Interreg North Sea

Co-funded by the European Union

FREIIA

Høgskolen i Østfold

EVALUATION AND LEARNING OUTCOMES

TRAINING MODULE STUDENT ENTREPRENEURSHIP

REPORT 4.

WP4 .2

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TABLE OF CONTENTS

EXECUTIVE SUMMARY

This report evaluates the learning outcomes, stakeholder experiences, and methodological performance of WP4.2 Training Module: Student Entrepreneurship within the FREIIA project. Students across six European islands applied fieldwork, interviews, AI-supported analysis, and co-creation workshops to explore sustainability challenges and develop context-adapted concepts.

Key findings:
- Authentic island contexts significantly strengthened learning by making sustainability challenges tangible and systemic.
- Collaboration with local stakeholders provided high value for both students and communities, offering fresh perspectives and clearer articulation of long-standing issues.
- AI-supported analysis improved efficiency and problem framing, though student interpretation remained essential.
- Students developed strong entrepreneurial competences, especially opportunity recognition, systems thinking, creative problem-solving, and communication.

Challenges:
- Time pressure limited depth of analysis and concept development.
- Variable interview quality highlighted the need for earlier methodological training.
- Group dynamics and unclear roles affected workflow.
- Students required more support in translating insights into feasible concepts.

Stakeholder insights:
Stakeholders valued the collaboration but requested earlier involvement, clearer expectations, and improved logistics.

WP4.2 effectively fostered student entrepreneurship and community value creation. The module is robust but will benefit from clearer preparation, strengthened methodological guidance, and more structured support for insight development and feasibility assessment.

EVALUATION AND LEARNING OUTCOMES

This report presents a comprehensive evaluation of the learning processes, methods, and outcomes within WP4.2 Training Module: Student Entrepreneurship.

While Report 3 described the case work carried out on the six FREIIA islands, this report goes deeper into what the students actually learned, how stakeholders experienced the collaboration, and the role that methodology and AI-supported analysis played in shaping understanding and entrepreneurial competence.

The evaluation is based on three primary sources:
- Student reflections following fieldwork, AI-supported analysis, and co-creation workshops.
- Stakeholder interviews and observations from the case processes on Koster, Hvaler, Groix, Ouessant, Schiermonnikoog, and Bornholm.
- Cross-island patterns identified through the UNIC method and AI-supported thematic analysis.

The evaluation is structured in alignment with the learning objectives from Report 1, the methodological framework presented in Report 2, and the case processes documented in Report 3.

Connection to the Learning Objectives (Report 1)
The evaluation framework is directly aligned with the competence categories defined in the training module:

Knowledge
The evaluation assesses the extent to which students developed:
- an understanding of sustainable and circular entrepreneurship
- insight into islands as learning arenas and living labs
- awareness of innovation governance in small communities

Skills
The evaluation measures student ability to:
- conduct structured fieldwork and qualitative interviews
- use the UNIC method to analyse insights
- apply AI tools for thematization and problem framing
- facilitate and participate in co-creation workshops

These skills correspond directly to the module's intended outcomes for methodological competence and insight development.

General Competence

The evaluation also examines broader competences such as:

- cross-sector collaboration
- intercultural communication
- critical reflection
- understanding of governance structures and local dynamics

Students were expected not only to generate solutions but to navigate complex community interactions, contributing meaningfully to local sustainability transitions.

Student Experiences: What Worked Well

Across the six FREIIA islands, student reflections show that learning outcomes were particularly strong when authentic local challenges, close collaboration with stakeholders, structured co-creation processes, and AI-supported analysis were combined. Together, these elements created a learning environment in which students could engage deeply with complex issues, develop entrepreneurial competencies, and experience how sustainable innovation unfolds in real communities.

Authentic Learning in Real Island Contexts

A consistent finding across all island cases was that working in real communities produced a level of depth and relevance that classroom learning cannot replicate.

The islands functioned as living ecosystems where challenges related to demography, tourism, mobility, nature management, and governance were tangible and visible. When students observed firsthand how these dynamics shaped everyday life, such as tourism pressure in Groix and Ouessant, housing scarcity on Koster, or seasonal fluctuations on Schiermonnikoog, sustainability ceased to be an abstract concept and became an experiential field of inquiry.

