencija:** Projekti mogu istraživati kulturne teme, omogućavajući studentima da steknu dublje razumijevanje različitih kultura, perspektiva i globalnih pitanja, podstičući interkulturalnu kompetenciju.

**Vještine prezentacije:** Učenici vježbaju predavljanje svojih projekata svojim vršnjacima, nastavnicima ili vanjskoj publici, poboljšavajući svoje vještine prezentacije i javnog govora.

**Refleksija i samoprocjena:** PBL podstiče učenike da razmisle o svojim iskustvima učenja, evaluiraju vlastiti napredak i postavljaju ciljeve za poboljšanje, promovirajući metakognitivne vještine i samoprocjenu.

Multimodalna pismenost: PBL uključuje različite multimedijalne elemente kao što su vizualni materijali, video zapisi i tehnološki alati, razvijajući digitalnu pismenost učenika i vještine multimodalne komunikacije.

Upravljanje vremenom: PBL zahtijeva od studenata da efikasno upravljaju svojim vremenom kako bi ispunili rokove projekta, poboljšavajući svoje organizacijske vještine i vještine upravljanja vremenom.

Angažman i motivacija: PBL koristi interese učenika, promoviše aktivno učešće i povećava motivaciju, stvarajući pozitivno i privlačno okruženje za učenje.

Ove ključne riječi ističu ključne komponente i ishode učenja povezane sa implementacijom učenja zasnovanog na projektima u nastavi engleskog jezika za srednjoškolce.

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# 1.Introduction

In today's globalized and interconnected world, proficiency in English as a Foreign Language (EFL) has become increasingly important for high school students. English serves as a gateway to educational, professional, and social opportunities, enabling students to communicate effectively and engage with a diverse range of people and cultures. However, traditional EFL instructional methods often fall short in engaging and motivating students, resulting in limited language proficiency and a lack of real-world application of their language skills (Fredri, 2020). To address these challenges, educators and researchers have turned to project-based learning (PBL) as an innovative approach that aligns with high school students' learning outcomes in the EFL classroom. “Project-based learning is an instructional methodology that emphasizes active learning, critical thinking, collaboration, and problem-solving through the completion of real-world projects. PBL projects are central, not peripheral to the curriculum.” (Thomas, 2000, p.3). It offers a departure from the traditional teacher-centered approach, placing students at the center of their learning experiences. PBL engages students in authentic tasks and challenges, enabling them to explore and construct knowledge in a meaningful context. “PBL projects incorporate a good deal more student autonomy, choice, unsupervised work time, and responsibility than traditional instruction and traditional projects” (Thomas, 2000, p4). By integrating PBL in the EFL curriculum, educators can create a dynamic and engaging learning environment that promotes language acquisition, skill development, and the cultivation of lifelong learners. Aligning project-based learning with high school students' learning outcomes is crucial to ensure that the approach effectively addresses specific language competencies and broader educational goals. Language learning outcomes encompass various skills, including reading, writing, listening, speaking, grammar, vocabulary, and cultural awareness. By clearly defining the desired language skills and competencies, educators can design projects that provide opportunities for students to acquire, practice, and apply these skills in meaningful ways. Through the completion of challenging and authentic projects, students can develop their language proficiency while engaging with real-world contexts. In addition to language proficiency, high school students' learning outcomes extend beyond linguistic competence. The 21st-century skills, often referred to as the four Cs—critical thinking, creativity, communication, and collaboration—are essential for students' academic and professional success. PBL provides a fertile ground for the development of these skills by incorporating tasks and activities that require students to analyze information critically, think creatively, communicate effectively, and collaborate with their peers. Moreover, PBL offers opportunities for students to develop digital literacy skills as they utilize technology tools and resources to research, create, and present their projects. To effectively implement PBL in the EFL

classroom, careful planning and implementation strategies are required. Educators need to design projects that are authentic, relevant, and challenging, ensuring that they align with the targeted learning outcomes. Authenticity refers to projects that reflect real-world problems, tasks, or situations, enabling students to see the relevance and practical application of their language skills. By choosing topics and themes that resonate with high school students' interests and experiences, educators can increase student engagement and motivation. The role of the teacher in a PBL classroom shifts from a traditional instructor to that of a facilitator and guide. The teacher's role is to provide support, structure, and guidance throughout the project process, rather than being the sole provider of knowledge. This includes setting clear expectations, scaffolding instruction, facilitating group work, and providing timely feedback to students. Moreover, reflection plays a crucial role in the PBL process, allowing students to evaluate their learning experiences, identify strengths and areas for improvement, and make connections between their project work and the targeted learning outcomes. Some of the skills required for 21st century jobs are: problem solver, responsible, works well with others, can work independently, critical thinker, confident, manages time and work effectively, communicates well with a variety of people (Larmer, 2015). The integration of PBL in the EFL classroom aligned with high school students' learning outcomes offers several benefits. Firstly, PBL promotes active learning and student engagement, making the language learning process more enjoyable and meaningful. By working on real-world projects, students can see the practical application of their language skills, enhancing their motivation and investment in their learning. "Students with a lack of motivation were more likely to be anxious and did not feel comfortable in their English classes" (Ahmetovic, 2020, p281). Secondly, PBL fosters the development of critical thinking and problem-solving skills, as students engage in complex and open-ended tasks that require them to analyze, evaluate, and generate creative solutions. Thirdly, collaboration and communication skills are enhanced through group work and project presentations, enabling students to learn from and with their peers. In conclusion, project-based learning provides a promising approach for aligning high school students' learning outcomes with the EFL curriculum. By integrating authentic projects that target specific language skills and competencies, educators can create a dynamic and engaging learning environment that promotes language proficiency, critical thinking, creativity, communication, collaboration, and digital literacy. The subsequent sections of this paper will delve deeper into the key components, benefits, and implementation strategies of project-based learning in the EFL classroom aligned with high school students' learning outcomes.

This paper will focus on Project Based Learning connected to learning English language as a foreign language (EFL) in high school. Research group will be two classes of the final year of

high school in Fourth Gymnasium Ilidža. There are 19 students in one and 20 in the other class. This project was done by Prof. Mirela Vasić Hadžihalilović and me. The project lasted for five months, where we followed the key structure of the PBL and our focus was on the outcomes, which in this case were: to make a digital tourist guide of Ilidža through time; to adopt a more student-centered approach; to integrate English subject with other subjects and to plan the outcomes before the project started. Our research question was: *How effectively do Project-Based Learning (PBL) projects align with high school curriculum standards and learning outcomes, including specific language learning objectives and standards, integration with other subject areas and interdisciplinary learning, and the development of 21st-century skills such as critical thinking, creativity, communication, and collaboration?* After the project students were graded based on their teamwork, individual work, creativity and their oral presentation. At the end they had a choice to answer the survey but also, they were encouraged to verbally give their honest opinion about positive and negative sides of this project.

This paper comprises five chapters, each focusing on essential aspects of the research project:

Chapter 1: Background and Rationale: In this chapter, the historical context of Project-Based Learning (PBL) is explored, along with an examination of EFL instruction in Sarajevo and curriculum reform in Bosnia and Herzegovina (BiH). Additionally, it delves into the specific context of PBL implementation in BiH, setting the foundation for the research project.

Chapter 2: Literature Review: The second chapter provides a comprehensive literature review covering various topics, including the alignment of PBL with curriculum standards, the role of PBL in EFL classrooms, high school students' learning outcomes, and the development of 21st-century skills through PBL. This chapter contextualizes the research within the existing body of knowledge.

Chapter 3: Research Project: It outlines the research project's core components, including research objectives, research questions, research methods, and research design. It sheds light on how the study was conducted and presents the framework for the interpretation of results.

Chapter 4: Interpretation of Results: This chapter interprets the research findings and discusses their implications. It explores how Project-Based Learning aligns with high school students' learning outcomes in the EFL classroom, offering insights derived from the research project's data.

Chapter 5: Final Conclusion and Recommendations: The final chapter encapsulates the paper's key findings and draws conclusions based on the research outcomes. It also offers recommendations for educators, policymakers, and stakeholders interested in implementing PBL in the EFL curriculum for high school students in Sarajevo, providing practical guidance for future endeavors in this field.

## 2. Background and Rationale

Understanding the historical context and rationale behind Problem-Based Learning (PBL) in the context of English as a Foreign Language (EFL) education in Sarajevo, Bosnia and Herzegovina, necessitates a multifaceted exploration. This comprehensive inquiry involves delving into the rich history and origins of PBL as an educational pedagogy, tracing the evolution of EFL instruction in Sarajevo, assessing the ongoing curriculum reform efforts in Bosnia and Herzegovina, and examining the specific implementation and impact of PBL within this unique educational landscape.

The significance of this exploration is underscored by the critical role education plays in shaping the intellectual and socio-economic future of any nation. Bosnia and Herzegovina, emerging from a turbulent past, stands at a juncture where educational reforms are pivotal in nurturing a generation equipped to meet the challenges of a globalized world. EFL education, as a means of fostering international communication and understanding, forms a critical component of these reforms. Simultaneously, PBL has gained recognition worldwide as an innovative pedagogical approach that promotes active learning, critical thinking, and problem-solving skills.

Our country has a very unfortunate past, many wars were fought here, but the last war (1992-1995) set us back the most. After the war it took years for schools to get back on their feet (although during the war classes were held in basements at every opportunity), but the education system did not change. A qualified worker shortage is unavoidable in a post-war emerging nation with a complicated governmental hierarchy that affects both the economy and the educational system. This resulted in students graduating from high school with little or no skills needed for the new jobs that were opening (Imamović, 2016). The environment in primary and secondary schools has radically altered. The value of studying a foreign language was underlined by the World Bank (2003) in addition to local educational authorities. All pupils in BiH learn English as part of the nine-year primary school curriculum, and they continue to do so for an additional four years in secondary schools. The education reform has taken place in Sarajevo, but at such a slow pace that it seems as if we are still in the initial phase, which has been going on for over ten years. In this context, it is imperative to investigate the historical development of PBL, its integration into the EFL curriculum in Sarajevo, the broader educational reforms in Bosnia and Herzegovina, and the specific experiences and outcomes of PBL implementation in this region. By shedding light on these interconnected facets, we aim to provide a comprehensive understanding of the dynamics shaping the education system in Bosnia and Herzegovina, while also contributing to the global discourse on PBL as a transformative educational strategy.

## 2.1. History and origin of the PBL

Problem-Based Learning (PBL) is an educational approach that emphasizes active learning and problem-solving skills. It was originally developed in the late 1960s at the Medical School of McMaster University in Canada. PBL was created as an alternative to traditional didactic teaching methods, which focused on passive absorption of information by students. The origins of PBL can be traced back to the desire for a more student-centered and practical approach to medical education (Schmidt, 2012). A group of faculty members at McMaster University, including Howard Barrows, were dissatisfied with the traditional lecture-based format and sought to develop a more effective way of teaching medical students. The concept of PBL was influenced by earlier educational philosophies and theories, such as constructivism and problem-solving approaches. Barrows and his colleagues drew inspiration from the work of educational theorists such as Jerome Bruner, who advocated for a learner-centered approach and the importance of active engagement with the subject matter. Barrows and his team designed a curriculum that placed students in small groups, known as tutorials, where they would tackle real-life clinical problems. These problems, known as "ill-structured" problems, were carefully crafted to stimulate critical thinking, collaboration, and the integration of knowledge from different disciplines. The students, guided by a facilitator, would work through the problem, identify learning objectives, conduct research, and propose solutions (Jaleniauskiene & Jucevičienė, 2019). PBL aimed to create a learning environment that mirrored the complexities of real-world problem-solving. It sought to develop not only knowledge and technical skills but also the ability to think critically, communicate effectively, and work collaboratively. PBL also emphasized the importance of self-directed learning, as students took responsibility for identifying and acquiring the necessary knowledge and skills to solve the problems they encountered. Over time, PBL expanded beyond medical education and found application in other fields, including engineering, business, and the social sciences. Its success in fostering deep learning, critical thinking, and problem-solving skills has led to its widespread adoption in various educational contexts around the world. Today, PBL is recognized as a valuable instructional method that promotes student engagement, self-directed learning, and the development of lifelong learning skills. It continues to evolve and be adapted to suit different disciplines and educational settings, but its fundamental principles of active learning, problem-solving, and collaboration remain at its core. The simultaneous need for changes in curriculum, instruction, and assessment practices—changes that are frequently unfamiliar to both students and teachers—represents a significant barrier to the implementation of project-based curricula. (Barron, 1998). The wide range of elements and methodologies connected with Project Based Learning (PBL) makes defining it difficult. Various writers and

educators emphasize different parts of PBL, resulting in a varied view of the idea. Some emphasize the importance of student-led, real-world projects that address realistic problems, while others emphasize the importance of inquiry, critical thinking, and teamwork as key components of PBL. Furthermore, the degree of teacher leadership, integration of technology, and evaluation techniques used in PBL might vary greatly, complicating the formulation of a single definition. This variety highlights PBL's versatility as an educational framework, capable of fitting a wide range of teaching and learning methods while encouraging student participation and deeper comprehension. "Project Based Learning is a teaching method in which students gain knowledge and skills by working for an extended period of time to investigate and respond to an authentic, engaging, and complex question, problem, or challenge." ( Buck Institute for Education, 2019)

There are two methods that are used worldwide : Collaborative Project Based Learning and Problem Based Learning. (Donnelly & Fitzmaurice, 2015) Teacher should decide which approach to use and there are some advices how to choose. It is important to always keep in mind that these methods are intended to lead to effective learning, but also to be aware of how our choice of teaching approach would affect our students' learning. (Race, 2007) CPBL (collaborative project-based learning) is focused on the interaction in the group where each student offers part of their skills while PBL (problem-based learning) is more focused on giving students a chance to be in control of their own learning. Without a question, lecturing is an excellent way to convey knowledge, but if we want students to acquire thinking, problem-solving, and lifetime learning skills, we need to adopt a more student-centered approach. As a result, the lecturer's function will evolve from imparting knowledge to one of facilitating and directing learning (Donnelly & Fitzmaurice, 2015).

