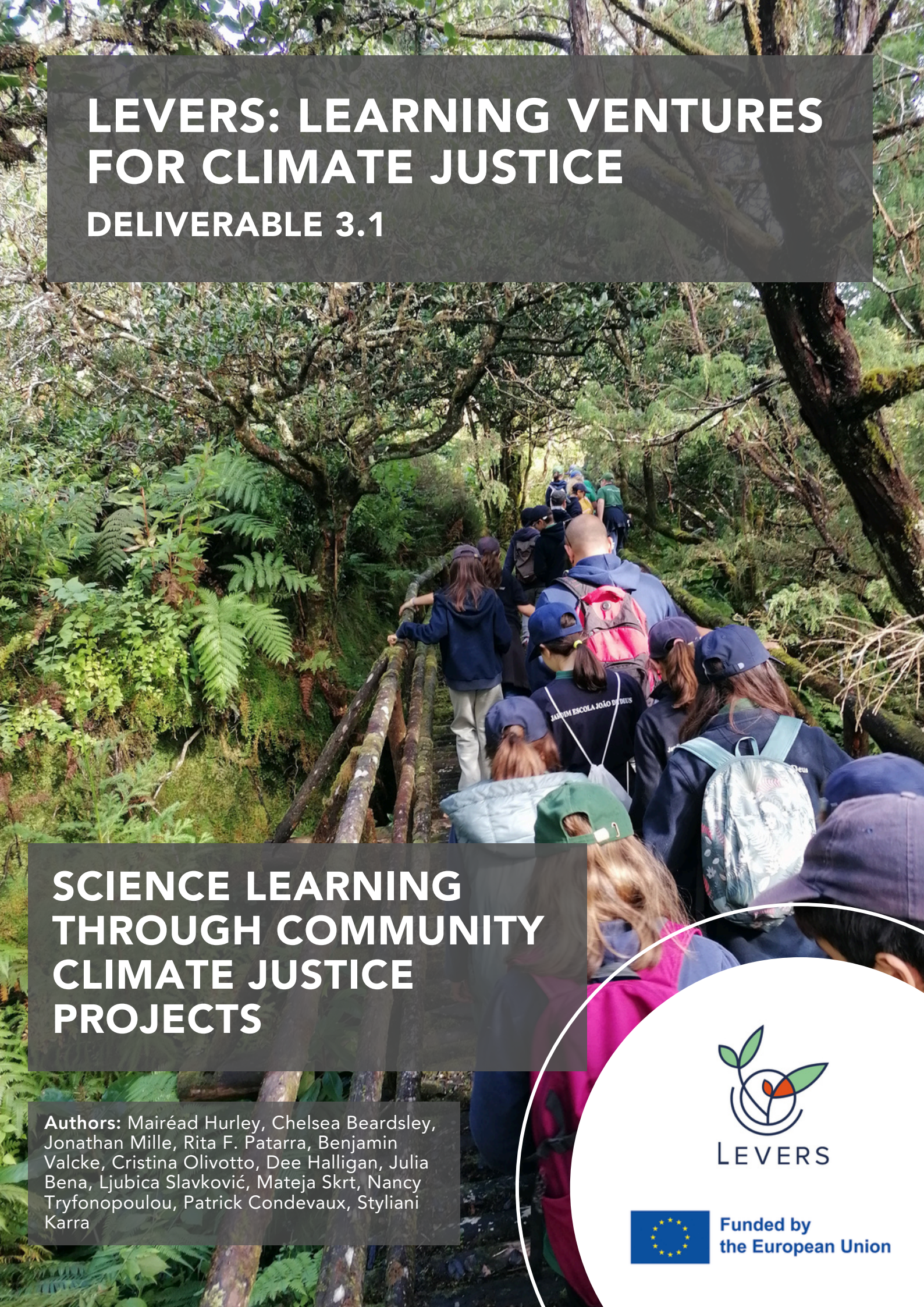
LEVERS: LEARNING VENTURES FOR CLIMATE JUSTICE

DELIVERABLE 3.1



SCIENCE LEARNING THROUGH COMMUNITY CLIMATE JUSTICE PROJECTS

Authors: Mairéad Hurley, Chelsea Beardsley, Jonathan Mille, Rita F. Patarra, Benjamin Valcke, Cristina Olivotto, Dee Halligan, Julia Bena, Ljubica Slavković, Mateja Skrt, Nancy Tryfonopoulou, Patrick Condevaux, Styliani Karra