Several students described how conversations with stakeholders on Bornholm, young stakeholder on Hvaler, or municipal representatives on Groix deepened their understanding of what sustainable development entails in practice: compromises, trade-offs, and complex systemic tensions. This situated knowledge strengthened their ability to connect theory to real-world challenges and fostered a sense of personal engagement with the communities they worked with.

"AUTHENTIC FIELDWORK ALLOWED STUDENTS TO UNDERSTAND SUSTAINABILITY AS A LIVED REALITY, NOT AN ABSTRACT CONCEPT."

Close Collaboration with Local Stakeholders

Many students highlighted the interaction with local actors as one of the most meaningful aspects of the learning process. Through interviews, informal dialogue, and co-creation sessions, they gained direct access to lived experience, contextual knowledge, and local priorities, insights that cannot be gathered solely through literature or secondary sources.

On Hvaler, students reported that discussions with municipal staff, volunteers, and business actors made the project "real" and gave them a sense of responsibility. On Koster, conversations with community members helped them understand how seasonal economies and environmental regulations shape island life. In Groix, meetings with both residents and policy actors revealed the structural tensions underlying local development processes.

This engagement created a strong sense of relevance and ownership. Students felt their contributions mattered, and stakeholders expressed that the students' analytical work and fresh perspectives helped illuminate challenges in new ways.

"MEANINGFUL COLLABORATION WITH LOCAL ACTORS ENABLED STUDENTS TO SEE ISLAND CHALLENGES THROUGH THE EYES OF THE COMMUNITY."

Co-Creation Workshops as Arenas for Shared Understanding

The co-creation workshops were perceived as both engaging and academically enriching. Methods drawn from the Double Diamond and design thinking provided a clear structure that helped participants move from broad, unstructured insights to concrete problem formulations and concept development. Students learned how co-creation operates in practice: how to facilitate dialogue, synthesise insights, and invite local perspectives into collaborative idea development.

Workshops proved particularly effective in building shared understanding. On Schiermonnikoog, students found that workshop discussions made longstanding tensions between local residents and tourism actors more visible, while also enabling constructive dialogue about potential solutions. On Bornholm, stakeholders commented that student-facilitated processes brought "energy and fresh thinking" and helped clarify where barriers and opportunities lay.

Even in contexts where participation was lower than expected—for instance, on Ouessant—students reported that the methodology remained adaptable and productive. They learned that co-creation is not only a method but also a relational practice requiring situational awareness, facilitation skills, and the ability to navigate uncertainty.

"IN THE WORKSHOPS, INSIGHT TURNED INTO CONNECTION — AND CONNECTION INTO POSSIBILITY."

AI-supported analysis as a catalyst for insight development

A significant cross-island finding is that AI-assisted analysis made qualitative work more accessible and efficient for students. By using AI tools to cluster interview data, identify themes, and highlight relationships, students were able to gain an early overview and formulate clearer problem statements.

On Koster, students noted that the AI-assisted process helped them see links between mobility, housing, and community identity. On Groix, AI tools enabled the group to manage a large dataset in a short time, while students on Ouessant described how the combination of AI and manual validation enhanced the quality of their analytical work.

At the same time, students recognised that AI cannot replace interpretation or critical reflection. Many groups described the importance of discussing AI-identified patterns within the student team and validating them through further stakeholder interaction. The strongest learning occurred through this interplay between digital tools, methodological structure, and human judgement.

"AI ACCELERATED THE ANALYSIS — BUT HUMAN REFLECTION GAVE THE INSIGHTS MEANING."

Student Challenges: What Needs Improvement?

While students reported strong engagement and motivation throughout the learning process, several recurring challenges influenced both workflow and the quality of outcomes. These challenges highlight important areas for improvement in future iterations of the WP4 model.

Time Pressure and Workshop Intensity

A common challenge on some of the islands was the tight scheduling and high pace between fieldwork, analysis, and co-creation workshops. Students noted that the complexity of the problems, combined with large amounts of qualitative data and the expectation to generate concepts within a single workshop session, created a sense of pressure. This time constraint reduced the depth of problem understanding and limited the number of solution pathways explored before entering prototyping. Several student groups expressed that an additional day between data analysis and workshops would have enabled more robust insight development and stronger concept proposals.

