

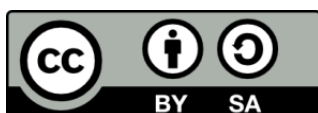


DISC WP3

Pilot Implementation Report



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Introduction

The DISC Pilot Implementation Report presents the outcomes of nine learning offers created and carried out by the DISC partnership. These offers are based on the DISC approach, which aims to promote sustainable literacy, therefore education for sustainable develop (ESD), among learners in higher education sector through design based collaborative learning and research.

In December 2023, a comprehensive DISC Continuing Professional Development (CPD) training session was held. Twenty professionals from higher education and adult education participated, each nominated by a DISC Project Partner to learn and apply the DISC methodology. These trained individuals then worked with their university and organisations to implement the DISC Pilot Learning Offers through the integration into their teaching context and/or as a stand-alone course for the students and interns.

These pilot projects covered a broad range of topics, formats, and audiences, reflecting DISC's commitment to interdisciplinary collaboration and innovation. The educators and facilitators documented the implementation and outcomes of each project.

The reports are organized into several sections:

- **Action Field:**
 - **Course Description:** Overview of the course content and structure.
 - **Target Group:** The primary audience for the project.
 - **Themes (Content Area):** Main topics and areas of focus.
 - **Learning Objectives:** Specific knowledge, skills, and attitudes the project aims to develop.
- **Learning Pathway:** Pedagogical approach and methods used.
- **Trainer Experience Report:** Insights, reflections and stories from educators.

Throughout these projects, participants engaged in various methodologies, resources, and activities, yielding valuable insights and outcomes. The educators' and facilitators' reflections highlight the transformative power of the DISC methodology in fostering a culture of innopreneurs for sustainability. The positive feedback from participants underscores the immediate applicability and impact of the skills and knowledge acquired.

The report serves not only as a documentation of the project outcome, but also as inspiration for those interested in developing their own DISC course and ESD.



(Source: Cover page of student project presentation)

1 Design Based Collaborative Learning and Research for Sustainable Development in Module 8 of the Master for Adult Education

Organisation/University: UDE

Prepared by: Tim Scholze

1.1 Action Field

1.1.1 Course description

The implementation of the programme at UDE took place in three circles from 2022 to 2025 along the following approach:

The students went through different phases:

1. Pre-Phase: to get familiar with own (and partners') projects and with theory on:
 - Sustainable Development and the SDGs
 - DBCL (Design Based Collaborative Learning in Theory)
 - DBCL (Design Based Collaborative Research in Theory)
 - This phase was (partly) delivered online on the DISC moodle system (SDG explorer=
2. In the F2F phase they
 - receive further theory inputs (at UDE on LLL and orgas/institutions in EU education), DBCL and DBCR and on Validation of Informal and Non-formal learning, and
 - create their joint DBCL project on SD (at UDE in semester 1 and 2)
3. In the 2nd semester they further developed their DBCL/DBCR project apply their knowledge in their own domains and organisations
4. The courses end with a self-reflection on the own projects, a self- and expert-assessment of the competence development and a LEVEL5 certification.

The Module 8 is a 2-semester course at the UDE Master of Adult Education which deals with Institutions and organisations in European Education. From 2022 onwards it was designed to combine the "traditional" study contents (Lifelong Learning and Institutions and organisations) with Sustainable Development and the innovative methodology of DBCL and DBCR.

It hence aims at opening the theme of what organisations and institutions exist in Germany and Europe, their properties, functions and specifications and their economic, societal impact and their contributions to sustainable development. Special emphasis is put on the themes of innovation, competition, European impact and European funding

Students are expected to work on a team project based on an own institution and to develop innovation and sustainability within this organisation

1.1.2 Target group

- Students of the Master of adult education
- Based on educational Bachelor or teaching professionals
- Educational students who don't want to work in schools
- People aiming to work in HR

1.1.3 Themes (content area)

- Definitions and Explanatory approaches to Institutions and Organisations
- Properties of institutions in education
- Education as market

1.1.4 Learning objectives (for final beneficiaries)

Knowledge:

- Understanding properties and differences between organisations and institutions
- Profound understanding of EU funding and possibilities for innovation within Educational organisations.

Skills:.

- Ability to differentiate o organisations and institutions
- Ability to describe the own organisation
- Ability to introduce innovation and sustainability
- Ability to create ideas to increase attractiveness of an educational organisation
- Ability to work in national and international teams on this topic

Attitudes:

- To become interested in the topic of organisations in education
- To become motivated to contribute with own ideas for improvement and to introduce sustainability

1.1.5 Methods/Activities

Blended learning of 8 input sessions, asynchronous self-learning studies (provided with 120 slides), collaborative synchronous online sessions (20 hrs) and a validation session (2 hrs)

1.1.6 Resources and materials

- Course slides (120)
- Moodle course
- Miro collaborative learning boards
- Moodle course self-validation

1.2 DISC Learning pathway

Schedule and blended learning approach:

Three courses were delivered between end of 2022 and February 2025 with a total of 22 students.

We blended the curricular units related to the themes of M81 (Lifelong Learning) and M82 (organisations and institutions in education) with the Design Based Collaborative Learning and Research modules and delivered parts of the SD knowledge via the SDG explorer app.

An exemplary schedule for the first semester is provided below:

Modul 8: Weiterbildung im Kontext europäischer und globaler Entwicklungen und Herausforderungen			
Datum	Uhrzeit	Thema/Aufgabe 8.1 Vergl. Weiterbildungsforschung	Thema/Aufgabe 8.2 Institutionen und Organisationen
15.04.	12-14	Vorstellung, Konzept, Terminabsprachen, Methodik,	Design Thinking, Begriffsklärungen: Inst. vs. Organisationen
29.04.	12-14	Einführungsvideo: Aufgabenbearbeitung in Moodle Aufgabe Grundbotschaften Memorandum des LLL	Input 1: Einführung: Inst. vs. Organisationen #1 Aufgabenstellung AG: "Ihre" Organisation in der EB
13.05	12-14	Aufgabenstellung: eLearning 1 : Lebenslanges Lernen in europäischen Institutionen und Organisationen der EB und WB:	Input 2: Einführung: Inst. vs. Organisationen #2 Nachhaltigkeit in europäischen Bildungsinstitutionen Aufgabenstellung: Ihre Challenge in der EB
27. Mai	12-14	Feedback 1: Lebenslanges Lernen in europäischen Institutionen und Organisationen der EB und WB: Diskussion über Memorandum und Ihrer Ergebnisse	INPUT 3: Strukturen: Anbieter von Weiterbildung in Deutschland und Europa
10.06.	12-14	Aufgabenstellung: Life Long Learning und Workplace Learning als systematische Lösungen für Europa (e-Learning 02)	Input 3: Institutionen und Innovation AG Präsentation : Vorstellung Ihrer Challenge/ Aufgabe: "Kunden" und Ideen
24.06.	12-14	Aufgabenstellung: Kriterien und Modelle für die internationale „Vermessung“ der Weiterbildung (eLearning 03)	Input 4: EU-Förderung#1 AG Präsentation: Ihre Ideen und "Kunden" Aufgabenstellung Auswählen der Ideen
08.07	12-14	Feedback EL 2&3: OECD und DQR und Internationale "Vermessung" der Weiterbildung Aufgabe EL04: Internationale wissenschaftliche Outputs – Einen wissenschaftlichen Beitrag verstehen & einordnen können	INPUT 5: Umsetzung von Querschnittsthemen in der EU Erwachsenenbildung (Sustainability) Präsentation: Von Ihrer Idee zum Prototyp/Präsentation
22.07.	12-14	Präsentationen, Prüfungen Teil 1 (Teil 2 = Essay)	
	Legende	Präsenz bzw. online synchron (weiß)	Lila Schrift = Projekt in Design Thinking
		Asynchrone Arbeitsaufgabe (EL 01-03) in Kombi mit nachfolgendem synchronen oder F2F feedback (blau)	

Table: 1st semester plan of the 2023 modules M81 and M82

In the second semester the projects were professionally planned and updated.

The DBCL module was carried out in conjunction with the DISC scheme (which was promoted and trained in the DISC course in Torino). Here the experiences of the first course (2022/2023) could be taken up.

Step	Title	Content	Learning Objective	Method & Activity	Competence Column
1	SDG Orientation	<ul style="list-style-type: none"> • Introduction to UN SDGs • Use of SDG Explorer 	<ul style="list-style-type: none"> • Understand global sustainability challenges • Align learning to specific SDG targets 	<ul style="list-style-type: none"> • Online session • Interactive use of SDG Explorer • Team selection based on interest in SDG topics 	<p>K = Basic Understand the purpose and structure of SDGs)</p> <p>A = Medium (Interest in sustainability and social relevance)</p>
2	Design Thinking & DBCR Framework	<ul style="list-style-type: none"> • Overview of DT and DBCR • Interlinking design and research 	<ul style="list-style-type: none"> • Understand DT as research approach • Appreciate iterative, user-centred innovation process 	<ul style="list-style-type: none"> • Presentation and discussion • Case studies and team reflection • Whiteboard canvas to link phases with research steps 	<p>K = Medium (Know DT and DBCR concepts)</p> <p>S = Medium (Relate design thinking to problem-solving)</p> <p>A = Medium (Openness to interdisciplinary work)</p>
3	Understand & Empathise	<ul style="list-style-type: none"> • Context analysis • Stakeholder/user research • Use of AI tools 	<ul style="list-style-type: none"> • Learn to collect and analyse data • Apply AI for insight generation 	<ul style="list-style-type: none"> • Group work using context research framework, secondary research 	<p>K = Medium (Know how to collect and interpret data)</p> <p>S = High (Apply research methods)</p> <p>A = High (Curiosity and empathy for user needs)</p>
4	Define	<ul style="list-style-type: none"> • Synthesis of findings • Problem framing (How Might We) 	<ul style="list-style-type: none"> • Formulate challenge based on research • Understand scope and constraints 	<ul style="list-style-type: none"> • Persona & HMW statement creation • Peer review of clarity and relevance 	<p>K = Medium (structured problem understanding)</p> <p>S = High (Synthesize information to define challenges)</p> <p>A = High (sense of ownership)</p>
5	Ideate	<ul style="list-style-type: none"> • Idea generation • Creative thinking tools 	<ul style="list-style-type: none"> • Develop multiple ideas using DT • Consider feasibility and innovation for ideas selection 	<ul style="list-style-type: none"> • Brainwriting and WOW-NOW-HOW matrix • Group reflection 	<p>K = Medium (Understand ideation principles and creative methods)</p> <p>S = High (Generate and cluster ideas)</p> <p>A = High (Willingness to explore ambiguity)</p>

Step	Title	Content	Learning Objective	Method & Activity	Competence Column
6	Prototype	<ul style="list-style-type: none"> Storyboarding, early models AI-supported visuals and media 	<ul style="list-style-type: none"> Create tangible outputs from abstract ideas Communicate effectively 	<ul style="list-style-type: none"> Create digital or paper prototypes Internal feedback and revision loops 	K = Medium (Know prototyping formats) S = High (using tools to create prototype) A = High (Commitment to iterative improvement)
7	Test & Present	<ul style="list-style-type: none"> Present prototypes to peers 	<ul style="list-style-type: none"> Evaluate solutions with reference to SDG impact, feasibility and user needs 	<ul style="list-style-type: none"> Peer testing & feedback sessions Presentations at final conference 	K = Medium (Know evaluation criteria) S = High (Present and justify ideas) A = High (Receptiveness to feedback, critical thinking)
8	Validation & Self-Assessment	<ul style="list-style-type: none"> LEVEL5 competence validation 	<ul style="list-style-type: none"> Reflect on personal learning Assess development in SD innovation competence 	<ul style="list-style-type: none"> Self- and peer-assessment using LEVEL5 	K = Medium (Understand competence dimensions) S = High (Reflect on learning outcomes) A = Medium-High (Motivation to apply skills beyond the course)

1.3 Your Experience Report (of the trainer team)

1.3.1 Development process

The first UDE course (2022/2023) served as prototype for the methodology of DBCL, which was very helpful for the ToT course in Torino, since practical experiences could be taken up.

This also opened the possibility that UDE could pilot the course concept three times and gave us an array of different student projects.

The course could increasingly be improved (over 2 years) so that we could deliver the course with 3 module 8 groups at UDE over the project lifetime. The most important finding from the methodological/didactic view is that we need to provide a very clear task description in the most challenging project initiation processes where the students had to cope with a high level of ambiguity (as they do not have a clear understanding of the challenge and their mission).

Coping with ambiguity seems to be one of the major (if not THE major) competence trait in the courses and learning programmes. This matches perfectly with the background (and intentions) of the GreenComp and EntreComp frameworks which aiming at the ability to cope with complex systems and to “positively embrace” ambiguity as a kind of “motivator” to learn together.

1.3.2 Contents

Contents were delivered as intended. The continuous development of online resources (SDG explorer, DBCL and DBCR handouts and learning units clearly supported the students in the cycles 2 and 3.

The Validation of Informal and Non-Formal learning was included in cycle 2 and 3 also as F2F input, which was appreciated by the students to understand the background of competence validation (beyond ECTS points).

1.3.3 Methodology

The methodology successfully combined synchronous online learning, asynchronous team collaboration, and an in-person development workshop. The use of collaborative digital platforms, particularly Miro boards, facilitated efficient remote teamwork. Participants had no problems with the collaborative jobs through all DT phases.

DISC’s modular courses at UDE were delivered in the envisaged four core modules:

1. **SDG Explorer**– A self-learning and self-reflection module introducing the 17 SDGs. It supports learners in identifying their personal “SDG type,” forming interdisciplinary student teams around sustainability themes.

2. **Design Thinking for Sustainability** – A collaborative, problem-solving module that applies **Design-Based Collaborative Research (DBCR)**. This innovative approach integrates design thinking methodology with empirical, practice-oriented research to co-develop real-world sustainability solutions. DBCR introduces students to applied research and motivates them to ground their innovation in substantiated evidence and participatory engagement.

At UDE a number of practice projects was developed which also had concrete links in real-life projects which created development opportunities for NGOs, e.g. BiBU and Sustain a wave.

3. **LEVEL5 Validation** – A meta-cognitive module using the LEVEL5 taxonomy for competence-oriented learning validation. Students reflect on and document their learning processes, with emphasis on transversal competences and personal development.
4. **Domain specific Course Modules** – At UDE this related to LLL and Organisations and Institutions as well as on European Education policy and programmes.

1.3.4 Outcomes

The pilot revealed significant developments in learners' competence, particularly in their ability to identify opportunities, conduct structured research and devise innovative, sustainability-related solutions. LEVEL5 validation confirmed improvements in knowledge, skills and attitudes related to sustainable innovation and design thinking.

The outputs included several well-conceptualised project prototypes that addressed SDG-related challenges; many of these prototypes incorporated primary research findings into their design rationale.

1.3.5 Impact

The DISC DBCR pilot course was innovative, combining design thinking, research methodology and AI-supported facilitation within a coherent framework. Learner feedback was positive, particularly regarding the course's structured yet creative nature and the practical applicability of the introduced tools and methods.

We entered the course into a university competition for innovative teaching approaches and a national competition funded by a foundation. Results are still pending.

The most convincing proof of impact and transferability was the successful development of a sustainability project that originated from an idea created by one of the workgroups on the course in 2023/24. This project has been selected for funding through the Erasmus programme and is currently being realised.

1.3.6 Sustainability aspect

As described above, the course connected the domain-specific M8 module (Organisations and Institutions in Education) with the web-based SDG Explorer self-learning programme, the DBCL module, and the validation module.

The common denominator was sustainability, since the students' projects started from an exemplary institution that intended to become more sustainable. The competence framework and validation were related to spotting ideas and opportunities on SD (Module 2), and the DBCL project was related

to developing ideas and prototypes on SD (Module 3). Knowledge on SD was delivered through the SDG Explorer (Module 1).

Therefore, the theme of sustainable development was not only a significant part of the content, but also strongly related to the context, action field and holistic, competence-oriented learning and validation.

1.3.7 Perspective/Synergy and Transfer

The course has been delivered three times, and in May 2025, the Master Module will be adapted to incorporate the DBCL methodology into the UDE Master AE Module Handbook. This paves the way for the continued integration of the SDGs into the module, as well as the introduction of the new methodology into other areas such as digitally supported learning and AI.

Intensive piloting provided an opportunity to refine the programme and methodology, and extend the learning module to other faculties and universities. Working with students from other countries was extremely interesting and complements existing mobility programmes.

1.3.8 Professional Development

Two trainers from UDE participated in the ToT programme, gaining new knowledge and skills, and changing their view of university teaching and European education.

During the intensive piloting phase, we were able to convert the theoretical approaches of COL&V and DBCL into our professional practice, and evaluate the success of the DISC approach in terms of both content and methodology.

This approach helped us to design our learning offers in a more 'user-friendly' way, and to introduce useful learning technologies (SDG Explorer) rather than just 'knowledge repositories' with low-quality behaviourist tasks.

In an institution (university) where teaching and learning are not prioritised, the DISC project revealed itself to be a powerful tool for transforming academic teaching into a positive, meaningful and even exciting experience for students. This also motivated us to become better teachers.

We also acquired 'European competences' through collaborating with colleagues from SR, EL, IT and PT, and through contact with their students. This helped us expand our view of teaching in higher education institutions (HEIs) in different EU countries, EU educational policies, goals, systems and limitations, and, last but not least, develop a much deeper understanding of the situation and culture of our European colleagues.

1.3.9 Narrative Project Report – “my Story”

The UDE DISC Journey: From First Steps to Sustainable Innovation

Our journey with the DISC course at the University of Duisburg-Essen began in 2022 with a simple but ambitious aim: to pilot a modular course that combined sustainability, research, and innovation through a methodology we were just getting to know—Design-Based Collaborative Learning (DBCL). This first prototype wasn't only a learning opportunity for the students; it was also a field test for us

as trainers. We started without a clear roadmap but with a strong belief in the potential of combining design thinking, competence validation, and the UN Sustainable Development Goals (SDGs).

Setting Out – The First Steps

The first delivery of the course (2022/23) served as our experimental ground. It helped us understand the complexities of initiating a project-based, collaborative learning process in higher education, where ambiguity is not only a challenge but a resource. This early experience provided valuable insights, which we then shared during the Training of Trainers (ToT) in Torino—making the UDE course a cornerstone for further capacity-building within the DISC partnership.

Having this opportunity allowed us to pilot the DISC approach three times over 2.5 years, each time with a new student cohort and refined methods. These iterations led to improved course design and a stronger alignment of the modules. Over time, the course became more than a teaching experiment—it became a real developmental journey for students and staff alike.

On the Way – Learning, Reflecting, Creating

Throughout the course, we observed that the ability to cope with ambiguity became one of the most critical competencies. Many students initially struggled when asked to navigate open-ended challenges without clear answers. Over time, however, this ambiguity became a learning catalyst—fuel for creativity, collaboration, and innovation. This reflects perfectly the intentions behind the GreenComp and EntreComp frameworks, which promote the ability to work in complex and uncertain contexts.

From a methodological standpoint, the blend of synchronous online learning, asynchronous team collaboration, and in-person development workshops worked well. The use of collaborative platforms like Miro helped structure remote teamwork, while in-person sessions allowed for deep dives into co-creation and validation. The continuous development of resources—such as handouts, learning units, and the SDG Explorer—enhanced the quality and depth of learning with each cycle.

Arriving – Achievements and Outlook

The outcomes exceeded our expectations. Students developed well-conceptualised project prototypes based on real challenges and primary research. Competence gains were measurable and meaningful, with clear growth in entrepreneurial thinking, sustainability awareness, and the ability to design implementable solutions. The LEVEL5 validation confirmed this progress, and student feedback highlighted the relevance and motivational power of the course.

One of the greatest testaments to the course's impact came when a project initiated during the 2023/24 cycle was selected for Erasmus+ funding and is now being implemented. We also submitted the course to a university-wide teaching innovation competition and a national foundation-funded award—results pending.

In terms of sustainability and transfer, the DISC methodology is now being mainstreamed. By May 2025, the Master AE Module Handbook at UDE will include DBCL, embedding the approach into formal structures. Plans are underway to transfer the methodology to other faculties and even universities. The course's cross-national component—working with students and staff from Slovakia, Greece, Italy, and Portugal—offered invaluable insights into European educational contexts and collaboration.

Reflection – What We Learned as Trainers

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Professionally, this journey changed how we teach and how we understand education. We moved from theory to practice, designing user-friendly, meaningful learning experiences. We embraced tools like the SDG Explorer not just as content providers, but as transformative learning spaces. In an academic environment where teaching is often undervalued, DISC reminded us of its power to engage, challenge, and inspire.

Personally, we grew as educators and as Europeans. Collaborating with partners across the continent broadened our understanding of education policy, systems, and cultural perspectives. DISC didn't just change our students—it transformed us too.

The journey continues, and we're proud to say that the DISC course at UDE is no longer a pilot. It's a living, evolving programme—one that started with a bold idea and has become a model for future-oriented, sustainability-driven education.



2 Design Thinking in Inclusive Mobility

Organisation/University: blinc e.G.

Prepared by: Nika Hrovat

2.1 Action Field

2.1.1 Course Description

In this project the blinc eG has collaborated with the REVEAL e.V., an association working in all informal and formal educational areas, ranging from volunteering and internship projects, School, Vocational and Higher Education to highly specialised and individualised learning-on-the-job programmes and entrepreneurship education. The DISC approach was applied in a Design Based Collaborative Learning course that blinc carried out with 9 persons from 4 countries across Europe.

In this course the focus was on the facilitation competence of the DISC approach. The training was entitled "Design Thinking in inclusive mobility" and was aimed at students of Universities from Portugal and Germany. It was consisting of a series of 4 online learning units in Design Thinking Facilitation following Design Based Collaboration Learning (DBCL) methodology. Participants attended a 5-day F2F event in Peniche in June 2024 for prototyping workshops and presentations during an international conference. Here, teams of participants created prototypes for different applications relating to inclusive mobility.

2.1.2 Target group

Participants were undergraduate students seeking foundational knowledge in the project's thematic area, graduate and postgraduate students engaged in advanced studies or research relevant to the project, international exchange students benefiting from mobility and collaborative learning opportunities and academic staff as professors and researchers collaborating on interdisciplinary or international aspects of the project. They have educational background and experienced in higher education and community development, and hoped to improve their competence in facilitating creativity & entrepreneurial skills and engagement with a multicultural and multidisciplinary group of learners.

2.1.3 Themes (content area)

- Design Thinking
- Facilitation of Design Thinking
- Mobility learning
- Inclusive mobility

2.1.4 Learning objectives

Knowledge:

- Theoretical knowledge on Design Thinking methodology

Skills:

- Design thinking skills: Techniques for designing and implementing educational activities tailored to diverse needs. Methods to ensure accessibility for learners with disabilities or other disadvantages.
- Cultural Sensitivity and Awareness: Understanding how to create learning environments that respect and celebrate cultural diversity.

- Learner-Centered Approaches: How to develop learner profiles to identify specific needs and tailor educational interventions.
- Project Planning and Evaluation: Insights into planning, implementing, and assessing inclusive learning initiatives.

Attitudes:

- Positive attitude towards the development of ideas in the team.
- Tolerance of ambiguity as a team member in relation to the developments in the teams
- Positive appreciation of all design thinking phases and iterative processes
- Positive appreciation of the contributions of all team members
- Openness, curiosity and motivation to use mixed learning forms

2.1.5 Methods/Activities

We applied a combination of:

- Competence Oriented learning (self-learning and Self-Assessment provided via DISC Moodle)
- Design Thinking workshops
- Own project development
- External assessment along the LEVEL5 taxonomy for “Facilitation on Design Thinking”

2.1.6 Resources and materials

Design Thinking workshops:

- facilitated via Design Based Collaborative Learning (zoom (online synchronous communication and collaboration), MIRO (online collaboration with creativity techniques), and Moodle (DISC Learning Suite); and
- F2F in the course

2.2 Learning pathway

Step	Title	Content	Learning objective	Method and Activity	Duration	Competence column
1.1	Design Thinking Intro	<ul style="list-style-type: none"> Overview of the whole design thinking methodology 	<ul style="list-style-type: none"> Understanding the context (entrepreneurship) and the additional value 	<ul style="list-style-type: none"> Tools to collect many ideas e.g. brainwriting, bisociation etc. 	<ul style="list-style-type: none"> 1 days 	K = Medium (know why and how on DT) S = low-medium (exercising) A = low/medium (Curiosity and Motivation)
1.2	Design Thinking	<ul style="list-style-type: none"> Ideation 	<ul style="list-style-type: none"> Lateral Thinking 	<ul style="list-style-type: none"> Tools to collect many ideas e.g. brainwriting, bisociation etc. 	<ul style="list-style-type: none"> 0,5 days plus 1-3 days' work groups 	K = Medium (know how on DT) S = High (application and transfer) A = high (Ambiguity tolerance, joint development)
1.3	Design Thinking	<ul style="list-style-type: none"> Refinement 	<ul style="list-style-type: none"> Exclusion 	<ul style="list-style-type: none"> Different tools and grids to select according to certain criteria Tools for marketing and client orientation e.g. persona canvas 	<ul style="list-style-type: none"> 0,5 days plus 1-3 days' work groups 	K = Medium (know how on DT) S = High (application and transfer) A = high (Ambiguity tolerance, joint development)
1.4	Design Thinking	<ul style="list-style-type: none"> Prototyping 	<ul style="list-style-type: none"> To create a convincing prototype 	<ul style="list-style-type: none"> Open catalogue of prototype formats Prototype has to be presented both as learning app module and in a group presentation 	<ul style="list-style-type: none"> 0,5 days plus 1-3 days' work groups 	K = Medium (know how on DT) S = High (application and transfer) A = high (Ambiguity tolerance, joint development)

Step	Title	Content	Learning objective	Method and Activity	Duration	Competence column
2	Facilitation	<ul style="list-style-type: none"> • Understanding audience • Active listening • How to give constructive feedback 	<ul style="list-style-type: none"> • To identify the needs of learners • To give constructive feedback to learners 	<ul style="list-style-type: none"> • Role play with a different work group 	<ul style="list-style-type: none"> • 1 day 	K = Medium (know how on facilitation) S = High (application and transfer) A = high (Ambiguity, tolerance)
3	Self-Assessment and Validation	<ul style="list-style-type: none"> • Competence assessment and validation over the learning pathway 	<ul style="list-style-type: none"> • To reflect on the own learning pathway • To give examples for the reached level of competence 	<ul style="list-style-type: none"> • Presentation of the assessment concept • LEVEL5 Self-assessment grids to be first filled individually, discussed with peer and (i/a) discussed in the group. • issue of LEVEL5 certificates 	<ul style="list-style-type: none"> • 2 hrs 	K = Medium (know how on competences and validation, self-reflection on the learning process) S = High (Metacognition) A = medium to high (motivating, maybe decides to go on).

2.3 Your Experience Report (of the trainer team)

2.3.1 Development process

As expected, the “challenge” workshops which were conducted in June 2024 were most demanding since international participants did not know each other but were supposed to collaborate in teams. Therefore, the identification of a common starting point, context and goal was difficult but could be managed.

All participants worked intensively through the following Design Thinking phases (Client orientation with persona canvas, Ideation phase, refining prototyping and presentations) and could accomplish the course successfully. The individual and external competence validation worked well and there were no substantial differences in regard to the LEVEL5 assessment results between the self- and expert validation. This was probably due to the preliminary delivery of the theory and the assessment methodology. All 9 participants were able to successfully in groups develop their prototypes.

In this respect, the main learning objectives were achieved.

In contrast to other working groups with partly rather theoretical learning contents and learning contexts, the topic of inclusive learning in mobility was excellently suited to develop concrete prototypes in mixed teams. The topic has undoubtedly a positive connotation, and everyone can contribute something - this facilitates the brainstorming (phase 2) and the coordination processes in phase 3 (selection).

The most important thing for us afterwards is that this seminar clearly proved that students can also use the topic of "mobility" as a platform for attractive training offers also in specific domains like culture & arts and social integration.

