

Development of Social-Emotional Competencies in Human Resources Through Project-Based Learning Methodology

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ABSTRACT:

Summary

The research arises as a result of the problem that shows how conventional pedagogical models, focused on the transmission of knowledge, do not promote the emotional or social formation of students. This creates gaps in essential skills such as empathy, collaboration, or self-regulation. A qualitative methodology of systematic review of the academic literature published from 2018 onwards was used. The analysis focused on studies that link Project-Based Learning (PBL) from now on with the comprehensive training of students.

The findings show that PBL promotes the construction of meaningful learning through teamwork, the solution of real problems and the development of emotional autonomy. The discussion highlights that PBL not only improves academic performance, but also enhances ethics, critical thinking, and social awareness.

In conclusion, PBL is configured as an effective and relevant training tool, capable of responding to the educational challenges of the twenty-first century from a humanistic, critical and emotionally intelligent perspective.

Keywords: Project-based learning; PBL; learning; education; tool; self-regulation.

Introduction

In the contemporary educational context, the importance of the integral development of the student has acquired increasing relevance. It is no longer enough for students to acquire only theoretical knowledge; It is essential to train

individuals capable of managing their emotions, establishing healthy interpersonal relationships and making responsible decisions. These skills, known as social-emotional skills, are essential not only for academic success, but also for a fulfilling life in society. According to Bolaños (2020),

socio-emotional education is the process by which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage their emotions, set and achieve positive goals, feel and show empathy towards others, cultivate and maintain positive relationships, and make responsible decisions. In this sense, active methodologies such as Project-Based Learning (PBL) are presented as powerful tools that integrate cognitive and socio-emotional development.

The purpose of this article is to examine how the implementation of Project-Based Learning can favor the development of socio-emotional skills in students, promoting more meaningful, participatory, and humanistic learning. PBL is characterized by being a student-centered methodology, organized around authentic and complex projects that involve research, problem solving, collaboration, and the presentation of tangible products. According to Valeriano (2021), PBL motivates students through relevant challenges that require intellectual effort, decision-making, teamwork, and the application of interdisciplinary knowledge. These aspects are closely related to the strengthening of socio-emotional competencies such as empathy, responsibility, leadership and collaboration.

Despite its many benefits, a significant key challenge remains in educational settings: How to ensure that academic learning is integrated with socio-emotional development without undermining the traditional curricular structure? This question reflects a common concern among teachers, who often face limitations of time, resources, or training to include these competencies in their pedagogical practice. In the words of Benavidez and Flores (2019), the lack of attention to the emotional dimensions of learning can contribute to teacher burnout, students' emotional disconnection, and the creation of an unhealthy school environment.

As an alternative to the current difficulties in education, Project-Based Learning (PBL) is presented as an innovative and effective option. Its interdisciplinary, collaborative and

experience-focused approach allows emotional and social development to be naturally integrated into the teaching-learning process. For example, during the planning and execution of a project, students are forced to communicate, organize, negotiate ideas, and resolve conflicts. These activities promote foundational skills such as empathy, self-control, and critical thinking. In the words of Pérez (2018), PBL develops essential life skills such as self-regulation, teamwork and perseverance, which cannot be taught only from theory, but need to be practiced in real situations.

The importance they highlight in educational success in the twenty-first century cannot be measured solely by academic performance. The purpose of education must be to form upright citizens, capable of functioning in complex, diverse and changing societies. They have pointed out that social and emotional skills are more reliable predictors of long-term well-being than academic achievement (Castro & Cortés, 2019). Similarly, Guevara et al., (2021) conclude that schools that implement socio-emotional development programs report improvements in school climate, a reduction in risky behaviors, and better academic performance. Therefore, adopting PBL as a strategy to cultivate these skills not only responds to an educational need, but also to an ethical and social imperative.

In short, the development of socio-emotional skills through Project-Based Learning provides a valuable opportunity to renew education from a more inclusive, participatory and transformative perspective. This article invites us to reflect on how this methodology can be a viable and effective response to contemporary educational challenges, promoting a more humane, critical and committed to reality.