Figure 1 - Students experienced the intersection of time constraints, complex insights, and high output expectations as a key pressure point.

Variations in Interview Quality

Across the islands, students reported considerable variation in interview techniques and the resulting data quality.

Challenges included:

- insufficient training in interview methods
- uncertainty about how to adapt questions to different types of informants
- inconsistent documentation and structuring of insights

These issues affected both the validity of findings and the quality of the problem statements brought into workshops. Some groups also experienced that weaker interview data led to less accurate AI analyses, reinforcing the need for stronger methodological preparation prior to fieldwork.

Group Dynamics Challenges

Group work is central to the WP4 methodology, but several teams encountered internal dynamics that hindered their performance. The most frequent challenges included:

- unclear role distribution and lack of coordination
- uneven levels of engagement and workload
- difficulties integrating diverse working styles and disciplinary perspectives
- challenges aligning analysis and making sense of complex findings together

These dynamics indicate a need for improved guidance on collaboration, team structure, and role clarification early in the process. Although many students ultimately recognised these dynamics as part of their learning experience, they still represent a key area for pedagogical improvement.

From Insight to Realistic Concepts

One of the most demanding steps for students was translating extensive qualitative insights into concrete, feasible concept proposals. Many groups found it challenging to:

- formulate solutions that balanced creativity with practical feasibility
- understand local constraints such as regulations, capacity, and economic limitations
- navigate between stakeholder expectations, innovative ambition, and realistic implementation

The tension between innovation and feasibility was especially visible on smaller islands with limited resources. Students expressed a need for more structured support in assessing implementability and designing solutions that align with the community’s strategic or operational capacities.

Stakeholder Evaluation: Perceived Value and Areas for Improvement

Perceived Value and Positive Experiences

Stakeholders across all six FREIIA islands consistently reported positive experiences with the student work. They highlighted three main types of value:

Fresh perspectives and "new eyes"

Many stakeholders noted that students introduced perspectives that the community itself often overlooks in daily operations. Students revisited familiar problems with new curiosity and asked questions that challenged established ways of thinking.

This aligns with co-creation literature, where external actors often function as catalysts for reflection and innovation.

High engagement, energy, and creativity

Stakeholders experienced the students as motivated, solution-oriented, and genuinely curious. This added momentum to local development discussions and created renewed optimism.

This resonates with theories of youth as change agents, noting that young people often drive ideation and creative problem-solving in local communities.

Clearer insight into existing challenges

Several stakeholders stated that students "put words to issues we already knew, but had never articulated."

Through interviews, AI-supported analysis, and structured workshop methods, challenges were organised into clear themes—fully aligned with co-creation principles where shared problem understanding is the foundation for meaningful innovation.

Strengthened local reflection and strategic awareness

Stakeholders felt that the student work helped surface long-term questions about island development, including collaboration, sustainability, youth retention, and seasonality. The students' presence therefore acted as a reflective mirror for the local community.

Challenges and Areas for Improvement

Although the overall evaluation was highly positive, stakeholders pointed to three main improvement needs:

Earlier involvement in the process

Several stakeholders expressed a desire to be included already during the insight and problem-framing phases.

Co-creation and local ownership theory emphasises that early involvement strengthens anchoring, quality of insights, and the chance of long-term use of the results.

Clearer expectations regarding roles and outcomes
Stakeholders wanted more clarity about what students can deliver, what the workshops will produce, and how the process unfolds.
Expectation alignment is essential in co-creation to avoid fatigue and ensure shared understanding of the process.

Coordination and logistical constraints
Some challenges were related to scheduling, availability, and limited local capacity—particularly on tourist islands during high season.
This is typical for small communities where time and resources are scarce and voluntary participation is common.

Link to Co-Creation Theory and Local Ownership
The stakeholder evaluation confirms several principles found in co-creation and local development research:

1. Co-creation works when there is mutual value
Students contributed analytical tools, structure, and creativity, while local actors contributed contextual knowledge and lived experience.
This reciprocity is the core of co-creation.

