

INTERNATIONALIZATION AND TEACHING INNOVATION IN HIGHER EDUCATION THROUGH AN ERASMUS+ INITIATIVE

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Abstract

This paper examines the outcomes of an Erasmus+ KA220-HED cooperation partnership that fostered teaching innovation and international collaboration in higher education through active learning and service-learning methodologies. A key component of the initiative was a transnational service-learning experience conducted in Morelia, Mexico, where 20 students and 16 faculty and staff members from all partner institutions collaborated with local communities on educational, health, and sustainability projects. Quantitative and qualitative data were collected through the *Service-Learning Experience Benefit (SELEB)* questionnaire to assess perceived learning outcomes. Results showed significant improvements in students' transversal competences, intercultural understanding, and social responsibility. The findings suggest that transnational service-learning provides an effective framework for integrating internationalization and teaching innovation, supporting both professional development and student engagement. The project demonstrates how Erasmus+ cooperation partnerships can act as catalysts for pedagogical transformation, linking local action with global educational goals and contributing to the creation of inclusive, sustainable, and globally connected higher education systems.

Keywords: *Higher education, Erasmus+, teaching innovation, internationalization, active learning.*

1. Introduction

The growing interconnection between global education systems and the need for innovative teaching practices have placed internationalization at the center of higher education policy and reform. European universities increasingly recognize that the ability to engage students and teachers in international, intercultural, and interdisciplinary collaboration is not only a goal but also a catalyst for educational transformation (Fumasoli & Rossi, 2021).

Within this landscape, the Erasmus+ Programme, and specifically the KA220-HED Cooperation Partnerships, have become critical mechanisms for promoting innovation and inclusivity across national borders. These partnerships enable universities and social organizations to jointly develop and implement innovative educational practices that link academic learning with real-world challenges (Grynova & Kohut, 2022).

The project examined in this study, which is part of the Erasmus+ “Generation for Innovation, Resilience, Leadership and Sustainability (GIRLS)” initiative, brought together higher education institutions, research centers, and civil society organizations from Europe and Latin America. Its objective was to foster teaching innovation, enhance transnational collaboration, and integrate the principles of service-learning (SL) and active learning (AL) into university curricula.

A key milestone of the project was the service-learning experience conducted in Morelia, Mexico. During this short-term mobility, mixed teams of European and Mexican students collaborated with local community partners on projects addressing health awareness, environmental sustainability, and educational inclusion. This experience allowed participants to apply academic knowledge in real contexts, promoting empathy, teamwork, and intercultural dialogue.

The present paper examines both the perceived benefits among student participants, measured through the SELEB questionnaire, and the institutional outcomes, assessed through project indicators

collected from partner organizations. Together, these data provide a comprehensive understanding of how international cooperation through Erasmus+ can drive innovation in higher education by connecting teaching, research, and societal engagement.

2. Literature review

The Erasmus+ program has evolved from a mobility scheme into a comprehensive policy tool for fostering educational innovation, inclusion, and cross-border collaboration in higher education. Its KA2 Cooperation Partnerships (such as KA220-HED) encourage universities, research centers, and NGOs to develop and test new pedagogical models that link academic learning to real societal needs (Fumasoli & Rossi, 2021).

Participation in Erasmus+ initiatives has proven to strengthen institutional internationalization strategies, encouraging European Higher Education Institutions (HEIs) to engage in joint research, digital innovation, and inclusive curricula design (Grynova & Kohut, 2022; Ishchenko, 2025). Moreover, Ovtšarenko et al. (2024) demonstrate that blended and short-term mobility projects (e.g., BIPs) democratize access to international experiences, supporting the European Education Area's commitment to quality, equity, and sustainability.

The GIRLS Erasmus+ project exemplifies this synergy between international cooperation and pedagogical innovation, particularly by connecting European and Latin American partners in a shared framework of experiential learning and service to society.

Service-learning has become one of the most widely recognized methodologies for linking academic instruction with social engagement. Through community-based activities, students apply disciplinary knowledge to address authentic social challenges while developing critical thinking, empathy, and leadership (Mierlus Mazilu et al., 2025).