2.3.2 Contents:

The course was also to some extent about sustainability - only no input was given on the topic but the participants developed their own concepts for educational modules on the topic of sustainability in the region of the training. In terms of content, the sustainability concepts deal in the context of arts, culture, integration.

Additionally, also methodological contents were delivered in asynchronous online modality such as Competence Oriented Learning and Competence Validation which aimed at:

1. Creating Consciousness for real life assessments outside the academic and formal education world
2. Getting a more holistic approach to learning and development and deeper understanding of the concept of competence
3. Getting prepared for a “self-critical and realistic” self-assessment of the own competence developments in the Design Thinking course

2.3.3 Methodology

The design thinking process then represents the central approach to the development of educational products.

2.3.4 Outcomes

We could clearly see and assess the competence developments of the students and also our own facilitators. All of them were able to collaborate successfully in teams and showed rather steep learning curves in regard to:

- Their competence to spot ideas and opportunities
- Inclusive learning in mobility competences
- Our own team members: Facilitation competences
 - Structuring and conceptualisation according to competence levels
 - Development of learning units (H5P and Moodle)

2.3.5 Impact

We aimed for a blended learning concept which would also offer the opportunity for some participants to accomplish the course entirely online (incl. validation); however, we prefer a modality in which international participants would eventually meet. This could be realised within the face to face workshop.

It was especially important and encouraging that the participants received the opportunity to present their results in the international conference.

2.3.6 Sustainability Aspect

Our pilot strongly emphasizes creating equitable learning opportunities for disadvantaged groups. By focusing on individuals who face barriers to mobility learning—such as those with physical disabilities, limited resources, or lack of prior educational opportunities—we aim to foster an inclusive environment. The pilot integrates tailored learning modules, mentorship programs, and flexible participation options, ensuring that all learners feel empowered to engage and succeed.

2.3.7 Perspective/Synergy and Transfer

We will continue to plan and deliver our courses and learning projects according to this methodology. This relates to learning offers in HE but it should be transferred also to VET and AE, in which specific learning projects on sustainability can be initiated. The principle, that the learners design these projects is a great move since this “challenge” step is on the one hand.

2.3.8 Professional Development

The methodology that we experienced within the DISC programme means a big change from a trainer centred to a learner centred approach. This was very much appreciated by our team members who facilitated the online and F2F phases of the course.

Most of us have heard about it but could not really understand and perceive what was meant with “learner centred” and “learning to learn”. Before transferring this into a course these ideas were more buzz words and concrete examples and introductions were missing. Some team contributed to a full understanding of the feasibility and impact of this kind of learning.

In a nutshell: This was one of the very rare CPDs for students which really brought about something NEW in terms of methodology and teaching and learning approach.

On the one hand we have to trust the self-organisation abilities of the learners and have to refrain ourselves from too much instruction and prepared content. On the other hand, we have to “navigate” the learners’ teams through their development processes – which is far more than just a product development exercise but an innovative form of instructional design which is more about moderating and facilitating than about presenting pre-formatted solutions. We also have to accept that we are not in a superior position but should happily welcome ideas and prototypes that are better than what we ourselves would have developed. Once we accept that, our role becomes more that of a colleague and a critical friend then the one of an instructor.

2.3.9 Narrative Project Report – “my Story”



As trainers, facilitating the "Design Thinking in Inclusive Mobility" course was truly rewarding. Our initial online gathering, prior to meeting in Portugal, revealed the incredible potential of this diverse group. Participants from across Europe, working with various disadvantaged target groups, shared a common challenge: making mobility learning accessible for disadvantaged adult learners. This immediately fostered a sense of community, and we eagerly anticipated our in-person meeting.

In Peniche, the energy was positive from the start. Our well-prepared program ensured participants understood the training structure. Engaging ice-breaking activities quickly forged instant connections, laying a firm foundation for collaborative work.

On the second day, an excursion to Berlengas island served as a crucial empathy exercise. We challenged participants to imagine themselves in their target groups' shoes, gaining profound understanding of navigating new places with physical disabilities, how older individuals might

experience such offers, or the needs of those with mental challenges. This experience powerfully underscored our mission to foster equal opportunities in mobility learning.

The third day focused on equipping participants with innovation tools. Our team provided comprehensive knowledge to kickstart group work and develop creative solutions. A detailed presentation of the design thinking method offered concrete, actionable steps, ensuring groups felt supported and guided.

Group work continued by defining "learning in mobility." This shared definition provided a clear starting point for their common goal. One group embraced the challenge of creating a mobility offer for trauma survivors, combining shared interests and best practices. Their focus was on developing innovative, "inclusively" co-created learning formats.

The next critical step involved deeply understanding their target group's needs. Participants effectively used the Persona Canvas, Empathy Map, and Journey Map to create detailed profiles, grasping beneficiaries' "pain points" and desires. This formed the base for generating inclusive mobility learning ideas. Progressing through Design Thinking steps, they refined concepts, culminating in tangible prototypes. The final stage involved presenting these ideas and prototypes at a conference on Thursday.

A motivational guest speaker also shared his inspiring story of developing innovations that enable physically disadvantaged people to surf. This powerful testimony reminded us that no obstacle is too great to overcome.

In less than a week, participants developed a wide array of skills. They applied design thinking to mobility challenges, gained a deeper understanding of needs for individuals with mental challenges and trauma, and practiced empathy, active listening, creativity, and public speaking in group work. It was an intense, enriching experience that laid a strong groundwork for continued development of accessible mobility learning and equal opportunities for all.



3 International Course on Design Based Collaborative Research for Sustainable Development

Organisation: blinc eG

Prepared by: Vianne Law

3.1 Action Field

3.1.1 Course description

The pilot course “Design-Based Collaborative Research for Sustainable Development” (DBCR) was delivered within the framework of the Erasmus+ DISC project to foster innovative and competence-oriented learning for sustainable development. The course was designed to develop students’ and professionals’ ability to spot opportunities and generate ideas for sustainable development by applying design based collaborative research methods. This course was implemented in April 2025 with 26 participants in the online sessions, of which 17 attended the in-person workshop.

This course was created in response to the growing demand for practical, interdisciplinary approaches to sustainability challenges and the need for higher education to address the UN Sustainable Development Goals (SDGs) through real-world projects. Participants worked in international, multidisciplinary teams, taking part in both online and in-person sessions to address SDG-related challenges, moving from research and ideation to prototyping and presentation. The final results included developed prototypes and project ideas ready for further implementation.

3.1.2 Target group

The target group comprised students, interns, and staff from DISC project partner organisations, predominantly higher education, and adult education in the fields of education, business, tourism, innovation, and sustainability. Participants were typically in early to mid-career stages with backgrounds in the humanities, sciences, social sciences, or engineering. The teams were intentionally international and interdisciplinary, fostering a rich environment for cross-cultural collaboration and knowledge exchange

3.1.3 Themes (content area)

Please list the themes/content areas that you worked on with your learners.

Themes/content

- Sustainable Development and the UN SDGs
- Design Thinking and Human-Centred Innovation
- Collaborative and Interdisciplinary Research
- Application of Artificial Intelligence in Design and Research
- Entrepreneurship and Opportunity Recognition
- Prototyping and Solution Development

3.1.4 Learning objectives

Knowledge:

- Understand the UN SDGs and their relevance to local and global challenges.
- Know key design thinking methods and research paradigms (inductive, deductive, abductive).
- Recognise the role of AI in supporting research, ideation, and prototyping.

Skills:

- Develop the ability to spot opportunities and generate creative solutions for sustainability.

- Apply design thinking in research and innovation contexts.
- Work effectively in interdisciplinary, multicultural teams.
- Utilise AI tools for research, analysis, ideation, and prototyping.

Attitudes:

- Value sustainability and entrepreneurial thinking.
- Foster curiosity, openness to innovation, and a willingness to collaborate.
- Appreciate the importance of critical reflection, iteration, and user feedback.

3.1.5 Methods/Activities

We applied a combination of::

- Interactive online workshops and ice-breakers
- Design thinking exercises (understand, empathise, define, ideate, prototype, test)
- Use of AI tools for research, ideation, clustering, and prototyping
- Team-based challenge development and scenario work
- Group presentations and feedback
- In-person development workshop (Thessaloniki) including team work, rapid prototyping, and pitch sessions
- Competence validation using the LEVEL5 system

3.1.6 Resources and materials

Various resources are developed by the course facilitators for this pilot, including:

- Sessions materials on Design Thinking, Using AI for Design Thinking and Design-Bases Collaborative Research
- Online collaborative whiteboards for teamwork (Canva)
- SDG scenario bank
- Ideation and prototyping templates and digital resources
- LEVEL5 Assessment Pack for competence validation

3.2 DISC Learning pathway

Step	Title	Content	Learning Objective	Method & Activity	Competence Column
1	SDG Orientation	<ul style="list-style-type: none"> • Introduction to UN SDGs • Use of SDG Explorer 	<ul style="list-style-type: none"> • Understand global sustainability challenges • Align learning to specific SDG targets 	<ul style="list-style-type: none"> • Online session • Interactive use of SDG Explorer • Team selection based on interest in SDG topics 	<p>K = Basic Understand the purpose and structure of SDGs)</p> <p>A = Medium (Interest in sustainability and social relevance)</p>
2	Design Thinking & DBCR Framework	<ul style="list-style-type: none"> • Overview of DT and DBCR • Interlinking design and research 	<ul style="list-style-type: none"> • Understand DT as research approach • Appreciate iterative, user-centred innovation process 	<ul style="list-style-type: none"> • Presentation and discussion • Case studies and team reflection • Whiteboard canvas to link phases with research steps 	<p>K = Medium (Know DT and DBCR concepts)</p> <p>S = Medium (Relate design thinking to problem-solving)</p> <p>A = Medium (Openness to interdisciplinary work)</p>
3	Understand & Empathise	<ul style="list-style-type: none"> • Context analysis • Stakeholder/user research • Use of AI tools 	<ul style="list-style-type: none"> • Learn to collect and analyse data • Apply AI for insight generation 	<ul style="list-style-type: none"> • Group work using context research framework, secondary research 	<p>K = Medium (Know how to collect and interpret data)</p> <p>S = High (Apply research methods)</p> <p>A = High (Curiosity and empathy for user needs)</p>
4	Define	<ul style="list-style-type: none"> • Synthesis of findings • Problem framing (How Might We) 	<ul style="list-style-type: none"> • Formulate challenge based on research • Understand scope and constraints 	<ul style="list-style-type: none"> • Persona & HMW statement creation • Peer review of clarity and relevance 	<p>K = Medium (structured problem understanding)</p> <p>S = High (Synthesize information to define challenges)</p> <p>A = High (sense of ownership)</p>
5	Ideate	<ul style="list-style-type: none"> • Idea generation • Creative thinking tools 	<ul style="list-style-type: none"> • Develop multiple ideas using DT • Consider feasibility and innovation for ideas selection 	<ul style="list-style-type: none"> • Brainwriting and WOW-NOW-HOW matrix • Group reflection 	<p>K = Medium (Understand ideation principles and creative methods)</p> <p>S = High (Generate and cluster ideas)</p> <p>A = High (Willingness to explore ambiguity)</p>
6	Prototype	<ul style="list-style-type: none"> • Storyboarding, early models 	<ul style="list-style-type: none"> • Create tangible outputs from abstract ideas • Communicate effectively 	<ul style="list-style-type: none"> • Create digital or paper prototypes 	<p>K = Medium (Know prototyping formats)</p> <p>S = High (using tools to create prototype)</p>

Project Number:

2022-1-DE01-KA220-HED-000087131

Step	Title	Content	Learning Objective	Method & Activity	Competence Column
		<ul style="list-style-type: none"> • AI-supported visuals and media 		<ul style="list-style-type: none"> • Internal feedback and revision loops 	A = High (Commitment to iterative improvement)
7	Test & Present	<ul style="list-style-type: none"> • Present prototypes to peers 	<ul style="list-style-type: none"> • Evaluate solutions with reference to SDG impact, feasibility and user needs 	<ul style="list-style-type: none"> • Peer testing & feedback sessions • Presentations at final conference 	K = Medium (Know evaluation criteria) S = High (Present and justify ideas) A = High (Receptiveness to feedback, critical thinking)
8	Validation & Self-Assessment	<ul style="list-style-type: none"> • LEVEL5 competence validation 	<ul style="list-style-type: none"> • Reflect on personal learning • Assess development in SD innovation competence 	<ul style="list-style-type: none"> • Self- and peer-assessment using LEVEL5 	K = Medium (Understand competence dimensions) S = High (Reflect on learning outcomes) A = Medium-High (Motivation to apply skills beyond the course)

3.3 Your Experience Report (of the trainer team)

3.3.1 Development process

Although previous courses on design thinking had been conducted within the partnership, the DISC pilot introduced several new methodological elements, leading to a noticeable improvement in the quality of learner outputs. In particular, the systematic integration of Design-Based Collaborative Research (DBCR) into the design thinking process resulted in a deeper understanding of the societal challenges being addressed by learners. Participants were guided to engage more rigorously in the research phase of the design process, which translated into more user-centred and feasible solutions.

A significant enhancement was the deliberate alignment of each design thinking phase with corresponding research activities. This approach encouraged learners to adopt an evidence-based mindset, resulting in better-focused problem definitions and higher-quality prototyping.

3.3.2 Contents

The course content was delivered according to plan and fulfilled its intended learning outcomes. The introduction of research methodologies, combined with practical application via design thinking and AI-supported processes, enabled a balanced focus on creativity, critical analysis, and real-world relevance. Notably, teams independently initiated primary user research, such as peer interviews, to validate and refine their problem understanding—demonstrating the practical uptake of the DBCR approach.

3.3.3 Methodology

The methodology successfully combined synchronous online learning, asynchronous team collaboration, and an in-person development workshop. The use of collaborative digital platforms, particularly Canva Whiteboard, facilitated efficient remote teamwork. Participants found the tool intuitive, which minimised technical barriers and maximised their engagement in the learning activities.

The integration of AI tools was effective across multiple phases, including research, ideation, prototyping, and communication. Participants used generative AI not only to process and analyse information but also to enhance the quality of their visual and written outputs. In future iterations, further structured application of AI in ideation and evaluation phases is envisaged.

A key challenge arose during the Thessaloniki workshop due to the late arrival of some local participants. This caused minor disruption to group work dynamics. A mitigation measure was implemented in the form of a targeted onboarding session, which helped integrate late participants into ongoing team activities.

3.3.4 Outcomes

The pilot demonstrated clear competence developments among learners, particularly in their ability to spot opportunities, apply structured research, and generate innovative, sustainability-related solutions. The LEVEL5 validation confirmed improvements across knowledge, skills, and attitudes dimensions related to sustainable innovation and design thinking.

Outputs included several well-conceptualised project prototypes addressing SDG-related challenges, many of which incorporated primary research findings into their design rationales.

3.3.5 Impact

The DISC DBCR pilot course was highly innovative in combining design thinking, research methodology, and AI-supported facilitation in one coherent framework. Learner feedback was positive, particularly regarding the structured yet creative nature of the course and the practical applicability of the tools and methods introduced.

3.3.6 Sustainability aspect

The course was directly aligned with the principles of Education for Sustainable Development (ESD), embedding sustainability literacy and the United Nations Sustainable Development Goals (SDGs) into all learning activities.

During the recruitment phase by each DISC partner, participants were introduced to the SDG Explorer, a digital learning tool designed to provide a foundational understanding of the SDGs and their relevance to global and local challenges. This ensured that all learners—regardless of their previous knowledge—had a shared baseline of awareness before beginning their research and design work.

During the course, teams selected focus areas closely related to SDG 3 (Good Health and Well-being) and SDG 4 (Quality Education). Their project work concentrated on challenges such as social isolation among specific groups, mental health support, and enhancing access to learning and personal development opportunities.

By connecting creativity with evidence-based research, and by explicitly anchoring their prototypes in the SDG framework, learners were empowered to think systemically about societal needs. The approach modelled a sustainable innovation practice suitable for replication and scaling in other higher education programmes and real-world settings.

3.3.7 Perspective/Synergy and Transfer

In future iterations, the DISC DBCR approach will be retained, with refinements in the application of AI-supported tools for idea generation and evaluation. There is strong potential for synergy with entrepreneurship education, social innovation programmes, and

interdisciplinary project-based learning initiatives. Additionally, the course format is suitable for adaptation to virtual mobility formats within Erasmus+ and other international education frameworks.

3.3.8 Professional Development

From a trainer perspective, the course provided valuable experience in facilitating competence development through blended learning environments. The application of AI as an enabler for creativity and research efficiency, combined with a design-based collaborative research framework, will inform future course designs within the consortium and beyond.

3.3.9 Narrative Project Report – “my Story”

Starting point:

In our previous work, design thinking was already a familiar companion—a trusted process for sparking creativity and navigating complex challenges. But there was always a lingering question: could we go deeper? Could we find a way to make the solutions not only more innovative but also more grounded and resilient?

The DISC project gave us the perfect opportunity to answer that question. By embedding Design-Based Collaborative Research into the heart of our course, we challenged ourselves—and our learners—to rethink how we approach innovation for sustainable development.

Start of the journey

From the very first online session, there was an energy that felt different. We weren't just asking learners to brainstorm; we were asking them to research, to investigate, to validate.

Armed with new tools like Canva Whiteboard—simple, intuitive, and surprisingly powerful—we saw teams form across borders, connecting diverse minds and experiences. AI entered the picture not as a gimmick, but as a real partner: analysing trends, creating personas, suggesting prototypes.

We set off together: a caravan of students, researchers, and facilitators, all moving towards the same goal—to create something meaningful for our world.

Milestones

Early on, the shift became visible. One team decided to explore isolation among gamers. Instead of jumping to solutions, they stepped back and started asking questions. They interviewed friends, gathered evidence, challenged their assumptions. Watching them move from empathy to ideation with such seriousness was a milestone we will not forget.

Meanwhile, AI became a true creative partner. Participants used it to generate not only research summaries but also to design their presentations, prototype visuals, and even video pitches. The synergy between human curiosity and machine support was inspiring.

Of course, not everything went smoothly. In Thessaloniki, we faced an unexpected twist: some local participants could only join us on the final day. It could have fractured the momentum. But thanks to a special onboarding session and the resilience of the teams, we turned it into a learning moment about adaptability and inclusiveness.

On the way

Throughout the course, participants encountered both productive and challenging moments. As teams progressed through the design thinking phases, we observed steady engagement, improved collaboration, and a growing confidence in applying the DBCR methodology.

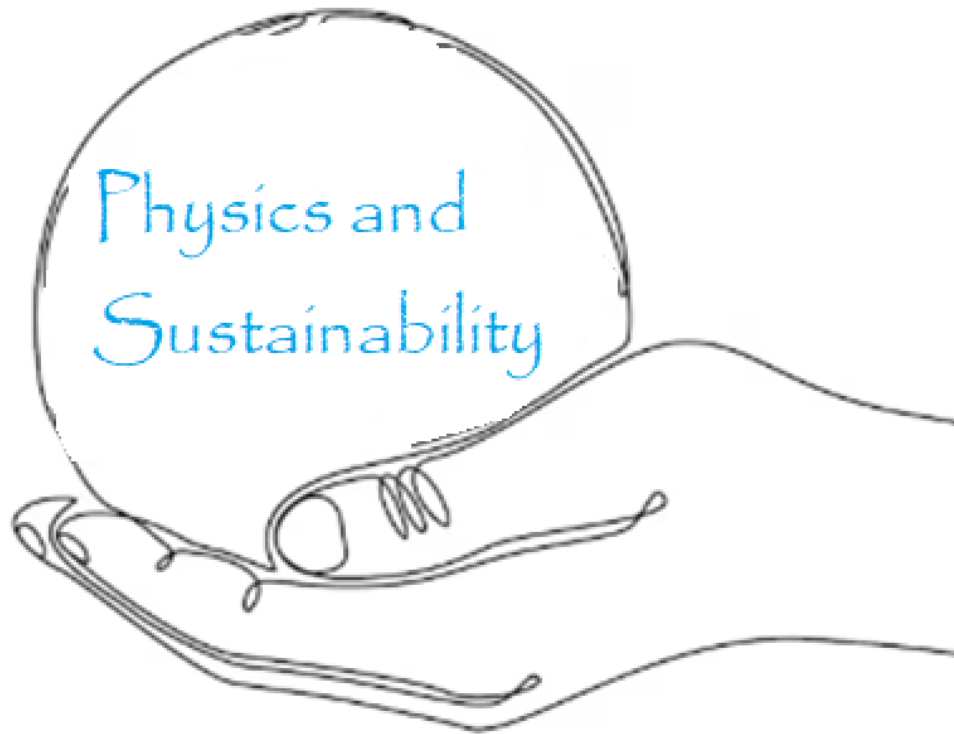
Some teams required more facilitation during the early stages of problem definition, while others adapted quickly to the research-driven structure. There were occasional difficulties, such as handling differing expectations and backgrounds within teams, and working under time pressure during the Thessaloniki sessions.

These experiences, however, were instructive. They prompted reflection, adaptation, and more conscious teamwork. Both participants and facilitators gained a clearer understanding of how to balance structure with creativity in a fast-paced, interdisciplinary setting.

On arrival

Standing at the final presentations, we saw more than prototypes. We saw confidence. We saw real connections. We saw young people who could think critically, work collaboratively, and create solutions for real societal needs.

We also saw new questions arise. How can AI further support not just research and presentation, but creativity itself? How might we better structure onboarding when groups are dynamic? These are questions we are excited to explore in the next journey.



4 Physics with sustainability: learning through videos-making

University: Polytechnic University of Leiria, Portugal

Prepared by: Roberto Gamboa

4.1 Action Field

4.1.1 Course description

The aim of the project is to relate physics with the UN Sustainable Development Goals (SDGs), the pilot challenges the students to produce a video relating physics with sustainability. Some initial information and examples are presented to the students, they team in groups of 4 to 5, research the topic, propose ideas for the video and build a story guide using a design thinking inspired methodology, producing the first deliverable. Then they start writing, recording, editing and producing the 3 minutes video, in the following month. Finally, the video is presented, to all the groups, commented on and evaluated by the students, at a Physics and Sustainability video festival.

Students are supposed to learn to relate the UN Sustainable Development Goals (SDGs) with the subject of the curricular unit, physics and with real life problems and communicate the relation in a video format.

This pilot takes approximately 3 months and runs within a curricular unit of physics in the ESTM-IPLeia in Peniche, Portugal, once per semester from September 2022 to December 2024, during 5 editions, in a total of 200 total students, using the educational Moodle platform provided by the IPLeia.

4.1.2 Target group

Participants are undergraduate students of the first year, 18 to 22 years, in Marine Biology, Biotechnology or Food Engineering degrees, depending on the semester and the year.

4.1.3 Themes (content area)

Themes address directly the UN Sustainable Development Goals that are intimate related to the physics domain and to the degree students are studying, most common themes were within Affordable and Clean Energy, SDG7, Industry, Innovation and Infrastructure, SDG9, Climate Action, SDG 13, and Life Below Water, SGD 14.

SDG 7: Affordable and Clean Energy - physics plays a crucial role in the development of renewable energy technologies, such as solar, wind, and hydroelectric power and students reflect on that.

SDG 9: Industry, Innovation, and Infrastructure - physics is fundamental for technological innovation and the development of sustainable infrastructures, including more efficient and durable materials, as well as the optimization of industrial processes to reduce environmental impact.

SDG 13: Climate Action - studies in physics are essential for understanding and mitigating climate change. This includes climate modeling, data analysis, and the development of technologies to reduce greenhouse gas emissions, these issues are addressed by some pf the student's videos.

SDG 14: Life Below Water - physics contributes to the protection of marine ecosystems through the development of technologies for monitoring and conserving the oceans, the creation of sensors and observation systems to study ocean health and ocean ecosystems.

4.1.4 Learning objectives

Knowledge:

- Relate to the UN Sustainable Development Goals in real context.
- Understand the relation between physics and sustainability within SDGs.
- Create and produce a video with meaningful content while working in teams.
- Communicate using video and multimedia tools.
- Evaluate colleague's work.

Skills:

- Learners developed practical skills in researching, identifying and generating ideas to develop in a story, in video format, relating science with the SDGs, enabling them to understand sustainable development projects and initiatives better.
- They learn to build a script for a video using design thinking inspired methodology while working in groups of 4 to 5 people. They record, edit and produce the video and present the final product to their colleagues.
- They also develop teamwork and project management skills, related to schedules and digital tools management.

Attitudes:

Learning allowed the development of attitudes that reflect SDGs understanding and relation to science contents, empowering learners to acknowledge contributes to sustainable development in several domains.

- Learners developed a stronger empathy to sustainable practices, understanding the importance of aligning their work with the SDGs.
- Learners developed a wider understanding of how physics relates to sustainability and SDGs contributing to a holistic approach to sustainable development.
- Learners developed an attitude of relational research, using design thinking inspired methodology and multimedia tools to produce quality final products related to innovative solutions to sustainable challenges.

4.1.5 Methods/Activities

The Moodle platform was used to communicate with the students, offering guidelines to structure and support the project. The platform encourages interactive learning through several resources and assignments, allowing students to engage actively with the project. Design-thinking inspired methodology was proposed to generate ideas and prototypes.

Students used collaborative digital tools to develop video projects and open-source tools to record, edit and produce the video. This work helped them to understand the difficulties but also the rewarding feeling of multimedia productions. The final step was the presentation of the videos to all the colleagues, a discussion about what could be better and an evaluation of the videos, the challenge and the professor.

4.1.6 Resources and materials

- Internet access, moodle, mobile phones, and open-source video editing tools.
- File to report on the video idea and the main parts of the script, uploaded on the moodle.
- Digital space for large files.

4.2 DISC Learning pathway

Step No.	Title	Content	Learning objective	Method Activity	Media	time	Competence column ¹
1	Physics and sustainability relation challenge, within ODS framework	Analysis of the Sustainable Development Goals (SDGs) relations with physics. SGS guidelines provided in (https://moodle.disc-eu.org/course/index.php?categoryid=2).	To understand the relevance and application of the SDGs and the relation with physics.	<ul style="list-style-type: none"> • Reviewing the SDG guidelines provided on the Moodle platform. • Identifying SDGs that relate more to science and physics. 	Moodle platform, SDG guidelines, online resources.	1 week: 1h with teacher + autonomous work	Knowledge and skills, easy
2	Review of videos related to sustainability and physics	<ul style="list-style-type: none"> • Conducting a review on video examples related to science and physics. • Discussion with colleagues about the videos. 	<ul style="list-style-type: none"> • To acquire knowledge about videos involving physics and sustainability. • Be inspired by the most interesting approaches and engage with the project. 	Review using different online tools and resources including YouTube and AI advice.	Multimedia repositories and educational platforms.	1 week autonomous work	Knowledge, medium difficulty Attitudes medium
3	Peer Discussions	Engaging in discussions with peers to generate ideas and select the video perspective to proceed.	Develop innovation and collaborative skills by discussing and justifying the selected ideas.	Group discussions and collaborative decision-making.	Group table discussions and online. Collaborative tools	Face-to-face or on line, 1 week	Skills and attitudes, medium.

¹ Please indicate if the unit targets knowledge, skills or attitudes and if the difficulty is rather basic, medium or advanced.

Step No.	Title	Content	Learning objective	Method Activity	Media	time	Competence column ¹
4	Problem Definition	Defining the challenge by exploring various dimensions, including resources, difficulty implementing and potential quality of the final product.	To understand the challenge and explore potential tools and solutions to develop it.	Structured analysis and brainstorming	brainstorming tools	1 week - Face-to-face group work	Skills and attitudes, advanced difficulty.
5	Script production	Developing the ideas in to a story like script with a time frame and key messages identification.	Know how to develop story like scripts to small multimedia projects, understand the production steps and key messages to deliver.	Story telling development and timeline script and dialogues writing.	Group table discussions, text editing and sharing tools	1 week - Face-to-face group work	Skills and attitudes, advanced difficulty.
6	Video production, recording, editing and translating	Video production phases, recording tools and problems, editing tools, translating and subtitles.	Develop small video production skills, know how to collaboratively record, edit, translate and add subtitles.	Hands on teamwork preparing settings, recording image and sound, choosing music editing, translating and adding subtitles.	Mobile phones on line translation and editing tools	2 weeks - Face-to-face group work	Knowledge and skills high difficulty.
7	Final presentation of the videos	Presenting the final video to colleagues, discussing what could be better and peer evaluation.	Communicate the project, receive feedback, compare and evaluate similar approaches to the same challenge.	Presentation and feedback session. Open discussion and peer evaluation	Video presentation Moodle survey for evaluation	3 hours class	Skills and attitudes, medium difficulty.