2. Early participation builds stronger ownership
The wish for earlier involvement reflects the importance of co-initiation—where stakeholders help define both the problem and the direction of the process, not only the solutions.

3. Ownership emerges through participation, not information
Stakeholders valued workshops where they had an active role. This supports the principle that sustainable solutions must be co-owned to be carried forward after the project period.

4. Relational trust strengthens legitimacy
Stakeholders emphasised the positive, respectful interactions with students.
Trust and dialogue are particularly important in small island communities, where social relations shape collaborative capacity.

Implications for Practice
Stakeholder feedback shows that effective co-creation depends on predictable processes, early engagement, and relational trust. When these elements are present, student–community collaboration becomes more meaningful, and islands are better positioned to continue innovation work beyond the project period.

Stakeholders perceived the student work as highly valuable, energising, and relevant. At the same time, they expressed clear wishes for:

- earlier involvement in the insight phase
- clearer expectations of roles and outcomes
- stronger logistical coordination

These findings align with co-creation and local ownership theory, and show that the methodology is effective but can be strengthened by involving stakeholders earlier and more systematically.

Development of Entrepreneurial Competence

The evaluation shows that students strengthened several key entrepreneurial competences during the WP4 learning process. These competences align with internationally recognised categories within entrepreneurship education, such as those used in the EntreComp framework, and reflect both the methodological design of the module and the authentic, real-world challenges students worked with.

EntreComp Framework

The entrepreneurial competences assessed in this report are aligned with the EntreComp Framework, developed by the European Commission as the leading model for entrepreneurship education in Europe. EntreComp defines entrepreneurship as the ability to create value for others—socially, culturally, or economically—and structures this into three competence areas comprising 15 sub-competences.

1. *Ideas & Opportunities*
2. *Focuses on recognising opportunities, applying creativity, forming a vision, valuing ideas, and integrating ethical and sustainable thinking.*
3. *Resources*
4. *Encompasses mobilising knowledge, skills, people, and materials; developing self-efficacy and perseverance; and understanding how to access and use financial resources.*
5. *Into Action*
6. *Covers the practical ability to initiate, plan, collaborate, manage uncertainty, and learn through experience.*

Together, these competences provide a comprehensive structure for understanding how students develop entrepreneurial capability. They are widely used across EU education, innovation, and policy contexts, making them a relevant benchmark for analysing student learning outcomes in the FREIIA WP4 training module.

Figure 2 - EntreComp Framework Wheel

Opportunity Recognition

Students developed the ability to identify innovation opportunities within complex, real-life systems. Through fieldwork, stakeholder interviews, and AI-supported theme analysis, they learned to spot patterns, unmet needs, and systemic tensions across island contexts.

This competence was especially visible when students reframed initial assumptions after deeper engagement with local actors, demonstrating increased sensitivity to contextual nuances.

Creative Problem-Solving

Design thinking workshops strongly facilitated students' creativity, enabling them to generate, cluster, and refine ideas collaboratively.

They learned to:

- move between divergent and convergent thinking
- use visual tools to explore complexity
- translate insights into feasible concept drafts

Students consistently reported that hands-on ideation and prototyping pushed them to think beyond traditional solutions and explore new pathways for sustainable entrepreneurship.

Systems Thinking

Working on small but complex island systems strengthened students' ability to understand interdependencies across governance, environment, tourism, mobility, and demography. Activities such as stakeholder mapping, innovation gap analysis, and identifying leverage points helped students view challenges as part of broader systemic structures, not isolated problems.

This competence proved essential for developing solutions that were realistic within local constraints.

Communication & Stakeholder Engagement

Students significantly strengthened their ability to:

- facilitate dialogue
- coordinate group discussions
- clarify interests and expectations
- present ideas to non-academic audiences

Pitching their concepts to stakeholders was repeatedly highlighted as one of the strongest learning moments.

The process required students to express complex insights clearly, justify design choices, and adapt communication to diverse audiences.

Prototyping and Concept Development

Students gained confidence in moving from abstract ideas to tangible solution proposals.
Through rapid prototyping, sketching, and scenario building, they learned to:
- visualise early concepts
- test ideas with stakeholders
- incorporate feedback iteratively

This competence was reinforced across all islands, but particularly where workshops allowed real-time testing of prototypes with community members.