One of the key benefits of implementing PBL in schools is its ability to foster critical thinking and problem-solving skills. PBL projects require students to analyze complex problems, conduct research, propose solutions, and present their findings. Problem-based learning is a student-centered teaching style that focuses on solving real-world problems by applying new knowledge (Donnelly & Fitzmaurice, 2005). This approach encourages students to think critically, collaborate with their peers, and apply their knowledge to real-world scenarios. By engaging in such projects, students develop a deeper understanding of the subject matter and acquire the skills needed to tackle complex challenges in their future academic and professional lives. Furthermore, PBL provides an opportunity for students in Bosnia and Herzegovina to develop their communication and collaboration skills. PBL projects often involve group work, where students collaborate to complete tasks, share ideas, and solve problems collectively. This collaborative aspect of PBL not only enhances students' communication skills but also

promotes teamwork, respect for diverse perspectives, and effective interpersonal interactions. It also emphasizes the integration of technology and digital literacy skills. In an increasingly digital world, it is essential for students to be equipped with the necessary technological competencies. PBL projects often require students to utilize digital tools and resources for research, data analysis, and presentation purposes.

## 2.2. EFL instruction in Sarajevo

English as a Foreign Language (EFL) instruction in Sarajevo, the capital city of Bosnia and Herzegovina, faces both unique opportunities and challenges. Sarajevo is a diverse city with a multilingual environment. While Bosnian, Croatian, and Serbian (BCS) are the official languages, English is widely taught and used as a foreign language. The nation's economy, research, technology, tourism, and education have all experienced tremendous development in the years after the 1992–1995 aggression. Since networking and close collaboration with foreign businesses and organizations are essential in all of these fields, proficiency in English has become crucial for day-to-day operations. (Imamović & Mulahtmetović-Ibrišimović, 2018). The multilingual setting can provide opportunities for language practice and cultural exchange. English proficiency is highly valued in Sarajevo as it enhances educational and employment prospects, particularly in fields like tourism, international business, and diplomacy. There is a growing demand for English language skills, which has led to increased emphasis on EFL instruction in schools and language centers. EFL instruction in Sarajevo follows the national curriculum, which includes language learning objectives and standards for different grade levels. The curriculum focuses on developing reading, writing, listening, and speaking skills, as well as grammar, vocabulary, and cultural understanding. Similar skills are developed while communicating in a second language as when communicating in one's native tongue. One should acquire languages through informal learning as part of lifelong learning. (Bosnic et al., 2018). Sarajevo has access to various resources for EFL instruction. Textbooks, digital materials, and online resources are commonly used in classrooms. Language centers and institutes also offer courses and materials for EFL learners, providing additional learning opportunities outside of school. EFL teachers in Sarajevo are legally required to hold a master degree in English language for working in primary and secondary schools. Many teachers have obtained qualifications such as TEFL (Teaching English as a Foreign Language) or TESOL (Teaching English to Speakers of Other Languages) certifications. Continuous professional development is encouraged to enhance teaching skills and keep up with current methodologies. EFL instruction in Sarajevo takes into account the local culture and context. Teachers may incorporate cultural topics and materials relevant to the region, allowing students to explore their own culture and develop intercultural competence. Like any EFL setting, Sarajevo faces

challenges related to language acquisition. Students may encounter difficulties with pronunciation, vocabulary acquisition, and applying grammatical rules. The limited exposure to English outside the classroom can also hinder language development. “Even “good” students don’t always have deep understanding of what’s been taught despite the fact that conventional measures (course grades and cumulative GPA) certify success. (Wiggins & McTighe , 2005, p.2). Sarajevo has a limited number of English immersion opportunities compared to countries where English is widely spoken. This can impact students' exposure to authentic English language use and their ability to practice English in real-life situations. The availability and access to technology and digital resources for EFL instruction vary across schools and institutions in Sarajevo. Some schools have well-equipped language labs and access to online learning platforms, while others may face limitations in infrastructure and technology integration. Despite the challenges, EFL instruction in Sarajevo plays a significant role in equipping students with English language skills for academic, professional, and personal purposes. Efforts to enhance EFL instruction, provide quality resources, and promote English proficiency continue to contribute to the language learning landscape in Sarajevo. Today, all children in Bosnia and Herzegovina (BiH) learn English as their first foreign language, and those who complete the country's grammar schools reach a high degree of fluency as English users. This accomplishment is impressive given that few individuals, mostly urbanites, could speak English a few decades ago, when it was only sometimes taught in schools. The recent history of BiH is closely related to how the position of English as a foreign language has changed. (Imamović & Delibegović-Džanić, 2016 ). “A second form of aimlessness goes by the name of “coverage”, an approach in which students march through a textbook, page by page, in a valiant attempt to traverse all the factual material within a prescribed time. “(Wiggins & McTighe, 2005, p.15). I witnessed this approach while I was a student and while teaching, I would find myself feeling stressed when there are so many pages from our book to finish until the end of the month but I see that my students are unable to fully grasp the knowledge from the book because there is not enough time to teach them all the necessary things and also cover all the tasks from the book.

### 2.3. Curriculum reform in BiH

The national constitution of Bosnia and Herzegovina specifies the country's educational system. The legal requirements for educational competency are outlined in the BiH Constitution, the constitutions of the entities, cantons, and the Brko District of BiH Statutes. The Republic of Srpska has a single minister of education and a centralized administration. The Federation of BiH comprises ten cantons and a decentralized administration. Each canton has its own minister of education. A Federal Ministry of Education also exists, although it only serves as a



coordination body. Brčko District has a functioning government with several ministries. The Department of Education is one of these divisions. As a result, 12 ministries—10 cantonal, one in the RS, and one department in the Brčko District—are together in responsibility of education in BiH. The Ministry of Education in the BiH Federation and the Ministry of Civil Affairs at the state level are the other two ministries that participate in coordination. According to the Ministry of Civil Affairs of BiH, Bosnia-Herzegovina faces the following major issues in this area: a gap between the educational system and the labor and employment sector, or the labor market, the foundation of the educational system is theory; there is no practical application ; an exceptionally high unemployment rate and poor labor force productivity; a mismatch between educational requirements and employment market demands ; delays in the implementation of educational reforms ; no human resource development policies. (Turčilo et al., 2018, p.41)

Upbringing and education have a multifaceted role beyond mere preparation for the workforce. They serve as the cornerstone of personal development, fostering social and emotional skills, moral values, and critical thinking. Education, in particular, equips individuals with the tools to navigate complex societal issues, fostering active citizenship and a sense of social responsibility. Furthermore, upbringing and education play a vital role in shaping well-rounded individuals capable of contributing to the betterment of society, promoting empathy, cultural awareness, and lifelong learning, ultimately leading to a more harmonious and interconnected world. One of the goals of the educational system is, however, to provide appropriate and relevant practical instruction, which should be designed to encourage students to cooperate as a team, adopt various job skills, and become familiar with the market and competitiveness. This gives pupils the opportunity to get familiar with the rules controlling the labor market, and giving them constant activity helps them build the drive for commercial success. (Kundalić et al., 2018, p14). One of the major variables that is associated to societal unemployment rates and perceived economic instability is the level and quality of the nation's educational system.

Curriculum reform aims to redefine educational goals and objectives, aligning them with the changing needs of society and the aspirations of learners. The state adopted the Common Core Curriculum Based on Learning Outcomes, although implementation across administrative entities remains unequal. (Guthrie et al., 2022). The reform process often seeks to foster the development of critical thinking, problem-solving, creativity, collaboration, digital literacy, and other 21st-century skills. Reform efforts often focus on redesigning the structure and content of the curriculum. This includes determining the scope and sequence of subjects, establishing learning outcomes and standards, and incorporating interdisciplinary and cross-cutting themes. Many curriculum reforms promote a shift towards a competency-based approach, emphasizing the development of transferable skills and abilities that students can apply in various contexts.

This approach often involves defining a set of key competencies and designing learning experiences that enable students to acquire and demonstrate them. The CCC specifies broad learning outcomes, which are described as the information, abilities, and competencies that each student must comprehend and be able to apply at various stages of education. It also outlines a set of ten essential competencies that are in line with European and international standards. (Guthrie et al., 2022) Curriculum reform endeavors to promote inclusive education by ensuring that the curriculum addresses the diverse needs, backgrounds, and interests of all learners. It may involve integrating multicultural perspectives, addressing gender equity, recognizing the experiences of marginalized groups, and accommodating students with special educational needs. Successful curriculum reform recognizes the crucial role of teachers and supports their professional development. It often includes training programs, workshops, mentoring, and ongoing support to help teachers understand and implement the revised curriculum effectively. The 2018 CCC expands on a previous curriculum framework and is now centered on learning outcomes (Guthrie et al., 2022). As part of a fundamental attempt to improve teaching and learning in BiH, the new CCC focuses a greater emphasis on competence-based learning outcomes. It is intended that the improvements would lead to increased student accomplishment via the acquisition of required information, skills, and good attitudes. An optimistic outlook involves respect for cultural variety, interest in languages and cross-cultural dialogue, and curiosity. (Bosnic et al.,2018)

#### 2.4. Project based Learning in BIH

Bosnia and Herzegovina is a country located in the Balkans region of Southeast Europe, characterized by its multicultural society and diverse educational landscape. In recent years, there has been a growing interest in integrating PBL into the educational system as a means to enhance student engagement, critical thinking, and problem-solving skills. The implementation of PBL in public school in Sarajevo (the capital of Bosnia and Herzegovina) aims to address some of the challenges faced by the traditional educational system, such as rote memorization, passive learning, and a lack of real-world application of knowledge. By adopting PBL, educators in public schools in Sarajevo seek to create a more student-centered and active learning environment that prepares students for the demands of the 21st century. By incorporating technology into the learning process, students in Sarajevo can develop their digital literacy skills, enabling them to navigate and utilize technology effectively in various contexts. Despite the potential benefits, the implementation of PBL in Sarajevo faces certain challenges. Limited resources, including access to technology and materials, can pose obstacles to the successful implementation of PBL projects. Additionally, teachers may require additional training and support to effectively design and facilitate PBL experiences in the classroom.

### 3. Literature Review

The literature review chapter provides a comprehensive exploration of the key areas central to our research project. It delves into the alignment of Project-Based Learning (PBL) with curriculum standards, shedding light on the essential role PBL plays in the educational landscape. Additionally, it examines the specific application of PBL within the English as a Foreign Language (EFL) classroom, emphasizing its significance in enhancing high school students' learning outcomes. Furthermore, this chapter explores how PBL serves as a catalyst for the development of 21st-century skills, offering a deeper understanding of the broader educational impact of this innovative pedagogical approach.

#### 3.1. Alignment of PBL with Curriculum Standards

The Alignment of Project-Based Learning (PBL) with curriculum standards is a pivotal aspect of modern education, particularly in the context of English as a Foreign Language (EFL) instruction. In light of recent research findings, it has become increasingly evident that curricula in secondary schools may be outdated, prompting the need for reform and modernization (Kundalić et al., 2018). Furthermore, studies have underscored the urgent necessity for student-centered teaching approaches and enhanced collaboration between education institutions and the business sector to meet evolving labor market demands (Muharemagić, 2022). Against this backdrop, this chapter will explore the role of PBL in the acquisition of English skills. As previous research suggests, when implemented with careful planning, the right teacher's attitude, and expertise, PBL not only offers inherent benefits but also provides additional advantages in the realm of language acquisition (Kalabzova, 2015).

The attention span of high school students can vary depending on several factors, including individual differences, the nature of the task, and the learning environment. High school students are more likely to maintain focus and attention when they find the task relevant, meaningful, and engaging. Project-based learning, hands-on activities, and interactive lessons can help capture students' interest and sustain their attention. The learning environment plays a crucial role in students' ability to focus. Factors such as classroom distractions, noise levels, and physical comfort can impact students' attention spans. Providing a conducive and organized learning environment can support students in maintaining focus. The complexity and duration of tasks can influence students' attention spans. Long, monotonous tasks may lead to decreased engagement and shorter attention spans. Breaking tasks into smaller, manageable chunks, incorporating variety, and providing regular opportunities for active participation can help sustain attention. Recognizing that students have diverse learning needs and preferences is essential. Differentiating instruction, offering choices, and providing support for students who

may struggle with attention can help accommodate varying attention spans and foster optimal engagement. High school students are often immersed in a digital world, which can present both opportunities and distractions. While technology can enhance learning experiences, it can also divert attention. Establishing guidelines and creating a balance between technology use and focused work can support students in managing digital distractions.

In the context of English as a Foreign Language (EFL) instruction, a well-structured lesson plan is instrumental in achieving language learning objectives effectively. Lesson plans in PBL are essential roadmaps, ensuring alignment with learning goals by outlining objectives, breaking down projects into manageable steps, and accommodating diverse student needs. They also aid in infusing content knowledge, managing time, assessing progress, and fostering educator reflection. Moreover, these plans promote collaboration among stakeholders for a purposeful PBL experience. As we explore the alignment of Project-Based Learning (PBL) with curriculum standards, it's important to recognize that a good EFL lesson plan typically encompasses several key components (Adams, 2019). These components include clearly defined objectives, engaging warm-up activities, targeted language input, controlled and guided language practice, opportunities for interactive and communicative exercises, independent practice tasks, as well as feedback and assessment mechanisms. Moreover, a comprehensive lesson plan should incorporate provisions for extension and enrichment activities, consider differentiation to address diverse student needs, and allow time for reflection and adjustments based on classroom dynamics. Understanding the structure and importance of a well-designed lesson plan serves as a valuable foundation for exploring how PBL aligns with and enhances EFL curriculum standards in the subsequent sections of this research.

A good lesson plan for English as a Foreign Language (EFL) typically includes the following key components (Adams, 2019):

**Objective(s):** Clearly state the specific language learning objectives or goals for the lesson. These objectives should be specific, measurable, achievable, relevant, and time-bound (SMART).

**Warm-up/Engagement:** Begin the lesson with an engaging activity or prompt that captures students' attention and activates their prior knowledge related to the topic or language focus of the lesson. This can be a short discussion, a video, a game, or a short reading.

**Language Input:** Introduce new vocabulary, grammar structures, or language functions that align with the lesson's objectives. Provide clear explanations, examples, and context to help students understand the language concepts.

**Controlled Practice:** Engage students in activities or exercises that allow them to practice the target language in a controlled and guided manner. This can include fill-in-the-blank exercises,

matching activities, or sentence-building tasks.

**Guided Practice:** Provide opportunities for students to practice the target language in a more interactive and communicative way. This can involve pair or group activities, role-plays, information gap tasks, or discussions that require students to use the language in meaningful contexts.