4.3 Your Experience Report (of the trainer team)

4.3.1 Development process

The development of the “Student made videos relating physics with sustainability” pilot project concept was based on the challenge-based learning perspective aiming at a deeper understanding of the Sustainable Development Goals (SDGs) and the science contribution to many of them. It was developed using design thinking inspired methodology and low threshold multimedia digital resources by the students.

The pilot concept started to be developed already in the ERASMUS application phase of the DISC project, being inspired by the work related to the call response. There were 5 editions of the pilot, from September 2022 to December 2024, with more than 200 total students involved. Resources were provided and changed between editions, building on the experience and on the DISC project development.

Most successful part was the engagement of the students, they were really motivated by the challenge of producing a video in teamwork, related to specific science contents and sustainability. Their autonomous group work on the digital multimedia tools and video production was also very successful and the overall quality of most videos was very good.

Final videos presentation class in a festival like perspective was always very interesting, successful, students like to present the videos and contribute to the peer evaluation to choose the one to award.

Most challenging part was to accommodate the project within the curricular unit time frame, the students project evaluation contributes for the final grade, and this helps in student motivation but most of the work has to be done as autonomous activity and that depends on student’s personal time constrains. Nevertheless, students evaluate the pilot in a very good perspective, and it also motivates them for better involvement on the curricular unit.

4.3.2 Contents:

Contents were delivered according to plan, during the curricular unit semesters covering all aspects of the pilot and the project methodology has a good transferability potential in other curricular units and other higher education institutions.

4.3.3 Methodology

The blended learning approach combined with challenge-based learning was very successful, combining class explanations and autonomous or group moodle tasks provided an effective approach for the project. Final videos presentation and peer-based evaluation play also a crucial role in the project because students know that their work will be presented to all the class, discussed and evaluated.

4.3.4 Outcomes

Learners demonstrated significant competence development relating physics with SDGs, showing some research competences and were also able to develop ideas to communicate in video format.

They also developed strong collaborative skills and a deeper appreciation for science related sustainable practices.

4.3.5 Impact

The concept was innovative in its integration of creativity and challenge-based learning in the curricular unit with a design thinking approach. Also allowed to relate the curricular unit with SDGs and the students produced a multimedia product they were proud to show and share with family and friends.

In the final presentation after the videos evaluation students also evaluated the idea, the curricular unit and the professor. The evaluation was always very good and generally students were satisfied with the project.

4.3.6 Sustainability aspect

The pilot directly addressed several SDGs, including affordable and clean energy, industry, innovation and Infrastructure, climate action and life below water. These SDGs were present in all editions of the pilot project in the produced videos, showing the research students conducted and the ideas they have compiled to make the video.

The innovative aspects in the context of sustainable education are related to the challenge-based learning relating multimedia, science and sustainability, communicating about it in a creative way, in video format.

4.3.7 Perspective/Synergy and Transfer

In the next round, the structured methodology and use of Moodle will remain. Improvements could include enhanced coordination for group activities, more interdisciplinary projects and the development of prototypes.

In this project 5 rounds were already delivered, and a 6th is in progress, and continuous improvement was made since the first edition, adding translation and subtitle challenges, asking for a more story type of video or recommending good practices to the students, related to sound and image recording.

There is potential for synergy with other sustainability-focused courses in the school, and some students even made use of the knowledge, skills and abilities to produce other videos for other curricular units and even to participate in video challenges and sometimes winning. Synergy is also found in the ECO Escolas project and Environment Club of the school.

4.3.8 Professional Development

As a trainer this project showed me a way to motivate students and relate science topics to multimedia challenges that they like to address, it also gave me a chance to integrate creativity, communications and digital related skills to the curricular unit. I am using this inspiration in other curricular units to enhance student engagement and improve learning outcomes.



Image created with AI by chatgpt

5 Seaweed Biomass for Sustainable Solutions

University: Polytechnic University of Leiria, Portugal

Prepared by: Teresa Mouga

5.1 Action Field

5.1.1 Course description

The main objectives of the project were to explore sustainable uses of seaweed biomass, align with the UN Sustainable Development Goals (SDGs), and provide practical, innovative solutions to real-world problems. This project involved four master students' groups working on different aspects of using seaweed biomass for sustainable solutions. Each group chose a different species and approach. The final projects were:

- Using Saccorhiza polyschides biomass to produce ethanol.
- Sustainable cultivation and use of bioactive compounds of Ericaria selaginoides.
- Bifurcaria bifurcata - A multifunctional solution for food insecurity and environmental sustainability.
- Transforming seaweeds into energy bars for children in underdeveloped countries.

The projects were conducted using the educational Moodle platform provided by the DISC ERASMUS project.

Please give a short summary of your project/course topic, the background of the project (why did you choose it), the objectives (what should be done and what were the students supposed to learn), and the final results.

5.1.2 Target group

- Master students in Biotechnology of Marine resources, School of Tourism and Maritime Technology Polytechnic University of Leiria.
- Age: 10 students (21-40 years old) – 7 girls; 3 boys
- Educational background: Bachelor's degree in biology, marine biology, biotechnology and biology/chemistry.

5.1.3 Themes (content area)

- Biofuel production from seaweed biomass
- Sustainable cultivation practices and bioactive compounds applications
- Food security and environmental sustainability
- Innovative food products for human nutrition

5.1.4 Learning objectives

Knowledge:

The project aimed to help learners gain a comprehensive knowledge of the SDGs, including their significance, individual targets and practical strategies for applying these goals to real-world projects and initiatives.

- SDG 7: Affordable and Clean Energy - Understanding the process of biofuel production from seaweed
- SDG 12: Responsible Consumption and Production and SDG 3: Good Health and Well-being - Knowledge of sustainable cultivation techniques for seaweed and insights into the bioactive compounds present in seaweed and their benefits

- SDG2: Zero Hunger and SDG 3: Good Health and Well-being - Awareness of food security issues and sustainable solutions
- SDG2: Zero Hunger - Innovative food products for nutrition.

Skills:

Learners developed practical skills in identifying, analysing, and implementing strategies aligned with the SDGs, enabling them to effectively contribute to sustainable development projects and initiatives.

- Within SDG7, learners developed the ability to analyse the processes involved in converting seaweed biomass into ethanol, including understanding the chemical reactions and potential efficiencies.
- Within SDG14, learners gained skills in evaluating sustainable cultivation techniques for seaweed, including assessing environmental impacts and sustainability metrics.
- Within SDG3, learners acquired the ability to identify and analyse the properties and potential applications of bioactive compounds found in seaweed.
- Within SDGs 2 and 9, learners developed skills in conceptualizing and evaluating innovative food products, such as energy bars, using seaweed biomass, including nutritional analysis and potential market impact.

Attitudes:

The learnings acquired allowed the development of attitudes that reflect a deep understanding and appreciation of the SDGs, empowering learners to contribute meaningfully to sustainable development initiatives, implemented in the projects developed by the learners.

- Learners developed a stronger commitment to sustainable practices, understanding the importance of aligning their work with the SDGs.
- Learners developed knowledge regarding the SDGs framework, understanding how each goal interconnects and contributes to a holistic approach to sustainable development.
- Learners developed an attitude of innovative and analytical thinking, applying their knowledge of the SDGs to propose creative solutions to sustainable challenges.

5.1.5 Methods/Activities

The Moodle platform provided by the DISC ERASMUS project (<https://moodle.disc-eu.org/course/index.php?categoryid=2>) offers several key guidelines to structure and support the methodology of the project. The platform encourages interactive learning through forums, and assignments, allowing students to engage actively with the material and with each other. Hence, the design-thinking methodology was developed with the learners, providing a systematic and structural approach to solving complex problems in the field of the blue biotechnology.

During the process, students were invited to analyse the SDGs and to learn their own context within the Blue Biotechnology. Each group chose a seaweed species and conducted a comprehensive literature review. Peer discussions were developed to engage the learners in discussions with peers addressing the identified SDGs and the societal problems targeted for resolution. Learners defined the problem by thoroughly exploring various dimensions, including opportunities, impacts, stakeholders, solutions, targets, and resources. This comprehensive approach ensured a holistic understanding of the problem and its potential solutions. Learners also conducted a simple PESTLE analysis (Political, Economic, Social, Technological, Legal, Environmental) to gain insights into the broader context and

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identify external factors that could influence the project's success. This analysis helped in understanding the complexities and interdependencies involved in addressing the problem. Learners were always encouraged to perform collaborative discussions to develop solutions and refine answers. The final step was performed to ensure that the final answers address the identified problems and align with the SDGs.

5.1.6 Resources and materials

- A classroom with projection and internet access.
- Each student/group had a laptop to develop the project.
- No physical prototyping was developed.

5.2 DISC Learning pathway

Step No.	Title	Content	Learning objective	Method Activity	Media	time	Competence column ²
• 1	• ODS Analysis on Moodle Platform	• Conducting an analysis of the Sustainable Development Goals (SDGs) using the guidelines provided by the Moodle platform (https://moodle.disc-eu.org/course/index.php?categoryid=2).	• To understand the relevance and application of the SDGs in the context of the project, and to identify which goals are addressed by the selected seaweed species.	<ul style="list-style-type: none"> • Reviewing the SDG guidelines provided on the Moodle platform. • Identifying and mapping the SDGs relevant to the selected seaweed species and the societal problems they aim to solve. 	• Moodle platform, SDG guidelines, online resources.	• 1 week: 1h with teacher + autonomous work	• Knowledge and skills, medium
• 2	<ul style="list-style-type: none"> • Literature Review on Selected Seaweed • 	<ul style="list-style-type: none"> • Conducting a comprehensive literature review on the selected seaweed species. • 	• To acquire in-depth knowledge about the selected seaweed species, including their properties, uses, and relevance to the project.	• Research and review of scientific literature using different online tools (WoS, Research Rabbit, ...)	• Research articles, Mendeley reference manager.	• 1 week (face-to-face 3h)	• Knowledge, medium difficulty
3	Peer Discussions	Engaging in discussions with peers to select and justify the chosen seaweed species.	To develop critical thinking and collaborative skills by discussing and	Group discussions and collaborative decision-making.	-	Face-to-face (3h)	Skills and attitudes, basic difficulty.

² Please indicate if the unit targets knowledge, skills or attitudes and if the difficulty is rather basic, medium or advanced.

Step No.	Title	Content	Learning objective	Method Activity	Media	time	Competence column ²
			justifying the selection of seaweed species and identifying relevant SDGs.				
4	Problem Definition	Defining the problem by thoroughly exploring various dimensions, including opportunities, impacts, stakeholders, solutions, targets, and resources.	To understand the problem comprehensively and identify potential solutions and stakeholders.	Structured analysis and brainstorming	brainstorming tools	1 week - Face-to-face (3h) + group work	Skills and attitudes, advanced difficulty.
5	Stakeholder Analysis	Identifying and analyzing key stakeholders involved in the project.	To understand the roles and interests of different stakeholders and how they impact the project.	Identifying key stakeholders. Analyzing their roles, interests, and influence on the project.	Stakeholder analysis templates, mapping tools	1 week - Face-to-face (3h) + group work	Skills and attitudes, advanced difficulty.
6	Group Discussions and Answers	Facilitating group discussions to develop and refine answers to the problem.	To collaboratively develop solutions that address the identified societal	Discussing potential solutions and refining answers. Ensuring that the final answers address the	Online discussion forums	1 week - Face-to-face (3h) + group work	Skills and attitudes, medium difficulty.

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Step No.	Title	Content	Learning objective	Method Activity	Media	time	Competence column ²
			problems and align with the SDGs.	identified problems and align with the SDGs.			
7	Final presentation of results	Presenting the final proposals developed during the project to peers and instructors.	Communicating project outcomes and receiving feedback.	Presentation and feedback session. Each group delivered a video of the final presentation.	Presentation slides, visual aids, handouts.	1 week - group work	Knowledge, skills and attitudes, medium difficulty.

5.3 Your Experience Report (of the trainer team)

5.3.1 Development process

The course concept was developed to integrate the principles of design thinking and the Sustainable Development Goals (SDGs) using the Moodle platform. The focus of the present Project was on projects development involving seaweed biomass for sustainable solutions.

The most successful part was the engagement and collaboration among students during peer discussions and group activities. The main challenge was ensuring all students would develop well-informed solutions, scientifically robust.

5.3.2 Contents:

The contents were delivered according to plan, covering all aspects of seaweed biomass, SDGs, and design thinking methodology.

The contents can be embedded in other sustainability-focused programs, environmental science courses, and interdisciplinary projects that aim to address global challenges using innovative solutions, through design thinking methodology.

5.3.3 Methodology

The blended learning approach, combining online self-learning modules on Moodle with interactive group discussions and activities, was effective. The design thinking methodology facilitated structured problem-solving and critical analysis.

5.3.4 Outcomes

- Learners demonstrated significant competence development in analytical skills, understanding of SDGs, and innovative thinking.
- Learners also developed strong collaborative skills and a deeper appreciation for sustainable practices.

5.3.5 Impact

The concept was innovative in its integration of SDGs and design thinking methodology, providing a unique approach to sustainability education.

I believe that learners were satisfied with the course.

5.3.6 Sustainability aspect

The pilot directly addressed several SDGs, including affordable and clean energy, zero-hunger, responsible consumption and production, and life below water.

The innovative aspects included the theoretical application of seaweed biomass in various sustainable solutions and the structured approach to problem-solving using design thinking.

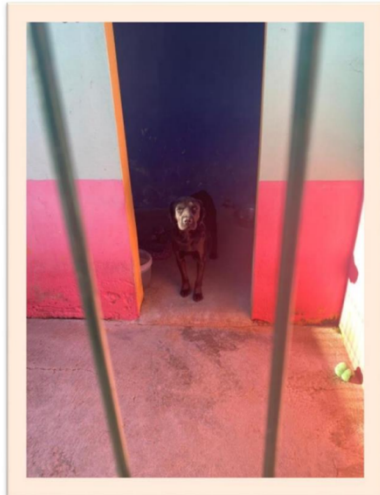
5.3.7 Perspective/Synergy and Transfer

In the next round, the structured methodology and use of Moodle will remain. Improvements could include enhanced coordination for group activities, more interdisciplinary projects and the development of prototypes.

There is potential for synergy with other sustainability-focused courses in the school, particularly those addressing environmental and food security challenges.

5.3.8 Professional Development

As a trainer, I learned the importance of integrating theoretical knowledge with sustainable development, developing innovative solutions. I plan to use these insights in future courses to enhance student engagement and learning outcomes.



Cuddle Me

Project developed for
Creativity and Experience in Events

(Source: Coverpage of student project's presentation)

6 Creativity and Experience in Events

Organisation/University: Polytechnic University of Leiria, Portugal

Prepared by: Marta

6.1 Action Field

6.1.1 Course description

The course *Creativity and Experience in Events* was developed to enhance students' capacity for creative and innovative thinking in the context of sustainable development. It was embedded within the broader aims of the DISC project to foster innopreneurship and sustainability competencies through real-life learning experiences.

The course was chosen as a vehicle for applying design thinking and project-based learning methodologies to event planning. Events serve as a powerful medium for promoting territories, mobilising local stakeholders, and fostering social innovation. By engaging students in the co-creation of events that address real community issues, the course provides a practical framework for learning and civic engagement.

The main objectives were to equip students with tools for creative project development, strengthen their skills in team collaboration and problem-solving, and increase their awareness of sustainability and the United Nations Sustainable Development Goals (SDGs). The course also aimed to deepen students' understanding of the role of creativity and personal experience in designing impactful solutions.

The final output was the co-design and organisation of sustainable events by student teams, in collaboration with local partners. These events tackled issues such as inclusive education, sustainable urban development, and responsible consumption, thereby fostering concrete contributions to SDG implementation.

6.1.2 Target group

The course was designed for undergraduate students in their third year of study, primarily from programmes related to event management, tourism, or communication. It also included Erasmus students from various European countries, adding an international and interdisciplinary dimension to the learning environment.

Participants typically ranged in age from 20 to 25 years and had prior academic exposure to cultural, creative, or business-related subjects. While most students had limited professional experience, they brought diverse perspectives, cultural insights, and personal motivations to the course, enriching the collaborative learning process.

6.1.3 Themes (content area)

The course addressed several interrelated themes, combining creativity, innovation, and sustainability in the context of event planning. Key content areas included:

- Creative project development – Exploring how to use personal and collective creativity to generate innovative ideas.
- Sustainable event planning – Applying sustainability principles to the design, organisation, and implementation of events.

- Design Thinking and co-creation – Using user-centred design approaches to understand local needs and develop inclusive event concepts.
- Local development and community engagement – Promoting interaction between students, local stakeholders, and community-based organisations.
- SDGs and social impact – Linking projects to the UN Sustainable Development Goals, with a focus on goals such as SDG 4 (Quality Education), SDG 11 (Sustainable Cities and Communities), and SDG 17 (Partnerships for the Goals).

6.1.4 Learning objectives

Knowledge:

- Understand the role of personal skills, experience, motivation, and culture in developing a creative project.
- Learn how to apply the Design Thinking methodology in sustainable event development.
- Gain knowledge of sustainability principles and the relevance of the UN Sustainable Development Goals (SDGs).

Skills:

- Develop creative thinking and collaborative problem-solving abilities.
- Apply project-based learning approaches to real-world challenges.
- Communicate and collaborate effectively in multicultural teams and with community stakeholders.

Attitudes:

- Foster a sense of responsibility towards sustainable development.
- Embrace co-creation and participatory approaches in working with local communities.
- Cultivate an open, inclusive mindset that values creativity, innovation, and social impact.

6.1.5 Methods/Activities

The course used a combination of interactive and experiential learning methods to foster creativity and innovation. The main activities included:

- Lectures and discussions: Introduced key concepts such as creativity tools, design thinking, and sustainability, using cooperative learning approaches based on real-world challenges.
- Group work: Students worked in multidisciplinary and multicultural teams to co-create project ideas and plan sustainable events.
- Field work and community engagement: Included ethnographic activities and interviews with local stakeholders to develop empathy and understand community needs.
- Practical exercises: Applied creativity tools and innovation methods to generate, refine, and implement event ideas.
- Independent study: Encouraged students to explore relevant literature and resources, reflect critically, and contribute autonomously to their team projects.

6.1.6 Resources and materials

- Design Thinking guides and creativity toolkits, adapted for the context of sustainable event planning.
- Academic readings and case studies on sustainability, innovation, and community development.
 - Buck Institute for Education. (n.d.). PBL and the U.N. Sustainable Development Goals. Retrieved from <https://blog.definedlearning.com/blog/pbl-and-the-u.n.-sustainabledevelopment-goal>
 - Richards, G. e Palmer, R. (2010) Eventful Cities: cultural management and urban Revitalization. Oxford: Elsevier.
 - UNDP (2019) Design Thinking Training Manual. Retrieved from <https://www.undp.org/iraq/publications/design-thinking-training-manual>
- Event planning frameworks and templates developed by the teaching team.
- Materials for group activities, including empathy maps, brainstorming tools, and project canvas templates.
- External resources from local partners, such as background information, community data, and input from stakeholders.

6.2 DISC Learning pathway

Step No.	Title	Content	Learning objective	Method Activity	Media/Resources	Time/duration	Competence column ¹
1	SDGs	<ul style="list-style-type: none"> • SDGs: what, why, how • SDGs in our school • Design Thinking and SD 	<ul style="list-style-type: none"> • Understand what SD is, • To know how to act on SDGoals, • draw up your SD profile 	<ul style="list-style-type: none"> • Design-Based collaborative Learning: Search, Mapping conclusions (MindMaps) 	<ul style="list-style-type: none"> • Web • Local observation • Mindmap 	<ul style="list-style-type: none"> • 4 hours (class) • Autonomous Work - 1 hour 	<ul style="list-style-type: none"> • Knowledge – basic • Attitudes - medium
2	Empathize	<ul style="list-style-type: none"> • The problem 	<ul style="list-style-type: none"> • To search the problem or the opportunity centered on the users' needs 	<ul style="list-style-type: none"> • Ethnographic Work • participant observation / non participant observation 	<ul style="list-style-type: none"> • mobile phone (camera) 	<ul style="list-style-type: none"> • 3 hours (Class) • Autonomous Work – depending the context 	<ul style="list-style-type: none"> • Knowledge – medium • Skills – medium • Attitudes - medium
3	Define	<ul style="list-style-type: none"> • Challenges: Root Causes 	<ul style="list-style-type: none"> • To articulate the challenges's root causes with the solutions that contribute to SD. • To identify the SD Goals to be achieved and define strategies 	<ul style="list-style-type: none"> • Personas • Brainstorming • Interviews 	<ul style="list-style-type: none"> • Mindmap (Mindmeister) • https://sdgs.un.org/goals 	<ul style="list-style-type: none"> • 3 hours (class) 	<ul style="list-style-type: none"> • Knowledge – • Skills – medium • Knowledge – advanced

4	Ideate	<ul style="list-style-type: none"> • Creativity 	<ul style="list-style-type: none"> • To develop the idea with creativity 	<ul style="list-style-type: none"> • Tools to promote creativity 	<ul style="list-style-type: none"> • 6 Thinking hats • 5 whys • Scamper • What if 	<ul style="list-style-type: none"> • 6 hours (class) 	<ul style="list-style-type: none"> • Skills - advanced • Attitudes - medium • Knowledge - advanced
5	Prototype	<ul style="list-style-type: none"> • Prototype and Test • Storytelling to communicate ideas 	<ul style="list-style-type: none"> • To communicate the idea • To test ideas in a real- world context • To propose where else this project could be implemented 	<ul style="list-style-type: none"> • Storytelling exercises • Poster • Pitch • User feedback • Reflection worksheet 	<ul style="list-style-type: none"> • Reflection worksheet • Video 	<ul style="list-style-type: none"> • Class: 4 hours • Autonomous Work – depending on the project 	<ul style="list-style-type: none"> • Knowledge - advanced • Skills – advanced • Attitudes - medium

6.3 Your Experience Report (of the trainer team)

6.3.1 Development process

The development of the course under the DISC framework was both a creative and iterative process. Originally focused on event design and management, the course was expanded to integrate sustainability education, design thinking, and community-based learning. The pilot phase encouraged us to move beyond traditional lecture formats and embrace more dynamic, project-based methodologies that reflected real-world challenges.

Early in the process, we engaged with local stakeholders—including NGOs, cultural organisations, and municipal actors—to identify real problems that students could help address. These consultations ensured the course had relevance and impact beyond the academic setting. The biggest challenge in development was aligning the course content with both the institutional academic calendar and the flexible, non-linear structure required for design thinking and co-creation processes.

The delivery of the course revealed several insights. Students responded very positively to being given responsibility for creating something tangible—a real event that mattered to the local community. Their motivation increased when they saw their ideas taken seriously and when they received feedback from real stakeholders.

However, not all students were initially comfortable with the open-ended nature of the course. Some required more structure and support, particularly in defining clear goals and managing team dynamics. Providing ongoing mentorship and check-ins helped maintain momentum and ensured alignment with learning outcomes.

6.3.2 Contents

All planned content was successfully delivered, including modules on creativity theory, sustainability, and event production. Design thinking provided a useful overarching methodology, guiding students through the steps of empathising with stakeholders, defining the problem, ideating solutions, prototyping event ideas, and reflecting on the outcomes. The content was integrated through workshops, field visits, peer feedback, and facilitated reflection.

The content could be readily adapted for use in other programmes, including business, social innovation, cultural studies, or urban development, particularly where there is interest in community-engaged learning and sustainable practices.

6.3.3 Methodology

The blend of team-based learning, design thinking, and hands-on project development proved to be highly effective. Students learned not only from instructors, but from each other and from external partners. Field work and empathy-building activities helped them connect to local contexts and made the learning process more authentic.

The flexibility of the methodology allowed us to respond to emerging ideas and opportunities throughout the course. Using a learning-by-doing approach made the process more engaging and helped students internalise key concepts more deeply than in conventional teaching settings.

6.3.4 Outcomes

The course had several measurable and observed outcomes. Students demonstrated progress in creative problem-solving, communication, and sustainability literacy. They were able to conceptualise, plan, and carry out events that aligned with the SDGs. One group, for instance, created an inclusive education event in a rural area that was well received and considered for repetition by the local school authority.

Beyond skills, the course also contributed to students' confidence and sense of agency. They saw how their work could create impact and this sense of ownership was one of the most significant outcomes.

6.3.5 Impact

Compared to traditional courses, this pilot offered a significantly more innovative learning environment. It emphasised active learning, social relevance, and real-world challenges. Students appreciated this practical approach and several reported that it was one of the most valuable and meaningful experiences of their academic journey.

Feedback highlighted the value of the co-creation process and the opportunity to work with external partners. Participants felt they were doing something “real” rather than simulated, which increased their commitment and satisfaction.

6.3.6 Sustainability aspect

Sustainability was not an add-on but a central theme of the course. Students worked on issues such as inclusive education, sustainable city development, and responsible consumption, directly addressing SDG 4 (Quality Education), SDG 11 (Sustainable Cities and Communities), SDG 12 (Responsible Consumption and Production), and SDG 17 (Partnerships for the Goals). Students were encouraged to reflect on the ecological footprint of their events, minimise waste, and use local resources.

6.3.7 Perspective/Synergy and Transfer

This pilot has high transferability. The structure, methods, and tools used can be easily adapted to other HEI courses, especially those seeking to strengthen ties between university learning and local societal challenges.

For future iterations, we would retain the core structure but improve aspects of stakeholder coordination (e.g. earlier involvement and clearer timelines) and provide more structured team coaching. There is strong potential for synergy with disciplines such as social entrepreneurship, service design, and urban planning.

6.3.8 Professional Development

As trainers, we deepened our skills in facilitation, particularly in guiding student groups through complex, open-ended projects. The integration of sustainability into event planning challenged us to think more systemically and reflectively. Working across cultural and disciplinary boundaries also broadened our perspectives and strengthened our capacity to manage diversity in learning environments.

We leave the course not only with refined teaching tools, but with greater confidence in the potential of higher education to inspire action and foster societal transformation.

6.3.9 Narrative Project Report – “My Story”

Starting point / Setting the scene

As a social anthropologist and researcher of creativity in organisations, I’ve always been drawn to how educational settings can become more open, inclusive, and innovative. At Instituto Politécnico de Leiria, I’ve spent years working at the intersection of formal learning and pedagogical innovation, particularly through initiatives that promote gender equality, value vocational education, and support new methodologies in higher education.

Traditionally, teaching in higher education here follows fairly conventional models—lecture-based, discipline-specific, and often disconnected from real-world impact. Yet I have always believed that creativity and sustainability should not just be theoretical topics but experiences that learners live through. The challenge is often in finding the space, the institutional flexibility, and sometimes even the courage to do things differently.

Start of the journey

Joining the DISC project felt like stepping into a shared space where those ideas could truly take root. It gave me the opportunity to collaborate with a European team committed to fostering innopreneurship, sustainability, and culture. The strength of DISC is in its collaborative spirit—working with colleagues from diverse disciplines and backgrounds made this feel more like a collective learning journey than a project in the traditional sense.

I brought to the project my background in creativity research and my experience in implementing educational innovation. But I also came with questions: How can I create a space where students don’t just follow instructions but discover their own creative agency? How can I align event planning—often seen as logistical—with deep sustainability values?

Milestones

Designing the course “Creativity and Experience in Events” was a milestone in itself. It was an opportunity to reimagine event planning as a tool for social change. We brought in real challenges from the local community, involved students in fieldwork, and encouraged them to develop events that addressed the Sustainable Development Goals.

A defining moment was when one student group partnered with a small rural association to promote inclusive education through a local event. Watching the students take ownership, collaborate with

community members, and make a meaningful impact reminded me why I love working at this intersection of learning and society.