Sustainable and Circular Thinking: Learning Outcomes

The evaluation shows that WP4 significantly strengthened students' ability to understand, analyse, and apply principles of sustainability and circular economy within real island contexts. Working in small, resource-constrained communities made sustainability challenges more visible and concrete, and Report 3 demonstrates how these insights were directly reflected in student concepts and reflections.

Understanding Sustainability Challenges

Students developed a deeper understanding of sustainability as a systemic rather than purely environmental issue. Interviews and field observations across Koster, Groix, Ouessant, Hvaler, Schiermonnikoog and Bornholm revealed recurring patterns such as housing pressure, demographic imbalance, seasonal tourism strain, and resource limitations.

Because these issues were experienced directly in the field, not just described theoretically, students reported a stronger grasp of how social, economic and environmental factors interact in small island systems. This aligns with WP4 Report 3, which shows that islands functioned as "scaled-down versions of global sustainability problems," enabling sharper insight into the interplay between tourism, local governance, mobility, resource use, and community resilience.

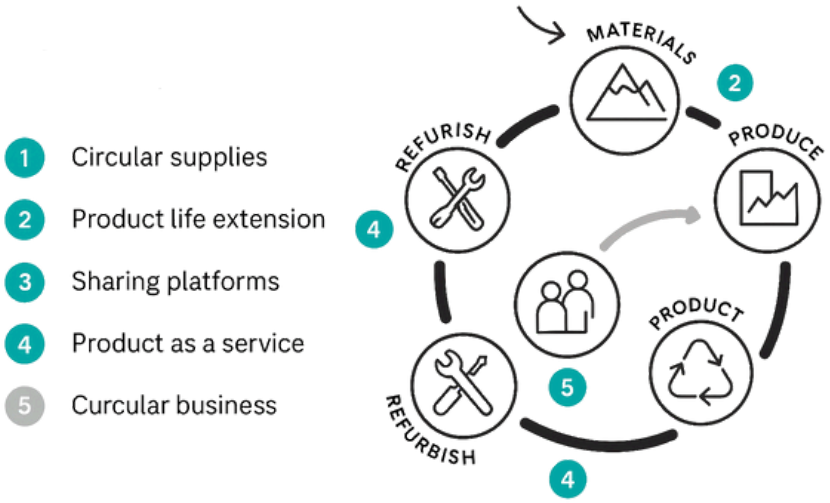

Figure 3 - Circular Economy Loop and Key Strategies.

Ability to Apply Circular Economy Models

Students demonstrated emerging ability to apply circular frameworks to real-world challenges. Across islands, several groups:

- proposed resource-sharing models (e.g., mobility solutions, tool-sharing, shared community spaces)
- suggested reuse, repair, or value-chain solutions in tourism and food systems
- worked with concepts that extend product or service lifecycles
- explored business models rooted in seasonal circularity (e.g., turning off-season capacity into new forms of value)

These applications reflected the principles introduced in Report 1, where circular entrepreneurship is described as designing systems that minimise waste, optimise resource loops and reduce dependency on linear production. Students' concepts showed clear connection to these principles, especially on Bornholm and Groix, where circular thinking was used to address agriculture, tourism and resource strain.

Linking Local Challenges to Global Systems

A key learning outcome was students' ability to link local, context-specific issues to larger sustainability systems, such as:

- global tourism dynamics
- climate-driven pressures on fisheries and agriculture
- demographic shifts affecting rural development
- policy tensions between conservation and economic growth

Report 3 illustrates how students recognised that even small islands are embedded in broader systems of mobility, governance, energy, and consumption. This strengthened their systems thinking competence: students were able to see how interventions in one area (e.g., tourism) created ripple effects across housing, labour markets, and local identity.

Recognising Resource Scarcity and Seasonal Economies

Island contexts amplified students' understanding of resource scarcity and seasonal fluctuation. Because islands have finite space, limited infrastructure and dependency on ferries, sustainability issues were more pressing and obvious. The "winter–summer contrast" described across all six cases helped students grasp how seasonal economies shape:

- waste flows
- housing availability
- local service levels
- labour markets
- ecological pressure

This led to a more nuanced awareness of how circular strategies must adapt to fluctuating demand and local capacity.