**Independent Practice:** Assign tasks or activities that allow students to practice the target language independently. This can include writing exercises, reading comprehension tasks, or online activities that reinforce the language skills and concepts covered in the lesson.

**Feedback and Assessment:** Provide timely and constructive feedback to students on their language use and performance. This can be done through teacher monitoring, peer feedback, self-assessment, or teacher-led evaluation activities.

**Extension/Enrichment:** Provide additional activities or resources for students who finish the main tasks early or show a higher level of proficiency. These extension activities can offer further opportunities for language practice or deeper exploration of the topic. **Closure:** Wrap up the lesson by reviewing the key concepts or language points covered. Connect the lesson to future lessons or provide a brief preview of what students can expect in the next class.

**Materials and Resources:** List the materials, resources, and technology needed for the lesson, such as textbooks, handouts, audiovisual materials, or online resources.

**Differentiation:** Consider the diverse needs and learning styles of students, and include strategies to support differentiation within the lesson plan. This can involve providing modified tasks, extra support for struggling learners, or additional challenges for advanced learners.

**Reflection:** Allocate time to reflect on the effectiveness of the lesson and make notes for future improvements. Consider what worked well, what challenges emerged, and any modifications needed for future implementation. Remember, a good lesson plan should be flexible and adaptable based on the needs and dynamics of the classroom. It should provide a clear roadmap for the teacher while allowing room for spontaneity and adjustments as necessary during the actual teaching process.

Understanding the differences between a standard lesson plan and a Project-Based Learning (PBL) lesson plan is crucial in the context of aligning PBL with curriculum standards in EFL instruction. As discussed in “Setting the Standard for Project – Based Learning “(2015) the traditional lesson plan typically adheres to a teacher-centered approach, where the educator imparts knowledge through direct instruction, while students passively receive information. In contrast, PBL embodies a student-centered philosophy, fostering active learning by engaging students in real-world problem-solving and inquiry-based activities. Within a standard lesson plan, content delivery relies on teacher-led lectures and demonstrations, whereas PBL integrates

content within the project or problem scenario, requiring students to actively construct knowledge as they work toward solutions. In the traditional setting, students assume passive roles as information recipients, whereas PBL encourages active participation, critical thinking, research, and collaborative teamwork. Assessment diverges as well; standard lesson plans predominantly employ testing methods to gauge content comprehension, while PBL utilizes multifaceted assessment approaches that evaluate not only final project outcomes but also process, collaboration, problem-solving skills, research capabilities, and presentation proficiency. Recognizing these distinctions is instrumental in appreciating how PBL can effectively align with and enhance EFL curriculum standards.

### 3.2. Alignment with inter-curricular link and interdisciplinary learning linked with STEM

In 21st-century education, there's a compelling need to move beyond traditional, subject-isolated learning paradigms. Instead, we embrace a holistic approach that readies students to navigate the complexities of the real world. This approach, driven by interdisciplinary learning, merges insights and methods from diverse subjects, nurturing critical thinking, problem-solving, and overall academic growth. At its core, STEM education—encompassing Science, Technology, Engineering, and Mathematics—stands as an exemplar of interdisciplinary learning. It fuses these four disciplines, fostering not only interdisciplinary experiences but also critical thinking, creativity, problem-solving, and collaboration. STEM thrives on hands-on, experiential learning, often in the form of collaborative projects that develop essential interpersonal competencies (Donnelly & Fitzmaurice, 2015).

#### Linking STEM, PBL, and Interdisciplinarity

When STEM education and Project-Based Learning (PBL) intersect, a dynamic pedagogical strategy emerges—one that nurtures deeper understanding and engagement. In Sarajevo's government schools, STEM integration forms the cornerstone of a curriculum reform that transcends subject boundaries. This innovative approach dissolves barriers between science, technology, engineering, mathematics, and language, offering a holistic, interdisciplinary learning experience. The outcomes are multi-fold: students not only master STEM concepts but also develop English proficiency. Practical application and problem-solving equip them with the ability to articulate complex ideas in English. Students become active participants in both STEM and language learning.

#### The Importance of Interdisciplinarity

This curriculum overhaul reflects a progressive educational approach that prepares students for an ever-evolving global landscape. It is through interdisciplinary projects—where STEM and

English intermingle—that students foster critical thinking, creativity, and the application of knowledge in real-world contexts. This fusion of STEM and language education doesn't remain abstract; it takes the form of a vibrant curriculum component that empowers students to explore the practical dimensions of their language skills. By conducting science experiments, embracing technological innovation, and tackling engineering challenges, students in Sarajevo's government schools aren't just becoming fluent English speakers but also innovative thinkers prepared for future challenges.

### Integrating STEM and English: Our PBL Approach

In our PBL experience, we carefully selected topics that piqued student interest and aligned with their language proficiency level. These age-appropriate subjects addressed real-world issues to spark curiosity. We clearly outlined language learning goals and STEM content objectives, ensuring students understood the language skills they would develop and the STEM concepts they would explore. Collaboration was key, with students working in small groups, promoting teamwork and requiring English communication for project success. Language development was interwoven throughout, with students using English for discussions, problem-solving, presentations, and documentation.

Assessment was comprehensive, evaluating both STEM content understanding and language proficiency using rubrics that encompassed STEM knowledge, language use, collaboration, and presentation skills. Real-world connections and ethical considerations were emphasized, fostering students' awareness of STEM's societal impact. We collected feedback from students and assessed the effectiveness of the STEM-PBL approach, ensuring continuous improvement.

In our digital age, students leveraged technology to explore real-world issues, conduct research, and create multimedia-rich presentations. This digital immersion extended language learning beyond textbooks, exposing students to authentic language usage and diverse cultural perspectives. It nurtured digital literacy skills, preparing students for a future where technology plays a pivotal role in education and the workforce.

In conclusion, integrating STEM and English education within a PBL framework creates a well-rounded and interdisciplinary learning experience. This approach equips students with the skills and knowledge needed to thrive in our complex, technology-driven world. By dissolving traditional subject boundaries, we empower students to become innovative thinkers, fluent communicators, and global problem-solvers—a testament to the transformative power of interdisciplinary PBL.

### 3.3. Project-Based Learning (PBL) in the EFL Classroom

Using Project-Based Learning (PBL) in English as a Foreign Language (EFL) classes has its pros and cons. PBL offers authentic language use, fostering meaningful communication and critical thinking while promoting hands-on learning and student engagement. It encourages collaboration and integrates various language skills for a comprehensive learning experience. However, it can be time-intensive, challenging for lower-proficiency students, and require alternative assessment methods. Effective implementation demands thorough planning, resource preparation, and attention to group dynamics and language learning objectives. Balancing content and language goals within PBL can also pose a challenge.

PBL encourages students to explore and understand core concepts, theories, and principles within a specific subject area. The outcomes in this domain focus on the depth of knowledge students acquire, their ability to apply concepts to real-world problems, and their understanding of interdisciplinary connections. (Vrbanac, 2009). PBL places a strong emphasis on the development of skills that are valuable in professional and personal contexts. Outcomes related to skills may include critical thinking, problem-solving, research skills, communication skills, collaboration, self-directed learning, and adaptability. PBL aims to foster these skills through the authentic and complex nature of the project's students engage with. PBL not only aims to develop cognitive skills but also to shape students' attitudes and dispositions towards learning and problem-solving. Outcomes in this domain might include increased motivation, curiosity, confidence, persistence, and a sense of ownership over their learning process. PBL can also promote positive attitudes towards collaboration, open-mindedness, and an appreciation for diverse perspectives.

Creating a successful Project-Based Learning (PBL) class involves several key steps that ensure the effective design and implementation of projects. (Cooper & Murphy, 2017)

The steps that were taken from the book "Setting the Standard for PBL" (2015) that were used when developing PBL classes that were followed for this project:

- Begin by clearly identifying the learning goals and objectives you want to achieve through the project. Determine the specific knowledge, skills, and competencies that students should develop during the project. PBL tends to be a group activity with a timeline, milestones and other formative evaluation steps. The process replicates the commonly used systemic approaches to resolving problems or meeting challenges that are encountered in real life (Donnelly and Fitzmaurice 2005). PBL experts point out that teachers shouldn't plan the content in advance because all the benefits of PBL basically come from the fact that project work should be proposed by students, filled mostly with



students' ideas, and driven by students' work. (Kalabzova, 2015). On the other hand, teachers need and can plan the outcomes of the project and align the ideas and suggestions of students with these outcomes. The key benefit is that by focusing on actual difficulties, students interact with genuine subject matter. (Kalabzova, 2015)

- Develop a driving question that serves as the central focus of the project. The driving question should be open-ended, challenging, and relevant to the students' interests and the learning goals. It should encourage critical thinking, problem-solving, and exploration.
- Create a detailed plan and structure for the project. Consider the scope, duration, and resources required. Outline the steps or stages of the project, including research, analysis, collaboration, and presentation.
- Break down the project into smaller tasks or milestones to guide students through the process. Provide support, resources, and guidance to scaffold their learning. Consider incorporating mini-lessons, workshops, and checkpoints to address specific skills or knowledge gaps.
- Define roles and responsibilities for each student within the project. Encourage collaboration and teamwork by assigning different roles, such as researcher, presenter, data analyst, or team leader. This fosters a sense of ownership and accountability among the students. Teachers can arrange kids who are behaviorally challenged, uncooperative, bossy, or unpopular in suitable groups. Second, they may modify the pattern of grouping to the instructional environment or purpose. Third, successful students give good modelling of effective learning techniques and tutoring to poor students. Finally, due to weaker pre-existing relationships between students, instructor-formed groups may have fewer proclivities for cheating; students do not tend to hide one's plagiarism or inability to engage in group activities (Oakley et al., 2004).
- Provide opportunities for students to engage in inquiry-based research to explore the driving question. Encourage them to gather information from various sources, critically analyze the data, and draw conclusions based on evidence.
- Foster a collaborative learning environment where students work together to solve problems and complete tasks. Promote effective communication, active listening, and respectful teamwork. Incorporate opportunities for peer feedback and reflection to enhance the collaborative process.
- Build in regular opportunities for students to reflect on their learning progress and experiences. Encourage them to evaluate their own work, provide peer feedback, and

self-assess their performance. Use rubrics or other assessment tools aligned with the learning goals to evaluate student achievements.

- Provide opportunities for students to showcase their projects to an authentic audience. This could involve presentations, exhibitions, or demonstrations. Celebrate their achievements and recognize their efforts to boost their confidence and motivation.
- Reflect on the project's successes and challenges. Gather feedback from students, colleagues, and stakeholders to identify areas for improvement. Use this feedback to refine future projects and enhance the overall PBL experience.

In summary, creating a successful Project-Based Learning (PBL) class involves a comprehensive series of steps, drawn from Cooper and Murphy's (2017) guidance and "Setting the Standard for PBL" (2015). It begins with a clear definition of learning objectives, encourages open-ended driving questions that promote critical thinking, and incorporates detailed project planning and structuring. Breaking the project into manageable tasks, defining student roles, and fostering a collaborative environment are pivotal elements that encourage active engagement and accountability. Additionally, PBL emphasizes inquiry-based research, regular reflection, and opportunities for showcasing projects to authentic audiences. Finally, reflecting on successes and challenges, gathering feedback, and continuous improvement form the foundation for an enriching PBL experience.

### 3.4. High School Student's Learning Outcomes

In recent years, there has been a notable paradigm shift in high school education, placing a significant emphasis on learning outcomes and competencies, marking a departure from traditional content-based approaches. In general, students are motivated to study by outside forces rather than the genuine "need to know" that is a crucial component of PBL's motivating impact. (Larmer, 2015)

In response to a question about why they were bored, the students gave various reasons, with these as their top three: "Material wasn't interesting" (81 percent), "Material wasn't relevant to me" (42 percent) "No interaction with teacher" (35 percent).

Experienced teachers know that when students are deeply engaged by a topic or a task, a lot of classroom management issues fade away. Students who used to disrupt class behave differently when they're doing active work on a project that engages them (Lambros, 2002).

The examples provided are used to illustrate the reasons why students often report feeling bored in the classroom and how their engagement with the material can significantly impact their behavior. The first set of statistics highlights the top three reasons students cited for their boredom, including the lack of interesting and relevant material and limited interaction with the

teacher. These statistics help to emphasize the importance of addressing these factors to enhance student engagement. The second example, referencing Lambros (2002), underscores the idea that experienced teachers understand the link between student engagement and classroom management. When students are actively engaged in meaningful tasks or projects that capture their interest, classroom disruptions tend to decrease. This serves as a practical insight into the relationship between engagement and classroom behavior.

### 3.5. Exploring the 4th Grade High School Curriculum in the BiH educational system: An Overview

This curriculum taken from “Common core curriculum plans and programs for foreign languages defined on learning outcomes” (Naletilić, 2014) lays the foundation for language development, communication skills, cultural understanding, and the cultivation of various competences. Here are the key components:

In the 4th grade, students focus on honing their language and communication skills. This includes:

- Listening (A.IV.1): Students learn to interpret listened content using various strategies while cultivating a positive attitude towards active listening.
- Vocabulary and Language Structures (A.IV.2): Students expand their vocabulary and analyze language structures and pronunciation in listened content.
- Reading (B.IV.1): They read different types of texts and digital content with understanding, employing reading strategies and technology.
- Reading Strategies (B.IV.2): Students use various strategies to acquire and analyze unknown words, language structures, and phonetic regularities.

The curriculum places a significant emphasis on cultural understanding, including:

- Culture Exploration (B.IV.3): Students explore the language, culture, and democratic values of English-speaking countries and their own culture.
- Intercultural Communication (C.IV): They engage in various forms of speech production and communication, with a focus on formal and informal language and reflection on communication patterns in different intercultural contexts.

Students are encouraged to develop strong written communication skills and critical thinking abilities:

- Writing (D.IV.1): They write different types of texts, respecting language rules, and vocabulary usage.

- Writing Strategies (D.IV.2): Students employ various strategies for writing creative, critical, and functional texts for effective communication in both real and digital environments.
- Reflective Writing (D.IV.3): They write reviews of intercultural experiences, reflecting on the facts and characteristics of their own and other cultures.
- Multilingualism, Multiculturalism, and Competences (D.IV.4 and D.IV.5). Students analyze literary creativity not only in English-speaking countries but also in other cultures. Multilingualism and Multiculturalism (D.IV.5): They explore the role of media and information and communication technologies in fostering multilingualism and multiculturalism.