On the way

There were challenges, of course. Some students were initially hesitant—unused to a process that didn't offer fixed answers but required initiative, dialogue, and iteration. Coordinating with external stakeholders also came with the usual unpredictabilities. But these were the kinds of challenges that made the learning deeper—for the students and for me.

What I found most rewarding was the transformation in the classroom dynamic. Students began to see themselves as co-creators, not just learners. Their presentations, their teamwork, and even their frustrations were part of a meaningful process that extended beyond the classroom.

On arrival

As I look back, I feel this experience has solidified my belief in the value of creative, community-based learning. I've seen that students thrive when given responsibility, trust, and a purpose that connects with the real world. I will continue using design thinking in my teaching and will work to integrate more socially responsive themes into my courses.

The feedback from students and community partners was overwhelmingly positive. Some students said it was the first time they felt their academic work had real meaning. Colleagues who observed the process also expressed interest in adapting similar methods to their own teaching.

Final reflection

DISC gave me a platform to practise the kind of education I believe in—dynamic, equitable, and transformative. As educators, we are not just transmitters of knowledge but facilitators of change. I'm grateful for this journey and look forward to taking these insights forward, both in my institution and within a wider European context.



Image created with AI by chatgpt

7 Applied Sustainable Education into Project Design

Organisation: SMART REVOLUTION

Prepared by: Enrica Pautasso

7.1 Action Field

7.1.1 Course description

The pilot involved four university students from different faculties (mainly Economics and Political Sciences) doing an internship at Smart Revolution, a private company active in European Project Management and Training. The goal was to include Sustainability Education into Project Design, through self-learning on SDGs/ESG, self-reflection exercises, a design thinking session and a practical project work of their choice.

7.1.2 Target group

University students undertaking an internship at Smart Revolution in the sector of Project Management. All students were attending the last year of the Bachelor programme or the Master programme, ranging from 22 to 25 years old. The faculties/study programmes attended were the following:

- Economics and Management
- Sciences of Government, Faculty of Political Sciences
- Area and Global Studies for International Cooperation, Faculty of Political Sciences
- European Global Studies

7.1.3 Themes (content area)

- SDGs and ESG
- Design thinking applied to innovation and entrepreneurship
- Project design

7.1.4 Learning objectives

Knowledge:

- Having a general knowledge of the 17th SDGs, as well as the ESG parameters and being able to describe possible practical applications
- Having a theoretical knowledge of the Design Thinking methodology and being able to name a selection of tools
- Having a theoretical knowledge of a general structure of a project proposal

Skills:

- Being able to apply approaches of project design as instructed
- Being able to apply a selection of design thinking tools
- Being able to identify and connect SDGs/ESG to their project idea

Attitudes:

- Being determined to include SDGs/ESG perspective into their own project proposals

- Being interested in further developing their “innopreneurial” approach to new ideas/proposals

7.1.5 Methods/Activities

- Asynchronous online course/app
- Conferences/events attendance
- Synchronous theoretical inputs
- Practical project phase
- Self-assessment quiz

7.1.6 Resources and materials

- Online learning module on SDGs <https://moodle.mathetics.eu/course/view.php?id=94>
- Self-reflection exercise (Quiz: What Sustainability Type are you? https://reveal-eu.org/survey/sdg_explorer2_type)
- Digital presentation on Design Thinking

7.2 DISC Learning pathway

Step No.	Title	Content	Learning objective	Method Activity	Media	time	Competence column ³
1	SDGs/ESG	<ul style="list-style-type: none"> • 17 SDGs and their sub-topics • ESG parameters, new standards and obligations 	<ul style="list-style-type: none"> • Having a good general knowledge on the 17 SDGs and the ESG parameters • Connecting the topic to own individual life/perspective 	<ul style="list-style-type: none"> • Self-paced online learning module • Individual online research on ESG parameters • Self-reflection quiz • If possible, attendance to conferences and events 	<ul style="list-style-type: none"> • Online module/app SDG Explorer • Web • Online quiz “What Sustainability type are you?” 	<ul style="list-style-type: none"> • 5 hours 	<ul style="list-style-type: none"> • Knowledge medium level • Attitude medium level
2	Design Thinking applied to Project Design	<ul style="list-style-type: none"> • 5 phases of DT • Main tools for ideation 	<ul style="list-style-type: none"> • Having a general understanding of the DT approach • being able to apply a selection of known tools when needed • Becoming interest in 	<ul style="list-style-type: none"> • Theoretical input, discussion, practical cases, group work 	<ul style="list-style-type: none"> • Presentations 	<ul style="list-style-type: none"> • 1 day 	<ul style="list-style-type: none"> • Knowledge low level • Skills: medium level • Attitude: low/medium level

³ Please indicate if the unit targets knowledge, skills or attitudes and if the difficulty is rather basic, medium or advanced.

Step No.	Title	Content	Learning objective	Method Activity	Media	time	Competence column ³
			developing skills to spot ideas and opportunities				
3	Project work	<ul style="list-style-type: none"> • Development of own project idea/proposal. The aim is to include the SDG/ESG perspective in an innovative project idea/proposal 	<ul style="list-style-type: none"> • Being able to apply theoretical knowledge on SDGs/ESG and DT • Practicing Project Design • Increasing own interest and own life perspective in the topic 	<ul style="list-style-type: none"> • Individual/group project work 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • 1 month 	<ul style="list-style-type: none"> • Skills: high level • Attitude: high level
4	Self-reflection	<ul style="list-style-type: none"> • Self-reflection/assessment on competence development 	<ul style="list-style-type: none"> • To become aware of their own learning development 	<ul style="list-style-type: none"> • Writing their own project report 	<ul style="list-style-type: none"> • Word doc 	<ul style="list-style-type: none"> • 2 h 	<ul style="list-style-type: none"> • Attitude: high level

7.3 Your Experience Report (of the trainer team)

7.3.1 Development process

The definition of the pilot concept was the most challenging part since, as non-university partner, we had a different context on which to apply the DISC approach. Indeed, our students often came one at the time and all had their own individual educational background and interests. Therefore, we developed a pilot structure that could leverage their own specific interests and area of study. Also, the use of the ESG Explorer app proved to be particularly useful since students could approach the material on the basis of their previous knowledge, if any, on the SDGs. Those who had no previous knowledge started from the first level of the module, others could deepen certain SDGs or start directly from upper levels.

7.3.2 Contents:

Yes, with some adjustments for each student, according to their individual interests and previous knowledge. All project works were part of bigger school or personal projects already undergoing, such as their final master thesis, external community projects or the electoral programme the student was part of for the upcoming municipal elections.

7.3.3 Methodology

Blended learning proved to be particularly successful: students could go through the theoretical knowledge at their own pace and taking into consideration their previous knowledge. Then, had the opportunity to discuss and exchange in a synchronous manner the different DT and Project Design tools and to test their knowledge in a practical project work of their choice.

7.3.4 Outcomes

Yes, especially on the attitude level. Learning at their own pace and applying the new concepts and tools to a project of their choice in which they had a strong interest, was highly appreciated and effectful.

7.3.5 Impact

The concept was surely innovative. We are involved in several collaborative projects and activities on Sustainability and our interns have the opportunity to follow meetings and take part in the production of deliverables, however they rarely found a personal connection to them. With the DISC approach, instead, students were able to apply the new knowledge to their own purposes. The more the project work was a personal one, the higher was the satisfaction.

7.3.6 Sustainability aspect

The focus of the entire pilot was on SDGs and/or ESG. We were particularly pleased to be able to include Sustainability Education into a general internship offer on project design and management.

7.3.7 Perspective/Synergy and Transfer

At the beginning, most students did not have a clear and complete understanding of the pilot idea, it was difficult for them to select their individual project context from the very beginning. So, we would start by stages, introducing first the SDGs Explorer to delve at their own pace. Then, we realised that the role of the tutor/facilitator was particularly important to orient the students on a feasible idea. Also, for the design thinking stage we would always prefer a couple or group exercise and encourage the use of its tools during the project work in a couple/group.

7.3.8 Professional Development

I feel that I have improved my ability to tutor students for them to have a meaningful learning experience while doing an internship.



[image created with DALL·E]

8 CALCULATING SUSTAINABLE DEVELOPMENT AS A PROJECT COST

Organisation/University:

University Of Novi Sad,
Faculty Of Technical Sciences,
Department Of Industrial Engineering And Management,
Novi Sad, Serbia

Prepared By:

PROF. DR. UGLJESA MARJANOVIC

8.1 Action Field

8.1.1 Course description

This course addresses fundamental concepts of financing and managing engineering projects, particularly focusing on budgeting, cost analysis, and financial monitoring. The motivation behind the course is to equip students with essential knowledge and practical skills for cost and supply chain management within project environments—a key competency in modern engineering and business practices.

The course aims to teach students how to:

- Understand and create project budgets.
- Control and report on financial elements.
- Apply financial analysis methods and manage market information.
- Implement procurement processes using PRAG rules.
- Evaluate projects using earned value analysis and perform carbon footprint assessments.

Students are expected to:

- Plan and control project costs.
- Apply budgeting techniques.
- Prepare funding documentation.
- Analyze cost efficiency and sustainability.
- Understand procurement regulations and sustainability impacts.

By the end of the course, students demonstrated their understanding through project proposals, budget simulations, and final presentations. They gained practical experience in tools and methodologies essential for sustainable financial and supply management within engineering projects.

8.1.2 Target group

The target group for the course consists primarily of students typically aged between 22 and 23 years.

Educational Background: Undergraduate students in engineering management.

Professional Roles/Fields: These students are being prepared for roles in project management, financial planning, supply chain coordination, and sustainability consulting. They are expected to work in industries such as construction, manufacturing, IT, energy, and public infrastructure projects where project budgeting, procurement, and cost control are essential.

8.1.3 Themes (content area)

Themes/content

- Project Budgeting and Financial Planning

- Cost Estimation, Control, and Reporting Techniques
- Procurement and Supply Chain Management using PRAG Rules
- Financial Analysis Tools (NPV, IRR, Payback Period, etc.)
- Carbon Footprint Analysis and Sustainable Development Costs
- Earned Value Management Methodology (EVM)
- Strategic Project Selection and Portfolio Management
- Use of Software Tools for Project Cost Management

8.1.4 Learning objectives

Knowledge:

- Understanding of project budgeting processes and financial planning principles
- Familiarity with cost control methods, financial indicators (NPV, IRR, Payback Period), and PRAG procurement rules
- Calculating carbon footprint for the project

Skills:

- Ability to plan, monitor, and report on project costs using analytical and software tools
- Capability to assess financial feasibility and sustainability through earned value analysis and carbon footprint evaluation

Attitudes:

- Development of a responsible and critical approach to financial decision-making in projects
- Promotion of sustainability-conscious thinking in planning and procurement processes

8.1.5 Methods/Activities

We applied a combination of:

- **Lectures and interactive discussions** to introduce theoretical concepts and real-world applications in project financing and cost control.
- **Case studies and group exercises** for hands-on experience in budgeting, financial analysis, and procurement planning.
- **Workshops and simulations** using tools like Gantt charts, WBS diagrams, and Earned Value Management to model project scenarios.
- **Carbon footprint calculation tasks** to integrate sustainability into financial project planning.
- **Final project presentations** where students developed and defended their own project budget proposals, applying all learned methodologies.

8.1.6 Resources and materials

- Course materials and templates developed by the instructors (lecture slides, financial analysis templates, PRAG procurement guidelines).

- PMBOK Guide (Project Management Institute – bought resource) for standardized project management practices.
- PRAG Handbook (European Commission – publicly available resource) for procurement rules.
- Software tools for project planning and financial management (e.g., MS Project, Excel – institution-provided licenses).
- Case studies and real-world examples (developed and adapted by the teaching team).
- SOVA e-learning platform (university's online system – used for sharing materials and facilitating online discussions).

8.2 DISC Learning pathway

Step No.	Title	Content	Learning objective	Method/ Activity	Media	time	Competence column
1	Introduction to Project Finance and Cost Concepts	<ul style="list-style-type: none"> Basic terms: budget, cost, project sponsors, stakeholders 	<ul style="list-style-type: none"> Understand key project financing terminology 	<ul style="list-style-type: none"> Lecture + Discussion 	<ul style="list-style-type: none"> Presentation slides Interactive lecture 	<ul style="list-style-type: none"> 4 hours 	<ul style="list-style-type: none"> Knowledge: basic Skills: basic Attitude: basic
2	Project Budgeting and Financial Planning	<ul style="list-style-type: none"> Budget creation, cost estimation, financial tracking 	<ul style="list-style-type: none"> Learn to create and manage a project budget 	<ul style="list-style-type: none"> Workshop 	<ul style="list-style-type: none"> Presentation slides Group budgeting exercise 	<ul style="list-style-type: none"> 4 hours 	<ul style="list-style-type: none"> Knowledge: medium Skills: medium Attitude: basic
3	Financial Analysis Techniques	<ul style="list-style-type: none"> NPV, IRR, Payback Period, Feasibility Studies 	<ul style="list-style-type: none"> Apply financial analysis tools for decision-making 	<ul style="list-style-type: none"> Case Study 	<ul style="list-style-type: none"> Presentation slides Real-world project analysis 	<ul style="list-style-type: none"> 4 hours 	<ul style="list-style-type: none"> Knowledge: medium Skills: advanced Attitude: medium
4	Procurement Management Using PRAG	<ul style="list-style-type: none"> Procurement rules, subcontracting, budget definition 	<ul style="list-style-type: none"> Understand and apply procurement rules 	<ul style="list-style-type: none"> Lecture + Simulation 	<ul style="list-style-type: none"> Presentation slides Procurement simulation activity PRAG Handbook 	<ul style="list-style-type: none"> 4 hours 	<ul style="list-style-type: none"> Knowledge: medium Skills: advanced Attitude: medium
5	Earned Value Management (EVM)	<ul style="list-style-type: none"> Performance tracking, cost control, risk analysis 	<ul style="list-style-type: none"> Monitor and report project financial health 	<ul style="list-style-type: none"> Workshop 	<ul style="list-style-type: none"> Presentation slides EVM calculations and reporting 	<ul style="list-style-type: none"> 8 hours 	<ul style="list-style-type: none"> Knowledge: medium Skills: advanced Attitude: advanced
6	Sustainability in Project Costs	<ul style="list-style-type: none"> Carbon footprint calculation and sustainability costs 	<ul style="list-style-type: none"> Integrate sustainability into financial planning 	<ul style="list-style-type: none"> Workshop + Discussion 	<ul style="list-style-type: none"> Presentation slides Carbon footprint calculation Online calculators, Excel 	<ul style="list-style-type: none"> 4 hours 	<ul style="list-style-type: none"> Knowledge: medium Skills: medium Attitude: medium

Step No.	Title	Content	Learning objective	Method/ Activity	Media	time	Competence column
7	Final Project Presentation	<ul style="list-style-type: none"> Develop and present a full project budget plan 	<ul style="list-style-type: none"> Apply complete course knowledge in practice 	<ul style="list-style-type: none"> Group Project 	<ul style="list-style-type: none"> Project proposal presentation 	<ul style="list-style-type: none"> 8 hours 	<ul style="list-style-type: none"> Knowledge: basic Skills: advanced Attitude: advanced

8.3 Your Experience Report (of the trainer team)

8.3.1 Development process

The development and realization of the course concept were highly structured and goal-oriented. Building on the expertise in project management, finance, and procurement, we designed a course that combines theoretical frameworks with strong practical application, aligning with both academic requirements and industry needs. Key elements included modules on budgeting, cost control, sustainable development integration, and PRAG procurement practices.

The most successful part was integrating *practical assignments* like project budgeting and Earned Value Analysis, which allowed students to immediately apply theoretical knowledge.

Challenges in developing the course included balancing the depth of financial analytics with the accessibility needed for students from varied academic backgrounds.

8.3.2 Contents:

The envisaged contents were delivered according to plan, covering all outlined topics: cost estimation, financial analysis, procurement strategies, and sustainability aspects (carbon footprint analysis).

The transferability is high: the course modules can be easily embedded into broader project management programs, engineering management curriculums, or specialized certifications in procurement and financial control.

8.3.3 Methodology

- We employed a blended learning approach: classroom lectures, online discussions via the SOVA Moodle platform, and independent project work.
- The combination of self-learning tasks, team projects, case discussions, and formal assessments created a dynamic learning environment.
- Integrating real-world software tools for project management was a critical success factor.

8.3.4 Outcomes

- Competence Development: Students demonstrated a noticeable improvement in applying budgeting methods, understanding PRAG procurement, and performing cost analyses independently.
- Students also developed a higher awareness of sustainability in project management, particularly through calculating project carbon footprints of the project activities and overall project.

8.3.5 Impact

- The concept was innovative in emphasizing sustainability as a cost factor and integrating Earned Value Management systematically, which is not standard in all similar programs.
- Learner satisfaction was high. Feedback praised the practical relevance of tasks, the clear structure, and the mix of teaching formats. Suggestions mainly called for more guest lectures from industry practitioners.

8.3.6 Sustainability aspect

- The course directly addressed Sustainable Development Goals (SDGs), particularly:
 - SDG 9 (Industry, Innovation, and Infrastructure) through efficient project management,
 - SDG 12 (Responsible Consumption and Production) through sustainable procurement practices,
 - SDG 13 (Climate Action) via carbon footprint analysis for projects.
- Innovative Aspect: Introducing carbon footprint calculations for project proposals as a mandatory part of financial planning is a notable innovation in sustainable education.

8.3.7 Perspective/Synergy and Transfer

Next round improvements:

- Maintain strong focus on practice and sustainability,
- Introduce more interdisciplinary projects (e.g., linking with environmental engineering students).

Synergy Potential:

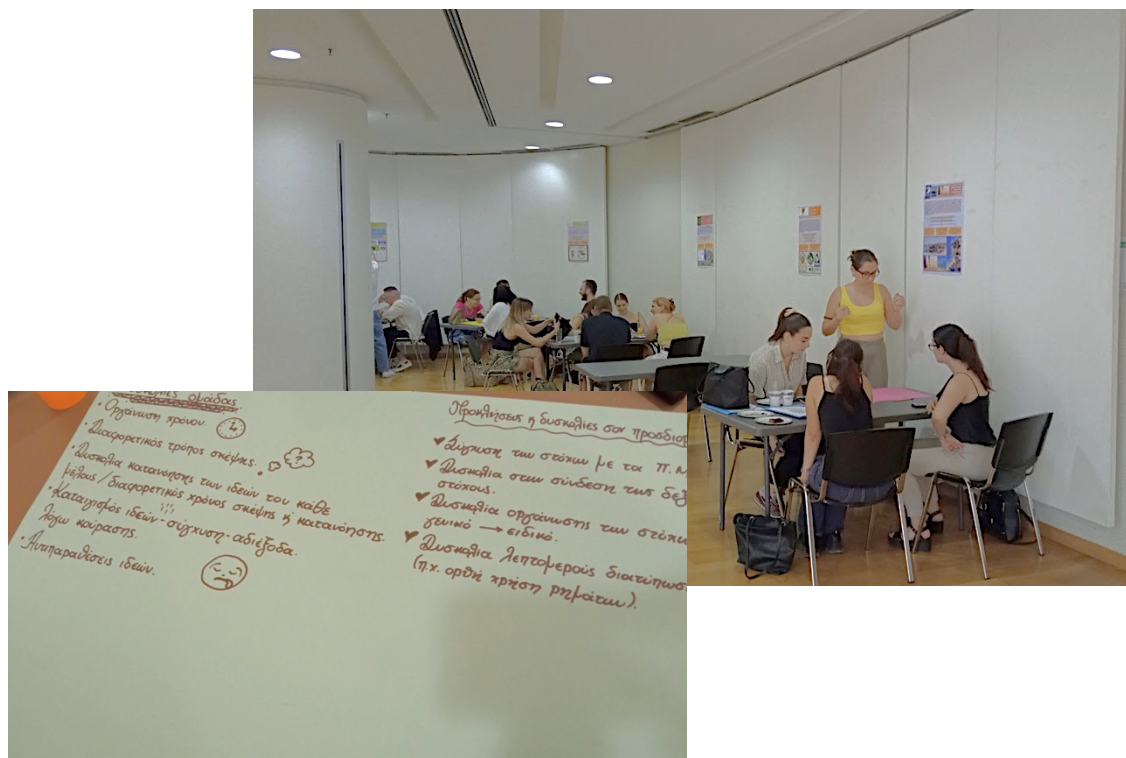
- Integration with courses on Strategic Management and Risk Management,
- Collaboration with ongoing research on sustainable project practices and green procurement.

8.3.8 Professional Development

What we learnt:

- The importance of integrating sustainability metrics into traditional project management curricula,
- New techniques for dynamic student engagement in blended environments.

Going forward, we plan to use more interactive simulations and digital collaborative tools (e.g., project management apps) in other courses as well.



(Source: DISC Students Projects Presentation)

9 Developing Programmes for Future Vocational Education and Training Professionals

Organisation/University: Aristotle University of Thessaloniki (AUTH)

Faculty: Department of Philosophy and Education

Prof. George K. Zarifis

9.1 Action Field

9.1.1 Course description

The DISC pilot at the Aristotle University of Thessaloniki (AUTH) was implemented within the undergraduate course titled *Vocational Education and Training: Developing Programmes for Future Professionals*. Hosted by the Department of Philosophy and Education, the course is designed to offer students a theoretically grounded yet practically oriented understanding of how vocational education and training (VET) systems function within broader lifelong learning frameworks. This course was selected for piloting the DISC methodology due to its strong alignment with the project's key principles: learner-centred pedagogy, social relevance, and competence-oriented education.

From the outset, the course promotes the development of critical awareness regarding the purpose and processes of vocational learning. It encourages students to examine the interplay between educational policy, social transformation, and the needs of diverse communities. With these foundations, students are invited to co-create learning interventions that not only reflect the academic content of the course but also contribute meaningfully to the local context. The integration of DISC introduced a new level of structure and coherence to this approach, especially through the use of the LEVEL5 methodology for validating competence development.

During the pilot semester, the course moved beyond the classroom walls, providing opportunities for students to collaborate with stakeholders and co-design 12 innovative educational projects. Each of these projects functioned as an individual sub-pilot, developed in partnership with different community actors, NGOs, and public institutions. As such, they reflected a wide range of learning themes based on the specific needs and focus areas of the collaborating stakeholders—including sustainability, digital equity, cultural heritage, refugee education, health awareness, and youth empowerment.

This report will first present an overview of the AUTH pilot course as a whole, followed by dedicated sections reporting on the 12 sub-pilots, each representing a distinct student-led initiative within the broader framework.

The pilot's success lies in its capacity to transform the academic course into a dynamic, community-embedded learning environment, thereby offering a model for integrating higher education with inclusive social change.

9.1.2 Target group

The course was attended by upper-year undergraduate students from the Department of Philosophy and Education at Aristotle University of Thessaloniki. With backgrounds in education, social sciences, and the humanities, the students had varying levels of experience in project planning and community engagement.

9.1.3 Themes (content area)

The main learning themes of pilot is the theory and practice of vocational education and training, to empower the students to design meaningful learning programmes, and to critically reflect on the professionalisation of adult and vocational educators—particularly with regard to how they can promote education for sustainable development in their future careers.

The course included learning content from both educational sciences and sustainability education, including the UN Sustainable Development Goals (SDGs). This thematic focus was closely linked to the students' collaboration with local stakeholders during the sub-pilot phase of the course.

9.1.4 Learning objectives

The course aimed to equip students with a solid understanding of the theory and practice of vocational education and training (VET) within broader lifelong learning systems. It encouraged critical engagement with national and European policy frameworks, while fostering the ability to design meaningful, socially responsive learning programmes in collaboration with local stakeholders. Students were guided to reflect on the role of education in promoting social transformation, equity, and sustainable development, and to consider how these principles relate to their future professional roles as adult and vocational educators. The course also introduced students to project-based and competence-based learning approaches, supporting the development of key transversal competences such as initiative, planning, empathy, and civic engagement. The use of the LEVEL5 methodology enabled participants to track and reflect on their own competence development throughout the process. The detailed learning objectives related to each specific theme and intervention will be presented in the individual sub-pilot reports that follow.

9.1.5 Methods/Activities

The course employed a combination of theoretical instruction, project-based learning, and community engagement. Weekly seminars provided the conceptual foundation, covering topics such as vocational education systems, adult learning theory, and education for sustainable development. These sessions were complemented by structured mentoring, which supported students in designing and implementing their projects in collaboration with local stakeholders. Field research, including interviews, needs assessments, and stakeholder mapping, was used to ground each project in real-world contexts. The course also applied the LEVEL5 methodology to guide and document competence development through continuous self-assessment and reflection. Students worked in small teams to co-design educational interventions, applying participatory methods and iterative planning. The integration of classroom learning with authentic, community-based project work ensured that students could apply theoretical knowledge in practice while developing both professional and personal competences.

9.1.6 Resources and materials

A range of resources and materials supported the delivery of the course and the implementation of student projects. Core academic content was provided through curated readings, policy documents, and seminar presentations covering vocational education theory, adult learning, and sustainable development. Students were also introduced to the DISC framework and the LEVEL5 methodology through dedicated templates, guides, and self-assessment tools. For fieldwork and project development, students used interview protocols, stakeholder mapping templates, and project planning worksheets. Digital tools, such as shared online workspaces and presentation software, facilitated collaboration and documentation. In the final phase, students produced a variety of dissemination materials—including posters, videos, digital stories, and reflection journals—to present their work and learning outcomes. These resources were adapted to suit the specific needs and themes of each sub-pilot project. SOVA e-learning platform (university's online system – used for sharing materials and facilitating online discussions).

9.2 DISC Learning pathway

Students from the AUTH pilot were separated into groups and were assigned to various local communities/NGOs for their individual sub-pilot/learning project. The course followed the structure below, with individual learning pathway of learning objectives tailor to each sub-piloting from Step 2-4.

Step No.	Title	Content	Learning objective	Method/ Activity	Media	time	Competence column
1	Introduction and Orientation	DISC framework introduction; LEVEL5 orientation; course and community context	Introduce DISC values; establish foundation for competence-based learning and community relevance	Introductory seminars, discussions, and LEVEL5 self-positioning	Slides, handouts, LEVEL5 templates	Weeks 1–2	Knowledge: basic Skills: basic Attitude: basic
2	Needs Exploration and Stakeholder Mapping	Field research; stakeholder interviews; needs analysis; contextual mapping	Develop research skills; map real social needs; identify and contact stakeholders	Field visits, interviews, secondary research, data interpretation	Interview guides, local data, digital tools	Weeks 3–4	Knowledge: medium Skills: medium Attitude: basic
3	Project Design and Planning	Collaborative project planning; defining goals, activities, competences, and evaluation	Design feasible, socially responsive learning interventions; structure competence development	Team mentoring, peer review, proposal writing, stakeholder consultations	Templates, mentoring notes, collaborative documents	Weeks 5–7	Knowledge: medium Skills: advanced Attitude: medium
4	Implementation in Authentic Contexts	Carrying out student-led interventions in real-world community settings	Apply theoretical knowledge in practice; navigate real-world complexity; engage stakeholders	On-site delivery of workshops, campaigns, or events; teamwork and facilitation	Project materials, physical/digital artefacts	Weeks 8–11	Knowledge: medium Skills: advanced Attitude: medium
5	Reflection, Self-Assessment and Dissemination	LEVEL5 validation; reflection presentations; dissemination of project outputs	Reflect on learning; assess competences; share learning process and results with peers and community	LEVEL5 self-assessment, peer dialogue, final presentations and artefact production	Posters, videos, reflection journals, LEVEL5 tools	Weeks 12–13	Knowledge: medium Skills: advanced Attitude: advanced

9.3 Sub-pilot Model of AUTH

The AUTH pilot was divided into 12 sub-pilots, each representing a student-led project developed in collaboration with a different local stakeholder or organisation. In the sections that follow, we present the action field, DISC learning pathway, and experience report for each of these sub-pilots individually. As the projects focused on distinct learning fields and SDG-related themes—including refugee education, sustainability, mental health, digital equity, and cultural heritage—each one is documented separately to reflect its unique context and learning process.