LEVERS

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Coordinator	School of Education, Trinity College Dublin, Ireland. Dr Mairéad Hurley, Assistant Professor in Science & Society Education mairead.hurley@tcd.ie
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Email	LEVERS@tcd.ie

LEVERS CONSORTIUM MEMBERS:

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Consortium Members			
1	Trinity College Dublin (School of Education)	TCD	Ireland +
2	Stickydot Srl	SD	Belgium +
3	CSI Centre for Social Innovation Ltd	CSI	Cyprus +
4	Sociedade Afonso Chaves-Associação De Estudos Açoreanos (aka Expolab – Centro Ciência Viva)	SAC	Portugal (Azores) +
5	Centar Za Promociju Nauke (aka Center for Promotion of Science)	CPN	Serbia +
6	Zavod Za kulturo, umetnost in izobrazevanje Kersnikova (aka Kersnikova)	KERSNIKOVA	Slovenia +
7	European Association for the Education of Adults	EAEA	Belgium
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EXECUTIVE SUMMARY

LEVERS (Learning Ventures for Climate Justice) is a Horizon Europe Coordination and Support Action led by Trinity College Dublin, running from March 2023 to February 2026. The project established nine Learning Ventures across Europe, in Belgium, Cyprus, Greece, Ireland, Portugal, Serbia, Slovenia, Switzerland and the United Kingdom, each a locally organised, cross-sectoral partnership co-designing climate action projects that offer real-world learning experiences grounded in locally relevant sustainability challenges.
This report, Deliverable 3.1, documents the climate action projects that emerged from the nine Learning Ventures and presents a cross-case analysis of the patterns, tensions and insights visible across them. It is not an evaluation of the LEVERS project as a whole, but an account of what happened when diverse partnerships attempted to create the conditions for action-oriented climate learning in real communities, and what those communities did with the opportunity.

Chapter 1 introduces the LEVERS project, its Learning Framework, the capacity-building programme led by UCL Climate Action Unit, and the foundational premise that action precedes and shapes belief. It presents an updated Learning Framework (v2.0) in which 'Reflect' is named as an explicit stage in the learning cycle and 'Act' is repositioned as the central engine of learning.

Chapter 2 presents narrative accounts of the nine Learning Ventures: from Laurissilva biodiversity gardens in Azorean schoolyards to a mobile shade structure designed and built by teenagers in Brussels; from pollinator habitats in Belgrade kindergartens to walking tours of London's waste infrastructure; from interactive theatre on Lesvos to spirulina cultures and fermentation workshops in Ljubljana. These narrative accounts tell the story of what the Learning Ventures did, foregrounding the subsequent chapters which feature cross-case analysis and situating findings in the broader environmental and climate education landscape.

Chapter 3 draws on cross-case analysis to identify seven themes among the patterns which emerged across the nine Learning Ventures. These include entry conditions, which ranged from deeply-felt community challenges to more opportunistic starting points, and the honesty with which these were examined shaped what followed. Actor constellations proved complementary regardless of how they formed, and the breadth of partnerships directly determined the range of knowledge, practices and perspectives available to learners. Three modes of science learning emerged across the cases: learning science through direct inquiry, learning through science embedded in making and growing, and learning to live with science in a world being reshaped by it. Nonhuman actors and living systems, including plants, insects, fungi, plankton, soil and weather, functioned as active

participants in shaping what was possible. The chapter documents failures and adaptive responses honestly, including the human cost of partnership difficulties, and identifies diverse forms of continuation and legacy already visible across the cases. It concludes with the principle that actions drive beliefs, observable across all nine ventures, at the level of learners, educators and the project itself.

Chapter 4 situates the findings within the broader landscape of environmental and climate education research. It maps the Learning Ventures against Ardoin et al.'s (2026) synthesis of effective environmental education, finding alignment across all six themes identified in that evidence base. It positions the LEVERS approach within the ongoing debate about the purpose of science education, advocating for an expansive understanding rooted in critical ecopedagogy and oriented toward just and sustainable futures. It proposes that the Learning Ventures, as established partnerships with living infrastructures and tested pedagogical approaches, are now well positioned for embedded research-practice partnerships that could address the need for further research in this evolving field. The chapter concludes by arguing that the LEVERS findings are highly relevant to schools and policymakers, but that bringing action-oriented climate learning into formal education requires structural and policy-level support that does not yet exist at sufficient scale.