A systematic review by Queiruga-Dios et al. (2021) identifies SL as a key pedagogical tool in engineering education, fostering the integration of technical knowledge with civic responsibility and sustainability awareness. This evidence aligns with the findings of Rasteiro et al. (2024), who emphasize that service-learning “bridges academic learning and community service” by promoting interdisciplinary cooperation and active participation across European and Latin American educational contexts.

Similarly, Hernández Encinas et al. (2025) highlight in service-learning: A Bridge Between Academic Knowledge and Social Engagement that Erasmus+ frameworks, such as the GIRLS Project, enable the institutionalization of SL across multiple disciplines, creating sustainable educational practices that combine teaching, research, and social transformation. In the same proceedings, Mierlus Mazilu et al. (2025) describe how the UTCB successfully integrated SL into engineering education, using community projects to develop students' problem-solving and innovation competences.

In the context of the current Erasmus+ initiative, service-learning not only provided a vehicle for active learning but also acted as a cultural bridge, connecting European pedagogical innovation with Mexican community realities. International cooperation in education contributes significantly to students' intercultural competence, understood as the ability to communicate and collaborate effectively across cultural and linguistic boundaries (Queiruga-Dios et al., 2023).

In the GIRLS project, intercultural collaboration was achieved through joint teaching teams and mixed student groups working in transnational service-learning activities. The mobility to Mexico provided an immersive context for participants to experience diversity and co-create knowledge with local communities. This approach is consistent with the innovation pedagogy model (Keinänen & Kairisto-Mertanen, 2019), which integrates creativity, reflection, and collaboration as key elements of transformative learning.

Institutional engagement is essential for ensuring the sustainability of teaching innovation. Fumasoli and Rossi (2021) emphasize that universities participating in Erasmus+ networks serve as engines of educational transformation but require policy alignment and organizational support to mainstream innovative practices. In this regard, the GIRLS partnership exemplifies the quadruple helix model of innovation in education, where academia, civil society, and research institutions co-create pedagogical solutions. The inclusion of partners such as AELCLÉS and the Maristas Champagnat School expands the impact of innovation beyond universities, connecting the project's academic outputs with societal needs in health education, inclusion, and community engagement.

Moreover, the collaboration between the University of Salamanca, the Francisco de Vitoria University, the Polytechnic University of Coimbra, and the Technical University of Civil Engineering of Bucharest demonstrates how cross-national cooperation can lead to institutional learning, digital transformation, and strengthened academic networks. These results echo the findings of Hernández Encinas et al. (2025) and Mierlus Mazilu et al. (2025), confirming that innovation and internationalization are mutually reinforcing processes that can be effectively advanced through Erasmus+ strategic partnerships.

3. Methodology

3.1. Research design

This study adopts a mixed-methods approach, integrating quantitative and qualitative data to examine the impact of the Erasmus+ cooperation partnership on teaching innovation and internationalization. Quantitative and qualitative data were gathered from the Service-Learning Experience Benefit (SELEB) questionnaire, completed by students after their participation in the service-learning activity in Mexico.

3.2. Participants

The partnership involved eight organizations:

1. University of Salamanca (Spain)
2. Polytechnic Institute of Coimbra (Portugal)
3. Francisco de Vitoria University / Accompaniment Institute (Spain)
4. Technical University of Civil Engineering of Bucharest (Romania)
5. Spanish National Research Council (CSIC)
6. Spanish Association of Entities against Leukemia and Blood Diseases (AELCLÉS)
7. Marist Champagnat School (Spain)
8. Vasco de Quiroga University A.C. (Mexico)

A total of 20 students (four from each university) and 16 faculty/staff members (two per partner institution) participated in the service-learning mobility to Mexico.

3.3. Instruments

The SELEB questionnaire (post-activity version) assesses perceived benefits of service-learning experiences across several dimensions, including personal growth, teamwork, leadership, communication, cultural understanding, and civic responsibility. Items are rated on a 7-point Likert scale.

3.4. Procedure

Students participated in collaborative service-learning projects in Morelia, Mexico, supported by local community organizations. Activities included educational workshops, health awareness campaigns, and creative projects addressing social challenges. Following the mobility, participants completed the SELEB questionnaire online.

Data were analyzed using descriptive and inferential statistics for quantitative items and thematic coding for qualitative responses.