Materials and methods

This study adopts a qualitative approach, focused on the review and analysis of relevant scientific literature published in recent years, related to the development of socio-emotional skills through the application of Project-Based Learning (PBL). This methodology allows for an in-depth understanding of the relationships between innovative pedagogical practices and

comprehensive training processes, based on the systematic study of academic written sources.

Research is characterized by collecting, selecting, analyzing, and interpreting information contained in digital works with scientific and pedagogical value. In this case, literature from academic databases such as Google Scholar, and others, has been consulted, prioritizing peer-reviewed articles, theses, specialized books, and institutional documents. The inclusion criterion focuses on studies that address PBL as an educational methodology and its relationship with the development of socio-emotional skills in school contexts.

According to Piña (2023), the qualitative approach allows us to understand natural phenomena, which is compatible with a theoretical review that seeks to explore various positions, evidence, and experiences on the topic addressed. Similarly, De Franco Arrieta (2021) argues that qualitative documentary analysis not only collects data, but also interprets its meaning, identifies patterns, and proposes relationships between categories.

The review was carried out through a process of thematic analysis, which consisted of identifying key concepts such as: collaborative work, meaningful learning and comprehensive training. Subsequently, the selected sources were organized according to their approach, educational level, and theoretical and practical contributions, allowing consistent links to be established between the PBL methodology and the emotional and social development of the student.

This procedure is based on what Garcés and Duque (2007) have argued, arguing that the review is an effective tool for contextualizing the research problem. Identify knowledge gaps and build a solid conceptual foundation. In turn, the analysis was validated through the triangulation of authors, theories and educational contexts, which guarantees a critical reading and a broad understanding of the study objective.

Finally, this allows not only to understand the progress in the implementation of PBL as a means of socio-emotional training, but also to

visualize its limitations and future projections. As Caís (1997) indicates, these analyses in the methodology not only generate knowledge, but also guide decision-making and evidence-based pedagogical proposals, which is why their use is pertinent and strategic for this work.

Result

Various studies support the positive link between Project-Based Learning (PBL) and the development of socio-emotional skills, highlighting that this methodology not only improves the academic performance of students of different educational levels, but also strengthens emotional and social competencies essential for the integral development of the student. Based on the review of specialized literature, results considered in diverse educational contexts are identified that demonstrate the impact of PBL in this area.

First, research has shown that PBL improves collaborative work skills, as it encourages constant interaction between peers, the negotiation of ideas and the joint solution of problems. According to Monereo (2003), PBL engages students in authentic tasks that require communication, positive interdependence, and joint conflict resolution, key aspects of socio-emotional development. These dynamics promote a collective construction of knowledge and the strengthening of positive social ties.

Another relevant result is the strengthening of self-confidence and emotional autonomy. When students take an active role in the planning, execution, and evolution of their own projects, they develop a greater capacity to make decisions and take responsibility for their actions. As Rodríguez (2015) notes, students who participate in PBL tend to feel more confident to express their ideas, take intellectual risks, and reflect on their emotions during the process. This emotional empowerment is key to their personal development.

Likewise, studies such as that of FECIES (2020) highlight the importance of PBL for emotional management and the stress framework. In her analysis of innovative school environments, she concludes that students who participate in PBL

learn to cope with uncertainty, tolerate training, and manage negative emotions in complex situations, which strengthens their emotional resilience. This skill is essential to function in dynamic school and social contexts.

In terms of developing empathy and social awareness, PBL has proven to be an effective methodology, especially when projects focus on real or community problems. Taking into account Orellana (2016), authentic projects allow students to understand and engage with their environment from an ethical dimension. This broadens their vision of the world and strengthens their civic engagement.

Finally, recent studies have underlined that PBL improves the emotional climate of the classroom, by promoting a more participatory, inclusive and emotionally safe environment. The implementation of PBL reduces school anxiety and improves the relationship between students and teachers (Solís, 2021). An emotionally favorable environment enhances learning and reduces socio-emotional risk factors.

These results confirm that Project-Based Learning is an effective methodological tool to promote the development of socio-emotional skills, thus contributing to a more comprehensive, humanistic and contextualized education.