The structure of this report therefore differs from other national pilot reports within the DISC project. While most pilots focused on a single course or learning unit, the AUTH implementation involved a decentralised learning model in which students applied the DISC framework across a wide range of community-based interventions. Each sub-pilot functioned as an independent educational initiative, with its own learning objectives, stakeholder collaboration, and implementation challenges.

To accommodate this diversity, the overall pilot report is followed by 12 structured sub-sections, each using the standard DISC reporting format. Unlike other pilots, there is no single consolidated trainer experience report; instead, the AUTH teaching team's insights are woven into the individual sub-pilot reports, based on their ongoing mentoring and involvement across all student projects.

This structure reflects the distinctive character of the AUTH pilot—demonstrating how a higher education course can serve as a platform for multiple, practice-oriented learning pathways rooted in competence development, social relevance, and real-world engagement.

9.3.1 Reforestation of Northern Evia: Breathing Life

9.3.1.1 *Action field*

Course Description

The learning project **“Reforestation of Northern Evia: Breathing Life”** was developed in direct response to the large-scale environmental disaster caused by the 2021 wildfires in Evia, which destroyed thousands of hectares of forest and disrupted entire communities. This project was not only a course—it was an educational intervention aimed at combining environmental restoration with civic education.

To ensure the project's real-world relevance and to foster meaningful collaboration, the course was co-designed and implemented with the Greek environmental NGO ΚΑΛΛΙΣΤΩ (Callisto – Wildlife and Nature Conservation Society). This partnership enabled students to engage directly with field experts, access data and case studies, and participate in scientifically grounded reforestation actions guided by forestry professionals.

The learning project fit within the DISC framework and targeted university students from education and environmental sciences. Its central aim was to:

- Engage students with the ecological and social challenges of post-fire reforestation.
- Equip them with skills to design, implement and communicate sustainability actions.

- Deepen their understanding of localised SDG implementation.

The learning outcomes were rooted in experiential education, eco-pedagogy, and place-based learning. The results included:

- Co-development of a reforestation micro-plan with Callisto and local stakeholders.
- Active planting of 500+ native trees and shrub species in a pilot plot near Rovies.
- Creation of bilingual (Greek-English) educational materials for local schools.
- A community exhibition event titled “Breathing Life into Our Forests” in Edipsos.

Target Group

The course involved 14 students (8 female, 6 male), mostly in their early-to-mid twenties. They came from two departments:

- Faculty of Education (pedagogical orientation – 4 female students)
- School of Forestry and Natural Environment (environmental science orientation – 10 students)
- Some had previous volunteering experience with NGOs; others joined primarily for academic credit. The diversity of the group created a dynamic blend of technical, creative, and civic competences.

Themes (Content Areas)

- Mediterranean forest ecosystems and fire ecology
- The politics and ethics of environmental recovery
- Community engagement in sustainability transitions
- Pedagogical frameworks for teaching climate resilience
- SDGs in action: Local-global learning interconnections

Learning Objectives

Knowledge:

- Recognise the environmental, economic, and cultural value of forests.
- Understand the mechanics of forest fire recovery and sustainable forestry.
- Grasp the SDGs framework and critically analyse its application in Greece.

Skills:

- Design and execute reforestation plans collaboratively.
- Translate scientific knowledge into age-appropriate educational tools.
- Communicate environmental knowledge to different audiences.

Attitudes:

- Develop an ethic of care for land and community.
- Embrace uncertainty, empathy, and resilience in field contexts.

- Adopt a reflective and critical stance towards “greenwashing” discourses.

Methods/Activities

We used:

- Experiential and project-based learning
- Field immersion and stakeholder engagement
- Cross-sectoral collaboration with NGO professionals
- Reflective practices including journaling and storytelling
- Blended learning sessions (asynchronous and synchronous)

Resources and Materials

- Custom fieldwork guide: “From Ashes to Roots: Reforesting Evia”
- Educational video clips from ΚΑΛΛΙΣΤΩ
- Greek-language SDG classroom resources (e.g. WWF Ελλάς):
https://www.wwf.gr/ekpaideusi/ekpaideytiko_yliko/
- Ministry of Environment reports on Northern Evia (2022–2023)
- Open-access geospatial tools and biodiversity catalogues

9.3.1.2 DISC Learning pathway

The learning pathway unfolded in six interconnected steps, each representing a stage of engagement, growth, and reflection.

Step 1: Grounding the Urgency – Understanding Fire and Forests

- The course began with online seminars and curated readings that introduced students to the ecological, social, and economic impact of wildfires in Greece.
- We discussed fire regimes, biodiversity loss, and forest management failure.
- Guest speakers from ΚΑΛΛΙΣΤΩ and the Forestry Department of Chalkida gave real-world insights.
- A debate on “Nature’s Recovery: Natural vs. Human Intervention” brought diverse views to the surface.

> *Key takeaway: Students realised that reforestation is not just ecological—it’s political.*

Step 2: Meeting the Land – Field Visit to Northern Evia

- A three-day field trip to Northern Evia immersed students in the burned landscape.
- They conducted site observations, soil analysis, and community interviews.
- Local elders shared stories of the fire and their hopes for forest recovery.
- Students experienced firsthand the emotional and physical magnitude of environmental loss.

> *One student wrote in their journal: “The smell of ash still lingers in the air. This is not just a landscape—it’s a living wound.”*

Step 3: Hands in the Soil – Participatory Reforestation

- Guided by Callisto’s reforestation plan, students participated in a collective planting effort.
- 500+ trees were planted in Rovies using native species (holm oak, strawberry tree, cistus).
- Students learned proper root treatment, irrigation, and microhabitat assessment.
- Physical exhaustion was met with emotional fulfillment.

> *“I never imagined digging holes could make me feel this proud,” one participant noted.*

Step 4: From Action to Education – Creating Pedagogical Tools

- Students were divided into thematic teams to design educational materials for schools.
- Each team created content for a different age group (kindergarten, primary, secondary).
- Products included storybooks, interactive posters, and role-play scenarios in Greek.
- Materials were shared with three local schools in Edipsos and Limni.

> *“This is where I saw the value of what we did—when the children asked questions we had answers for,” a student remarked.*

Step 5: Reflecting Forward – Peer Dialogue and Journaling

- Back in Thessaloniki, students engaged in structured reflection through journaling and group dialogues.
- They revisited earlier thoughts and examined how their attitudes evolved.
- A digital Padlet was used to share reflective prompts anonymously.
- Emotional literacy and social-emotional learning became visible outcomes.

> *“I learned to listen without judging. Not everything can be fixed—but everything can be understood,” one entry said.*

Step 6: Sharing the Story – Community Event in Edipsos

- The final act was a community event co-organised with Callisto.
- Titled “Breathing Life into Our Forests,” it featured student exhibitions, artwork, and short speeches.
- Local students performed a play based on a storybook written by course participants.
- Media coverage was minimal—but the emotional impact was immense.

> *“Seeing people tear up during the children’s performance—that was our reward,” said a student organizer.*

9.3.1.3 Your Experience Report (of the trainer team)

Development Process

Designing the “Reforestation of Northern Evia” course was a blend of urgency, innovation, and logistical tightrope-walking. The catastrophic fires of 2021 provided both a grim motivation and an authentic learning context. The challenge lay in translating the real ecological tragedy into an empowering pedagogical experience.

We built the curriculum around experiential learning principles, emphasizing emotional connection, civic responsibility, and co-creation. The integration of SDGs wasn't an afterthought—it was the backbone of the project. Collaborating with local stakeholders (foresters, educators, community leaders) was both enriching and eye-opening, revealing the strong potential of place-based learning.

Contents

We successfully delivered the content as envisaged. Our core themes of reforestation, environmental justice, and SDG application resonated with students and local participants alike. We believe the course is highly transferable—not only to other Greek regions with post-fire challenges (e.g. Rhodes or Attica) but also to any context where climate change education can benefit from grounded, local case studies.

Methodology

Blending fieldwork with online modules worked better than expected. Students appreciated the freedom to explore topics at their own pace online while being emotionally and physically engaged during the on-site activities. The reflection exercises helped solidify learning outcomes and gave space for processing the complexity of the experience.

Assessment combined performance (via project work), reflection (through journals), and knowledge (through an SDG quiz). This triangulation was effective in capturing holistic learning.

Outcomes

- We witnessed significant competence development:
- Improved understanding of sustainability in a real-world context.
- Heightened civic engagement and emotional investment in the issue.
- Growth in critical thinking, teamwork, and digital communication skills.

A surprising outcome was students' initiative to remain engaged beyond the project. Several volunteered to return to Evia during the summer to support ongoing reforestation.

Impact

The concept stood out for its direct action orientation. Unlike many sustainability courses confined to classrooms, ours put boots on the ground. Learners reported a sense of empowerment and relevance—"we weren't just learning about change; we were making it," as one participant noted.

Feedback was overwhelmingly positive. One critique: the physical intensity of fieldwork was underestimated. We adjusted mid-course by balancing physical and creative tasks.

Sustainability Aspect

The project was deeply anchored in sustainability education, addressing at least three SDGs explicitly (13, 15, 4) and touching on others (like SDG 11 on Sustainable Communities). What made it innovative was the merging of activism, local participation, and pedagogical development.

A strong sustainability aspect was the co-creation of reusable educational resources in Greek, which local schools have since adopted.

Perspective, Synergy, Transfer

In a next round, we would:

- Start earlier with physical preparation (e.g. planting zones)
- Include interdisciplinary students (architecture, social work)
- Provide stronger emotional support structures (fieldwork was intense)

There's strong synergy potential with environmental NGOs, school networks, and municipalities seeking youth engagement for sustainability.

Professional Development

As trainers, we learned that environmental education is most impactful when rooted in local pain—and hope. Witnessing student transformation from hesitant observers to active contributors was profoundly motivating. We also refined our ability to manage complex logistics across digital, physical, and social realms.

9.3.1.4 Learner Experience Narrative



We gathered in a semicircle after the last tree had been planted. There was no ceremony, no speeches—just silent nods of acknowledgment, sweat, and ash on our boots. And yet, something had clearly shifted in each of the learners.

Maria, a quiet postgraduate student, broke the silence:

"I used to think climate action was about politics and policy papers. Now I know it's about soil under your fingernails, and looking a villager in the eye when they say, 'Thank you.'"

The journey hadn't been easy. Anna, a 26-year-old adult education graduate, confessed that the emotional weight of the stories shared by Evia's elderly population nearly overwhelmed him.

"What struck me most was not the black trees, but the blackened hope in people's eyes. We had to earn their trust—not by talking, but by working."

Vasiliki, a second-year education student, found her voice during the storytelling workshops with schoolchildren.

"The kids helped me realise how powerful stories are. Our educational material wasn't just a product—it was a promise that the forest would be remembered and reborn."

Anastasia, the forestry student, took pride in the technical aspects—soil pH measurements, spacing guidelines, hydrological planning. Yet even he admitted:

"It's one thing to model reforestation on a laptop. It's another to dig in rocky soil while a grandmother offers you bread and asks you to save her hill."

She was initially apprehensive about the fieldwork, said she experienced a personal transformation.

"I thought I would be the one teaching. But I learned more in three days in Rovies than in a year of lectures. What challenged me most? The silence at night—the burned landscape haunts you."

Their reflections wove a complex picture—grief and growth, action and contemplation, exhaustion and empowerment. These were not just learners—they had become co-authors of a regenerative future.

9.3.2 Recycling Techniques in the Greek Context: From Waste to Worth

9.3.2.1 Action field

Course Description

The learning project “Recycling Techniques in the Greek Context: From Waste to Worth” was born out of a practical need: despite the growing national and European discourse on sustainability, Greece continues to struggle with recycling efficiency, citizen participation, and systemic waste sorting. The gap between legislation and daily practice is wide, and education has a vital role to play in bridging it.

Developed within the framework of the DISC methodology and anchored in SDGs 11, 12, 13, and 4, this pilot project sought to empower students with the tools to investigate, engage with, and improve local recycling practices. The initiative was co-developed and co-implemented with ANAKYKΛΩΝΩ (Anakyklono), a Thessaloniki-based social cooperative enterprise that works on circular economy, material recovery, and public awareness projects across Northern Greece.

The partnership brought together academic insight and community engagement infrastructure. Through workshops, site visits, campaign design, and public-facing activities, students had the opportunity to engage in project-based environmental learning with clear, measurable outcomes.

Key objectives of the course included:

- Understanding the cultural and infrastructural barriers to recycling in Greek cities
- Acquiring hands-on knowledge of recycling technologies and classification systems
- Developing educational tools and campaigns to raise awareness
- Engaging with diverse publics in co-creating sustainable waste management habits

Final deliverables included:

- A recycling awareness van co-operated by AUTH students and Anakyklono staff
- Over 500 interactions with the public through quizzes and pledges
- A set of visual communication tools (posters, infographics, stickers)
- A final community event showcasing the learning outcomes

Target Group

The target group comprised 4 undergraduate and postgraduate students (1 woman and 3 men) from three department of Philosophy and Education.

Aged between 20 and 33, the students brought diverse experiences—some had participated in Erasmus+ youth exchanges on climate action, others were new to sustainability. The heterogeneity enhanced team dynamics and skill-sharing.

Themes (Content Areas)

- Circular economy principles and practice
- Urban waste management in Greece
- Local governance and Law 4819/2021 on sustainable development
- SDG 12 and behavior change communication
- Visual literacy and environmental campaigning
- Education for sustainable consumption and production

Learning Objectives

Knowledge:

- Learn the difference between downcycling, recycling, and reuse.
- Understand Greece’s recycling system and the relevant legal framework.
- Identify best practices for separating recyclable waste streams.

Skills:

- Conduct small-scale waste audits and community needs assessments.
- Design and deploy awareness campaigns tailored to local populations.
- Collaborate with non-academic actors to deliver mobile educational interventions.

Attitudes:

- Cultivate ecological consciousness in everyday practices.
- Embrace collaborative work with civic organisations and public stakeholders.
- Reflect critically on personal waste habits and consumer culture.

Methods/Activities

The project used a mix of:

- Inquiry-based learning and critical reflection
- Site-based immersion and field observation
- Community engagement through design sprints
- Peer collaboration and real-world prototyping
- Blended learning with multimedia tools

Resources and Materials

- Official materials from the Ελληνική Εταιρεία Ανακύκλωσης (HERRCO):
<https://www.herrco.gr/>
- Leaflets and infographics co-created with Anakyklono
- Recycling behavior statistics and municipal policy briefs
- Sorting tools, educational bins, and mobile workshop infrastructure
- Canva Pro, Padlet, Google Forms for design and documentation

9.3.2.2 DISC Learning pathway

The learning journey unfolded in five structured, interconnected steps.

Step 1: Waste Literacy – Seeing the System

- The first module demystified the recycling chain and revealed systemic weaknesses.
- Students examined local municipal practices and international comparisons.
- An open discussion explored Greek cultural attitudes toward waste (“kathariótita” as performance).
- The class mapped their own consumption patterns and produced individual waste diagrams.

Step 2: Facility Visit and Forensic Sorting

- Students visited the Anakyklono sorting facility, a medium-sized recovery plant servicing Thessaloniki.
- They learned how contamination disrupts sorting and traced the route of recycled material.
- Conducted a classroom bin audit (week’s worth of waste) and categorized it by recyclability.
- Compiled their findings into a presentation: “From Bin to Bargain or Burn?”

Step 3: Design and Dialogue – Creating for the Community

- Students formed creative teams to build public education tools.
- Each team researched neighborhood demographics to tailor messaging.
- They created a suite of stickers and posters using Greek idioms and humor to promote proper recycling.
- Mock-up testing took place in the university cafeteria, followed by feedback revisions.

Step 4: Pop-Up Learning – The Mobile Recycling Lab

- In collaboration with Anakyklono, the students launched a mobile education unit.
- They set up on two busy public squares in Thessaloniki.

- Passersby were invited to play the “Sorting Challenge” and sign pledge cards.
- A QR-linked mini-survey collected data on recycling habits and misconceptions.

Step 5: From Awareness to Action – Reflective Closure

- The final module involved analysis, feedback, and visioning.
- Students wrote digital portfolios including a photo diary and a ten-day personal recycling log.
- They presented their campaigns and discussed what worked and what didn’t in public engagement.
- The final circle was emotional—many students reported changes in their family habits as a result.

9.3.2.3 Your Experience Report (of the trainer team)

Development Process

The design of this course was a collaborative effort between AUTH and Anakyklono, with significant input from urban planning experts and youth workers. The goal was to combine rigorous environmental education with street-level engagement. Designing the mobile learning lab was particularly challenging but rewarding, as it required real coordination with civic infrastructure.

The most successful component was the pop-up van: it generated high public interest and gave students a meaningful context to communicate what they had learned. The biggest challenge was pacing: students needed more time to prepare their materials and to debrief their intense public interactions.

Contents

Yes, all core content areas were successfully delivered. The integration of SDG content, public policy, and design communication was effective and well-received. The thematic flow from theory to action gave students a strong narrative throughline.

Transferability is high: this course could be adapted to other municipalities or contexts, especially those needing local public awareness campaigns. The structure can also be linked to formal teacher training or urban planning courses.

Methodology

The combination of inquiry-based learning, real-world field exposure, and public action created a strong pedagogical loop. Students moved from disorientation to orientation, from analysis to action, and finally from doing to reflecting. The digital portfolio proved an excellent tool for documenting learning progress.

Outcomes

- Students developed interdisciplinary competences across environmental science, communication, and civic education.
- Campaign products were authentic and usable beyond the course.
- Real behavior change was observed in both students and the community members they engaged with.

Impact

The course was seen as original and hands-on. It empowered students to be not just learners, but environmental communicators. Feedback highlighted the importance of doing “real work for real people” instead of simulations.

Students were highly satisfied and suggested expanding the van project into a permanent learning resource for schools.

Sustainability Aspect

The course aligned strongly with SDG 12 (Responsible Consumption and Production), and supported SDGs 4, 11, and 13 through education, urban transformation, and climate literacy. The mobile lab was particularly impactful in translating abstract sustainability goals into street-level action.

Perspective/Synergy and Transfer

In future iterations, we would begin earlier with design prototyping and provide more training in public facilitation. There's clear synergy potential with municipalities, youth centers, and school districts interested in zero-waste strategies.

Professional Development

As trainers, we deepened our understanding of how sustainability can be taught through lived, material practices. We also learned to co-navigate public dialogue and logistics with students, gaining insight into real-time community engagement. This model of university–NGO collaboration was inspiring and replicable.

9.3.2.4 3. Learner Experience Narrative: A Story from the Streets

The sun beat down on the white van parked outside the Rotunda. Inside, Maria was preparing handouts while Konstantinos set up the sorting bins. Neither had done anything like this before. “We’re live in five,” said Mihail, half-nervous, half-excited.

What followed was chaos, laughter, correction, and learning—on both sides of the table. Children ran up to play the sorting game. Elderly passersby offered unsolicited advice. Teenagers posed with posters. “It’s working,” whispered Maria, watching people linger longer than expected.

Later that day, Lazaros spoke about a man who refused to listen at first—then returned twenty minutes later to thank them. “I told him about how one greasy pizza box ruins a whole load. He asked if I was a government worker. I said: ‘No, just someone who cares.’”

The project changed how these students saw recycling—but more importantly, how they saw themselves. They were no longer passive consumers or observers. They were educators, advocates, and initiators of change.

“I will never look at a bin the same way again,” said Konstantinos. “And that’s probably the point.”

9.3.3 Informing and Empowering School Students on Issues of Environmental Protection

9.3.3.1 *Action Field*

Course description

The pilot project “Informing and Empowering School Students on Issues of Environmental Protection” was initiated and carried out by a team of five undergraduate students (all women) from the Department of Philosophy and Education at AUTH. The project emerged from a collective concern about the environmental apathy and misinformation often found among young adults, particularly regarding their role in environmental decision-making and behavior change.

To ensure community relevance and field-based credibility, the project was developed in close partnership with “ΠΕΡΙΒΑΛΛΟΝ+” (Perivallon Plus), an environmental NGO based in Serres, Northern Greece. Perivallon+ focuses on youth empowerment, community eco-literacy, and participatory training for sustainable behavior.

This pilot used peer learning and dialogic education methods to connect university students with youth (aged 16–24) in Thessaloniki. Together, they explored climate justice, environmental responsibility, and personal empowerment through co-created learning activities and public-facing discussions.

The learning project was grounded in the DISC educational principles and related directly to the following UN Sustainable Development Goals (SDGs):

- SDG 4: Quality Education
- SDG 13: Climate Action
- SDG 15: Life on Land
- SDG 16: Peace, Justice and Strong Institutions

The final deliverables included:

- A participatory youth workshop series titled “Youth for the Planet”
- A modular environmental education toolkit based on ethical dilemmas
- A public dialogue event hosted in Thessaloniki’s Municipal Youth Centre
- A digital reflection booklet compiling participant and facilitator insights

Target Group

The project’s core activities targeted young students aged 11–16 in urban Thessaloniki. Participants came from secondary schools, youth hubs, and local civic associations. The project also served as a learning journey for the five university students themselves, who designed and facilitated all sessions, engaging as both educators and reflective learners.

Themes (Content Areas)

- Environmental ethics and civic responsibility
- Youth participation and climate justice
- The role of SDGs in local environmental education
- Critical thinking, peer dialogue, and ethical reflection
- Non-formal environmental education methods

Learning Objectives

Knowledge:

- Introduce SDGs 13, 15, and 16 in youth-friendly formats.

- Explain key concepts in environmental justice, intergenerational responsibility, and civic action.
- Understand youth attitudes toward sustainability and identify barriers to engagement.

Skills:

- Design and facilitate environmental education for youth audiences.
- Use participatory methods such as role-play, ethical mapping, and storytelling.
- Adapt philosophical inquiry to real-world environmental topics.

Attitudes:

- Build confidence in peer education and community dialogue.
- Foster a sense of responsibility toward environmental protection and collective futures.
- Deepen self-awareness and moral engagement with global challenges.

Methods/Activities

- Philosophical dialogue and ethical inquiry
- Youth facilitation training and peer learning cycles
- Co-design of learning materials and role scripts
- Field-based public engagement (debate event)
- Reflection through journaling and group debrief

Resources and Materials

- Co-developed toolkit with Perivallon+: discussion cards, dilemmas, values posters
- SDG visuals from UN Youth platforms (adapted in Greek)
- Educational videos from MedSOS, WWF Ελλάς, and Greenpeace Greece
- Philosophical prompts from Arne Naess and Rachel Carson (youth-adapted)
- Municipal support via the Thessaloniki Youth Department

9.3.3.2 DISC Learning pathway

The learning journey followed five transformative steps:

Step 1: From Theory to Initiative – Getting Started

- Students formed a project team under a shared interest in environmental ethics and youth empowerment.
- They met with Perivallon+ facilitators to understand current outreach gaps in environmental education for youth.
- A scoping workshop helped define the project's purpose: not just to inform, but to spark dialogue and agency.

Step 2: Creating the Toolkit – Learning by Designing

- The team designed a four-part workshop series featuring ethical scenarios around fast fashion, plastic pollution, urban deforestation, and environmental rights.
- Methods included role-playing, visual metaphors, and dialogue games.
- All tools were tested in a simulation with fellow students and revised.

Step 3: Engaging the Youth – Peer-to-Peer Workshops

Project Number:

2022-1-DE01-KA220-HED-000087131



Co-funded by
the European Union

- Workshops were hosted at two youth centers in Thessaloniki.
- Activities included “ethical mapping,” future scenario design, and silent debates.
- The workshops were deliberately horizontal: the students facilitated, not lectured.

Step 4: From Dialogue to Action – Public Event

- Students hosted “Voice for Nature,” a public dialogue event at a municipal cultural space.
- The event combined open discussion, participant exhibits, and a “values wall” where youth could write pledges.
- Over 70 young people attended. A panel of educators, activists, and students shared stories, not stats.

“It felt like we were co-writing the future with them,” — Styliani, student organizer

Step 5: Reflecting and Sharing – What Did We Learn?

- The project closed with two reflective sessions—one internal, one with Perivallon+.
- Each student wrote a personal reflection chapter for the group e-booklet.
- A digital debrief was sent to all youth participants, inviting them to future engagements.

“What I learned wasn’t in any textbook—it was in the faces, questions, and silences of those youth,”
— Evangelia, student writer

9.3.3.3 Your Experience Report (of the trainer team)

Development Process

This project was built around a student-led idea, and our role was to coach, provoke, and support—not direct. The collaboration with Perivallon+ helped anchor the project in community needs and offered feedback at each design stage. What made the process powerful was its groundedness: students moved from idealism to pragmatism without losing vision.

The greatest success was the quality of engagement achieved with the youth. The challenge was coaching the students to balance autonomy with structure and not to overplan at the expense of authentic dialogue.

Contents

We covered a full range of SDG-related topics and embedded philosophical inquiry without jargon. The environmental dilemmas were both accessible and profound, giving space for real dialogue.

The toolkit format proved adaptable, and the students are now working with Perivallon+ to scale its use in school programs.

Methodology

We used blended methodologies: Socratic questioning, experiential group work, role-play, and reflective writing. This combination helped create a space of critical hope, not just critique or fear.

The decision to engage young adults through values-driven dialogue, rather than fact-delivery, created deeper connections and long-term interest.

Outcomes

- Five student facilitators developed strong capacities in education design, peer engagement, and civic leadership.
- Over 70 youth were reached through workshops and events.
- Two students have been invited to present the model at an ESD conference in Athens.

Impact

The project demonstrated that youth-to-youth environmental education works best when it's values-driven, participatory, and emotionally honest. The public debate showed that young people are hungry for platforms, not lectures.

Participant feedback showed significant attitude shifts and interest in continued action. Schools and NGOs requested follow-up engagements.

Sustainability Aspect

Sustainability was central—not only in content but in process. The learning journey model is reusable, and the toolkit is being translated into multiple languages.

The core innovation was the ethical entry point—turning environmental issues into personal, relational, and political questions.

Perspective/Synergy and Transfer

Future iterations could incorporate more multimedia and partnerships with art schools to visualize ethical dilemmas.

This model could also be used for adult learners, civic education, or intergenerational dialogue.

Professional Development

As trainers, we refined our understanding of youth-led facilitation and learned how to coach emotional safety in philosophical discussions.

We also saw first-hand the power of student autonomy within structured pedagogical frameworks—a lesson we'll carry into future project-based learning initiatives.

9.3.3.4 *Learner Experience Narrative: From Conversation to Transformation*



At first, they weren't sure what to expect. "Philosophy and climate change? That's abstract," said Eleni, nervously reading the invitation email.

But within minutes of their first session, something shifted.

Eleni-Mina, holding a card that read "Your character is a single-use plastics manufacturer," looked up and said: "Wait—I don't know if I want to defend this."

"Exactly," replied Stiliani. "That's the point."

The sessions didn't feel like classes. They felt like conversations that mattered.

By the time they reached the Voice for Nature event, students weren't facilitators—they were mentors, listeners, provocateurs. Niki, who once feared public speaking, ended the evening by saying:

"When we empower others, we empower ourselves. This wasn't just about the planet. It was about finding our place in it." – And they did.

One workshop. Five students. Dozens of young lives engaged. And an echo that still resonates in every story, dilemma, and pledge they helped inspire.

9.3.4 Gender Equality in the Workplace: Rethinking Power and Opportunity in the Greek Context

9.3.4.1 Action Field

Course description

The learning project “Gender Equality in the Workplace: Rethinking Power and Opportunity in the Greek Context” was initiated and developed by a group of four undergraduate students (all women) from the Department of Philosophy and Education at AUTH. The initiative was born out of a shared frustration: gender biases, wage gaps, and occupational segregation persist in Greece despite decades of policy commitments and EU legislation.

In order to connect theory to lived experiences and practice, the project was co-developed with “Ισότητα στον Εργασιακό Χώρο” (Equal Workspaces), a Thessaloniki-based NGO that supports workplace inclusion and gender rights across Northern Greece. The collaboration allowed students to access real-life workplace case studies, anonymized HR data, and mentoring from gender equality trainers.