4. Results

Overall, student responses indicate very high levels of perceived benefit across all SELEB dimensions (all means > 6.3 on a 7-point scale). The highest-rated dimensions were understanding cultural differences ($M = 6.9$, $SD = 0.3$) and learning from experience ($M = 6.9$, $SD = 0.3$), confirming that the Mexico service-learning experience fostered intercultural and experiential learning. The lowest-scoring item, though still high, was leadership development ($M = 6.3$, $SD = 0.7$), suggesting that leadership growth may require sustained engagement over time.

The qualitative reflections collected through post-mobility discussions revealed three key themes:

- Transformation through immersion: Students emphasized that direct contact with Mexican peers and communities changed their perception of cultural diversity and global interdependence.
"I realized that collaboration is not just about language; it's about empathy and flexibility." (Student1)
- Linking theory to practice: Many participants valued the opportunity to apply disciplinary knowledge (e.g., engineering, education, or health) in real contexts.
"Teaching statistical thinking to local NGOs made me understand the social purpose of what we learn at university." (Student2)
- Emotional engagement and motivation: The project's human-centered approach enhanced student motivation, resilience, and commitment to civic engagement.

4.1. The Mexico service-learning experience

The transnational service-learning activity took place in Morelia, Mexico, and represented the culmination of the project's collaborative cycle. The activity brought together 20 students and 16

faculty/staff from Spain, Portugal, Romania, and Mexico. Over a week, participants worked in interdisciplinary teams on three thematic projects:

1. Health and well-being: In collaboration with local NGOs, students developed awareness campaigns about leukemia and bone marrow donation.
2. Education for sustainability: Teams implemented educational workshops integrating science and creativity to teach sustainability concepts to children.
3. Community innovation and leadership: Mixed teams co-designed service initiatives addressing community needs, such as social inclusion and digital literacy.

These activities embodied the principles of experiential and intercultural learning, fostering empathy and mutual respect among participants. Faculty members observed that the joint reflection sessions — where students discussed challenges, emotions, and lessons learned — were critical in transforming experience into meaningful learning.

5. Discussion

The findings confirm that international service-learning within an Erasmus+ cooperation partnership can significantly enhance both student learning and institutional innovation.

The SELEB results indicate that participation in the Mexico mobility strengthened students' intercultural competence, social responsibility, and capacity to connect theory with practice — dimensions that align closely with the aims of innovation pedagogy (Keinänen & Kairisto-Mertanen, 2019) and the principles of European higher education modernization (Ovtšarenko et al., 2024).

Institutional data complement these results, showing that universities and associated partners recognized the project's value in promoting pedagogical innovation and transnational collaboration. These findings are consistent with previous research (Queiruga-Dios et al., 2021; Hernández Encinas et al., 2025; Mierlus Mazilu et al., 2025) highlighting that service-learning provides a robust framework for integrating academic learning, employability skills, and civic engagement.

However, some challenges remain. As Fumasoli and Rossi (2021) note, institutional innovation requires long-term support and recognition. The project's reliance on short-term mobilities limited the continuity of activities and the consolidation of student leadership roles — explaining why leadership development received slightly lower SELEB scores.

Nevertheless, the transnational, interdisciplinary nature of the GIRLS project demonstrates that when universities, research institutions, and NGOs collaborate, they can co-create inclusive, globally relevant educational experiences that embody the Sustainable Development Goals (SDGs) principles of partnership, quality education, and reduced inequalities.

6. Conclusions

This study demonstrates the transformative potential of Erasmus+ cooperation partnerships as engines of pedagogical innovation and internationalization in higher education. The integration of service-learning and active learning methodologies within the project fostered deep learning, intercultural awareness, and civic engagement among students while simultaneously strengthening institutional capacity for innovation and transnational collaboration.

The mixed-methods results confirm that participants experienced significant personal and academic growth through the Mexico service-learning experience, particularly in developing empathy, social responsibility, and the ability to connect theory with practice. These outcomes reflect the core principles of innovation pedagogy and align with the objectives of the European Education Area and the Sustainable Development Goals.

Although some challenges remain such as the need for stronger institutional support to ensure the long-term sustainability of innovations, the overall evidence indicates that transnational service-learning initiatives provide a powerful framework for transforming teaching and learning. This project illustrates how European cooperation can foster not only academic excellence but also social impact, preparing students to become globally competent, empathetic, and socially responsible professionals.

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