The curriculum emphasizes the development of key competences through a competence approach, including:

- Learning How to Learn: Encouraging students to become self-directed learners.
- Social and Civic Competence: Fostering active citizenship and social responsibility.
- Entrepreneurial Competence: Nurturing creativity, innovation, and an entrepreneurial mindset.
- Intercultural Competence: Preparing students for intercultural interactions and global citizenship.
- Digital Competence: Equipping students with digital literacy skills.
- Creative-Productive Competence: Encouraging creativity and productivity.

Our project aligns seamlessly with the anticipated outcomes stipulated in the English language curriculum, encompassing various facets of language acquisition and communication proficiency. These expected outcomes, categorized across different dimensions, reflect a comprehensive approach to linguistic competence and cultural understanding.

In the domain of listening and comprehension (A. IV<sup>1</sup>), our project resonates with the curriculum's objectives. By employing effective listening strategies, our endeavor fosters a favorable disposition towards active listening (A.IV.1). Furthermore, it engages with vocabulary utilization, linguistic structures, and pronunciation nuances of the content being listened to (A.IV.2). Critical analysis of communication patterns in everyday intercultural contexts is integral to our project's design (A.IV.3), as is the examination of media and information technologies' roles within interculturality (A.IV.4).

In the sphere of reading comprehension (B.IV), our project harmonizes with the curriculum's goals. It involves reading diverse text types and digital materials with comprehension,

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<sup>1</sup> letter A,B,C,D represents category underlined; number IV represents the fourth grade of high school

employing strategies and technological resources (B.IV.1). Our approach encompasses diverse reading strategies for comprehending unfamiliar words, linguistic structures, and phonetic regularities (B.IV.2). Exploration of English-speaking countries' language, culture, and democratic principles is embedded within our project (B.IV.3). Furthermore, we acknowledge and dissect media and technology's roles in intercultural contexts (B.IV.4).

Regarding oral communication (C.IV), our project aligns with the curriculum's ambitions. Participation in various speech forms, both formal and informal, while integrating features of standard and non-standard language, constitutes a central aspect (C.IV.1). The usage of diverse communication strategies in English-speaking interactions is integral (C.IV.2). Critically reflecting on communication patterns within diverse intercultural contexts is facilitated by our project (C.IV.3), and its design incorporates an examination of media and technology's impact within interculturality (C.IV.4).

Within the realm of written communication (D.IV), our project dovetails with the curriculum's objectives. Crafting various text genres using appropriate vocabulary and adhering to spelling and linguistic conventions is a core tenet (D.IV.1). The project encourages the application of varied strategies for composing creative, critical, and utilitarian texts across real and digital environments (D.IV.2). Inclusive in our approach is the creation of reviews based on intercultural experiences, contemplating cultural facets (D.IV.3). The project's framework also involves an assessment of literary creativity in English-speaking and diverse cultures (D.IV.4), while exploring the intersection of media, technology, multilingualism, and multiculturalism (D.IV.5).

Furthermore, our project offers opportunities for educational activities that nurture key competences, including learning to learn, social and civic competence, entrepreneurial competence, intercultural competence, digital competence, and creative-productive competence. These facets underscore the holistic educational value of our project, aligning cohesively with the competence-based approach advocated by the curriculum (*Predmetni Kurikulumi / Online Platforma Za Kurikulum*, n.d.) & (Naletilić, 2018, p.65-77)

The importance of outcomes in project-based learning (PBL) lies in assessing the effectiveness and impact of this instructional approach on student learning and development. Outcomes serve as measurable indicators of what students are expected to achieve as a result of engaging in PBL experiences. These outcomes can encompass various domains, including knowledge acquisition, skills development, and attitudinal changes. Several studies have suggested that language learning is supported by what students are able to do and is also supported by varied opportunities (Lee, Quinn, & Valdés, 2013).

The article titled "Assessing Students During the Problem-Based Learning (PBL) Process," (2015) authored by Phyllis Blumberg, Ph.D. from the University of the Sciences in Philadelphia, explores the essential assessment processes within Problem-Based Learning (PBL). In light of the current emphasis on assessment, educators are actively investigating a range of assessment methods designed to improve students' performance. As explained in the article stated above that assessing outcomes in PBL is crucial for several reasons:

- Outcomes provide evidence of what students have learned and achieved through their engagement in PBL. They allow educators to evaluate the effectiveness of the instructional approach in promoting meaningful learning experiences.
- Demonstrating positive outcomes in PBL can help institutions and educators justify the investment of resources and time into implementing this instructional method. It allows stakeholders to understand the value and impact of PBL on student learning outcomes.
- Assessing outcomes in PBL enables educators to reflect on their teaching practices, identify areas for improvement, and make necessary adjustments to enhance student learning experiences. Outcomes provide students with clear goals and expectations, enabling them to track their progress and take ownership of their learning.
- They also allow students to showcase their acquired knowledge, skills, and growth to future employers or educational institutions. „One classroom teacher, for example, was impressed by the students' increased ability to generate their own questions to guide their scientific inquiry “(Barron, 1998, p275).

Overall, outcomes in PBL are essential for evaluating, improving, and demonstrating the effectiveness of this student-centered approach in fostering deep learning, critical thinking, and the acquisition of relevant skills for future success.

A normal classroom, often associated with traditional teaching methods, typically follows a teacher-centered approach where the teacher is the primary source of knowledge and instruction. In contrast, a Project-Based Learning (PBL) classroom is student-centered, emphasizing active learning, inquiry, and problem-solving. In a normal classroom, the teacher usually delivers information through lectures, textbooks, and structured assignments. The focus is on transmitting knowledge from the teacher to the students. In a PBL classroom, the emphasis is on student inquiry and active learning. Students engage in projects or real-world problems, working collaboratively to explore and construct their knowledge. The teacher acts as a facilitator, guiding and supporting students' learning process. Students in a normal classroom are typically passive recipients of information. They listen to lectures, take notes, and complete assignments or exams to demonstrate their understanding. In a PBL classroom, students take an

active role in their learning. They drive the learning process by asking questions, conducting research, collaborating with peers, and applying their knowledge to solve real-world problems.

### 3.6. Alignment of PBL with skills for the 21st Century

The number of students enrolled in particular professions must be balanced with the actual capabilities and demands of the society in which we live. To guarantee that the entire educational system is in accordance with contemporary scientific and technical advancements, it is also necessary to harmonize educational processes, including learning and teaching techniques (Kundalić et al., 2018). According to Wiggins and McTighe's argument in *Understanding by Design* (2005), backward design is primarily concerned with improving student comprehension. Teachers frequently place more emphasis on the activities and instruction than the results of the instruction when creating lessons, modules, or courses. Therefore, it may be said that teachers frequently place a greater emphasis on teaching than on learning. When learning is actually generated from an in-depth investigation of the meaning of the action, this approach might lead to the mistake that learning is an activity. Teachers often make unique changes to their practices, mapping new behaviors onto old behaviors and switching between old and new practices, with varying degrees of success. Teachers also revert to beginner status as a result of changing their methods, which frequently leads to difficult classroom management techniques and failures in orchestrating the many components of problem-based science. However, the authors of "*Understanding by Design*" (2005), come to the conclusion that enactment issues may be successfully supported by a supportive school climate that enables instructors to reflect on their practices and to attempt adjustments in these practices through enactment coupled with cooperation and feedback. For high school students, project-based learning (PBL) can offer numerous benefits and contribute to their educational and personal development. Over 40% of EU companies that participated in a study on Foreign Language Proficiency and Employability (Beadle, 2015) disagree with the claim that graduates from national educational systems possess the essential level of foreign language proficiency for employment. PBL promotes active engagement by providing students with hands-on, real-world projects that are relevant and meaningful to their lives. This approach can enhance student motivation and enthusiasm for learning, as they are actively involved in solving problems and addressing authentic challenges. PBL encourages students to think critically, analyze information, and develop effective problem-solving skills. Soft skills like communication and foreign language proficiency are among the professional abilities and soft skills that need to be improved to meet the demands of the labor market. (Muharemagić, 2022) Through engaging in complex projects, students learn to identify problems, gather and evaluate information, generate creative solutions, and make informed decisions.

## 4. Research Project

The subject of the study and its goal, together with the aims and objectives, will be presented in this section. The research approach will be discussed, with an emphasis on the data collecting, research tools, and study restrictions. The study's findings will be illustrated.

Goal: To explore the alignment of PBL projects with high school curriculum standards and learning outcomes in English language teaching.

### 4.1. Research Objectives:

- a. To evaluate the extent to which PBL projects align with specific language learning objectives and standards.
- b. To investigate the integration of PBL projects with other subject areas and interdisciplinary learning.
- c. To examine the alignment of PBL projects with the development of 21st-century skills, such as critical thinking, creativity, communication, and collaboration.

### 4.2. Research Question

How effectively do Project-Based Learning (PBL) projects align with high school curriculum standards and learning outcomes, including specific language learning objectives and standards, integration with other subject areas and interdisciplinary learning, and the development of 21st-century skills such as critical thinking, creativity, communication, and collaboration?

### 4.3. Research Methods

A mixed-methods approach was used to investigate the alignment of Project-Based Learning (PBL) projects with high school curriculum standards and learning outcomes, specifically focusing on language learning objectives, interdisciplinary connections, and the development of 21st-century skills. This approach allowed for a comprehensive understanding of the topic by combining quantitative and qualitative data collection and analysis.

With the support of my colleague Mirela Vasić Hadžihalilović, a high school teacher, a thorough literature review was made in order to establish a theoretical foundation and identify existing research on PBL, curriculum standards, and learning outcomes in the EFL classroom. This provided valuable insights into the current state of knowledge and help identify any gaps that need to be addressed in the research. To assess the extent to which PBL projects align with specific language learning objectives and standards, the quantitative methods were applied. This involved developing surveys or questionnaires for teachers and students to gather data on the alignment of PBL projects with language learning objectives, as well as their perceptions of the effectiveness of the projects in meeting those objectives. Statistical analysis techniques were



used to analyze the survey data and determine the level of alignment. We engaged in the PBL process with high school students by designing and implementing a PBL project in collaboration with the participants. This participatory action research approach allowed us to work closely with students, guiding and facilitating their project while also gaining firsthand insights into the alignment of the project with curriculum standards and learning outcomes. We documented the project implementation process, collected relevant project artifacts, and conducted reflections and observations to capture the students' experiences and perspectives. By employing this mixed-methods approach and actively involving high school students in the PBL process, we aimed to provide a comprehensive analysis of the alignment of PBL projects with high school curriculum standards and learning outcomes. This research approach allowed for a deeper understanding of the topic.

#### 4.4. Research Design: Integrating PBL in the fourth grade English classes

The project "Exploring Ilidža Through Time" was a collaborative effort which also involved students in their final year at a high school<sup>2</sup> in Sarajevo. The project aimed to delve into the historical evolution of Ilidža, a locality in Sarajevo Canton, in Bosnia and Herzegovina, using the Project-Based Learning (PBL) method. The initiative was integrated into the annual English language course plan, ensuring its alignment with the curriculum objectives, and a detailed lesson plan was formulated to guide the entire process. The basic topic was provided by the teachers. However, the content and the product were determined by the learners, who were given space for creative work and independent decisions while remaining within a carefully planned teacher's plan, which is seen as an important characteristic of PBL. (Kalabzova, 2015).

The project 'Ilidža through time – A digital tourist guide' started in February of 2023. The idea was formed by a colleague Mirela Vasić Hadžihalilović, who is a teacher, and with my own contribution. Ms. Vasić already integrated the project in her annual course planning and she was kind to include me since I was searching for a project which I could make with high school students. Two English classes were included in this project, both English classes were in IT programs, which had 3 classes per week). Since the students were in their final year, we did not have much time. They had many final exams, preparations, concerts, tasks and there also some issues with bad weather interfering in the realization of the activities of filming outdoors. In each class students were divided into groups of 4 to 5, with the note that they all needed to have their own tasks beside the main group task. Everyone was also encouraged to share and help the other class if they found it necessary.

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<sup>2</sup> Fourth Gymnasium Ilidža (Četvrta gimnazija Ilidža )

Project Duration: Five months: From 01.02.2023. to 01.07.2023.

Project Development:

In the preparation phase the possibility of linking the project to the prescribed curriculum was considered. The connection to other subjects like German, Bosnian language, IT, Geography, Arts, Music and History was also thoroughly explored.

It is linked with German and Bosnian language since the videos in our guide have subtitles in these languages. It is linked to Geography since students had to find maps and do research about the important locations near and in Ilidža. It is also connected with Arts and Music since cultural aspect was one of our main focuses of this work, meaning that students found a variety of cultural objects, music and famous artists from Ilidža. As already stated, the students in this project were from the IT program and they used a lot of their IT knowledge while making the online guide and interactive map.

The project commenced with an introductory session, where we presented the overarching goal: to trace the transformation of Ilidža through different periods and make a guide for tourists and young students. The project's connection to historical research and digital media was highlighted, emphasizing the students' roles as researchers, content creators, and presenters.

Students and teachers had to agree on assessment criteria and the students knew exactly what they were supposed to focus on and what the assessment standards were. Furthermore, defined criteria helped students to better apply peer-assessment or self-assessment in diverse activities.

"Projects involve students in a constructive investigation. An investigation is a goal-directed process that involves inquiry, knowledge building, and resolution" (Thomas, 2000, p.4). In this context, students actively embraced this principle as they designed the project timeline, incorporating preparations for the collection of artifacts and data spanning different historical periods in Ilidža's history. They were thoughtfully provided with essential resources and guided on the intricacies of conducting primary and secondary research. Central to this investigative process was the emphasis on sourcing information from credible outlets and rigorously validating their findings. Whether working individually or in pairs, students fervently engaged in inquiring into various historical eras, meticulously gathering information, images, and videos that shed light on each epoch, thus exemplifying the essence of constructive investigation within the project framework.

### Content Creation and Video Production:

Apart from researching about information and pictures, each pair was also responsible for creating a video segment dedicated to a specific historical period. PBL assumes that project work will be completed, mostly in project teams, which is another element that students should be prepared to do so that they are able to work in effective teams in the future. (Kalabzova, 2015).

### Development of Online Platform:

As the project's centerpiece, an online platform was created to host the videos, images, and textual content. This digital repository acted as a timeline, allowing users to navigate through Iliđža's history. Students collaboratively designed the platform's structure, ensuring easy navigation and a cohesive narrative.