The report's central proposition is that if the most powerful way to change what people understand about climate is to give them the experience of acting on it, then the most effective investment is not in more content but in more conditions for action: more partnerships, more places, more trust, and more people equipped to hold the space in which learning from action can occur.

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1. INTRODUCTION

1.1 LEVERS: Learning Ventures for Climate Action

LEVERS (Learning Ventures for Climate Justice) is a Horizon Europe Coordination and Support Action project, delivered by a consortium of eleven members and coordinated by Trinity College Dublin's School of Education. LEVERS ran from March 2023 to February 2026. The project responds to a core tension: while the climate and biodiversity crises demand greater scientific literacy and collective action, education systems remain largely siloed, classroom-bound and disconnected from the communities and places where climate change is felt most acutely. LEVERS set out to develop and test a replicable model for climate learning that works differently: rooted in place, led by cross-sectoral partnerships, and oriented toward justice. The project established nine 'Learning Ventures' in Belgium, Cyprus, Greece, Ireland, Portugal, Serbia, Slovenia, Switzerland and the United Kingdom. Each Learning Venture is a locally-organised alliance bringing together educators, community organisations, researchers, industry actors and public authorities to co-design climate action projects around a specific climate issue, offering real-world learning experiences grounded in locally-relevant sustainability challenges. The consortium comprises eleven members, including universities (TCD, UCL), science centres and cultural organisations (Expolab, CPN, Kersnikova, LATRA), creative studios and community labs (Forth, Stickydot, Onl'fait), a social innovation centre (CSI), and an association representing non-formal adult learning and education organisations (EAEA).

The Learning Ventures were not required to implement a predefined template; instead, they were accompanied through a structured and iterative development process designed to build shared capacity while preserving contextual flexibility. In the first year of the LEVERS project, consortium partners engaged in capacity-building activities on collaboration and systemic design, facilitated by UCL's Climate Action Unit in partnership with Forth. This process commenced at the March 2023 kick-off meeting with training on the *Seven Insights for Climate Action*, a programme grounded in neuroscience and psychology and designed to address the "people factor" dimensions of climate collaboration. It includes the development of a shared vocabulary across sectors, the navigation of polarisation, and the recognition that awareness-raising alone does not reliably drive actions and does not necessarily generate behavioural change.

Between January and March 2024, UCL conducted structured outcomes-mapping sessions with each Learning Venture to clarify intended long-term achievements. These discussions informed the co-design of tailored capacity-building activities, delivered both in person and

online between April and December 2024 across all nine sites, engaging more than 150 Learning Venture members (LEVERS D2.1 Capacity Building).

Building on this foundation, each Learning Venture applied systemic design principles to identify a locally relevant climate challenge, establish cross-sector partnerships and develop context-specific learning programmes. The diversity of initiatives that emerged - from Laurissilva gardens in Azorean schools to a mobile shade structure constructed by teenagers in Brussels, from interactive theatre on Lesvos to walking tours exploring London's waste infrastructure - reflects the deliberate openness of the model which is applicable in various contexts. While united by shared commitments and orientations developed through LEVERS, each Learning Venture remains place-based, relational and responsive to its socio-ecological context, mirroring the differentiated manifestations of climate change itself.

This approach is articulated in the LEVERS Learning Framework (D1.1), which provides the pedagogical architecture of the project. The original Learning Framework is structured around a cyclical process of Engage and Understand, Investigate and Act, with climate justice positioned at its core. It is supported by five design commitments: Place-Based Learning Ecosystems; Transdisciplinary integration of STEM with the Arts, Humanities and Social Sciences (AHSS); Systemic Design; the Seven Insights for Climate Action; and a commitment to Diversity, Equity, Accessibility, Inclusivity and Belonging.

