

STUDENT SUSTAINABLE ENTREPRENEURSHIP FOR GOVERNANCE: EDUCATIONAL INNOVATION FROM THE INTERREG FREIIA PROJECT

G. Andersson, B.G. Hauge, F.R. Johansen, E.A. Leister

Østfold University College (NORWAY)

Abstract

This paper presents key insights from the Interreg FREIIA project (2022–2025). It explores how student-led innovation can strengthen sustainable governance in small island communities across Northern Europe. The project engaged university students in real-world innovation and project management, using a design thinking-based framework to address local development challenges. Work Package 4 (WP4) emphasized experiential learning and sustainable entrepreneurship, empowering students to co-create solutions with local stakeholders on six islands - Hvaler in Norway, Schiermonnikoog in The Netherlands, Bornholm in Denmark, Koster in Sweden, Groix and Ouessant in France. Through interviews, analysis, ideation, and prototyping, students tackled shared challenges such as youth outmigration, seasonal tourism dependency, housing shortages, and fragmented governance structures. The project's educational model promoted interdisciplinary collaboration, international exchange, and place-based learning. Students together with local stakeholders developed context-sensitive ideas for solutions including mobile innovation hubs, and decentralized education facilities. These initiatives not only addressed local needs but also fostered entrepreneurial thinking aligned with principles of sustainability and inclusive governance. Key findings highlight the potential of student sustainable entrepreneurship as a driver for resilient local governance. The Interreg FREIIA project demonstrates how international education projects can integrate sustainability, circular economy principles, and student engagement to build capacity for long-term community development. It offers a replicable model for embedding governance-oriented entrepreneurship into higher education curricula.

Keywords: International Collaboration, Student-Led Innovation, Sustainable Entrepreneurship, Governance.

1 INTRODUCTION

Island communities face systemic challenges such as depopulation, housing shortages, and seasonal economic dependency that require innovative and participatory approaches to governance and development [1][2][3]. The Interreg FREIIA project engaged students in international, interdisciplinary teams to co-create solutions with local stakeholders on six European islands. This paper explores how international projects can foster sustainable entrepreneurship and governance capacity through experiential learning and place-based innovation.

The FREIIA project represents a new approach to teaching and learning in higher education. Rather than learning about sustainability and entrepreneurship in the classroom, students worked directly with local communities to understand real-world challenges and co-create practical solutions. This hands-on, collaborative model gave students the opportunity to apply their knowledge in meaningful ways, while also learning from peers, researchers, and local actors across Europe. By combining design thinking, fieldwork, and international teamwork, the project created an 'extended classroom' that connected academic learning with societal needs. This kind of educational innovation enhances student engagement and learning outcomes, and contributes to more relevant and impactful higher education.

2 METHODOLOGY

The project employed a design thinking framework based on the Double Diamond model [4], integrating divergent and convergent phases of problem exploration and solution development.

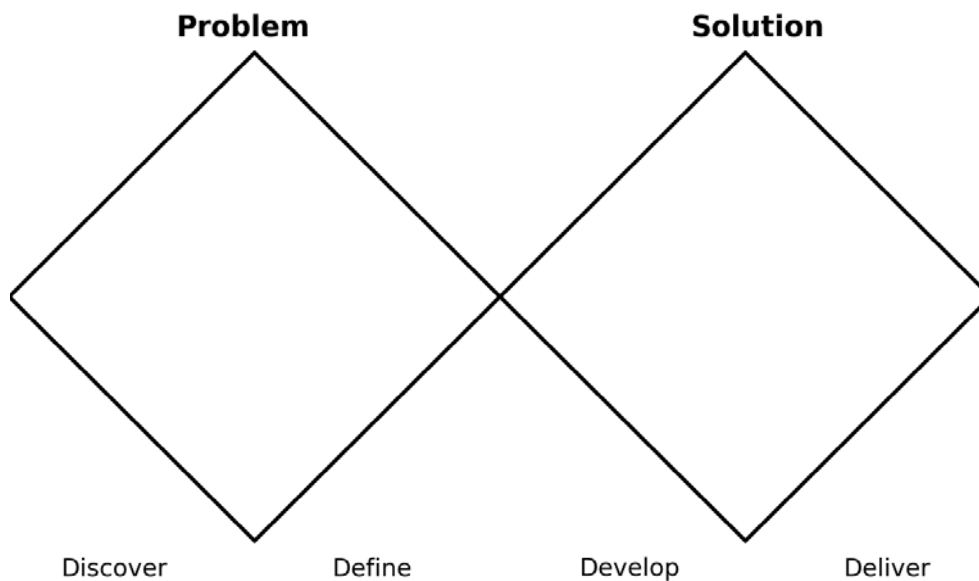


Figure 1. Research design based on the Double Diamond model

The research design includes four phases: Discover, Define, Develop, and Deliver. In the Discover phase, students and researchers conducted semi-structured interviews with a wide range of local stakeholders, including business owners, municipal officials, community leaders, and residents. These interviews were designed to gather rich qualitative data describing the current situation on each island, including perceived challenges, opportunities, and systemic barriers to sustainable development. The data collected through these interviews formed the empirical foundation for the Define phase, where the most pressing challenges were identified based on stakeholder perspectives.

Following the definition of key challenges, the project moved into the Develop phase, which consisted of design thinking workshops held on each island. These workshops brought together students, researchers, and local stakeholders (where possible) to generate ideas for potential solutions. The workshops emphasized interdisciplinary dialogue and creative problem-solving, using the interview data as a grounding reference to ensure relevance and contextual sensitivity. Prototypes included conceptual models, service designs, and policy proposals.