Developing Sustainability-Driven Concept Proposals

Across all island workshops, students produced concepts that demonstrated their ability to design solutions grounded in sustainability and circularity. Examples from Report 3 include:

- Hvaler: low-impact social infrastructure concepts addressing inclusion during the winter season
- Groix & Ouessant: ideas for regulating seasonal pressure and reducing environmental strain
- Bornholm: circular food and agriculture initiatives

These concepts show that students were not merely applying circular economy terminology but genuinely integrating it into problem framing and solution pathways.

Islands as Living Laboratories for Sustainable Thinking

Working on islands played a critical pedagogical role. As highlighted in Report 1 and Report 3, islands function as ideal learning arenas because they are:

- small enough for students to understand full systems
- complex enough to reflect real sustainability transitions
- resource-constrained, making circular solutions necessary, not optional
- heavily affected by tourism, illustrating global-local tensions
- communities with strong identity and ownership, enhancing co-creation

This “living lab environment” made sustainability tangible, immediate, and emotionally engaging, leading to deeper learning outcomes than classroom-based teaching alone.

Learning Outcomes for Sustainable and Circular Thinking

Students developed:

- Holistic understanding of sustainability challenges across environmental, social and economic dimensions
- Practical application skills for circular models such as reuse, shared resources, lifecycle thinking and regenerative approaches
- Systems thinking competence, recognising interconnections across tourism, governance, infrastructure and resource flows
- Contextual adaptation skills, designing solutions tailored to seasonal dynamics and local culture
- Enhanced awareness of real-world sustainability trade-offs—particularly the balance between preservation and development

The Role of AI in Learning

AI and data-supported analysis played a central role in the WP4 learning process. Across all islands, students reported that AI increased analytical precision, accelerated insight development, and strengthened their ability to identify complex sustainability challenges. At the same time, the evaluation highlights the need for critical reflection, methodological guidance, and human validation to avoid over-reliance.

Increased Efficiency in Insight Work

AI-supported thematic coding significantly accelerated the students' ability to synthesise field data. Interview transcripts, field notes, and observations were converted into structured patterns within minutes, allowing students to spend more time on interpretation, discussion, and workshop preparation.

Students emphasised that AI helped them:
- identify recurring themes across interviews
- detect underlying structural and systemic patterns
- recognise cross-island similarities more quickly
- organise large volumes of qualitative data into workable insight clusters

This aligns with Report 2, which highlights AI's role in supporting pattern recognition and insight development in the UNIC methodology.

Improved Problem Understanding and Framing

AI contributed to deeper problem-framing quality by visualising relationships between challenges, stakeholders, and system drivers. Students were better able to see:
- shared challenges across the six islands
- hidden tensions, contradictions, and leverage points
- actor dependencies and local systemic relationships

As a result, workshop inputs became clearer, more precise, and better grounded in real data. This improved the quality of co-creation sessions with stakeholders and created stronger alignment between local needs and student-developed concepts.

The AI-supported insight process thereby strengthened students' systems thinking, a core competency in sustainable and circular entrepreneurship (Report 1 & 2).

Strengthened Critical Reflection

A consistent finding across the islands is that comparing their own interpretations with AI-generated theme clusters strengthened students' meta-learning.

Students learned to:
- question AI's suggestions
- validate insights against their own field notes
- triangulate data with stakeholder feedback
- reflect on how digital tools shape their understanding

This reflection process enhanced methodological awareness and supported higher-order learning outcomes such as critical thinking, analytical judgement, and epistemic responsibility.

Risk of Over-Reliance

The evaluation also highlights clear pedagogical risks. Students occasionally assumed AI output to be "correct," especially under time pressure.

This demonstrates the need for explicit guidance on:
- validating AI outputs
- ethical and critical use of digital tools
- distinguishing between pattern detection and meaning-making
- ensuring local voices remain central to the insight process

Without such guidance, AI risks overshadowing human interpretation, particularly in qualitative, community-based research where nuance, context, and lived experience are essential.