Drawing on the experiences of the nine Learning Ventures, this report proposes an updated version of the Framework (v2.0, Figure 1.1) with two changes being made to the original version. Firstly, Reflect is named explicitly as a distinct element of the central cycle. Reflection was practised throughout the Learning Ventures but not initially named as a distinct element of the framework in the graphic included in D1.1. However, the cases presented in this report revealed it to be essential in the consolidation of learning from action. Secondly, Act has been moved from its original place as a node in the cycle to become the central engine of learning instead, reflecting the principle that actions drive beliefs, which emerged as a defining insight across all cases and among the LEVERS consortium. This principle is discussed in detail in Chapters 3 and 4.

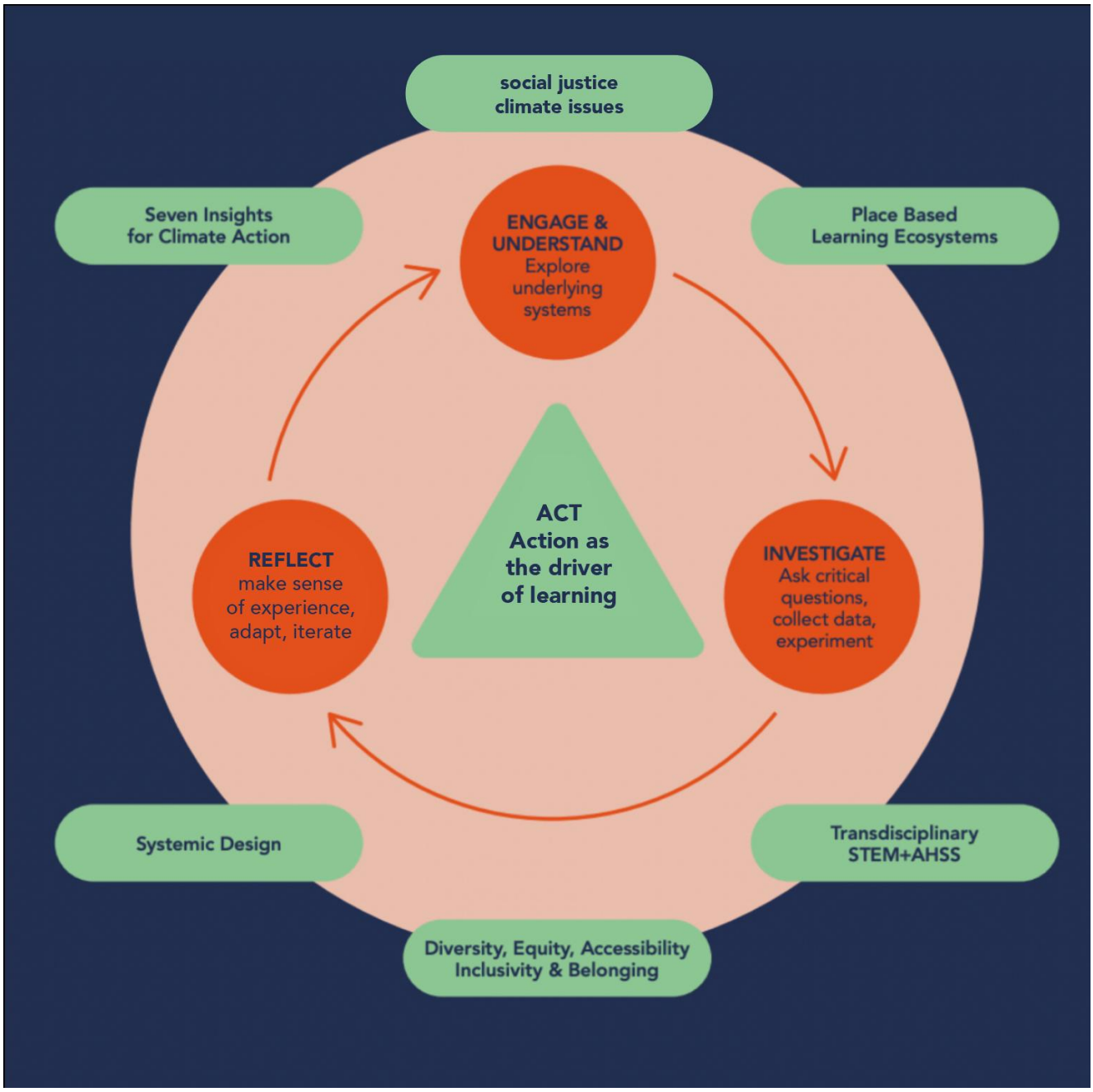

Figure 1: LEVERS Learning Framework v2.0 (Update from v1.0 presented in the LEVERS Learning Framework D1.1)