The learning initiative sought to bridge philosophical reflection with practical tools for awareness and advocacy. It targeted university peers, emerging professionals, and early-career job seekers, aiming to challenge stereotypes, uncover hidden barriers, and spark dialogue on gender equity in Greek work culture.

This course was grounded in the DISC methodology and aligned closely with the following UN Sustainable Development Goals:

- SDG 5: Gender Equality
- SDG 8: Decent Work and Economic Growth
- SDG 10: Reduced Inequalities
- SDG 4: Quality Education

Key outputs included:

- An interactive workshop series titled “Gender at Work: Recognise, Reflect, Respond”
- A set of bilingual educational resources including a gender audit checklist and role-play scenarios
- A public simulation and dialogue event on workplace bias, hosted at a co-working space in Thessaloniki
- A reflective visual installation titled “Invisible Labor” created by students

Target Group

The primary target group consisted of young adults aged 20–30, university students and recent graduates from Thessaloniki. The group included individuals preparing for entry into the workforce, particularly in education, business, and public administration. Several sessions also involved mentoring from working professionals and HR consultants provided by Equal Workspaces.

Themes (Content Areas)

- Workplace gender dynamics in Greece
- Legal frameworks: EU directives and Greek labor law
- Gender bias, microaggressions, and occupational stereotypes

- Intersectionality and invisible labor
- Ethics, empowerment, and institutional change
- Tools for dialogue, advocacy, and inclusion

Learning Objectives

Knowledge:

- Understand the structural, legal, and cultural roots of gender inequality in Greek workplaces
- Identify patterns of implicit bias and systemic discrimination
- Learn about gender audits, HR practices, and inclusive policies

Skills:

- Facilitate conversations about sensitive topics with empathy and clarity
- Design and lead participatory workshops on gender inclusion
- Develop and deliver accessible educational resources on equity

Attitudes:

- Cultivate moral sensitivity to workplace injustice
- Embrace diversity as a core component of ethical citizenship
- Build confidence to challenge discrimination and advocate for fairness

Methods/Activities

- Dialogue-based learning and Socratic questioning
- Role-play and perspective-taking simulations
- Co-creation of educational tools and visual content
- Public engagement and real-time scenario workshops
- Reflective journaling, peer mentoring, and feedback loops

Resources and Materials

- Co-created educational pack: role cards, workplace scenarios, gender equality flashcards
- Excerpts from Greek Labor Law and EU Equality Directives (simplified for educational use)
- Video resources from KETHI (Κέντρο Ερευνών για Θέματα Ισότητας)
- Testimonies and anonymized case studies from Equal Workspaces
- Visual art materials, printed zines, and storytelling installations

9.3.4.2 DISC Learning pathway

The learning journey evolved over five carefully designed stages:

Step 1: Getting Real – Understanding the Landscape

- Students conducted a mini-review of gender disparities in Greece using KETHI reports and NGO data.
- They participated in a webinar hosted by Equal Workspaces on gender-neutral recruitment.
- A reflective dialogue was held in class on personal experiences with gender roles in work or education.

“Until we mapped the pay gap by sector, I didn’t realize how invisible discrimination could be,” —
Athina, student researcher

Step 2: Toolmaking – Designing for Dialogue

- Students co-designed a workshop series called “Gender at Work” including interactive scenarios, dilemma discussions, and a gender audit checklist.
- Role-play materials included cases like “the interrupted female speaker,” “the token hire,” and “the invisible caregiver.”
- All content was tested with peer groups and revised based on feedback

“When my male classmates played the role of the overlooked female employee, they really saw the difference,” — Stefania, student co-designer

Step 3: Bringing Theory to Practice – Facilitating Workshops

- Workshops were delivered at two university campuses and a youth co-working hub.
- Sessions began with a visual metaphor exercise (“Draw Your Workplace”) and ended with an “Equality Pledge Wall.”
- Participants discussed real stories and imagined alternative futures.

“The hardest part was holding silence after someone shared pain—but that silence was also powerful,” — Dialehti, facilitator

Step 4: From Classroom to Community – Hosting the Public Event

- Students staged a live simulation at a co-working space, involving members of the public in workplace scenarios.
- Each attendee received a character role and participated in a moderated workplace meeting simulation.
- A panel with gender experts, HR professionals, and students followed.

“One guy said: ‘I thought this was going to be woke propaganda. I leave convinced we need this in every company,’” — Athina, student organizer

Step 5: Reframing and Reflecting – The ‘Invisible Labor’ Installation

- Students curated a visual installation using real quotes from women in unpaid labor roles (mothers, caretakers, interns).
- The installation was displayed in the university atrium for one week.
- Reflection sessions included feedback collection and ethical analysis of what students learned.

“It hit me hardest when a visitor said: ‘This reminds me of my mom—she worked twice as hard, but no one ever noticed,’” — Irini, student-artist

9.3.4.3 Your Experience Report (of the trainer team)

Development Process

The project was initiated by students, which added authenticity and ownership to every stage. Working with Equal Workspaces grounded the experience in real-world complexity—students didn’t just study discrimination, they dialogued with its consequences. The creative mix of data, role-play, and ethics made the course both emotional and analytical. The most successful part was the public simulation,

which transformed passive participants into reflective actors. The challenge was emotional pacing: students had to process stories of injustice while remaining strong enough to lead.

Contents

Content delivery was successful and well aligned with the intended learning outcomes. The integration of law, ethics, and personal testimony proved especially powerful.

This course has great transfer potential to corporate training, teacher preparation, and public service sectors. All materials are modular and replicable.

Methodology

We used participatory action learning, ethical dialogue, and experiential role-play. These methods made abstract inequalities visible and actionable.

Using gender as both an analytical lens and lived experience helped students connect emotionally and intellectually.

Outcomes

- All students demonstrated improved confidence, facilitation, and critical thinking skills.
- Participants expressed increased readiness to recognize and challenge workplace inequality.
- Requests were received from local NGOs and the municipality to adapt the materials for civic training.

Impact

The course succeeded in turning passive understanding into proactive engagement. Student facilitators emerged as skilled mediators, and workshop participants became vocal about workplace change.

Feedback showed that even skeptical attendees left with new perspectives—and some left in tears.

Sustainability Aspect

The project directly addressed SDG 5 and integrated SDGs 8 and 10. It challenged systems, not just individuals, and called for institutional responsibility, not only behavioral change.

Its visual and dialogic tools are now being considered for wider dissemination in civic education programs.

Perspective/Synergy and Transfer

Future editions could link to trade unions, business schools, or public administration programs. The model can also support training for public sector staff or NGO youth workers.

Visual tools and the role-play script archive are now available in open source format for reuse.

Professional Development

As trainers, we gained deeper insight into facilitating emotionally charged conversations while maintaining pedagogical integrity. We also strengthened our understanding of how interdisciplinary methods (ethics, law, storytelling) can produce transformative learning.

9.3.4.4 Learner Experience Narrative: “We Saw It, Felt It, Faced It”

Athina never considered herself an activist. But when she read a testimony from a woman who lost her job after maternity leave, she said: “I need to do something.”

The team didn’t know where to start. Stefania asked, “Isn’t this too political?” But after one workshop, he changed his mind: “I realized silence is political.”

They designed the role-play together. They cried after testing it. They argued about tone. But when the event came, they were ready.

Dialechti, who feared facilitation, led a group of ten strangers through a difficult dialogue on bias. One participant asked: “Why should I care?” He paused and said: “Because if we don’t, this becomes our normal.”

After the event, someone approached Irini and said: “I finally feel seen.”

The project didn’t just inform. It transformed. And not just the audience—the students too.

As Athina wrote in the final journal:

“This wasn’t a course. It was a confrontation—with injustice, with ourselves, and with the world we want to build.”

9.3.5 Political Self-Activation and the Role of Local Communities in Driving Change

9.3.5.1 Action Field

Course description

The learning project “Political Self-Activation and the Role of Local Communities in Driving Change” was co-created and implemented by four undergraduate students (three women, one men) from the Department of Philosophy and Education at Aristotle University of Thessaloniki. Concerned by widespread political apathy and a lack of civic participation among their peers, the students sought to explore how democratic agency can be revived from the bottom up—through community action and self-driven civic education.

The project was carried out in partnership with the civic NGO “ΔΗΜΟΣΕΝΕΡΓΩ” (DimosEnergo), based in Northern Greece, which focuses on democratic innovation, citizen dialogue, and community capacity building. DimosEnergo provided access to local initiatives, participatory planning tools, and community engagement protocols.

The project aligned with the DISC methodology, emphasizing action-based civic learning, and addressed the following SDGs:

- SDG 4: Quality Education
- SDG 11: Sustainable Cities and Communities
- SDG 16: Peace, Justice, and Strong Institutions
- SDG 17: Partnerships for the Goals

Its objectives were to:

- Reframe what “being political” means for young adults.
- Build capacity for local civic action through deliberation and reflection.
- Connect philosophical inquiry with local democratic practice.

Key deliverables included:

- A civic activation toolkit titled “Democracy, Here and Now”
- A public simulation forum “Agora for All”
- A participatory mapping project identifying neglected community issues
- A co-authored bilingual policy brief and education guide

Target Group

The main target groups were:

- University students and early-career adults (ages 20–30) with little or no previous political participation.
- Local community members of all ages, particularly in neighborhoods of Thessaloniki with weak civic structures.

The project included collaboration with youth groups, citizen councils, and local associations.

Themes (Content Areas)

- Political self-activation and civic disempowerment
- Democratic theory and political autonomy (Arendt, Crouch, Graeber)
- Participatory governance and community engagement tools
- Deliberative democracy and consensus building

- Ethics of citizenship and local activism

Learning Objectives

Knowledge:

- Understand key theories and critiques of modern democracy.
- Gain awareness of Greece's local governance structures and their limitations.
- Learn practical tools for facilitating public dialogue and civic simulation.

Skills:

- Facilitate group dialogue and participatory planning.
- Map community needs using GIS and social diagnostics.
- Design and implement civic education events and workshops.

Attitudes:

- Build confidence in one's right and ability to engage politically.
- Develop empathy and curiosity about differing civic experiences.
- Embrace collaboration, dissent, and complexity in decision-making.

Methods/Activities

- Socratic dialogue and public philosophy
- Case study analysis and field research
- Simulation of democratic forums and community deliberations
- Participatory mapping and visual storytelling
- Collective journaling and peer feedback

Resources and Materials

- Colin Crouch (2004). Post-Democracy, selected chapters
- Hannah Arendt (1958). The Human Condition, esp. chapters on action and the polis
- David Graeber (2013). The Democracy Project, for modern grassroots organizing
- Council of Europe (2010). EDC/HRE Charter and Manual for Educators
- Hellenic Foundation for European and Foreign Policy (ELIAMEP, 2021). Mapping Civil Society in Greece
- Democracy International database of participatory budgeting case studies
- DemosEducation's Civic Literacy Toolkit (translated for this project)
- Greek documentary "Δημοκρατία σε Κρίση" (ERT, 2021)
- Digital platforms: Miro (collaborative mapping), Canva (toolkit design), Google Forms (feedback)

9.3.5.2 DISC Learning pathway

Step 1: Awakening the Political Self – Framing the Disconnection

- Students began with personal reflections and group dialogue on why young people feel alienated from politics.
- Using Crouch's Post-Democracy, they examined the structural causes of political fatigue.
- They conducted anonymous interviews with peers asking: "When was the last time you felt politically heard?"

“Some said never. That silence became our starting point,” — Ismini, student team lead

Step 2: Exploring Alternatives – Learning from the Commons

- The team studied examples of participatory democracy from Porto Alegre, Athens, and Trikala.
- They analyzed the Compass Manual for Human Rights Education with Young People to build inclusive facilitation methods.
- Simulated a neighborhood assembly to debate the use of a vacant public space.

“We role-played citizens. I became a retired teacher. I argued with myself and loved it,” — Nikos, student facilitator

Step 3: Taking to the Streets – Community Mapping and Story Circles

- Students conducted participatory mapping with residents in two low-engagement neighborhoods of Thessaloniki.
- Used oral history techniques from the StoryCorps model to gather local voices.
- Mapped overlooked spaces, broken systems, and community hopes.

“People showed us problems, but also pride. A woman pointed to her balcony garden as her act of resistance,” — Ioanna, student mapper

Step 4: Simulation and Solidarity – Agora for All

- The project culminated in a large-scale simulation forum at a local cultural center.
- Citizens played roles (immigrant worker, local official, small shop owner) and debated how to allocate a fictional community budget.
- The simulation was guided using protocols from the Deliberative Democracy Handbook (Gastil & Levine, 2005).

“The debates were intense. But at the end, people clapped—for each other,” — Nikos, student facilitator

Step 5: Sharing and Sustaining – From Moment to Movement

- Students compiled a bilingual civic activation guide with instructions for replicating all activities.
- Co-authored a short policy brief delivered to municipal offices and NGOs.
- Presented the project at a Thessaloniki youth policy roundtable.

“We went from complaint to competence. That was the real transformation,” — Niki, student writer

9.3.5.3 Your Experience Report (of the trainer team)

Development Process

This was an exceptionally generative project. The initiative started from a personal sense of powerlessness and was transformed into a structured, participatory process for reclaiming political voice. The involvement of DimosEnergo was vital. They offered local insight, real-life facilitation experience, and access to active civic groups.

As trainers, we scaffolded the learning with readings that included:

- Colin Crouch’s critique of post-democracy, which helped define the structural challenge.

- Hannah Arendt's work on action and the polis, which inspired the team's focus on dialogue and visibility.
- Graeber's democracy-as-practice framework, which legitimized informal action and public imagination.
- The Council of Europe's EDC/HRE Manual, which supported ethical facilitation.
- Greek sources from ELIAMEP's 2021 mapping report, highlighting civic infrastructure gaps.

These references ensured the course was both philosophically robust and pragmatically useful.

Contents

We covered:

- Political theory and everyday democratic practice
- Participatory planning tools (budgeting, mapping, forum theatre)
- Youth engagement methods (story circles, reflective journaling)
- Civic simulation protocol from The Deliberative Democracy Handbook
- Local policy documents (e.g., Thessaloniki municipal participation strategies)

Students actively applied these contents in planning and implementing their own activities. The documentation was made open access.

Methodology

The pedagogy was hybrid:

- Socratic (dialogue, values clarification)
- Experiential (simulation, role-play, field interviews)
- Constructivist (learner-led creation of resources)
- Democratic (non-hierarchical facilitation and reflection)

A key innovation was our "Voice Loop" method, inspired by StoryCorps, where participants passed a symbolic mic and responded to prompts like "I first felt like a citizen when..."

Outcomes

- Four student facilitators developed high competence in civic design and facilitation.
- Over 120 citizens engaged directly with the team's activities.
- Municipal and NGO partners requested replication of the simulation forum.
- The project moved from concept to practice—and from knowledge to collective empowerment.

Impact

The impact was emotional, intellectual, and civic. Many participants described it as "their first political experience that didn't involve anger or silence."

Students are now co-authoring an article titled "Civic Learning Without Permission: Youth, Autonomy, and Local Democracy in Northern Greece".

Sustainability Aspect

This project exemplified sustainability through political culture. It fostered the capacity of communities to self-organize, deliberate, and collaborate on common challenges—core tenets of resilient and inclusive societies (SDGs 11, 16, 17).

The toolkit and mapping methodology are now being adapted for high schools and adult learning centers.

Perspective/Synergy and Transfer

Next steps include:

- Linking with Erasmus+ projects on civic engagement
- Piloting the simulation model in rural municipalities
- Collaborating with EETAA and Inter Alia to create a civic education training manual

The process and products are highly replicable and low-cost.

Professional Development

As trainers, we:

- Sharpened our ability to mediate political dialogue
- Relearned the importance of vulnerability in civic education
- Understood that political literacy is best taught through doing—not theorizing

Most of all, we witnessed what happens when students are treated not as “learners of democracy,” but as its practitioners.

9.3.5.4 Learner Experience Narrative: “We Did Not Wait for Democracy—We Made It”



Nikos once said: “Democracy is always a word in textbooks.” But when she facilitated her first story circle, and heard a migrant mother talk about her fight for a public playground, she whispered: “It’s also a word in her voice.”

Ioanna, more comfortable behind the camera, ended up guiding a group of senior citizens through a participatory budget game. He later admitted: “I thought politics was for others. Now I think it’s for us—and we’re late.”

And when Ismini stood before the “Agora for All” crowd and invited 50 strangers to deliberate like equals, her voice did not tremble. She simply asked:

“What would this city look like if you had a say in it every day—not just every four years?”

And then she listened.

That was the moment democracy walked back into the room.

9.3.6 Waves of Change: Collaborative Action for the Protection of Our Seas

9.3.6.1 Action Field

Course description

The learning project “Waves of Change: Collaborative Action for the Protection of Our Seas” was designed and implemented by a team of five students (all women) from the Department of Philosophy and Education at Aristotle University of Thessaloniki. Motivated by the increasing degradation of marine environments in the Aegean and Mediterranean Seas, the students set out to connect environmental ethics with direct civic engagement in coastal protection.

In this case, the project was not conducted in collaboration with an NGO, but with the marine conservation unit of the Hellenic Center for Marine Research (HCMR)—a leading public research institution in Northern Greece with offices and field stations in Thessaloniki and Crete. HCMR provided scientific expertise, data, and direct access to ongoing marine research projects, enabling students to align education with evidence-based marine stewardship.

The goal of the project was to explore how local communities—especially youth—can be empowered through philosophical, scientific, and participatory frameworks to engage in protecting the sea as a shared ecological and cultural resource.

The project was aligned with the following UN Sustainable Development Goals:

- SDG 14: Life Below Water
- SDG 4: Quality Education
- SDG 13: Climate Action
- SDG 17: Partnerships for the Goals

Key deliverables included:

- A mobile interactive learning unit (“SeaAction Lab”) for youth education on marine ecology and ethics
- A citizen science engagement event in collaboration with HCMR researchers
- A digital narrative platform sharing marine testimonies and coastal knowledge
- A public campaign titled “The Sea Is Not Silent”

Target Group

The project targeted two distinct audiences:

1. Students and early-career adults (ages 18–30) interested in education, environmental philosophy, or marine biology.
2. Young members of coastal communities in Northern Greece, including students from public schools near Thessaloniki’s waterfront districts.

The students facilitated the learning while also engaging in co-learning with scientists, educators, and local youth.

Themes (Content Areas)

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- Marine ecosystems and oceanic sustainability
- Environmental ethics and intergenerational justice
- Citizen science and coastal monitoring
- Collaborative action for environmental protection
- The philosophy of common goods and ecological stewardship

Learning Objectives

Knowledge:

- Understand the threats facing marine biodiversity and their anthropogenic causes.
- Learn key concepts in environmental philosophy (e.g. the commons, deep ecology, justice as care).
- Become familiar with public marine policies and SDG 14 implementation in Greece.

Skills:

- Design marine-focused educational materials using philosophical and scientific sources.
- Facilitate collaborative citizen science activities.
- Engage youth and local communities in interactive public awareness campaigns.

Attitudes:

- Cultivate ecological empathy and marine literacy.
- Embrace interdisciplinary collaboration between science, philosophy, and civic action.
- Develop a personal ethic of environmental stewardship rooted in local and global responsibility.

Methods/Activities

- Educational co-design with marine researchers
- Field-based exploration and water sampling
- Dialogue-based learning on environmental values and justice
- Visual storytelling, campaign creation, and digital engagement
- Youth-led learning experiences and community feedback loops

Resources and Materials

- Marine reports from HCMR and European Marine Observation and Data Network (EMODnet)
- Greek-language policy briefs on marine protection zones
- Video material from Blue Planet II and HCMR field expeditions
- Readings from Aldo Leopold, Naomi Oreskes, and Arne Naess on environmental responsibility
- Toolkit excerpts from the EU “Educating for Ocean Literacy” program
- Visual creation tools (Canva, Padlet), marine sensors and sampling kits from HCMR

9.3.6.2 *DISC Learning pathway*

Step 1: From Curiosity to Concern – Discovering the Sea’s Silent Crisis

- Students began with a visit to HCMR’s Thessaloniki coastal observation unit and attended a seminar on microplastic pollution and marine habitat degradation.
- They explored philosophical texts on the ethics of environmental care, including Aldo Leopold’s Land Ethic and Arne Naess’ Deep Ecology.

“I always loved the sea. But I never saw it as a political space until now,” — Anna, student team member

Step 2: Connecting Disciplines – Building Shared Tools for Awareness

- In collaboration with HCMR staff, the students co-developed educational stations for a mobile lab including:
- An underwater soundscape listening station
- A microplastic sorting challenge
- A digital wall of marine testimonies and poems from coastal communities

“Science gave us the data. We turned it into a conversation,” — Eleni, designer of the audio station

Step 3: The Sea in the Classroom – Engaging Youth with Ethics and Evidence

- The team visited three public high schools along Thessaloniki’s coastal zone.
- They used metaphors and storytelling to explore questions like: “Who owns the sea?” and “Can fish have rights?”
- Students guided workshops with hands-on elements (sampling kits, mapping exercises).

“A teenager told us: ‘I’ve lived by the sea my whole life, but this is the first time I understood it,’” — Maria, facilitator

Step 4: From Shore to Square – Launching the Public Campaign

- The students organized “The Sea Is Not Silent,” a public event with interactive installations and performances.
- Passersby could listen to underwater recordings, write marine pledges, and join short walks to examine marine litter.
- A QR wall linked citizens to real-time HCMR ocean data dashboards.

“We watched a little girl ask her grandfather why he throws cigarette butts in the sea. He had no answer,” — Irini, campaign team member

Step 5: Reflect, Relearn, Reconnect – Closing the Circle

- The students created a short documentary showing how the sea connects generations, disciplines, and justice struggles.
- The SeaAction Lab was handed over to a local youth center for continued use.
- Each team member presented a personal action plan for marine education and civic engagement.

“The sea is not just water. It’s memory, meaning, and future. Now I know I am part of that story,” — Anna-Maria, in closing reflections

9.3.6.3 Your Experience Report (of the trainer team)

Development Process

This was the first time our department co-developed a project with a public scientific institution. The interdisciplinary nature of the collaboration—with HCMR marine ecologists, oceanographers, and education experts—enriched the students’ learning experience and deeply informed the project’s ethical and educational scope.

Key learning materials included:

- Aldo Leopold’s (1949) “A Sand County Almanac” (esp. the Land Ethic chapter)
- Arne Naess (1973) “The Shallow and the Deep: Long-Range Ecology Movements”
- HCMR’s public report on “Coastal Eutrophication in the Thermaic Gulf” (2020)
- Visual and policy content from EMODnet and the EU Ocean Literacy for All initiative
- Naomi Oreskes’ TED talk “Why We Should Trust Scientists”
- Youth-focused adaptations of The Ocean Decade Literacy Framework (UNESCO, 2021)

HCMR scientists provided guest lectures, raw datasets, and practical tools. This gave the students an immersive, evidence-based grounding from which to design their learning interventions.

Contents

The course content merged:

- Environmental ethics (Leopold, Naess, Oreskes)
- Marine science and local environmental issues (HCMR, EMODnet)
- Educational design for citizen science and ocean literacy
- Public engagement practices based on storytelling and empathy

This blend allowed students to bridge cognitive, emotional, and political dimensions of sustainability.

Methodology

We combined:

- Inquiry-based learning through exposure to live marine research
- Constructivist pedagogy via student-led material design
- Deliberative dialogue on intergenerational and interspecies justice
- Field-based action learning, with high emotional and ethical investment
- Reflective journaling was scaffolded through the use of prompts adapted from UNESCO’s Learning for Justice Framework (2021).

Outcomes

- Students acquired a robust understanding of marine science and ethics and translated this into practice.
- 150+ youth participated in school-based workshops.

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- The SeaAction Lab is now a permanent tool hosted by a coastal education center.
- The final event drew media attention and was positively reviewed by local environmental educators.

Impact

This project demonstrated the power of partnerships between higher education, public research institutions, and communities. Students acted as mediators between knowledge systems and citizens. The impact was intellectual, emotional, and public.

The bilingual toolkit and student-designed exhibits are being considered for inclusion in HCMR's permanent outreach programming.

Sustainability Aspect

The project was embedded in SDG 14 and linked directly to Goals 4, 13, and 17. Its innovation lay in:

- The integration of scientific data with environmental philosophy
- Tools that invited not only awareness but personal moral alignment
- A structure that can now be replicated in other coastal areas

The SeaAction Lab will be further developed in cooperation with schools and youth centers.

Perspective/Synergy and Transfer

The project is adaptable to other geographies (islands, wetlands) and target groups (fishermen, tourism workers). It aligns well with Erasmus+ priorities and the Ocean Literacy global movement.

HCMR has expressed interest in continuing the collaboration through a co-funded internship program and an open call for marine education ambassadors.

Professional Development

As trainers, we:

- Improved our capacity to guide interdisciplinary student work
- Learned to mediate between scientific content and philosophical inquiry
- Strengthened our approach to emotional learning through ecology

Most importantly, we witnessed how young educators can embody the ethic of the commons—and teach it with sincerity, clarity, and courage.

9.3.6.4 Learner Experience Narrative: *“The Sea Is Not Silent—And Neither Are We”*



Anna always felt at home by the water. But during a SeaAction Lab session, when a teenager asked her if the sea had a “soul,” she hesitated—and then said: *“Yes. And we are part of it.”*

Maria used to think philosophy had no place in marine protection. But when a fisherman cried during a listening station exercise—he changed his mind.

“I saw that pain isn’t just in facts. It’s in the stories people don’t tell unless you listen,” he wrote.

Eleni thought campaigns were shallow. Then he watched a stranger ask for a QR code because *“this matters to my son.”*

By the end of the project, they were not just students. They were connectors, facilitators, and guardians of meaning.

Their final installation read:

“The sea speaks. We’re learning to hear it. And to respond.”

9.3.7 Conscious Consumption through Critical Reflection

9.3.7.1 Action Field

Course description

The learning project “Conscious Consumption through Critical Reflection” was initiated and developed by a group of six students (five women, one man) from the Department of Philosophy and Education at Aristotle University of Thessaloniki. It was motivated by growing concerns around unsustainable consumption patterns, ethical consumerism, and the manipulation of consumer behavior through media and marketing.

To ensure a real-world grounding, the project was developed in collaboration with the Institute for Sustainable Consumption and Ethical Trade (Ινστιτούτο Βιώσιμης Κατανάλωσης και Ηθικού Εμπορίου), a private research and consultancy company based in Thessaloniki, Northern Greece. This partnership gave students access to consumer behavior data, sustainability reports, and experts working on ethical supply chains.

The project aimed to raise awareness among young adults about how critical thinking can be used to challenge manipulative consumption practices, make more ethical purchasing choices, and advocate for structural change in markets.

The learning intervention aligned with the following UN Sustainable Development Goals:

- SDG 12: Responsible Consumption and Production
- SDG 4: Quality Education
- SDG 10: Reduced Inequalities
- SDG 13: Climate Action

Deliverables included:

- An educational campaign titled “Think Before You Buy”
- A simulation workshop on ethical dilemmas in consumption
- A public “Conscious Market” pop-up event
- A reflective digital booklet for youth titled “The Ethics of Everyday Choices”

Target Group

The project targeted university students, young professionals, and high school students in Thessaloniki. Participants were mainly aged 17–30 and included future educators, social scientists, and communication experts interested in sustainability and ethics.

Themes (Content Areas)

- Critical thinking and media literacy
- Consumer psychology and behavior manipulation
- Environmental and social impacts of consumption
- Ethical trade, fair production, and sustainable supply chains
- Personal responsibility and structural advocacy

Learning Objectives

Knowledge:

- Understand the mechanisms behind consumer manipulation and unsustainable markets.

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- Learn basic concepts of ethical trade, carbon footprints, and sustainable production.
- Gain familiarity with SDG 12 and global/local consumer initiatives.

Skills:

- Critically analyze advertisements, packaging, and marketing narratives.
- Design educational campaigns addressing consumption issues.
- Facilitate reflective dialogues about consumer ethics.