In this image, captured from our Digital Tourist Guide project, a student demonstrates the user-friendly instructions for accessing the "desktop site" on a mobile device through a QR code scan, enabling users to navigate freely and interact with the guide's content.

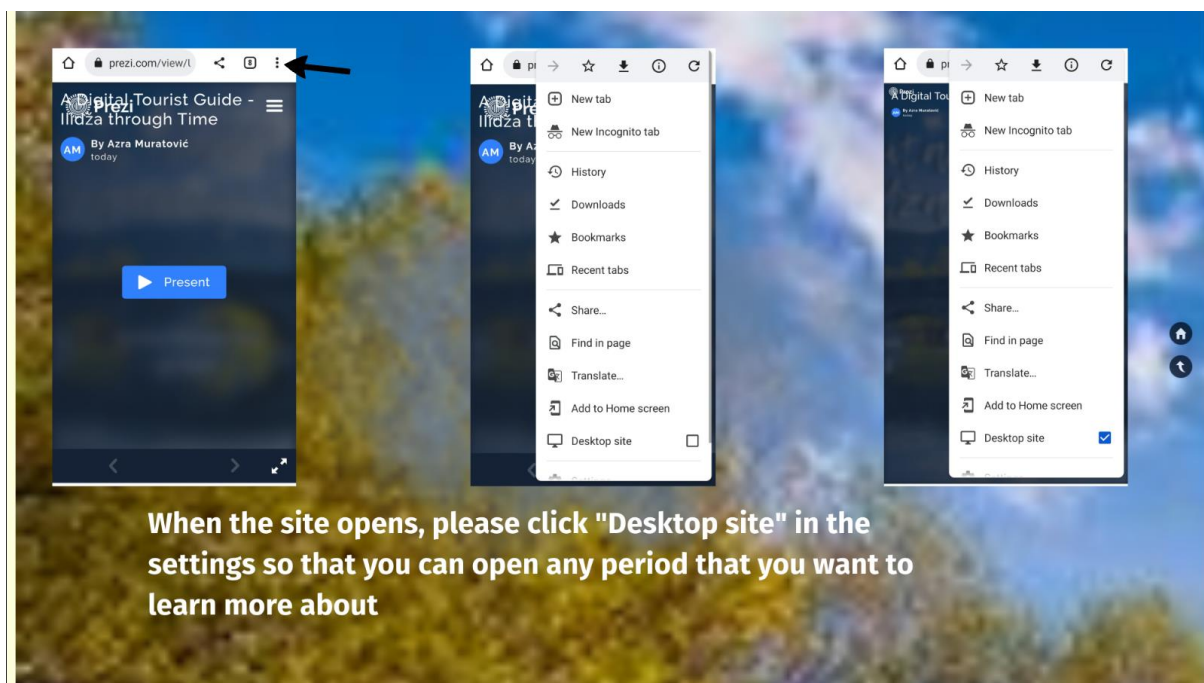


Image 1 : Instructions on how to use the guide on the phone for better experience (Vasić & Muratović, 2023)

In this image, featured in our Digital Tourist Guide project, the main page provides users with an overview of various historical periods, while the backdrop showcases the enduring Roman Bridge and its arches, symbolizing its presence throughout the ages.



Image 2 : The home page of the guide (Vasić & Muratović, 2023)

This image from our Digital Tourist Guide project showcases an interactive map seamlessly integrated with Google Maps, offering tourists easy access to key landmarks and points of interest mentioned in the guide, enhancing their exploration experience.

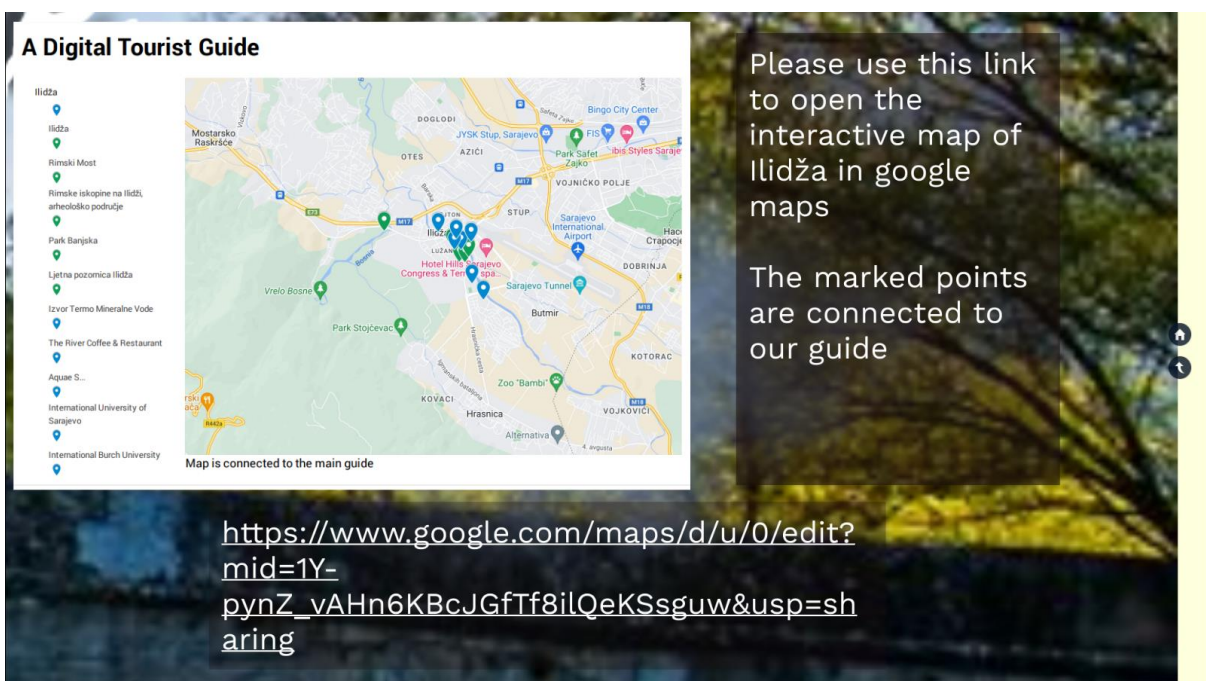


Image 3 : Interactive map connected with google maps (Vasić & Muratović, 2023)

In this snapshot from our Digital Tourist Guide, we present one of the dedicated sections focusing on a specific historical period. Here, users can delve into a wealth of valuable information, captivating images, and even a video that immerses them in the unique details of that particular era.

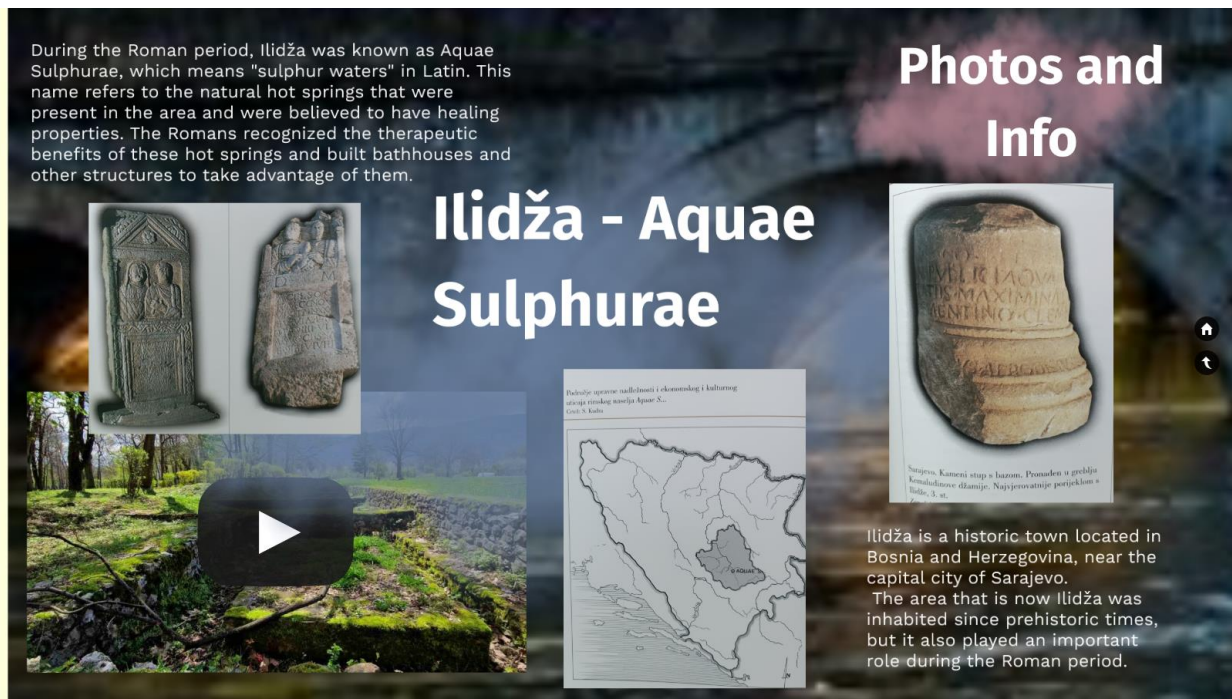


Image 4 : Slide from the guide about the specific period of Ilidža (Roman period) (Vasić & Muratović, 2023)

#### QR Code Integration and Distribution:

To extend the project's impact beyond the classroom, students designed and generated QR code generator and included an interactive map that is connected to google maps. These QR codes were placed at relevant sites in Ilidža, allowing locals and visitors to access the online platform using their mobile devices.



Image 5: QR code for the guide

### Project Presentation:

The project culminated in a formal presentation to the school's vice president, teachers, and fellow students, embodying the principles of social constructivist theories of learning (Dale & Tanner, 2012). This presentation served as a testament to the understanding that language acquisition is a social, dynamic process, as each pair of students actively engaged with one another to showcase their video segment and collaboratively explained the historical significance of their chosen period.

Formative assessment (during project execution) and Summative evaluation (at the end of the project):

Formative assessment, conducted during the course of a project, plays a pivotal role in gauging and enhancing student learning experiences. As Redžepagić (2020) aptly emphasizes, the realm of educational evaluation is a multifaceted landscape, devoid of one-size-fits-all solutions. Formative assessment embodies the dynamic and adaptive nature of education, acknowledging that no uniform approach can universally apply to all teaching practices and learning contexts. This ongoing assessment process allows educators to gain valuable insights into student progress, adapt instructional methods, and identify areas for improvement as the project unfolds.

Summative evaluation, conducted at the culmination of a project, represents the capstone assessment that measures the overall success and achievement of learning objectives. Redžepagić's (2020) perspective underscores the complexity of evaluating learning and teaching within educational settings, highlighting the need for nuanced approaches tailored to specific contexts. Summative evaluation provides a comprehensive overview of the project's outcomes, emphasizing the holistic impact on students' knowledge, skills, and abilities. This final assessment offers valuable feedback to educators, students, and stakeholders, informing future educational endeavors and shaping the way forward in the ever-evolving landscape of learning and teaching.

In the context of evaluating student performance in our project, Redžepagić's (2020) reflection on the multifaceted nature of evaluation presents a compelling perspective. The grades that the students earned during the project were intricately tied to their collaborative efforts within their teams, individual contributions, resource utilization, and presentation techniques. As Redžepagić (2020) points out, evaluation encompasses not only the final result achieved but also the methodology employed, the complexity of the task, the application of acquired knowledge, the quality of the product, and the effectiveness of group cooperation. This

approach aligns with formative assessment, which allows instructors to continuously gather feedback on project progression, providing valuable insights into the strengths and weaknesses that influence the project's outcomes.

All students got an excellent score connected to questions my colleague and me would follow to determine the involvements of students during the project, which were connected to the learning goals outlined in this report.

Questions that we used to keep track of our students' work during the project:

1. Is the student actively participating in group discussions and consistently demonstrating enthusiasm for the project's goals?
2. Is the student committed to meeting project deadlines? Does the student actively seek opportunities for learning?
3. Is the student contributing to the project?
4. Is the students' language skills showing substantial improvement?
5. Is the student effectively expressing his/her ideas in English, with a noticeable increase in vocabulary and fluency?
6. Is the student consistently displaying strong critical thinking skills?
7. Are the students improving in problem-solving tasks? Does the student offer insightful solutions to project challenges?
8. Are the students a team player, fostering positive collaboration within the group?
9. Is the student effectively connecting classroom learning to the project's real-world context?

In our research, we have established a clear correlation between the various aspects mentioned earlier and the final grades assigned to students in our project. We recognized the significance of this opportunity to evaluate our students comprehensively, shedding light on both the learning process and the acquired knowledge. To achieve this, we designed a multifaceted grading approach aimed at providing a more holistic assessment of their performance. While this task presented its own set of challenges, it ultimately allowed for a more nuanced understanding of our students' capabilities and achievements.

Our grading system encompassed three key components, each reflecting different facets of student engagement and proficiency:

*Written Work Evaluation:* One crucial component of our grading methodology involved a comprehensive assessment of students' written work. This evaluation examined their ability to effectively communicate ideas, apply language skills, and articulate their understanding of the

project's subject matter. By focusing on written work, we were able to gauge their proficiency in written English and their capacity to convey complex information in a coherent manner.

Out of the 40 students, an impressive 85% successfully finished their Written Work assignments in a timely and satisfactory manner. This outcome reflects the students' strong work ethic, their ability to effectively apply language skills, and their commitment to articulate their understanding of the project's subject matter in writing.

*Oral Presentation Assessment:* Another pivotal dimension of our grading approach centered on students' oral presentations. This aspect assessed their public speaking skills, ability to engage with an audience, and their capacity to effectively communicate their findings. Evaluating oral presentations allowed us to gauge their verbal communication skills, critical thinking abilities in real-time, and their overall confidence in presenting information.

Out of the 40 students, an impressive 99% successfully completed their Oral Presentation Assessment, demonstrating their outstanding oral communication skills, confidence in presenting, and their ability to engage with the audience. This remarkable achievement underscores their dedication to the project's objectives and their capacity to convey complex ideas verbally.

*Multimedia Product Evaluation:* In recognition of the contemporary importance of multimedia in communication and education, we included the assessment of students' multimedia products as a third grading component. This aspect examined their proficiency in using technology to create engaging and informative content, highlighting their adaptability in incorporating various media forms to convey information effectively.