Connection to Educational Theory: Digital Competence

The role of AI in WP4 connects closely to contemporary theories of digital literacy and digital competence in higher education.

According to other frameworks, competent use of AI requires:
- Technical skills (operating AI tools effectively)
- Information literacy (assessing quality, bias, and validity of generated insights)
- Critical digital awareness (understanding how algorithms shape knowledge)
- Responsible and ethical use (ensuring transparency, fairness, and accuracy)

WP4 shows that students developed several of these competencies through experiential use of AI. However, achieving full digital competence requires structured pedagogy—not just access to tools.

Therefore, AI should be framed as a support system that augments, rather than replaces, human qualitative judgement.

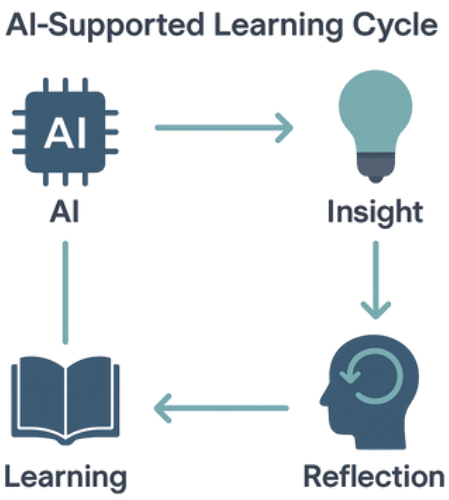

Figure 4 - AI-supported learning cycle.

AI in Learning

AI enriched the learning experience by accelerating analysis, improving insight quality, and strengthening reflective competence. When properly guided, it enhances students' ability to work with complex sustainability challenges and supports higher-order digital competencies. However, the evaluation also makes clear that AI must be embedded in a pedagogical structure that emphasises critical validation, ethics, and human interpretation. AI is a catalyst for learning—but not a substitute for analytical thinking.

Strengthened Critical Reflection

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What the Module Must Improve Before Future Implementation

Based on the evaluation of WP4 activities and insights from Reports 1–3, several improvements are recommended to strengthen the next iteration of the Training Module. These recommendations address structural, methodological, and pedagogical gaps observed across all six islands.

1. Clearer Roles and Expectations

Both students and local actors reported uncertainty about roles, responsibilities, and the scope of the student work. Future implementation must therefore include:
- explicit role descriptions for students, supervisors, and stakeholders
- clearer communication of boundaries, expectations, and deliverables
- better preparation for stakeholders regarding their involvement in workshops and interviews

This aligns with the need for "more clearly defined roles" identified in Report 1's implications section.

2. Earlier Introduction to Qualitative Methods and Interview Technique

Students frequently expressed that they entered fieldwork without adequate methodological grounding. To strengthen data quality and confidence:

- interview technique and the UNIC method should be introduced earlier
- students should receive structured training in qualitative inquiry
- ethical guidelines and field protocols must be covered before the island visits

This recommendation directly supports the need for “better integration of methods” and improved preparation described in Report 2.

3. More Guided Reflection Before, During, and After the Process

Although reflection is embedded in the module, students need more support to process field experiences, understand power dynamics, and connect theory to practice.

Suggested improvements:

- mandatory reflection checkpoints (pre-fieldwork, mid-fieldwork, post-workshop)
- structured formats such as reflection logs, guided questions, and short debriefs
- explicit focus on positionality, facilitation challenges, and governance insights

Report 2 stresses the importance of strengthening reflective learning and integrating it more systematically.

4. Better Coordination With Local Actors

Stakeholder involvement varied greatly across islands. To ensure stronger anchoring and continuity:

- local actors should be contacted earlier and more systematically
- expectations and schedules should be aligned well before fieldwork
- municipalities, DMOs, and community groups should be briefed about workshop structure and student needs

Report 3 highlights the need for improved collaboration logistics and more predictable participation structures.

5. More Time Allocated to Insight Analysis Before Workshops

Students often had insufficient time between fieldwork and co-creation sessions, reducing depth in insight generation and problem framing. The module should therefore:

- add a dedicated insight-analysis day before workshops
- allow students more time to validate AI findings and refine problem statements
- provide methodological guidance during the transition from “Discover” to “Define”

This improvement reflects consistent student feedback and structural implications noted across reports.