Attitudes:

- Develop a questioning stance toward everyday consumer behavior.
- Build empathy for workers, producers, and ecosystems affected by consumption.
- Foster agency in promoting more sustainable and ethical choices.

Methods/Activities

- Critical media analysis and advertisement deconstruction
- Role-playing and ethical dilemma workshops
- Simulation of consumer decision-making scenarios
- Co-creation of educational materials and public engagement events
- Reflective journaling and peer-to-peer coaching

Resources and Materials

- Naomi Klein (1999), No Logo: Taking Aim at the Brand Bullies (selected chapters)
- Reports from the Ethical Trading Initiative (ETI) and Fair Trade Advocacy Office
- WWF Greece's guide "Ζήσε Υπεύθυνα" (Live Responsibly)
- Greek-language materials from Greenpeace Greece on sustainable consumption
- Documentaries such as "The True Cost" (2015) and "Minimalism" (2016)
- Critical Thinking Handbook (Paul & Elder, Foundation for Critical Thinking)

*9.3.7.2 DISC Learning pathway***Step 1: Awakening the Consumer Self – Awareness Workshop**

- Students organized a "blind consumption" simulation where participants received gifts without knowing the origin or environmental cost of the products.
- A debriefing circle helped participants uncover hidden labor, resource, and carbon costs.

"I never thought about how a T-shirt could travel 20,000 kilometers before it touches me," — Fani, student participant

Step 2: Seeing through the System – Media Literacy and Critical Analysis

- Students deconstructed real Greek advertisements from supermarkets and fashion brands.
- They applied frameworks from *Paul & Elder's Critical Thinking Handbook* to analyze manipulation techniques.
- Key questions included: "What assumptions does this ad make about your values?" and "Whose voice is missing?"

"Once you see the tricks, you can't unsee them. It's a kind of liberation," — Thanos, student team member

Step 3: Designing for Change – Conscious Campaigns

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- Students created the “Think Before You Buy” campaign, including:
- Posters with questions instead of slogans
- Street quizzes about product journeys
- Social media challenges (e.g., #WhoMadeMyPhone)

“We didn’t want to shame people—we wanted to empower reflection,” — Vaya, designer of the poster series

Step 4: Testing New Markets – The Conscious Pop-Up Event

- A pop-up “Conscious Market” was set up at a central university square.
- Products included local, ethical, second-hand, and low-carbon alternatives.
- Interactive stations challenged visitors to trace products' environmental and social footprints.

“A woman held up a banana and said: ‘So cheap, so expensive in other ways.’ That was it—that was the moment,” — Aggeliki, campaign volunteer

Step 5: Reflecting and Projecting – Future Consumption

- Students led workshops where participants wrote “ethical consumption manifestos” for their future selves.
- They co-created a digital booklet compiling testimonies, pledges, and critical reflections.

“This project made me realize that the most revolutionary thing we do every day might be shopping—or refusing to,” — Alexandra, reflection journal

9.3.7.3 Your Experience Report (of the trainer team)

Development Process

The students were highly motivated but initially struggled to connect philosophical critique with everyday choices. The collaboration with the Institute for Sustainable Consumption and Ethical Trade was crucial: it grounded the course in real supply chain data and local examples.

Learning materials included:

- Naomi Klein’s No Logo (1999) for brand critique
- The True Cost (2015) documentary for the human cost of fashion
- Paul & Elder’s Critical Thinking Handbook for deconstruction exercises
- WWF Greece’s Ζήσε Υπεύθυνα guide for responsible consumption actions
- ETI’s guide on ethical trading frameworks

Lectures were complemented by visits to sustainable stores and interviews with fair trade suppliers in Thessaloniki.

Contents

We delivered content on:

- The psychology and economics of modern consumption
- The impact of globalization on labor and the environment
- Critical media literacy applied to consumer messaging
- Positive examples of fair production, ethical entrepreneurship, and sustainable alternatives

This combination built a bridge between philosophical reflection, economic realities, and action planning.

Methodology

Our approach combined:

- Critical inquiry (ad deconstruction, question mapping)
- Experiential learning (market simulations, role-plays)
- Creative campaign design (visual and textual activism)
- Reflective and peer-led dialogue (critical circles)
- Students moved through cognitive, emotional, and ethical stages of learning.

Outcomes

- Students demonstrated significant growth in media literacy, campaign strategy, and ethical reasoning.
- Over 60 citizens engaged with the Conscious Market and campaign.
- Schools and youth centers requested adapted versions of the workshops.
- The project transformed everyday consumerism into a site of ethical inquiry and civic action.

Impact

The project showed that small, everyday choices are political acts. Students became not only consumers but active critical citizens advocating for change.

The reflective booklet is now part of the Institute's public education resources.

Sustainability Aspect

- The initiative addressed SDG 12 directly, promoting sustainable lifestyles and raising awareness about production and consumption patterns. It also reinforced SDGs 4 and 13, connecting education and climate action.
- Sustainability education was reframed not as sacrifice, but as empowerment and ethical agency.

Perspective/Synergy and Transfer

- The model can easily be transferred to:
- Adult education programs on sustainable living
- Erasmus+ projects on environmental justice
- Municipal youth campaigns
- A collaboration with Thessaloniki's Green Office is already under discussion for 2026.

Professional Development

As trainers, we:

- Strengthened our interdisciplinary facilitation skills
- Deepened our understanding of "critical consumerism" as civic education
- Learned to support complex emotional responses to consumer guilt without paralyzing learners
- We were reminded that critical thinking without agency is despair—but critical thinking with action is transformation.

9.3.7.4 3. Learner Experience Narrative: *“Beyond the Receipt”*

Thanos had never cared about brand ethics. *“I thought it was all greenwashing anyway,”* he confessed.

But when he compared the life cycle of a local t-shirt to a fast fashion one—and realized the difference in water, labor rights, and emissions—he said: *“Every price tag has a shadow.”*

Fani, initially nervous about “preaching,” discovered through a poster feedback session that questions work better than accusations. *“When we asked, ‘Who made your shoes?’ people leaned in, not away,”* she noted.

The project was full of such moments: realizations, shifts, awakenings. Vaso, at the final event, looked around at the visitors, the questions hanging in the air, and simply said:

“We planted questions. Now we wait for the forest.”

And with that, they understood:

Consciousness is not a product. It’s a process.

9.3.8 Circular Economy and Collective Action

9.3.8.1 Action Field

Course description

The pilot project “Circular Economy and Collective Action” was initiated and carried out by a motivated group of six students (five women, one man) from the Department of Philosophy and Education at AUTH. Inspired by the urgent need for sustainable economic models, the students explored how the principles of the circular economy can be introduced into local communities through participatory education and collective practices.

To ensure practical depth and real-world relevance, the project was developed in partnership with the Circular Economy Cluster Northern Greece (CECNG)—a professional consortium based in Thessaloniki consisting of sustainable businesses, green startups, and innovation hubs focusing on circular production, repair, and reuse systems.

The project aimed to foster an understanding of circular economy principles, challenge linear “take-make-waste” consumption patterns, and empower young adults and citizens to participate in collective sustainability initiatives.

It directly addressed several UN Sustainable Development Goals (SDGs):

- SDG 12: Responsible Consumption and Production
- SDG 11: Sustainable Cities and Communities
- SDG 13: Climate Action
- SDG 17: Partnerships for the Goals

Key project outcomes included:

- A mobile educational exhibit “From Waste to Worth”
- A Repair Café simulation event
- A collaborative mapping of circular initiatives in Thessaloniki
- An open-source manual for launching community-based circular economy projects

Target Group

The target groups were:

- University students and young professionals interested in sustainability, education, and social innovation.
- Local community groups, neighborhood associations, and eco-entrepreneurs interested in circular practices.

Participants were diverse in background, ranging from environmental activists to business students.

Themes (Content Areas)

- Principles and models of the circular economy
- Systems thinking and sustainable design
- Collaborative consumption, repair culture, and community resilience
- The ethics and philosophy of regeneration
- Citizen innovation and grassroots movements

Learning Objectives

Knowledge:

- Understand the fundamentals of circular economy theory and practice.
- Learn about successful case studies of collective sustainability initiatives locally and globally.
- Familiarize with the policy frameworks and SDGs supporting circular economy transitions.

Skills:

- Facilitate participatory workshops on circular economy topics.
- Design educational exhibits and community engagement tools.
- Conduct stakeholder mapping and identify opportunities for collective action.

Attitudes:

- Foster a regenerative mindset focused on reuse, sharing, and sustainability.
- Encourage critical reflection on consumption and waste generation.
- Cultivate collaborative approaches to local innovation and social entrepreneurship.

Methods/Activities

- Field visits to circular economy initiatives and social enterprises
- Participatory stakeholder mapping exercises
- Co-creation of an educational pop-up exhibit
- Simulation of community Repair Café models
- Reflective practice sessions and peer facilitation circles

Resources and Materials

- Ellen MacArthur Foundation, Circular Economy Handbook (2019)
- Walter R. Stahel, The Circular Economy: A User's Guide (2019)
- European Commission reports on circular economy strategies
- Greek-language reports from the Green Fund (Πράσινο Ταμείο) and the Center for Renewable Energy Sources (CRES)
- Documentary "Closing the Loop" (2018)
- Circular design case studies (e.g., IKEA's sustainable initiatives, local Greek eco-entrepreneurs)

9.3.8.2 DISC Learning pathway

Step 1: Understanding the Problem – Beyond Recycling

- Students began by unpacking misconceptions: how recycling alone cannot solve the linear economy crisis.
- They studied the foundational ideas of Walter Stahel's Product-Life Extension strategies and the Ellen MacArthur Foundation's Butterfly Diagram.

"I always thought recycling was enough. Now I see it's just a small piece of the puzzle," — Anna, student participant

Step 2: Seeing Circularity in Action – Field Exploration

The team visited several local initiatives:

- A startup repairing electronics and offering lifetime guarantees
- A textile cooperative upcycling old clothes into new products
- A zero-waste café using compostable and reusable systems
- Interviews and field notes helped students see how theory meets practice.

“Every repaired bike, every reused shirt, is a small rebellion against waste,” — Giorgos, student mapper

Step 3: Creating the Exhibit – From Waste to Worth

- Students co-designed an educational pop-up exhibit highlighting:
- Product life extension stories
- Local circular heroes and initiatives
- Interactive challenges like "Design Your Circular Product"
- Materials were built with upcycled wood, fabrics, and reusable displays.

“When visitors touched a bag made from old banners, they smiled—and thought,” — Elisavet, designer of the pop-up unit

Step 4: Practicing Circularity – The Repair Café Simulation

- Inspired by European Repair Cafés, the team simulated a community repair event.
- Participants brought broken items (clothes, electronics, furniture) and collaborated with volunteers to repair or upcycle them.
- Reflection sessions explored the meaning of repair not just as technical action, but as cultural healing.

“Fixing a broken lamp became fixing our broken habits,” — Melina, Repair Café coordinator

Step 5: Mapping and Mobilizing – Collective Action Toolkit

Students mapped Thessaloniki’s circular hotspots and drafted a practical guide:

- How to organize community swaps, fix-it events, and sharing hubs
- How to advocate for municipal support for circular initiatives
- Final presentations were made to city representatives and local sustainability networks.

“Circular economy isn’t just about products—it’s about people finding new ways to live together,” — Martha, student speaker

9.3.8.3 Your Experience Report (of the trainer team)

Development Process

The project challenged students to move beyond “green consumerism” into systems thinking. Collaboration with the Circular Economy Cluster Northern Greece provided access to real businesses pioneering circular models. The main theoretical references included:

- Ellen MacArthur Foundation’s Circular Economy Handbook (2019)
- Walter R. Stahel’s The Circular Economy: A User’s Guide (2019)
- European Commission Action Plan for Circular Economy (2020 update)
- Greek reports from the Green Fund and the CRES on circular strategies

- The documentary “Closing the Loop” (2018), directed by Graham Sheldon
- We held combined seminars and field visits to local circular hubs and eco-businesses.

Contents

We covered:

- Core principles of circular design and product life extension
- Circular business models (reuse, repair, sharing platforms)
- Environmental and ethical implications of consumption habits
- Participatory methods for community engagement in circular transitions

Materials were connected back to SDGs 12, 11, 13, and 17 throughout.

Methodology

The educational approach combined:

- Problem-posing pedagogy (critical questioning of waste systems)
- Experiential learning (Repair Café simulation)
- Participatory mapping (community asset identification)
- Visual and narrative learning (exhibit creation)

Students documented their learning journeys through collective reflective journals.

Outcomes

- Students gained solid understanding of circular principles and facilitation skills.
- Over 200 citizens interacted with the exhibit and Repair Café.
- City representatives expressed interest in supporting future real Repair Cafés.
- The project demonstrated how circular economy education can foster civic empowerment, not just personal lifestyle changes.

Impact

- The students didn't just teach circular economy concepts—they modeled them through collaborative design, reuse of materials, and democratic participation.
- Public feedback was enthusiastic, especially from older citizens who remembered past eras of repair culture before mass consumption.

Sustainability Aspect

- This initiative addressed sustainability through systems transformation, community resilience, and behavioral change. It planted seeds for durable circular initiatives beyond the classroom.
- The final toolkit is now accessible through Thessaloniki's municipal sustainability office.

Perspective/Synergy and Transfer

The Repair Café model can be transferred to:

- Other university campuses
- Adult education settings
- Local municipalities interested in sustainable community development

The project also has strong potential for integration into Erasmus+ initiatives focused on environmental innovation and youth empowerment.

Professional Development

As trainers, we:

- Strengthened our competence in systems thinking facilitation
- Improved interdisciplinary project management skills
- Confirmed that real change starts from building both skills and emotional investment

Students learned how to become circular citizens—by doing, repairing, and connecting.

9.3.8.4 3. Learner Experience Narrative: “Circular means Culture”



At first, Giorgos thought repairing old headphones was pointless. “Cheaper to buy new,” he said. But when he watched a refugee woman fix her daughter’s torn backpack at the Repair Café, he realized: “Some things carry stories no new product can replace.”

Martha, meanwhile, faced doubt organizing the exhibit. “Will people care?” she wondered. Visitors stopped. Asked. Laughed. Touched. Remembered.

“My grandmother fixed everything. I had forgotten,” one visitor whispered.

In the closing circle, Dimitra said: “We didn’t just teach sustainability. We stitched it back into daily life.” They moved from consuming things to repairing meaning.

And they knew: Circular economy isn’t just economics. It’s care. It’s culture. It’s the future.

9.3.9 Gender Equality in the Workplace: Rights, Challenges, and Change

9.3.9.1 Action Field

Course description

The learning project “Gender Equality in the Workplace: Rights, Challenges, and Change” was developed and implemented by a team of two students (all women) from the Department of Philosophy and Education at AUTH. Motivated by persisting gender inequalities in professional settings in Greece, the project aimed to address not only visible disparities but also the hidden biases and cultural barriers that undermine workplace fairness. This initiative was created in collaboration with “DiversityNow Consulting”, a professional company based in Thessaloniki specializing in workplace diversity management, inclusion strategies, and organizational training on gender equality.

The learning project pursued two major goals:

1. Empower young adults to critically examine gender dynamics in employment.
2. Equip them with the skills and tools to design awareness-raising interventions promoting equitable work environments.

The project aligned strongly with several UN Sustainable Development Goals:

- SDG 5: Gender Equality
- SDG 8: Decent Work and Economic Growth
- SDG 10: Reduced Inequalities
- SDG 4: Quality Education

Key deliverables included:

- A participatory workshop series “Equal Futures: Navigating Gender in Work Life”
- An interactive exhibition showcasing real stories of gender bias
- A workplace role-play simulation event
- A bilingual resource guide “Building Inclusive Workspaces” distributed to participants and local employers

Target Group

The project focused on:

- University students across faculties preparing to enter the workforce.
- Recent graduates, young professionals, and internship program participants.
- HR officers and diversity coordinators from local organizations invited to simulation events.

Participants were aged between 20–35, ensuring a mixture of emerging workers and early career professionals.

Themes (Content Areas)

- Gender stereotypes, biases, and microaggressions at work
- The gender pay gap and career advancement barriers
- Legal frameworks and rights regarding workplace equality (Greek and EU law)
- Inclusive leadership and organizational diversity strategies
- Philosophical foundations of justice, equity, and dignity

Learning Objectives

Knowledge:

- Understand gender-based challenges and systemic discrimination in professional settings.
- Learn about legal protections, diversity management principles, and organizational best practices.
- Analyze power structures, bias mechanisms, and the socio-cultural roots of inequality.

Skills:

- Facilitate workshops and critical dialogues about sensitive workplace issues.
- Design campaigns and educational interventions promoting gender equity.
- Develop reflective strategies for recognizing and challenging biases.

Attitudes:

- Foster commitment to inclusive values and justice-oriented action.
- Build empathy and perspective-taking skills regarding others' professional experiences.
- Strengthen resilience and strategic optimism in pursuing systemic change.

Methods/Activities

- Critical case study analysis and discussion
- Role-playing exercises on workplace interactions
- Personal storytelling and reflective dialogue circles
- Public exhibition and interactive installations
- Collaborative creation of educational materials and advocacy toolkits

Resources and Materials

- European Institute for Gender Equality (EIGE) reports and toolkits
- ILO Global Wage Report 2022–2023 (Gender Pay Gap Focus)
- Greek Ombudsman Annual Reports on Gender Equality Issues
- Excerpts from bell hooks, “Feminism is for Everybody” (2000)
- Selections from Nancy Fraser’s work on justice and recognition
- Video testimonials from the EU “Work Without Barriers” campaign
- Legal guides from the Greek Ministry of Labour’s General Secretariat for Gender Equality

9.3.9.2 DISC Learning pathway

Step 1: Setting the Stage – Mapping Workplace Inequality

- Students reviewed Greek and European data on gender gaps in pay, leadership, and opportunity.
- Used EIGE’s Gender Equality Index to compare Greece with other EU countries.
- Designed a "Bias Map" exercise where participants identified subtle and overt workplace biases.

“We realized that inequality isn’t always visible—but its impacts are everywhere,” — Maria, research coordinator

Step 2: Building Empathy – Story Circles and Testimonies

- Students collected anonymized testimonies from individuals who had experienced gender bias at work.
- Story circles allowed participants to listen without judgment and reflect on the emotional cost of discrimination.

“Hearing someone talk about being sidelined after maternity leave—it made it real, not just statistical,”
— Maria-Eleni, student participant

Step 3: Practicing Response – Role-Play Simulation Workshop

Designed role-play scenarios such as:

- The interrupted meeting
- The unequal promotion
- The “benevolent” bias

Participants practiced navigating these situations as bystanders, allies, or affected individuals.

“At first, I froze. Then I realized that silence is also a choice—and it’s not neutral,” — Maria, student participant

Step 4: Visualizing the Invisible – Interactive Exhibition

Students curated an exhibit with:

- Visualized pay gaps by sector
- “A Day in the Life” stories of bias
- A “Rewrite the Policy” station where visitors suggested workplace reforms

Held at a Thessaloniki public cultural center over two days.

“Seeing the same qualifications but different salaries—it hit differently when you saw it,” — Maria, student participant

Step 5: From Dialogue to Action – Resource Guide Launch

Students created a practical bilingual guide for promoting workplace equality, including:

- Tips for bias reduction in hiring
- Action checklists for inclusive leadership
- Legal rights awareness sections

“Change needs to be accessible—not hidden in academic papers,” — Maria-Eleni, student participant

9.3.9.3 Your Experience Report (of the trainer team)

Development Process

The project arose from deep student interest in making abstract discussions of justice and equality tangible and actionable. The collaboration with DiversityNow Consulting ensured that students received real-world case studies, access to HR practices, and mentorship on facilitating sensitive topics.

Key learning materials included:

- European Institute for Gender Equality (EIGE) Toolkit on Gender Mainstreaming in Employment
- ILO Global Wage Report 2022–2023 (with Greek-specific data)
- Greek Ombudsman Report on Workplace Gender Discrimination (2021)
- bell hooks, “Feminism is for Everybody” (2000) – chapters on work and equality
- Nancy Fraser, “Justice Interruptus” (1997) – on redistribution and recognition
- EU Video Series “Work Without Barriers”

Guest speakers from DiversityNow also shared anonymized real cases and guided students on creating psychologically safe spaces for critical dialogue.

Contents

We covered:

- Legal, structural, and psychological aspects of gender inequality
- Frameworks for inclusive organizational change
- Critical dialogue techniques around bias and discrimination
- Visual and narrative advocacy tools for public education

All content was linked explicitly to SDG 5 and SDG 8 indicators.

Methodology

Our pedagogy was hybrid:

- Critical Inquiry (bias mapping, storytelling deconstruction)
- Experiential Learning (role-play simulations)
- Public Pedagogy (exhibition and public engagement)
- Collaborative Reflection (story circles and feedback loops)

Students developed both emotional intelligence and strategic advocacy skills.

Outcomes

- 20+ participants engaged directly with workshops and exhibitions.
- Students developed strong facilitation, campaign design, and public education skills.
- Several participants expressed interest in starting workplace equality clubs.
- The project showed how education can become intervention without losing rigor or safety.

Impact

The experience deepened understanding of workplace inequality's structural and emotional dimensions. It also gave students the confidence to advocate for systemic change in their own future workplaces.

Feedback indicated both increased awareness and readiness to act among participants.

Sustainability Aspect

- This project focused on social sustainability, aiming to build inclusive institutions (SDG 5, 8, 10).
- The resource guide will be distributed to HR departments and NGOs working on employment equality.

- The collaboration with DiversityNow is ongoing, with plans to co-host a youth conference on gender justice in 2026.

Perspective/Synergy and Transfer

The methodology can easily be transferred to:

- Teacher training
- Municipal employment programs
- NGO advocacy campaigns
- Erasmus+ youth empowerment projects

An adapted toolkit is in development for high school civic education curricula.

Professional Development

As trainers, we:

- Enhanced our skills in facilitating sensitive discussions
- Deepened our understanding of participatory advocacy education
- Learned to design transformative learning spaces where dialogue leads to reflection—and reflection to action

We confirmed that change starts where people feel heard, empowered, and equipped.

9.3.9.4 Learner Experience Narrative:

Maria always cared about justice—but she didn't always know how to speak about it. After leading her first role-play simulation, she realized: *"Words matter. Silence matters more."*

Maria-Eleni admitted he used to think gender discrimination was "a women's issue." After listening to real testimonies, he wrote: "It's a humanity issue. It's a dignity issue."

During the exhibition, a woman touched a salary graph and whispered: *"That's my story."* Maria heard it—and knew: their work was needed.

And as Maria-Eleni said during the closing reflection:

"We didn't just talk about equality. We practiced it—in listening, in learning, in daring to imagine better."

9.3.10 Individual Initiative and Sustainability in Business

9.3.10.1 Action field

Course description

The learning project “Individual Initiative and Sustainability in Business” was initiated and developed by a group of five students (all women) from the Department of Philosophy and Education at AUTH. It emerged from a growing concern that sustainability is often seen as a corporate-level responsibility, whereas individual action within businesses can play a decisive role in creating meaningful change.

To ground the learning experience in real-world business practice, the project was designed in collaboration with GreenVision Strategies, a sustainability consulting firm based in Thessaloniki, Northern Greece, specializing in environmental, social, and governance (ESG) transformations in SMEs and startups.

The project aimed to:

- Explore the role of individual initiative and ethical leadership within business environments.
- Identify ways employees at any level can promote sustainability goals.
- Connect entrepreneurial thinking with sustainable practices and civic responsibility.

This initiative strongly aligned with multiple UN Sustainable Development Goals (SDGs):

- SDG 8: Decent Work and Economic Growth
- SDG 12: Responsible Consumption and Production
- SDG 9: Industry, Innovation, and Infrastructure
- SDG 13: Climate Action

Key deliverables included:

- A simulation workshop “Sustainability from Within” exploring micro-initiatives in businesses
- Case study analysis of Greek companies adopting employee-led green practices
- A mini-guide titled “Act Small, Change Big: Individual Sustainability Actions at Work”
- A public panel discussion with local entrepreneurs promoting sustainable innovation

Target Group

The project targeted:

- University students preparing for careers in business, management, education, and social innovation.
- Young professionals and startup founders in Thessaloniki.
- HR officers and CSR managers from local companies.

The participants ranged from 20 to 35 years old, ensuring both emerging and early-career audiences.

Themes (Content Areas)

- Corporate social responsibility (CSR) and ESG frameworks
- Sustainability and innovation in small and medium enterprises (SMEs)
- Entrepreneurial thinking for systemic change
- Ethical leadership, resilience, and personal responsibility
- The philosophy of initiative and sustainability

Learning Objectives

Knowledge:

- Understand the connections between individual initiative, business innovation, and sustainability.
- Learn about ESG reporting, circular business models, and green entrepreneurship.
- Analyze the enablers and barriers to sustainable practices within organizations.

Skills:

- Facilitate simulations and dialogues around business sustainability challenges.
- Design micro-initiatives to promote sustainability from within companies.
- Critically assess business practices through a sustainability and ethics lens.

Attitudes:

- Foster proactive mindsets centered on resilience, responsibility, and innovation.
- Develop ethical sensitivity to social and environmental impacts in business contexts.
- Encourage entrepreneurial courage for initiating change at any organizational level.

Methods/Activities

- Case study analysis of Greek and European sustainable businesses
- Simulation of internal sustainability initiatives
- Design thinking workshops for business model innovation
- Reflective practice sessions on ethical leadership
- Public dialogue events linking students, businesses, and civic actors

Resources and Materials

- UN Global Compact Report: Business Leadership for the SDGs (2019)
- Harvard Business Review articles on intrapreneurship and green innovation
- Greek case studies from SEV (Hellenic Federation of Enterprises) on ESG strategies
- Paul Hawken's "The Ecology of Commerce" (Revised Edition, 2010)
- Documentary: "Tomorrow" (Demain) (2015) – Sections on local sustainable economies
- Greek Ministry of Development resources on sustainable entrepreneurship initiatives

9.3.10.2 DISC Learning pathway

Step 1: Setting the Frame – From Responsibility to Opportunity

- Students engaged with Hawken's Ecology of Commerce and discussed the philosophy of ethical entrepreneurship.
- Dialogue sessions focused on reframing sustainability from burden to opportunity.

"We started seeing sustainability not as cost—but as innovation," — Andreas, student facilitator

Step 2: Seeing It Happen – Case Studies and Field Interviews

- Students analyzed cases like:
- A Greek startup creating biodegradable packaging
- An SME switching to renewable energy through employee advocacy

- Conducted interviews with employees and founders about how small internal initiatives triggered wider organizational changes.

“One employee’s idea reduced waste by 30%. One voice can echo through a whole company,” — Keisi, student researcher

Step 3: Simulation Workshop – Sustainability from Within

- Students created a simulation where participants role-played company staff proposing green initiatives to resistant management.
- Scenarios included:
 - Launching a recycling program
 - Advocating for ethical suppliers
 - Proposing remote work to cut emissions

“You realize how much diplomacy and persistence change actually takes,” — Despina, simulation participant

Step 4: Innovation Challenge – Designing Micro-Initiatives

- Students facilitated a design thinking workshop:
- Participants created 48-hour action plans for launching small sustainability initiatives within hypothetical companies.
- Challenges focused on low-cost, high-impact changes (e.g., waste audits, green meetings, employee carpooling).

“Sustainability isn’t waiting for permission—it’s starting with what you can touch,” — Maria, workshop participant

Step 5: Public Event – Voices of Change

- A final public panel was held featuring:
 - A local entrepreneur who embedded sustainability into their supply chain
 - A CSR manager who championed employee green actions
 - A student-led presentation on the “Act Small, Change Big” mini-guide

“If our generation doesn’t innovate differently, we’ll inherit a burnt-out system,” — Stella, closing speaker

9.3.10.3 Your Experience Report (of the trainer team)

Development Process

The partnership with GreenVision Strategies provided practical anchoring through direct exposure to sustainable business practices, ESG models, and ethical entrepreneurship stories.

Key learning materials included:

- UN Global Compact Report: Business Leadership for the SDGs (2019)
- Paul Hawken’s Ecology of Commerce (2010)
- SEV’s Greek business case reports on ESG strategies
- Harvard Business Review articles on intrapreneurship
- Tomorrow documentary segments on local sustainable economies

GreenVision provided anonymized real cases for the simulations and guest speakers for the public event.