Out of the 40 students, a noteworthy 99.9% successfully completed the Multimedia Product Evaluation, reflecting their outstanding ability to harness technology for educational purposes. This accomplishment highlights their commitment to the project's objectives and their aptitude for creating multimedia materials that effectively convey complex information.

Our commitment to a diversified grading approach aimed to provide a more comprehensive representation of our students' abilities and achievements in the project. By incorporating assessments of written work, oral presentations, and multimedia products, we were able to gain a well-rounded perspective of their overall performance. This approach not only acknowledged their linguistic competence but also their critical thinking skills, teamwork, and engagement with the EFL curriculum.

In conclusion, our grading methodology, encompassing these three critical components, has contributed to a more holistic understanding of our students' capabilities and learning outcomes.



While it presented certain challenges, it offered a fair and reflective assessment of their achievements, aligning with the multifaceted nature of Project-Based Learning (PBL) and the diverse skill set required for success in the EFL classroom.

#### Reflection and Evaluation:

A reflection session was conducted, allowing students to share their experiences, challenges, and personal growth. The overall impact of the project on their research skills, teamwork, and digital literacy was discussed. The most significant challenges are those that haven't even been identified as challenges. In her book “Projektna nastava bazirana na ishodima učenja” (Rustempašić, 2020), the author talked about how this demands performance evaluations of higher-order thinking abilities, activities that compel students to create high-quality outputs, and techniques of disciplined inquiry that allow students to integrate information to develop high-quality knowledge.

#### Outcomes and Impact:

When evaluating and assessing any educational project, outcomes, and effects are vital since they give important information about successful and long-lasting educational initiatives.

The entire plan, outcomes, and survey were carefully designed and prepared. Each class that was connected to the project was the same for both of us involved in the project as teachers. The principal of the school was also introduced to the project.

The "Exploring Ilidža Through Time" project exemplified the effectiveness of Project-Based Learning in fostering research skills, historical understanding, digital literacy, and collaborative teamwork. By immersing themselves in a comprehensive exploration of Ilidža's history and presenting their findings through multimedia, the students not only acquired knowledge but also developed skills that will serve them well in their academic and professional endeavors.

In the project's introductory class, I engaged 19 students, aged 18—9 boys and 10 girls—in a discussion about project-based learning, addressing their initial interest and concerns about its implementation given their busy schedules and university applications, ultimately leading to their enthusiastic decision to start the project. The project's inception began with a collaborative brainstorming session among students, focusing on the creation of a digital tourist guide for Ilidža, where the 4th gymnasium is located. Over a 30-minute period, students formulated the project's basic plan, emphasizing its potential benefits for both locals and students. The central concept that emerged was a comprehensive digital guide depicting Ilidža across historical periods: Roman, Ottoman, Ex-Yugoslavia, and the present day. This guide would feature

multimedia elements and an interactive map for user-friendly navigation, extending its utility beyond the designated platform. Following this, students were organized into groups, with suggested compositions to ensure effective task completion. Each group was responsible for researching and gathering information for a specific historical period, culminating in the creation of informative content, presentations, and ultimately, a collaborative digital tourist guide. The initial assessment of individual research and presentation skills played a pivotal role in grading students, aligning with the project's multifaceted approach to holistic skill development.

**Holistic Learning:** Students engaged in research, media production, platform development, and public speaking, fostering a holistic skill set.

**Historical Understanding:** Through hands-on research, students gained a deep understanding of Ilidža's evolution and the historical context of each period.

**Digital Competence:** The project enhanced students' digital literacy, enabling them to develop an interactive online platform and effectively use multimedia tools.

**Community Engagement:** The QR codes facilitated engagement with the local community, sharing the historical insights with a wider audience.

#### 4.5. Research surveys and results

The uniqueness of the PBL approach when compared to the standard learning reflect in the importance of receiving feedback from students about the project. The survey conducted for this project was composed out of nine questions, where six questions were multiple choice questions and three were open-ended questions.

The importance of survey is related to the following principles:

##### Feedback Gathering

The survey allows teachers to collect feedback from students regarding their experience with project-based learning (PBL) in the English class. This feedback is essential for assessing the effectiveness of the teaching approach and making informed decisions for future instructional planning.

##### Student Engagement

By actively involving students in providing feedback, the survey encourages their active participation and engagement in the learning process. It shows that their opinions and perspectives are valued, fostering a sense of ownership and dedication to their education.

### Assessment of Overall Experience

The survey helps assess the students' overall experience with PBL in the English class. It provides insights into their satisfaction levels, allowing teachers to gauge the success of the project and identify areas for improvement.

### Language Skill Development

The survey seeks to determine the impact of PBL on students' understanding and use of English language skills. Positive responses would indicate that the project effectively contributed to the development of their language proficiency, reinforcing the value of the PBL approach.

### Engagement and Enjoyment

The survey explores whether PBL made English learning more engaging and enjoyable for the students. Positive responses in this regard suggest that the project succeeded in creating a stimulating and enjoyable learning environment, which can enhance motivation and promote active participation.

### Skill Enhancement

By inquiring about the development of important skills beyond language proficiency, such as critical thinking, problem-solving, collaboration, and relevance to real-life situations, the survey assesses the broader educational benefits of PBL. Positive responses highlight the effectiveness of the project in promoting these essential skills.

### Significance of the Study -The importance of the digital guide for Ilidža

The digital tourist guide for Ilidža offers numerous positive aspects, particularly for young people and tourists. Firstly, it provides an engaging and interactive platform for young people to explore and showcase the rich cultural heritage, natural beauty, and recreational opportunities of Ilidža. Through the digital guide, young individuals can develop their research, communication, and technological skills while creating content that appeals to their peers. Additionally, the guide serves as a valuable resource for tourists, offering comprehensive information on attractions, historical sites, local cuisine, and events in Ilidža. It empowers visitors to navigate the area confidently, discover hidden gems, and fully immerse themselves in the local culture. The digital format allows for easy accessibility, instant updates, and multimedia integration, making it an engaging and user-friendly resource for both young people and tourists alike.

The results of the survey completed upon the final stage of the project:

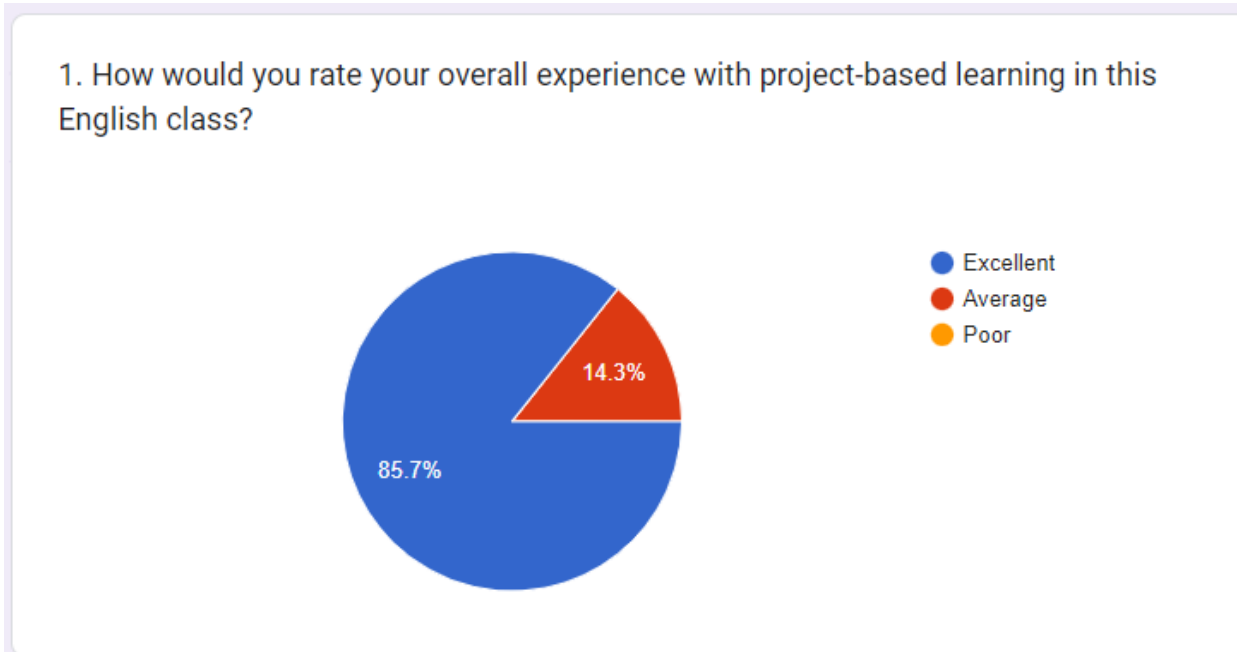


Image 6: This question sought to determine the respondent's level of satisfaction and perception of their Project-Based Learning (PBL) experience in their English class.

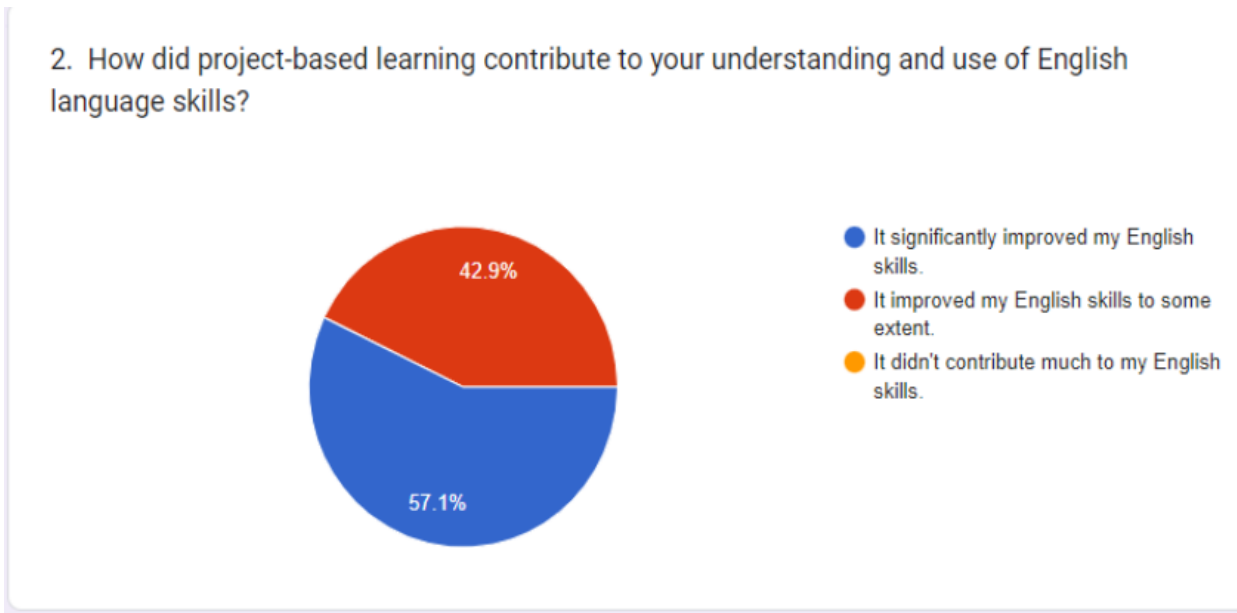


Image 7: These questions sought to determine the contribution of PBL to understanding and usage of English language skills

3. Did project-based learning make English learning more engaging and enjoyable for you?



Image 8: Question sought to understand whether PBL had a positive effect on the learner's engagement and enjoyment in the process of acquiring English language skills.

4. How did project-based learning help you develop important skills beyond language proficiency?

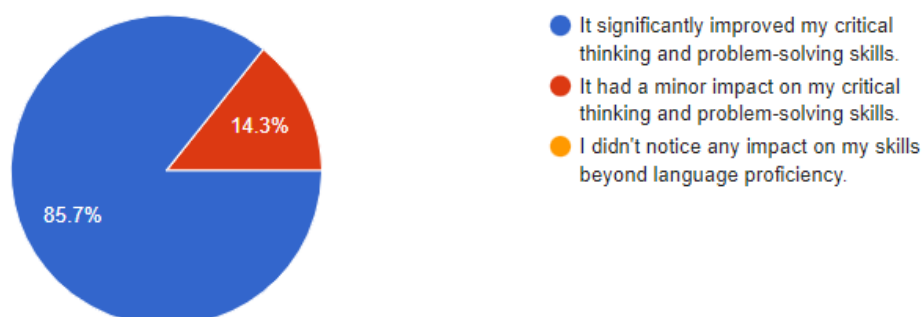


Image 9: The aim of this question was to explore the ways in which Project-Based Learning (PBL) contributed to the development of skills beyond language proficiency in the respondent.

5. Did project-based learning enhance your ability to work collaboratively with your classmates?

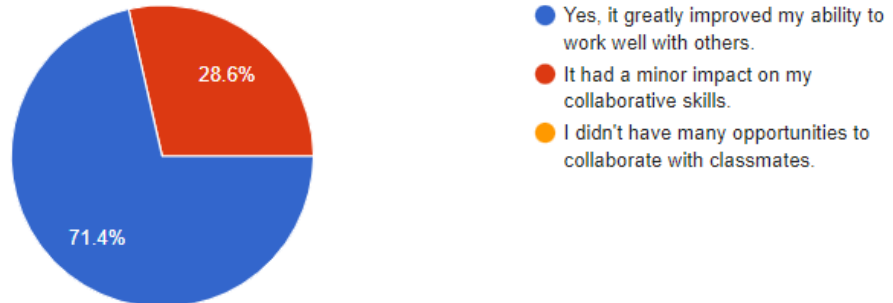


Image 10: The point of this question was to assess whether Project-Based Learning (PBL) had a positive impact on the respondent's collaborative skills when working with their classmates.

6. How did project-based learning make English learning more relevant to real-life situations?



Image 11: The aim of this question was to inquire about how Project-Based Learning (PBL) enhanced the relevance of English learning to real-life situations for the respondent.

7. In your opinion, what were the strengths of project-based learning in this English class?

Engagement, fun, researching different topics.

It was fun and we got to know each other better

Team work and problem solving

Learning about different traditions and cultures in different times

Communication skills, teamwork, fun

I believe that project-based learning is definitely the best way of learning, because it helps students learn faster and it eliminates stress which is unfortunately very present in school.