A total of 280 students, 27 researchers, and 191 local stakeholders participated across six islands: Hvaler (NO), Schiermonnikoog (NL), Bornholm (DK), Koster (SE), Groix and Ouessant (FR). Data included 148 interviews (~529,000 words) analyzed using grounded theory method [5][6].

3 RESULTS

The interventions identified key challenges and co-created solutions specific to each island context. Table 1 summarizes the main challenges, proposed solutions, and key insights from each island.

Table 1. Summary of key challenges, proposed solutions and key insights by island.

<i>Island</i>	<i>Key Challenges (from interviews)</i>	<i>Proposed Solutions (from workshops)</i>	<i>Key Insights</i>
Hvaler (NO)	Limited cross-sector collaboration; aging population; youth outmigration; seasonality; few innovation platforms	Mobile Innovation Hub; decentralized university facilities; project house; transport; collaboration platforms; mobile sauna	Year-round tourism; collaboration matters; engage youth
Schiermonnikoog (NL)	Low understanding of circularity; youth outmigration; limited collaboration; space/resource constraints	Key stakeholder collaboration; social media & influencers; collaboration arena; blue minimal surfing camp; waste education	Retain youth; localize sustainability; strong identity

Bornholm (DK)	Tourism dependency; lack of off-season services; youth outmigration; weak collaboration	Youth engagement & education; collaboration & innovation; market Bornholm as a living destination	Attract young families; infrastructure + collaboration
Koster (SE)	High housing prices; closed school; limited services; summer overcrowding; economic barriers	Reopen local school; public-private trust program; market to Scandinavian businesses; intergenerational service exchange	Need year-round residents; trust & collaboration; balance tourism/residency
Groix (FR)	Unaffordable housing; limited municipal resources; high seasonal rents; infra gaps	Extend tourist season; more recycling stations; eco-transport & bike infra; promote local products; regular stakeholder meetings	Sustainable tourism focus; visibility & collaboration; environment-economy link
Ouessant (FR)	Housing shortage; energy & water infra; local food; transport & accessibility; little digital innovation	Seasonal housing; energy education; island council for dialogue & governance	Collaboration locals/seasonals; local governance; integrated sustainability

Table 2 presents cross-cutting themes that emerged across all islands, including housing, youth outmigration, and governance fragmentation.

Table 2. Cross-cutting themes and similarities across islands.

<i>Theme</i>	<i>Hvaler (NO)</i>	<i>Schiermonnikoog (NL)</i>	<i>Bornholm (DK)</i>	<i>Koster (SE)</i>	<i>Groix (FR)</i>	<i>Ouessant (FR)</i>
Housing Issues	Few areas for youth housing	Seasonal housing; young workers live at work	Seasonal housing due to tourism	School closed; not supportive for families	Too expensive; tourist rentals dominate	Hard to find affordable lodging in season
Aging Pop. & Youth Retention	Dominated by retirees; need families	Few young permanent residents	Youth leave; lack opportunities	Hard for young families to settle	Need more young; avg. age ~45	—
Tourism Dependency & Seasonality	Population 4,700→30,000 in summer	Summer boom; winter quiet	Economy depends on tourism	More tourists than locals in summer	Rentals reserved for tourists	Tourism main activity
Infrastructure & Services	Depends on Fredrikstad for services	—	Decline in industry; limited diversity	Closed school; minimal services	Lack of social services/infra	Limited accommodation/ services during season
Cross-sector Collaboration	Improving public-private collab.	Poor cross-sector communication	—	Local initiatives; no structure	Lack of shared initiatives	—
Environmental Regulation	—	—	Rules hurt agriculture/ fisheries	Fishing threatened by regulation	Declining fishing economy	Fishing declined; tourism dominates
Geographic Isolation	Reliant on mainland; little space	Isolated despite accessibility	“Peripheral Denmark”	“We are far out”; limited inter-island ties	“Cut off”; lack support services	Long ferry; perceived distant
Innovation & Youth	High housing prices; few jobs	Wealthy non-residents reduce engagement	Promote year-round entrepreneurship	Few services for young families	Reclaim economy for youth	Bureaucracy blocks ideas
Community Identity	Deep generational ties	Strong collective memory	“Denmark’s Hawaii”; pride	Long family traditions	Pride in staying; raise families	Distinct local character
Seasonal Imbalance	Summer surge	Summer full; winter quiet	Seasonal income replaces primary sectors	Quiet off-season	Seasonal jobs; unstable housing	Hotels rely on early bookings

Communication & Participation	Better dialogue emerging	Insufficient multi-citizen platforms	Calls for collective strategies	Active citizens; limited formal influence	Few community spaces/ organizations	—
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The student-led interventions identified key challenges but also revealed systemic issues that were previously underexplored. For example, students on Bornholm highlighted the lack of year-round youth engagement infrastructure. Interviews described barriers such as seasonal employment cycles and limited access to affordable housing.

We experienced how student involvement brought new perspectives and helped reframe challenges in ways that resonated with local stakeholders, especially in communities where institutional capacity was limited. These findings underscore the value of student participation not only as learners but as co-creators of knowledge and innovation in governance-oriented entrepreneurship.

4 CONCLUSIONS

The FREIIA project demonstrates how international projects can serve as platforms for experiential learning and community engagement. Students developed entrepreneurial competencies while contributing to local innovation. The educational model emphasized place-based learning, interdisciplinary collaboration, and real-world problem solving. This approach aligns with calls for higher education to address sustainability and governance challenges through active, contextualized learning [7][8].

International projects like Interreg FREIIA can be a platform for sustainable entrepreneurship and innovation in peripheral regions. By embedding students in real-world contexts and engaging them in co-creation with local stakeholders, higher education institutions can contribute to both student learning and community resilience. The FREIIA model offers a replicable framework for integrating governance-oriented entrepreneurship into curricula.

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