Contents

Students worked through:

- Understanding ESG frameworks and business sustainability reporting
- Exploring personal leadership within organizational structures
- Analyzing barriers to sustainability advocacy inside companies
- Practicing entrepreneurial action planning

Content strongly linked to SDGs 8, 9, 12, and 13.

Methodology

We used:

- Problem-based learning (case analysis and innovation challenges)
- Simulation exercises (internal advocacy role-play)
- Design thinking (micro-initiative development)
- Reflective circles (critical discussion and personal action mapping)

The emphasis was on empowerment, innovation, and ethical leadership.

Outcomes

- Students demonstrated growth in business ethics literacy, innovation planning, and change advocacy skills.
- 140+ participants engaged through the workshops and final event.
- Requests were received from two local SMEs to replicate the simulation model for employee training.
- The project turned business education into an ethical action lab.

Impact

- Students learned that sustainability transformation doesn't just come from CEOs—it starts wherever individuals act boldly, wisely, and together.
- Feedback showed a marked increase in participants' belief in their agency to drive change from within.

Sustainability Aspect

- The project fostered a culture of internal sustainability leadership, supporting SDG 8 (decent, sustainable work) and SDG 12 (sustainable production patterns).
- It empowered students and participants to see themselves as agents of systemic business transformation.

Perspective/Synergy and Transfer

The simulation and toolkit are easily adaptable for:

- University business programs

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- Corporate sustainability trainings
- Youth entrepreneurship programs under Erasmus+

Discussions have begun with Thessaloniki's Innovation Hub to further disseminate the materials.

Professional Development

As trainers, we:

- Refined our ability to integrate ethics, innovation, and entrepreneurship
- Strengthened our simulation and facilitation strategies for action-oriented learning
- Reinforced the lesson that personal initiative is the seed of organizational change

We were reminded that sustainability is not just about systems—it's about the people courageous enough to change them from within.

9.3.10.4 3. Learner Experience Narrative

Stella used to think he needed a powerful position to drive change. After leading a simulation where a “junior intern” convinced the company to start a composting program, she realized: *“Leadership isn't a title. It's a choice, every day.”*

Xanthi believed that sustainability depended on management commitment.

After interviewing a logistics manager who revolutionized packaging waste reduction on her own initiative, she said: *“Change is viral—if we dare to be contagious.”*

During the public panel, Maria stood up and said: *“We are not just the future workforce. We are the future leadership.”*

The project wasn't just about business innovation. It was about seeing the fire that personal initiative can light—and learning how to keep it burning sustainably.

9.3.11 Understanding How Institutions Foster Political Self-Activation Among Citizens

9.3.11.1 Action Field

Course description

The learning project “Understanding How Institutions Foster Political Self-Activation Among Citizens” was developed and implemented by a group of five students (three women, two men) from the Department of Philosophy and Education at AUTH. Motivated by the realization that political participation is often misunderstood as voting alone, the students decided to explore the invisible yet crucial role institutions can play in promoting active, critical, and sustained citizen engagement.

This project was carried out in collaboration with "Polis Civic Innovation Hub," a Thessaloniki-based consultancy firm specializing in democratic innovation, participatory governance, and civic technology projects.

The project aimed to help young adults understand:

- How participatory institutions work.
- How citizens can activate their political agency through collaboration with or within institutions.
- What structural barriers and opportunities exist for political self-activation.

The project aligned with several UN Sustainable Development Goals (SDGs):

- SDG 16: Peace, Justice, and Strong Institutions
- SDG 11: Sustainable Cities and Communities
- SDG 4: Quality Education
- SDG 17: Partnerships for the Goals

Deliverables included:

- A public simulation of a participatory municipal assembly
- A civic literacy workshop series “From Representation to Participation”
- A mapping project of local participatory structures and councils
- A short documentary video “Institutions That Listen: Stories of Engagement”

Target Group

The main audiences were:

- University students from political science, education, and social work faculties.
- Young citizens involved (or interested) in local governance, youth councils, or community initiatives.
- Educators and youth workers seeking to promote political education.

Participants were aged 18–35, representing diverse experiences with political engagement.

Themes (Content Areas)

- Institutions as enablers (or inhibitors) of citizen participation
- Participatory democracy beyond elections
- Rights, responsibilities, and access mechanisms for civic engagement
- Structures of participatory governance (youth councils, participatory budgets, citizen assemblies)

- The ethics of public voice, dissent, and responsibility

Learning Objectives

Knowledge:

- Understand the design and function of participatory governance institutions.
- Learn about legal rights to participation at local, national, and EU levels.
- Recognize how political self-activation is shaped by institutional structures.

Skills:

- Facilitate simulations of civic engagement mechanisms.
- Conduct field interviews with civic institution stakeholders.
- Design accessible educational tools for civic literacy.

Attitudes:

- Foster respect for collective decision-making processes.
- Build commitment to ongoing, critical engagement with democratic structures.
- Develop resilience against disillusionment through realistic understanding of systemic limitations and possibilities.

Methods/Activities

- Field research and interviews with institutional actors (youth councils, participatory budgeting offices)
- Participatory simulations and role-play exercises
- Public mapping of engagement opportunities in Thessaloniki
- Reflective practice workshops and debriefing circles

Resources and Materials

- Council of Europe, Charter on Education for Democratic Citizenship and Human Rights Education (2010)
- UNDP Democratic Governance Manual (2018 edition)
- Greek Ministry of the Interior reports on citizen participation mechanisms
- Case studies from Participedia.net (global participatory democracy projects)
- Short readings from John Dewey, “Democracy and Education” (1916) – sections on active citizenship
- Video material: “How to Make Democracy Work Better” (TED-Ed animation)

9.3.11.2 DISC Learning pathway

Step 1: Setting the Inquiry – How Do Institutions Enable Us?

- Students engaged with primary legal documents like the Greek Citizen Participation Law and the Council of Europe's standards.
- They organized a public dialogue circle posing the core question: “When was the last time an institution truly listened to you?”

“We realized most citizens don’t feel they are part of the system—they feel like outsiders,” — Konstantinos, student team member

Step 2: Field Research – Mapping Civic Gateways

Students conducted interviews with:

- Youth Council representatives
- Municipal participatory budgeting officers
- Civic tech coordinators
- They mapped existing opportunities for citizen voice and identified obstacles (e.g., bureaucratic complexity, lack of publicity).

“Participation is often a right you have—but don’t know how to use,” — Melpomeni, field researcher

Step 3: Simulation Workshop – Building a Participatory Assembly

- Students designed a live simulation of a participatory municipal assembly.
- Participants role-played citizens proposing, debating, and voting on community projects (e.g., public park redesign, new library funding).
- Reflection circles followed the simulation, focusing on power, voice, and frustration management.

“Democracy is messy—but it’s ours to mess up or improve,” — Anastasia, simulation facilitator

Step 4: Creating the Narrative – “Institutions That Listen”

Students produced a short video documentary:

- Testimonials from citizens who had positive and negative experiences with local engagement.
- Visualized case studies of participatory successes and failures.
- Screened at a public event followed by a live discussion.

“When someone said, ‘I never believed they’d fund my idea—and they did,’ the whole room leaned in,” — Vasiliki, documentary coordinator

Step 5: Projecting Forward – Civic Literacy Toolkit

Students created a bilingual toolkit with:

- “How to Navigate Civic Institutions” infographics
- Rights guides for local participation
- Templates for proposing citizen initiatives

“You can’t be empowered if you don’t know where the doors are—or how to knock,” — Konstantinos, student team member

9.3.11.3 Your Experience Report (of the trainer team)

Development Process

The partnership with Polis Civic Innovation Hub was transformative. Their expertise in participatory frameworks, civic tech tools, and public policy analysis grounded the project solidly in real-world practice.

Key learning materials included:

- Council of Europe, Charter on Education for Democratic Citizenship and Human Rights Education (2010)
- UNDP Democratic Governance Manual (2018)
- Greek Ministry reports on youth councils and citizen engagement reforms

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- Selected articles from Participedia.net case database
- John Dewey, Democracy and Education – chapters on participation and growth

Guest workshops led by Polis Innovation facilitators introduced students to digital tools like participatory budgeting platforms and open civic proposal portals.

Contents

The project engaged students in:

- Understanding democratic institutions from a systems perspective
- Practicing public deliberation and proposal formulation
- Critically analyzing gaps between legal frameworks and citizen experience
- Designing tools for improving civic access and education

All sessions were linked explicitly to SDGs 4, 11, 16, and 17.

Methodology

We employed:

- Inquiry-based learning (question-driven mapping and investigation)
- Simulation and role-playing (embodying participatory processes)
- Narrative learning (through storytelling and video production)
- Reflective circles (for emotional processing and meta-cognition)

Students were encouraged to oscillate between critical analysis and constructive imagination.

Outcomes

- More than 80 young citizens engaged directly through simulations and public screenings.
- Students developed strong skills in field research, participatory education design, and facilitation.
- Municipal staff requested copies of the toolkit for civic education purposes.

The project created visible bridges between citizens and their democratic institutions.

Impact

- The initiative demonstrated that citizenship is a practice, not just a legal status. Participants shifted from passive spectators to active architects of civic life.
- Feedback from participants indicated increased confidence in using institutional pathways for proposing community change.

Sustainability Aspect

This project strengthened local democratic culture by promoting civic access literacy. It supports SDG 16 in practical, grassroots terms—turning rights into action.

The toolkit will be hosted by civic libraries and youth hubs in Thessaloniki.

Perspective/Synergy and Transfer

The model can be adapted for:

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- Youth civic education programs
- Local government training on participatory design
- University civic engagement curricula

Discussions are ongoing for expanding the simulation model into a city-wide participatory democracy festival.

Professional Development

As trainers, we:

- Refined our ability to mediate between policy analysis and emotional, experiential learning
- Strengthened our capacity to support student-led civic innovation
- Confirmed that democracy education must move from texts to tools, and from lecture halls to lived experiments

We saw that trust in institutions is rebuilt not through rhetoric—but through real, visible access and engagement.

9.3.11.4 Learner Experience Narrative: “From Paper to Participation”

At first, Anastasia thought democracy was distant and untouchable. Then, after moderating a simulated citizens’ assembly, she realized: *“Every voice counts—but only if it’s given space and structure.”*

Konstantinos, skeptical at first, admitted during final reflections: *“I thought participation was boring forms. Now I know it can be shared laughter, fierce debates, and small victories.”*

The project wasn’t just about understanding institutions—it was about reclaiming them.

As Vasiliki put it: “Citizenship is not just belonging. It’s building. And it’s never finished.”

And when the simulation ended, and the real-world engagement began—they were ready.

Because they knew that institutions aren’t just systems. They’re spaces we have the right—and the responsibility—to co-create.

9.3.12 Homelessness: A Challenge Facing Our City

9.3.12.1 Action Field

Course description

The learning project “Homelessness: A Challenge Facing Our City” was initiated by a group of five students (three women, two men) from the Department of Philosophy and Education at AUTH. They were driven by the growing visibility of homelessness in Thessaloniki and a desire to explore not only its socio-economic roots but also the ethical, political, and civic dimensions of public responsibility.

To ensure real-world connection and field relevance, the project was carried out in collaboration with CityShelter Solutions, a social enterprise based in Thessaloniki providing support services, advocacy, and transitional housing programs for the homeless.

The project's goals were:

- To understand homelessness as a structural, not individual, problem.
- To raise awareness about the complexity of homelessness.
- To promote civic responsibility, empathy, and collective action.

The project directly addressed several UN Sustainable Development Goals (SDGs):

- SDG 1: No Poverty
- SDG 10: Reduced Inequalities
- SDG 11: Sustainable Cities and Communities
- SDG 16: Peace, Justice, and Strong Institutions

Deliverables included:

- An interactive public exhibit “Faces of the Unseen”
- A documentary screening and dialogue event
- A civic action plan for sustainable city responses to homelessness
- An awareness-raising campaign designed by students titled “No One Invisible”

Target Group

The target groups were:

- University students across disciplines.
- Young citizens, community volunteers, and social workers.
- Local decision-makers and municipal staff involved in urban development and social policy.

The project sought to bridge academic, civic, and institutional audiences.

Themes (Content Areas)

- Structural causes of homelessness: economics, policy, discrimination
- The ethics of visibility and voice in public space
- Intersectionality: mental health, migration, gender, and homelessness
- Sustainable urban development and social inclusion
- Civic responsibility and human rights frameworks

Learning Objectives

Knowledge:

- Understand the systemic causes and effects of homelessness.
- Learn about human rights approaches to housing and public space.
- Analyze how city planning and public policy intersect with homelessness.

Skills:

- Facilitate critical discussions about poverty, exclusion, and visibility.
- Design public education and advocacy materials.
- Conduct respectful field interviews and qualitative social research.

Attitudes:

- Foster empathy and human dignity-centered perspectives.
- Challenge stereotypes and stigmatization.
- Build a commitment to advocacy and inclusive urban citizenship.

Methods/Activities

- Field interviews with homeless individuals and support organizations
- Critical case study analysis (local and global approaches)
- Visual and narrative advocacy through public exhibitions
- Reflection circles and civic dialogue forums
- Collaborative campaign design and action planning

Resources and Materials

- FEANTSA (European Federation of National Organisations Working with the Homeless) reports
- United Nations Human Rights Reports on Adequate Housing
- Greek Ombudsman's Special Report on Homelessness (2018)
- Amartya Sen's Development as Freedom (selections)
- Documentary: "Invisibles" (2019) – Homelessness in European cities
- Research from Arsis and Praxis NGOs in Thessaloniki

9.3.12.2 DISC Learning pathway

Step 1: Understanding the Unseen – Mapping Structural Causes

- Students studied FEANTSA reports and Greek Ombudsman findings.
- Created a mind map identifying economic, mental health, migration, and policy failure as interconnected causes.

"No one chooses homelessness like they choose an apartment. It's not a choice—it's a collapse of choices," — Dimitris, student team member

Step 2: Listening Before Acting – Fieldwork with CityShelter

- Students shadowed outreach workers and conducted anonymized interviews with individuals experiencing homelessness.
- Focused on building relationships based on trust, consent, and non-extractive storytelling.

"You realize quickly—it's not about saving people. It's about hearing them, respecting them, and fighting structures, not victims," — Roula, student researcher

Step 3: Making the Invisible Visible – Public Exhibit

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- Created “Faces of the Unseen”, an interactive outdoor exhibit featuring:
- Portraits (drawn anonymously to protect identities)
- Audio stories accessible via QR codes
- Myth-busting infographics about homelessness

“When a passerby cried listening to a story, we knew we had reached the human core,” — Marinos, exhibit coordinator

Step 4: Dialogue Across Distance – Documentary Screening

Screened “Invisibles” and hosted a public dialogue with:

- Formerly homeless individuals
- Social workers and city planners
- Students and volunteers

The dialogue focused on how cities can move beyond “managing” homelessness to addressing its roots.

“Housing is not just a roof—it’s a right to stability, dignity, and future,” — Anna, event moderator

Step 5: Projecting Solutions – Civic Action Planning

Students co-created a Civic Action Plan proposing:

- Mobile hygiene stations
- Job reintegration initiatives
- Municipal Housing First pilot programs

The plan was presented to Thessaloniki’s Social Policy Department.

“Activism begins not with slogans—but with careful, respectful attention to lives already lived,” — Dimitris, student planner

9.3.12.3 Your Experience Report (of the trainer team)

Development Process

Working with CityShelter Solutions grounded the project in lived realities. Their expertise in advocacy, case management, and urban policy provided students with a complex, nuanced view of homelessness.

Key learning materials included:

- FEANTSA Reports on homelessness solutions in Europe
- Greek Ombudsman Special Report on Homelessness (2018)
- UN Special Rapporteur Reports on Adequate Housing as a Human Right
- Amartya Sen’s Development as Freedom – Sections on capability deprivation
- Documentary “Invisibles” (2019)

Workshops led by CityShelter also taught students fieldwork ethics and trauma-informed communication practices.

Contents

We explored:

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- The structural, not individual, nature of homelessness
- Intersectionality and cumulative disadvantage
- Global best practices for Housing First models
- Ethical storytelling and public space advocacy

All content was framed within SDGs 1, 10, 11, and 16.

Methodology

We employed:

- Field-based inquiry (real-world listening and documentation)
- Critical pedagogy (challenging dominant narratives)
- Public pedagogy (educational exhibitions and dialogues)
- Collaborative civic planning (student-designed action strategies)

Students were encouraged to move from observation to critical compassion to proposal.

Outcomes

- 20+ citizens engaged with the public exhibit and documentary events.
- Students developed strong skills in field ethics, public education design, and civic advocacy.
- A pilot Housing First proposal inspired ongoing dialogue with local authorities.

The project created public conversations around homelessness as a systemic injustice—not an individual failure.

Impact

The students experienced a powerful shift:

- From charity mindsets to structural analysis
- From pity to solidarity
- From speaking about to speaking with affected individuals

They learned that civic education must make visible those who are too often erased.

Sustainability Aspect

The project promoted sustainable, rights-based urban development policies. It aligned with SDGs on poverty, inequality reduction, sustainable cities, and inclusive institutions.

The Civic Action Plan will serve as a baseline document for future university-community partnerships.

Perspective/Synergy and Transfer

The project model can be adapted for:

- Youth civic education programs
- Municipal training for social policy staff
- Erasmus+ projects on urban inclusion and rights advocacy

Plans are in place to develop an annual “Invisible Thessaloniki” week of events based on the students' blueprint.

Professional Development

As trainers, we:

- Deepened our skills in facilitating ethical field education
- Strengthened trauma-sensitive reflection practices
- Affirmed the need to teach advocacy with humility, precision, and solidarity

This course reminded us that justice starts with attention. Attention leads to action. And action shapes the cities and the futures that we all share.

9.3.12.4 Learner Experience Narrative.

At the beginning, Anna worried: *“What if we exploit their stories?”* By the end, she knew:

“It’s not about their stories. It’s about our listening—and our readiness to act.”

Dimitris thought change needed big structures. After listening to a woman who had rebuilt her life from a shelter, he wrote: *“Hope isn’t a building. It’s a community.”*

During the exhibit, Roula watched two teenagers stop, listen, and talk about dignity.

That was enough. And as Marinos said after the final dialogue: *“We didn’t give voices. We amplified them. We didn’t fix. We stood beside.”*

10 DISC Pilot Implementation Report – Full Partner Analysis

10.1 Part A: Introduction

The DISC project (Design-based Interdisciplinary Sustainability Competences) was established to bridge gaps in sustainability education across various levels and sectors of education—primarily focusing on Higher Education (HE), Adult Education (AE), and Vocational Education and Training (VET). At its core, DISC combines the principles of sustainable development with design thinking, collaborative learning, and competence-based assessment. The overarching goal is to develop not only technical understanding of sustainability challenges, but also transversal competences such as critical thinking, collaboration, empathy, and entrepreneurial spirit.

Trainers played a pivotal role in implementing the DISC methodology across Europe. Each educator underwent a Train-the-Trainer programme, covering DISC's theoretical and methodological foundations. They were equipped with key tools such as the SDG Explorer (a digital self-reflection tool to identify sustainability engagement profiles), LEVEL5 validation system (to assess competence development), and frameworks for design-based collaborative learning (DBCL).

Following the training, partners were responsible for conducting pilot implementations—adapting DISC in ways suitable to their institutional context, target group, and thematic focus. The purpose of these pilots was threefold: 1) to test and refine the DISC learning pathway in diverse contexts, 2) to validate whether the proposed competences could be realistically acquired in practice, and 3) to offer trainers and learners a unique opportunity to engage in real-world sustainability action. The pilots serve as a backbone to DISC's research phase, evidencing how learning processes anchored in real-life challenges can transform both learners and educational systems.

10.2 Part B: Experience Report – Partner-Specific Analysis by Key Themes

10.2.1 Development Process

The development process across DISC partners reflected the flexibility and modular nature of the methodology. At UDE, the team embedded the DISC approach into Module 8 of their Adult Education Master's programme. The course was run three times between 2022 and 2025, evolving with each cycle. Students formed interdisciplinary teams and created sustainability-oriented projects such as BiBu (a mobile film-based education initiative for Roma communities) and Sustain-a-Wave (a mobile water-sport sustainability festival). Each iteration allowed trainers to revise materials, refine challenge formulations, and strengthen the interface between theory and application.

AUTH took a more embedded approach by integrating DISC into an existing undergraduate module. The course was organised into five phases aligned with DISC's learning pathway: orientation, stakeholder analysis, project planning, implementation, and reflection. Students formed teams and developed 12 community-focused projects—ranging from refugee education to environmental awareness and digital literacy. This tightly scaffolded process enabled a deepened engagement with societal needs.

IPL developed three pilot courses, each targeting different student groups. One course used video-

making to communicate physics and sustainability to a general audience. Another explored applications of seaweed in bioeconomy. A third worked on tourism and event planning for sustainability. Each course employed challenge-based learning and iterative project refinement. Trainers highlighted the importance of interdisciplinary learning environments in shaping creative and socially relevant outputs.

UNS focused on embedding sustainability into project cost accounting. The pilot took place within an Engineering Management course. Students were taught financial techniques such as cost-benefit analysis, PRAG rules, and earned value management—but from a sustainability perspective. One innovation was the requirement to calculate a carbon footprint for each proposed project, shifting students' focus from purely economic to socio-environmental impact.

blinc conducted its pilot in the form of an international Design Thinking bootcamp in Peniche. Students and staff from different European universities collaborated in a series of workshops to design inclusive mobility projects. As the group was multicultural and unfamiliar with each other, identifying shared challenges and aligning goals took time—but this also made the learning deeper and more authentic.

SMART adapted DISC to its internship model. Four students in political science and economics participated in a blended course that connected their academic interests to real-world challenges. They selected project topics based on their passions—ranging from youth policy to sustainable tourism—and applied design thinking and SDG mapping to shape their proposals.

10.2.2 Contents

The educational content across DISC pilots was thematically diverse but united by a shared commitment to sustainable development. UDE integrated sustainability into institutional and organisational analysis within the Adult Education master's programme. Students examined lifelong learning policies, EU educational strategies, and the impact of institutional structures on educational innovation. Sustainability was contextualised not as a separate subject, but as an overarching value embedded within each organisational case.

AUTH focused heavily on vocational education and training (VET), embedding theoretical constructs such as educational policy frameworks and professionalisation models alongside real-world case analysis. The 12 projects addressed a broad thematic spectrum, including health education, intercultural awareness, refugee support, digital inclusion, and climate responsibility. This allowed students to relate abstract content to tangible outcomes.

At IPL, the three course strands offered highly creative and practical engagement. In the physics pilot, students used video storytelling to link science with everyday sustainability practices. In the biotechnology course, learners worked on applying seaweed biomass in biofuel and food industries. The tourism/event management group developed a local sustainability festival. Content delivery was interdisciplinary and research-informed.

UNS offered a finance-heavy curriculum, covering project budgeting, PRAG procurement, NPV/IRR

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calculations, and cost reporting—all linked to SDG-aligned outcomes. Carbon footprint assessment was added as a standard requirement, enabling students to consider environmental factors in cost-benefit planning.

blinc prioritised design thinking and facilitation methods. Its course was built around the question: how can we design inclusive mobility experiences? Participants explored design principles, built learner personas, mapped empathy findings, and used ideation grids to prototype solutions.

SMART focused its content on SDGs, ESG metrics, and project design. Interns had to identify a societal problem, map it to the SDGs, and construct a proposal integrating ESG indicators. Digital learning tools included the SDG Explorer and quiz-based reflection modules.

10.2.3 Methodology

All partners adapted the DISC methodology to their contexts, combining blended, challenge-based, and competence-driven pedagogies. UDE ran an eight-unit blended module with asynchronous materials (slides, Moodle activities), live collaborative workshops (via Miro), and a final validation session. Learners followed the DBCL model: understanding, empathising, defining, ideating, prototyping, testing, and reflecting.

AUTH's methodology was phased: it began with theory, moved to stakeholder mapping, and culminated in community-based learning. The cycle included weekly seminars and mentoring sessions. The LEVEL5 tool was introduced early and reinforced through guided peer reflection.

IPL adopted a project-based learning model across its courses. Methods included field research, brainstorming, scriptwriting, product prototyping, and event planning. Moodle provided structure, while group work and digital collaboration supported real-time decision-making.

UNS favoured case-based learning. Students worked on budgeting scenarios, carbon costing simulations, and procurement models. Real-world project challenges were replicated using Excel, MS Project, and the PRAG handbook.

blinc implemented online DT facilitation sessions prior to a five-day in-person bootcamp. Teams tackled inclusive mobility challenges through interactive DT tools (e.g., persona mapping, WOW-NOW-HOW matrices). Sessions were facilitated using Zoom, Miro, and collaborative whiteboards.

SMART used a modular structure: self-learning, synchronous discussion, project work, and final reflection. Tutors played a critical role in aligning learners' personal interests with applicable sustainability challenges.

10.2.4 Outcomes

UDE's pilot led to multiple learner-led project prototypes, some externally funded. Students demonstrated significant gains in ideation, teamwork, research, and sustainability planning. They also gained confidence in applying innovation frameworks to real-life settings.

AUTH's outcome was a portfolio of 12 implemented student projects across Northern Greece. Competence gains included initiative, empathy, and civic engagement. Projects received community attention and were evaluated via peer feedback, reflection journals, and LEVEL5.

IPL students created multimedia campaigns, science-based applications, and local events. Trainers observed enhanced problem-solving and stakeholder communication skills.

UNS students gained practical budgeting competence and a new sensitivity to sustainability costs. They delivered final presentations that incorporated carbon impact, budget simulations, and procurement scenarios.

blinc's learners successfully produced prototypes and demonstrated advanced facilitation and collaboration skills. All participants passed LEVEL5 validation and some used the experience as a basis for further academic or NGO engagement.

SMART's interns gained deepened reflective awareness and produced personal projects embedded in their studies or civic engagement. Learners reported greater clarity on sustainability frameworks and increased motivation for innovation.

10.2.5 Impact

UDE's pilot contributed to shaping university-wide teaching innovation policy and led to the funding of a student project under Erasmus+. AUTH intends to develop a repository of student initiatives to support policy advocacy and future course development.

IPL noted positive student feedback and broader use of DISC tools across other faculties. UNS demonstrated that sustainability metrics can be embedded in traditionally quantitative domains.

blinc's approach proved that international design thinking events can generate high learner satisfaction, even under compressed timeframes. SMART's model received praise for its personalisation and potential to reform internships into transformative learning experiences.

10.2.6 Sustainability

Sustainability was addressed holistically. UDE structured its courses around the SDG Explorer and embedded sustainability into institutional case studies. AUTH's entire project portfolio focused on pressing social and ecological issues. IPL's pilots addressed SDG 7, 12, 13, and 14 in highly creative ways.

UNS uniquely linked SDG 13 (Climate Action) with budget management. Carbon footprint calculations were mandatory for all student proposals. blinc's course framed inclusive mobility as a sustainability dimension, developing equitable access prototypes. SMART used ESG and SDG metrics to evaluate learner proposals.

10.2.7 Perspective/Transfer

The DISC methodology showed high transfer potential. UDE plans to expand DBCL to additional master's modules. AUTH will offer training sessions for faculty and integrate DISC into course portfolios. IPL confirmed that DISC can be scaled across both STEM and creative disciplines.

UNS intends to replicate the model in strategy and procurement modules. blinc sees a fit for AE/VET and will adjust materials accordingly. SMART will continue refining their DISC-aligned internship programme.

10.2.8 Professional Development

Trainers across all partners reported significant growth. UDE facilitators gained fluency in DBCL and digital co-creation. AUTH mentors developed deeper skills in formative assessment and community-based learning. IPL educators embraced interdisciplinary co-design and reflected more systematically on teaching.

UNS trainers gained confidence integrating sustainability metrics into finance modules. blinc's facilitators matured into co-learners, supporting rather than directing learners. SMART's staff improved their mentoring strategies and built capacity to deliver learner-driven education.