Image 12: The aim of this question was to solicit the respondent's perspective on the strengths and positive aspects of using Project-Based Learning (PBL) in their English class.

8. In your opinion, what were the limitations or challenges of project-based learning in this English class?

Everything new is a challenge

Deadlines

We were limited by weather conditions (rain)

I don't see any

/

Image 13: The aim of this question was to gather the respondent's opinion on the limitations or challenges they encountered while using Project-Based Learning (PBL) in their English class.

9. Do you feel that project-based learning should be incorporated more frequently in EFL classes? Why or why not?

I think it should be incorporated more frequently because it is fun and interesting.

Yes because they offer a different take

I think that is one of best ways to improve our english

I believe that they should be involved in EFL classes more often, because of the acquisition of new knowledge and abilities

Yes. It is way more practical to use english in projects. Students have to learn and adapt and it is much easier than usual learning.

Yes, I believe that we need this type of learning in every class, because it allows students to express themselves and their ideas.

Image 14: The aim of this question was to ascertain the respondent's opinion on the frequency of incorporating Project-Based Learning (PBL) into English as a Foreign Language (EFL) classes.

In examining the data gathered from our research and connecting it to the principles and theory of Project-Based Learning (PBL), several key quotes and findings emerged, shedding light on the effectiveness of this pedagogical approach.

First and foremost, students acknowledge the real-world relevance of our project, demonstrating a fundamental aspect of PBL. They engage directly with their local environment and community, making the learning experience more authentic. PBL, as a teaching strategy, emphasizes the application of knowledge and skills in practical, real-life scenarios. As one student aptly expressed, "PBL helps me develop my critical thinking and problem-solving skills. It pushes me to think creatively and find solutions on my own." This aligns perfectly with PBL's emphasis on critical thinking, creativity, and problem-solving.

Moreover, the project's focus on the students' locality and high school nurtures a sense of pride and ownership, an essential component of PBL. This sense of ownership and connection to the project translates into increased motivation and dedication, factors that directly contribute to the success of PBL initiatives. When students are emotionally invested in a project, they are more likely to put in the effort required for producing high-quality work. This connection is vital to the collaborative and authentic nature of PBL.

The creation of a digital tourist guide, as observed in our research, offers a meaningful context for language learning, aligning with another core principle of PBL. By working on a real-life



project that requires them to research, organize information, and present it effectively, students are motivated to apply and develop their language skills. This practical application enhances their learning experience. One student aptly stated, "PBL makes learning English more engaging and meaningful. We get to work on real-life projects and use English in practical ways." This reinforces PBL's goal of making learning relevant and engaging.

However, it's essential to acknowledge the challenges students faced during this project, as these challenges also tie into the principles of PBL. Time management, a common challenge in PBL, highlights the need for students to take responsibility for their learning and project management. PBL encourages independent learning and self-direction, which can be challenging for students who are accustomed to a more structured approach. This aligns with the PBL principle of fostering self-directed learning. Additionally, working in teams, although a valuable skill, can present difficulties related to communication and cooperation, reflecting the need for students to develop interpersonal skills, another facet of PBL.

In conclusion, the data and quotes collected from our study reveal a strong alignment between the principles and theory of Project-Based Learning and the outcomes of our project. PBL effectively promotes critical thinking, problem-solving, ownership of learning, and the practical application of language skills. While challenges such as time management and teamwork arise, they underscore the importance of nurturing self-directed learning and interpersonal skills within the PBL framework. Overall, our research provides compelling evidence that PBL is a powerful approach for creating authentic and meaningful learning experiences in the EFL classroom.

## 4.5. Interpretation of Results

The research question I set out to explore was: *How effectively do Project-Based Learning (PBL) projects align with high school curriculum standards and learning outcomes, including specific language learning objectives and standards, integration with other subject areas and interdisciplinary learning, and the development of 21st-century skills such as critical thinking, creativity, communication, and collaboration?*

Our PBL project, centered around creating an interactive guide to Ilidža has yielded promising results that align seamlessly with our high school curriculum standards and learning outcomes. From the outset, our project was meticulously designed to encompass various facets of language learning, interdisciplinary collaboration, and the development of essential 21st-century skills. First and foremost, our project's successful integration of technology into the learning process exemplifies a forward-thinking approach that aligns with both modern educational practices and high school curriculum standards. The incorporation of digital tools not only engaged our students but also provided them with valuable digital literacy skills essential for their future academic and professional pursuits. The interactive guide itself, tailored for young students and tourists, exemplifies our commitment to aligning the project with specific language learning objectives and standards. It provided students with a platform to apply and consolidate their language skills in a real-world context. As they designed the guide, they had to carefully consider language use, clarity, and the needs of their target audience, thereby reinforcing their language proficiency. Furthermore, the project's interdisciplinary nature was a key aspect of its success. The collaborative efforts of our students spanned various subject areas, seamlessly integrating English language learning with history, geography, and technology. This multidisciplinary approach not only enriched the content of the guide but also showcased the relevance of English in broader academic contexts. Perhaps the most significant achievement of our project was the development of 21st-century skills among our students. Through the various project phases, they honed their critical thinking, creativity, communication, and collaboration skills. The process of researching, designing, and presenting the guide required them to think critically, communicate effectively, and collaborate harmoniously with their peers. These skills are invaluable not just for language learning but also for their future careers and personal growth. The survey conducted among the students corroborates the success of our project and the positive impact of PBL in our EFL classes. The feedback collected revealed that students found the project to be not only engaging but also instrumental in improving their English language skills. They cited increased confidence in speaking, better writing abilities, and a deeper understanding of English in practical contexts.

## 5. Final conclusion and recommendations

In our experience with Project-Based Learning (PBL) in BiH high schools, we encountered the challenge of aligning the educational system's focus on grades with true knowledge acquisition. We recognized that this problem stemmed from the emphasis on teaching over learning and the need to adhere to strict curriculum standards. Our project's primary focus was on the outcome, echoing the importance of students making sense of what they learn.

The integration of PBL into the EFL curriculum demonstrated significant gains in language proficiency across all domains – listening, speaking, reading, and writing. This approach facilitated interdisciplinary learning, enhancing critical thinking and problem-solving abilities. Furthermore, it fostered 21st-century skills development through creative thinking, teamwork, and effective communication.

In conclusion, our PBL initiative created a guide to Ilidža that showcased the efficacy of this approach in the EFL classroom. The project was well-aligned with curriculum standards, language objectives, and interdisciplinary integration. The use of technology enriched the project and adhered to modern educational standards. Interdisciplinary collaboration provided a holistic learning experience and equipped students with vital skills. Survey results reinforced the project's success in enhancing English language skills and building student confidence in EFL high school classrooms, when aligned with specific learning outcomes, significantly enhances language proficiency, critical thinking, and engagement. However, educators must address challenges like time constraints and assessment complexities to maximize PBL's benefits. Flexibility in the curriculum is crucial, supported by ongoing professional development and a gradual implementation approach. Embracing PBL prepares students for both academic and real-world success.

## 6.References

1. Adams, S. (2019). "EFL Lesson Plan Template". OER Commons. Institute for the Study of Knowledge Management in Education. <https://oercommons.org/authoring/52181-efl-lesson-plan-template>
2. Affandi, A., & Sukyadi, D. (2016). Project-Based Learning and Problem-Based Learning for EFL Students' Writing Achievement at the Tertiary Level. *Rangsit Journal of Educational Studies*, 3(1), 23.
3. Ahmetovic, E & Becirovic, S., & Dubravac, V. (2020). Motivation, Anxiety and Students' Performance. *European Journal of Contemporary Education*, 9 (2) 271-289. DOI: 10.13187/ejced.2020.2.271 <https://files.eric.ed.gov/fulltext/EJ1262574.pdf>
4. Bartlett, W., Uvali'c, M., Durazzi, N., Monastiriotis, V., Sene, T. (2016). Higher Education Provision and Labour Market Needs in the Western Balkans Synthesis Report. European Union.
5. Barron, B., Schwartz, D. L., Vye, N. J., Moore, A., Petrosino, A., Zech, L., & Bransford, J. D. (1998). Doing with understanding: Lessons from research on problem- and project-based learning. *Journal of the Learning Sciences*, 7(3-4), 271-311.
6. Beadle, S., Humburg, M., Smith, R., Vale, P. (2015). Study on Foreign Language Proficiency and Employability Final Report. European Commission, Brussels.
7. Becirovic, S., & Podojak, S. (2018). Intercultural Development of Bosnian University Students Through Foreign Language Learning. *European Researcher. Series A*, 2018, 9(2). DOI : [10.13187/er.2018.2.68](https://doi.org/10.13187/er.2018.2.68)
8. Bell, S. W. (2010). Project-Based Learning for the 21st Century: Skills for the Future. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 83(2), 39–43. <https://doi.org/10.1080/00098650903505415>
9. Blumberg, P. (2015). Assessing Students During the Problem-Based Learning (PBL) process. *International Association of Medical Science Educators - IAMSE*. <https://www.iamse.org/mse-article/assessing-students-during-the-problem-based-learning-pbl-process/>
10. Buck Institute for Education (2019). Gold Standard PBL: Essential Project Design Elements. <https://www.pblworks.org/what-is-pbl/gold-standard-project-design>
11. Cooper, R., & Murphy, E. (2016). *Hacking Project Based Learning: 10 Easy Steps to PBL and Inquiry in the Classroom*. Times 10 Publications.
12. Dale, L., Tanner, R. (2012). *Clil activities*. Cambridge: Cambridge University Press.
13. Coufalová, J. (2006). *Projektové vyučování*. Praha: Nakladatelství Fortuna.

14. Donnelly, R. Fitzmaurice, M. (2005) Collaborative Project-based Learning and Problem-based Learning in Higher Education: A Consideration of Tutor and Student Role in Learner-Focused Strategies. In G. O'Neill, S. Moore & B. McMullin (eds) *Emerging Issues in the Practice of University Learning and Teaching* (pp.87-98). Dublin, AISHE/HEA.
15. Fredi D. G. (2020). Problems of English language learning in context (Based on some Studies in Manggarai). Edisi Pertama-Ruteng; PKBM Sambu Poleng. Retrieved from <https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwjTiKy5yPKAAxUiUKQEHaaCpoQFnoECBUQAQ&url=https%3A%2F%2Fosf.io%2Fvudxy%2Fdownload&usg=AOvVaw2yWbKOJOaDQ5kIEPVq8AgD&opi=89978449>
16. Guralnick, D., Auer, M. E., & Poce, A. (2022). Innovative Approaches to Technology-Enhanced Learning for the workplace and Higher education: Proceedings of 'The Learning Ideas Conference' 2022. Springer.
17. Guthrie, C., & Vitoria, A.P.E.S., & Henderson, K., & Fordham, E & Baucal, A. (2022). OECD Reviews of Evaluation and Assessment in Education: Bosnia and Herzegovina. Organization for Economic Co-operation and Development. DOI: <https://doi.org/10.1787/a669e5f3-en>
18. Imamovic, A., & Delibegovic, N. Dz. (2016). The Status of the English in Bosnia and Herzegovina. Chapter: Past and Present. Pp19-35 DOI: 10.21832/9781783095971-004
19. Imamovic, A., & Mulahmetovic, A. (2018). International English: The Case of English in Bosnia and Herzegovina.
20. Jaleniauskiene, E., & Jucevičienė, P. (2019). Educational system for the development of collaborative Ill-structured problem-solving skills. *Pedagogika*, 132(4), 5–22. <https://doi.org/10.15823/p.2018.132.1>
21. Kalabzová, M. (2015). The Application of project-based learning in the English classrooms [MA thesis]. University of West Bohemia.
22. Kundalić, A., Zulejhić, E., Mahmić, S., Džaferbegović, A., Alibegović, N., & Šabić Hamidović, D. (2018). Realizacija praktične nastave u srednjim školama u BiH. *Asocijacija srednjoškolaca u Bosni i Hercegovini*.
23. Larmer, J., Mergendoller, J., & Boss, S. (2015). *Setting the Standard for Project Based Learning: A Proven Approach to Rigorous Classroom Instruction*. ASCD. Retrieved from <https://files.ascd.org/staticfiles/ascd/pdf/siteASCD/publications/books/Setting-the-Standard-for-PBL-sample-chapters.pdf>

24. Lee, O., Quinn, H., & Valdes, G. (2013). Science and language for English language learners in relation to Next Generation Science Standards and with implications for Common Core State Standards for English language arts and mathematics. *Educational Researcher*, 42(4), 223-233.
25. McTighe, J., & Wiggins, G. (2013). *Essential questions: Opening doors to student understanding*. ASCD.
26. Miller, L., Hafner, C. A., & Fun, C. N. K. (2012). Project-Based learning in a technologically enhanced learning environment for second language learners: Students' perceptions. *E-learning and Digital Media*, 9(2), 183–195.  
<https://doi.org/10.2304/elea.2012.9.2.183>
27. Muharemagić, Džalila. (2022). The Importance of Language and Communication Skills in the IT Industry in Bosnia and Herzegovina. 10.1007/978-3-030-90677-1\_21.
28. Muratović, A & Vasić K. M. (2023). A Digital Tourist Guide - Ilidža through Time. prezi.com. <https://prezi.com/view/c0LI7BdzQNDCoC5oTTC2/>
29. Naletilić, M. (2018). Zajednička jezgra nastavnih planova i programa za strane jezike definisana na ishodima učenja. Agencija za predškolsko, osnovno i srednje obrazovanje.
30. National Core Curriculum for Upper Secondary Schools (2003): National Core Curriculum for General Upper Secondary Education Intended for Young People, Helsinki: Finnish National Board of Education.
31. Nurwiansyah, I. (2016). 2 - Project based learning handbook. www.academia.edu. [https://www.academia.edu/20432502/2\\_Project\\_Based\\_Learning\\_Handbook](https://www.academia.edu/20432502/2_Project_Based_Learning_Handbook)
32. Oakley, B., Brent, R., Felder, R., & Elhajj, I. (2004). Turning student groups into effective teams. *Journal of Student Centered Learning* 2 (1) Retrieved from: [http://bie.org/object/document/turning\\_student\\_groups\\_into\\_effective\\_teams](http://bie.org/object/document/turning_student_groups_into_effective_teams)
33. Okvirni zakon o srednjem stručnom obrazovanju i obuci u BiH (2008.)
34. Predmetni kurikulumi | Online platforma za kurikulum. (n.d.). Ishodi Učenja. [https://kurikulum.ks.gov.ba/bs/elementi?predmet=Engleski%20jezik&element=pk4\\_ishodi\\_ucenja](https://kurikulum.ks.gov.ba/bs/elementi?predmet=Engleski%20jezik&element=pk4_ishodi_ucenja)
35. Rustempašić, S. M. (2020). Projektna nastava bazirana na ishodima učenja.
36. Schmidt, H. G. (2012). A brief history of problem-based learning. In Springer eBooks (pp. 21–40). [https://doi.org/10.1007/978-981-4021-75-3\\_2](https://doi.org/10.1007/978-981-4021-75-3_2)
37. Thomas, J. W. (2000). *A review of research on project-based learning*. San Rafael, CA: Autodesk Foundation.
38. Vrbanac, M. (2009). Projektna nastava u nastavi stranih jezika. *Stručni članak UDK* 371.314.6:81'243(091)