Discussions

1. Project-Based Learning as a catalyst for social-emotional development

The findings clearly support that PBL acts as a catalyst in the development of social-emotional skills. The active, collaborative, and contextual nature of this methodology facilitates emotionally meaningful learning experiences, which not only promote critical thinking, but also empathy, self-regulation, and teamwork. In contrast to traditional methods, PBL places the student at the center of their learning process, which increases their emotional and cognitive commitment.

According to Toledo and Sánchez (2018), PBL fosters authentic learning, where students feel emotionally involved because they work on real

problems that make sense to them. This emotional involvement fosters the development of competencies such as persistence, self-control, and responsible decision-making. For its part, for (2022), collaborative work in PBL develops interpersonal skills, such as respect for the ideas of others and the peaceful resolution of conflicts, essential aspects of emotional intelligence. Thus, PBL not only responds to academic needs, but also human and social needs.

2. Structural Limitations in PBL Implementation and Its Effect on Social-Emotional Development

Despite the obvious benefits of PBL in the socio-emotional sphere, its implementation presents structural challenges that can limit its effectiveness. The lack of teacher training, the rigidity of the curriculum, and the pressure to meet academic standards tend to reduce the space to apply strategies such as PBL, affecting the full development of socio-emotional skills in the classroom.

As expressed by Zúñiga et al., (2021) although PBL has great potential, its application requires a profound redesign of the pedagogical approach, which is not always feasible in traditional education systems. In addition, many teachers have not been trained in emotional competencies or active methodologies, which represents a significant barrier. Along these lines, Samayoa and Márquez (2020) point out that the teacher is a key player in the emotional development of the student, but also needs institutional support to generate affective and meaningful environments. These structural limitations must be addressed in order for PBL to achieve its full potential in the socio-emotional development of students.

3. Projection of PBL as a comprehensive and ethical training strategy

Beyond the classroom, PBL must be understood as a comprehensive training tool that enhances ethical and civic values. Work on real and socially relevant problems not only stimulates cognitive and emotional learning, but also trains subjects capable of reflecting on their role in society. This ethical dimension makes PBL a methodology that

goes beyond the instrumental and contributes to forming more aware and empathetic citizens.

In the opinion of Aritio et al., (2021) PBL allows students to work in real contexts, which offers them the possibility of making informed, ethical decisions with social impact. This experience reinforces the connection between learning and responsibility. In addition, Pérez de Albéniz et al., (2021) argue that well-designed projects offer opportunities for students to practice responsible decision-making, ethical problem-solving, and positive leadership. In this way, PBL is projected as a way to educate integrally, aligning emotional competencies with citizen and ethical values.

Conclusions

Problem-Based Learning (PBL) is positioned as a transformative pedagogical strategy that, beyond promoting the acquisition of academic knowledge, significantly promotes the development of socio-emotional competencies in students. Through hands-on, collaborative, and contextualized experiences, PBL allows learners to not only think, but also feel, communicate, and connect with the world around them. This comprehensive approach favors the formation of individuals capable of self-regulating their emotions, working in a team, empathizing with others and making responsible decisions in real and complex scenarios.

One of the most relevant contributions of PBL is its ability to integrate the cognitive with the affective, the individual with the collective, the academic with the ethical. In this sense, PBL is not only an active methodology; it is an educational proposal with a strong humanistic component, which responds to the demands of education in the twenty-first century and contributes to closing the gap between school and life. In addition, by encouraging active and meaningful student participation, their identity, self-esteem, and sense of purpose are strengthened.

However, for this potential to be effectively realized, it is essential that educational institutions reconsider their curricular and methodological structures, provide greater teaching autonomy, continuous training, and flexible spaces for innovation. Only in this way will it be possible to consolidate a person-centred education, capable of forming emotionally intelligent, ethically committed and socially responsible citizens. In short, the development of socio-emotional competencies through PBL should not be considered an added value, but an urgent need in the comprehensive training of students. Educating from the project not only transforms the classroom, but also transforms the person.

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