6. Integrated and Responsible Use of AI

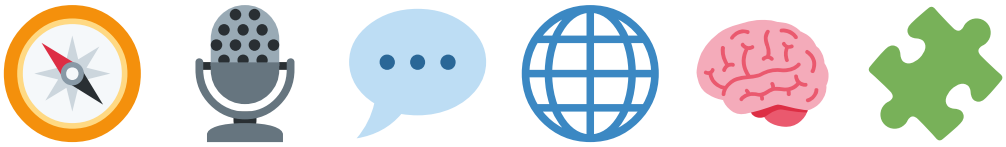
WP4 demonstrated that AI-supported analysis significantly improves insight development—but also introduces risks of over-reliance. To ensure responsible use:

- students should receive a short introduction to AI as an analytical assistant
- emphasis must be placed on validation, triangulation, and critical thinking
- AI tools should be positioned as support, not automated insight generators

Both Report 1 and Report 2 highlight the importance of embedding AI critically and pedagogically.

Key Recommendations

1. *Define roles clearly* to strengthen ownership and avoid confusion.
2. *Introduce qualitative methods earlier* to improve fieldwork outcomes.
3. *Embed structured reflection* throughout the module.
4. *Improve coordination with local actors* before and during fieldwork.
5. *Allocate more time for insight analysis* before workshop facilitation.
6. *Provide integrated AI training* focusing on responsible and critical use.



Summary of Evaluation Findings

Three things that worked well

- Islands as living learning arenas created deep engagement, contextual understanding, and strong student motivation.
- Close collaboration with stakeholders gave authenticity, trust, and higher-quality insights.
- AI-supported analysis significantly increased the clarity, speed, and precision of thematic coding and insight development.

Three things that must be improved

- Time management and workshop structure must be tightened to avoid rushed processes.
- Earlier introduction to qualitative methods and interview skills is needed to ensure consistent data quality.
- Clearer expectations and logistics with partners would strengthen engagement and reduce confusion during fieldwork and workshops.

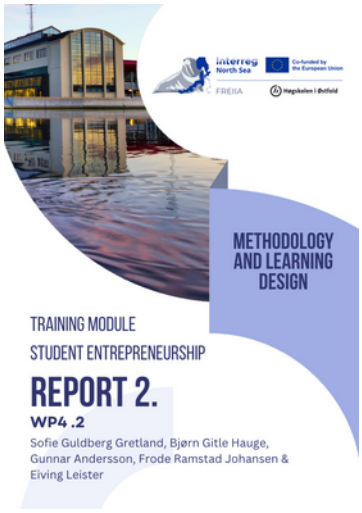
Three core learning outcomes

- Entrepreneurial competence development, including opportunity recognition, co-creation skills, and confident pitching.
- Enhanced understanding of sustainability and circular systems, particularly how island contexts expose systemic barriers and opportunities.
- Improved qualitative analysis and critical reflection, especially through responsible use of AI as an analytical support tool.

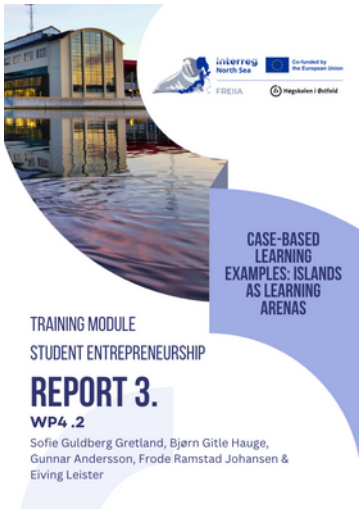
Figure 5 - Visual summary of the three core learning outcomes: reflection, knowledge development, and student progression throughout the WP4 training module.

Structure of the Other Reports

CONSEPT AND FRAMEWORK FOR THE TRAINING MODULE



METHODOLOGY AND LEARNING DESIGN



CASE - BASED LEARNING EXAMPLES: ISLANDS AS LEARNING ARENAS

INTEGRATION AND FUTURE IMPLEMENTATION