39. Wahbeh, D. G., Najjar, E. A., Sartawi, A. F., Abuzant, M., & Daher, W. (2021). The role of Project-Based Language Learning in developing students' life skills. *Sustainability*, 13(12), 6518. <https://doi.org/10.3390/su13126518>
40. Warschauer, M. (2000) The Changing Global Economy and the Future of English Teaching, *TESOL Quarterly*, 34(3), 511-535. <http://dx.doi.org/10.2307/3587741>
41. Wiggins, G., & McTighe, J. (2005). *Understanding by design* (2nd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.
42. Turcilo, L., & Osmic, A., & Kapidzic, D., & Sadic, S., & Ziga, J., & Dudic, A. (2019). *Youth Study Bosnia and Herzegovina*. The Friedrich-Ebert-Stiftung. Retrieved from: <https://library.fes.de/pdf-files/id-moe/15262.pdf>

## 7. Appendix

### Appendix 1: Lesson Plan for the project “A Digital Tourist Guide – Ilidža through Time”

LESSON PLAN		
THE NAME OF THE PROJECT:	A Digital Tourist Guide – Ilidža through Time	Time: 5 months
Subjects: English language – first foreign language German language – second foreign language	Grade/ Age: IV grade of secondary school / 18-year-olds	
Teachers: Azra Muratović Mirela Vasić – Hadžihalilović	Preconditions: None	
Other subjects:	History; Geography; IT; Arts; Biology; Music	
The field of knowledge economy (including the explanation)	<ol style="list-style-type: none"> <li>1. Tourism: Acquiring knowledge about the importance of natural resources and cultural-historical heritage and the skills to promote it from different aspects and perspectives.</li> <li>2. Entrepreneurship: Promotion of hotels and other catering and cultural facilities and educational institutions.</li> <li>3. Health-medical tourism (spa, thermal water...)</li> </ol>	
Research question	How effectively do Project-Based Learning (PBL) projects align with high school curriculum standards and learning outcomes, including specific language learning objectives and standards, integration with other subject areas and interdisciplinary learning, and the development of 21st-century skills such as critical thinking, creativity, communication, and collaboration?	



Facts	<p>Ilidža is a place with a rich historical, cultural and natural heritage, which makes it extremely attractive and tempting for tourists.</p>
Concepts	<p>To promote Ilidža's cultural, historical, and natural treasures, the aim is to depict every relevant fact in an interdisciplinary and comparative way from the viewpoint of young people, or students, and to combine it into a single digital tourist guide.</p>
Discussion	<p>After researching and creating a digital tourist guide, develop a discussion about its improvement and presentation, the challenges of promoting the tourist potential of Ilidža in this way, but also about the awareness of young people about its "wealth" and the importance of promoting and preserving that "wealth".</p>
Detailed data about the project	
Short description of the project	<p>Ilidža is characterized by an extremely rich and diverse natural and cultural heritage. Students within the project should identify, research, classify and present part of the tourist offer of Ilidža in different time periods, in the form of a digital and printed tourist guide in Bosnian, English and German.</p> <p>In this project, the emphasis was placed on cultural and historical heritage, natural and tourist resources and existing tourist content.</p>

Motivation	<p>Students are aware of the tourist potential of Ilidža and the importance of promoting tourism in the local community where they live and where they study. The innovative approach of cross-curricular connections made it easier for students to research this topic. Also, the students found motivation in the creative and unique approach of creating this tourist guide, in the way that they themselves recorded video materials and audio recordings and selected photographs to describe and evoke the tourist attractions of Ilidža.</p>
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<p>Theoretical background (for teachers)</p>	<p>The main theoretical background for teachers is knowledge from the field of tourism geography, i.e., the geography of the local community and homeland, the history of that area and homeland in the context of the cultural-historical legacy and language and communication skills in English, German, which in today's world of globalization represent the tourist potential and offer of a certain area.</p> <p>The natural and rural environment and the presence of Sulphur / thermal water are also an important segment of the cultural heritage of a certain region and a resource for the development of various forms of tourism and the preparation of tourist offers. In History and Chemistry, students gain knowledge about Sulphur water and its medicinal properties, an area that is characteristic of the area where the students live, which all forms the basis for a good theoretical preparation of this project.</p> <p>Students will carry out part of their research using Internet resources and ICT.</p>
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<p>The outcomes and indicators</p>	<p><b>ENGLISH LANGUAGE:</b></p> <p>Our project incorporates a range of language learning and communication skills, and it perfectly complements the expected educational outcomes outlined in the English language curriculum formed by Ministry of Education of Sarajevo Canton (Predmetni Kurikulumi   Online Platforma Za Kurikulum, n.d.). These anticipated results, which are broken down into different domains, show a thorough approach to linguistic proficiency and cultural awareness.</p>
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Expected educational outcomes for students finishing the high school (IV grade) in English Language:

#### A Listening to and understanding listened content

##### A.IV.1

- Interprets listened content using listening strategies developing a positive attitude towards active listening.
- Interprets key and specific information of a more complex standard speech text on various general and professional topics from all walks of life.

#### B Reading and understanding read content

##### B.IV.1.

- Reads with understanding different types of texts and digital content, using reading strategies and information and communication technologies.
- Analyzes key and specific information in various more complex adapted and original texts of concrete and abstract topics (texts, newspaper articles, brochures, etc.).
- Uses information and communication technologies and visual aids for the purpose of understanding and interpreting the read text.

##### B.IV.3

- It explores the language, culture and democratic values of English-speaking countries and its own culture.
- Expresses cultural awareness by reading texts about his own country and English-speaking countries.
- Forms a critical opinion and attitudes based on the text read in the media (excerpts from newspapers or magazines, professional publications, etc.).

#### B.IV.4

- Analyzes the role of the media and information and communication technologies within interculturality.

#### C Speech and oral communication

##### C.IV.1

- Participates in various forms of speech production using features of formal and informal (non)standard language.
- Connects different text elements into a logical whole in planned (retelling, reporting and presenting) and unplanned speech.

##### C.IV.5

- Analyzes the role of media and information and communication technologies in context interculturality.
- Researches relevant sources of information with the aim of independent recognition reliable from unreliable sources, content and developing presentation and speaking skills.

#### GERMAN LANGUAGE:

##### A Listening to and understanding listened content

###### A.IV.1

The student analyzes listening to different audio/audio-visual contents

- Follows most of the media content and notices the main elements of the media content, if it is about topics from the personal sphere of interest, and if they are slowly and clearly articulated.
- Follows presentations of familiar content, if they are presented slowly and clearly, as they are accompanied by slides, graphs and other visual elements.

##### B Reading and understanding read content

###### B.IV.1.

The student analyzes information in different written content.

- Analyzes specific and detailed information from medium long and medium of complex written content related to their sphere of interest in addition to visual content teacher's encouragement

and/or help in terms of lexical relief.

- Analyzes the main idea and intention of the author in medium length and medium complexity literary/media content from traditional and modern media for which a visual and/or multimedia stimulus is important for understanding.

#### B.IV.3.

The student applies different reading strategies by critically reflecting on the source's information

- Uses independently appropriate sources of written/text content and available digital tools for solving teaching tasks and for independent learning by critically reflecting on their relevance.

#### C Speech and oral communication

##### C.IV.1.

The student produces different types of monologic and dialogic forms of communication in accordance with the basic features of the spoken language using ICT

- Uses independently different sources of multimedia content and available digital tools in practicing pronunciation and achieving communication intentions by critically reflecting on their relevance.

#### HISTORY:

##### A Listening to and understanding listened content

###### A.I. I / A.II.1

Researches the past using historical sources, (various methods and previously acquired knowledge).

###### A.I. I / A.II.2

Creates more complex evidence-based papers and presents them in prescribed ways.

##### B Reading and understanding read content

###### B.I.3 / B.II.3

Analyzes periods, events in them, processes and problems, placing people and events in time and space.

#### C Speech and oral communication

	<p>C.I. I / C.II.1</p> <p>It explores certain segments of society in different contexts over time and different historical periods (economic, cultural, religious, political, everyday life).</p> <p>MUSIC CULTURE (ARTS)</p> <p>C Speech and oral communication</p> <p>C.1.1 Draws a conclusion about the role of music / music in society and the importance of its application in everyday life.</p> <ul style="list-style-type: none"> <li>• Explores today's relationship to music / musical art.</li> <li>• Makes a conclusion about the role of music / music in society and the importance of its application in everyday life.</li> </ul>
<p>Individual work</p> <p>The size of the group and type of the work</p>	<p>2-3 students</p> <p>4-6 students</p> <p>More than 6 students</p>

<p>4K I DK</p>	<p>When researching and creating a tourist guide, students apply 4K skills (critical thinking, creativity, collaboration and communication) and thus come to purposeful conclusions.</p> <p>By researching professional literature, researching websites, and creating a digital presentation (Prezi) and creating a QR Code to display a tourist guide on a mobile device, students' digital competencies are developed.</p>
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	School and STEM classroom
Significant points (milestones):	<ol style="list-style-type: none"> <li>1. Preparation and introduction of the project to the students</li> <li>2. Research of Internet resources and professional literature regarding Ilidža in different time periods</li> <li>3. Collection of information and photos of Ilidža in different historical periods</li> <li>4. Identification of attractions that will be displayed in the digital tourist guide</li> <li>5. Selection and processing of information (dialogue) and photos</li> <li>6. Recording of video material</li> <li>7. Created a working version of the digital tourist guide</li> <li>8. Analyzing, summarizing and concluding</li> <li>9. Presentation of the digital tourist guide</li> </ol>
Products expected as a result of the project	<ul style="list-style-type: none"> <li>• Digital tourist guide in one of the forms:</li> <li>• Prezi digital presentation</li> <li>• QR Code – mobile application</li> <li>• Tourist guide in printed form</li> </ul>
Performance indicators	<ul style="list-style-type: none"> <li>• Encouraging and developing working habits, responsibility, motivation and teamwork</li> <li>• Encouraging the formation and presentation of a reasoned position</li> <li>• Developing peer collaboration and cross-subject correlation</li> <li>• Realized learning outcomes</li> <li>• Created tourist guide in digital and printed format</li> </ul>

Assessment of activities and reflections		
Formative assessment (during project execution)	Tests Activity list tracking Preliminary plans/prototype Working versions of the results "Short Notes" "exit slips" Online tests/exams	Following the list of activities and the working version of the guide can be a good basis for formative monitoring.  Working versions of results: Taking notes during research (data collection and processing)

Summative evaluation (at the end of the project)	Written work	At the end of the project, the teacher evaluates the student's achievements based on the oral presentation of the results as well as the quality of the multimedia and printed material. - <a href="https://www.visitsarajevo.ba/">https://www.visitsarajevo.ba/</a>
	Oral presentation Multimedia product Printed material Physical product	

Grading	Formal assessment	
	Informal assessment	
Applicability of self-assessment	YES          NO	- Evaluating the process (How well did the group work together? What did we learn from the project?)  - How satisfied are you with the achieved results? - Which task was challenging and/or which difficulties did we encounter while working on the project?  - Are you satisfied with the way you implemented the project? What would you like to improve for next time?



		- Assessing the content (Application of new concepts and how confident they feel in understanding the concepts)
Questions for reflection		<ol style="list-style-type: none"> <li>1. Why is strengthening the tourist offer important for the development of your area?</li> <li>2. What beauties of your region did you get to know through activities?</li> <li>3. Would it be good to continue this project? What activities would you undertake?</li> </ol>
Support for project implementation		
Recommend material		Books and textbooks, camera, costumes, pen and paper, pictures
Equipment and tools		Computer, projector, projection screen, WIFI, color printer
Financial costs		<p>YES</p> <p>Higher quality printing of the tourist guide</p> <p>Printing QR codes</p>
Precautions		Take care of the safety of students on the field.



## Appendix 2: Survey template

Survey for students after the completion of the project “A Digital Tourist Guide – Ilidža through time”

1. How would you rate your overall experience with project-based learning in this English class? \*

- Excellent
- Average
- Poor

2. How did project-based learning contribute to your understanding and use of English language skills? \*

- It significantly improved my English skills.
- It improved my English skills to some extent.
- It didn't contribute much to my English skills.

3. Did project-based learning make English learning more engaging and enjoyable for you? \*

- Yes, I found it highly engaging and enjoyable.
- It was neither more nor less enjoyable than traditional teaching methods.
- No, I didn't find it engaging or enjoyable at all.

4. How did project-based learning help you develop important skills beyond language proficiency? \*

- It significantly improved my critical thinking and problem-solving skills.
- It had a minor impact on my critical thinking and problem-solving skills.
- I didn't notice any impact on my skills beyond language proficiency.

5. Did project-based learning enhance your ability to work collaboratively with your classmates? \*

- Yes, it greatly improved my ability to work well with others.
- It had a minor impact on my collaborative skills.
- I didn't have many opportunities to collaborate with classmates.

6. How did project-based learning make English learning more relevant to real-life situations? \*

- It made English learning highly relevant and practical.
- It had a minor impact on the relevance of English learning.
- I didn't notice any relevance to real-life situations in the projects.

7. In your opinion, what were the strengths of project-based learning in this English class?

Long answer text

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8. In your opinion, what were the limitations or challenges of project-based learning in this English class?

Long answer text

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9. Do you feel that project-based learning should be incorporated more frequently in EFL classes? Why or why not?

Long answer text

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10. Any additional comments or suggestions regarding project-based learning in this English class?

Long answer text

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