The LEVERS Learning Framework does not prescribe curricula but instead provides a shared language and set of principles that each Learning Venture adapted to its own context, learners and partners. The project's outputs extend beyond the nine cases documented in this report, and a full account of these outputs, including the Field Guide (D1.3), policy briefs (D5.4, D5.2, D5.5), and professional learning resources for educators, is provided in Section 4.4. These outputs are intended to enable the lessons learned through the LEVERS project to be adapted for other regions, challenges and educational settings, and can be accessed through the LEVERS project website at www.leversforclimate.eu.

1.2 This Report: LEVERS Deliverable 3.1

This deliverable (LEVERS D3.1: Science Learning Through Community Climate Justice Projects) serves as a report on the portfolio of climate action projects developed by communities of learners across the nine Learning Venture sites as part of LEVERS WP3: ACTIVATE, undertaken as LEVERS Task 3.2 from mid-2024 through to the end of the LEVERS project (February 2026). The analysis presented in this report adopts a qualitative, interpretive approach designed to attend to the relational, emergent, and context-dependent nature of climate learning in action. Rather than treating the Learning Ventures as discrete interventions to be evaluated against predefined outcomes, the analysis approaches them as situated learning processes unfolding within complex social, institutional, and ecological conditions. This orientation is informed by scholarship that emphasises relationality, uncertainty, and the importance of "staying with the trouble" of messy, real-world educational practice (Haraway, 2016; Higgins et al., 2019). As such, the analysis does not seek to identify best practices or generalisable models, but to surface patterns, tensions, and possibilities that arise when learning, action, and sustainability are intertwined over time.

Across the nine Learning Ventures, case materials were analysed using a shared analytic framework that foregrounds how learning was entered, organised, and sustained in practice. The framework includes six categories: (1) entry conditions to action; (2) constellations of primary actors and roles; (3) key constraints shaping what was possible; (4) major shifts or reorientations over time; (5) nonhuman or material influences; and (6) forms of continuation or legacy beyond the formal project period. These categories were not applied as rigid coding schemes, but as relational prompts to support comparative sense-making across diverse contexts. Attention was also given to cross-cutting dimensions such as emotions, hope, adaptive capacity, positionality, relationality, and justice-oriented learning, where these were made visible in the case narratives. Taken as a whole, this approach allows the analysis to remain grounded in the lived realities of learning in action, while offering a structured way to reflect on how education as sustainability is enacted, negotiated, and sustained across different learning ecosystems.

1.3 Education as Sustainability in Action

Across research, policy, and everyday practice, education is understood as a powerful space for responding to climate change and intersecting socio-ecological crises, both through what is taught, and increasingly, through how learning is organised (Nusche et al., 2024; Global Education Monitoring Report Team, 2024). There is growing recognition that these challenges cannot be addressed through technical knowledge alone: they are social, political, ethical, and deeply entangled with questions of justice, power, and accountability (IPCC, 2022). Rather than asking only what learners should know about climate change,

attention is turning toward how learning unfolds in conditions of complexity, uncertainty, and unequal impacts (UNESCO 2021). This includes asking how schools, universities, workplaces, and community organisations might respond by rethinking their everyday educational practices, relationships, roles, and responsibilities (ibid).

Exploring this orientation to learning itself in the context of climate change has been the impetus of the consortium responsible for the LEVERS project (2023 - 2026), supported by the European Commission's Horizon Europe programme. The LEVERS project emerged from a group of organisations rooted and grounded in science education, but with a transdisciplinary orientation to learning and individual expertise in the consortium covering psychology and neuroscience, art and design, architecture, and social innovation, alongside science research and innovation, education and public engagement with research.

Recent evidence from environmental education research strongly supports a shift towards expanded conceptions of suitable education for planetary sustainability. A large-scale systematic review by Ardoin et al. (2026), synthesising findings from 546 international peer-reviewed studies, identifies six recurring themes associated with effective environmental education: (1) employing diverse teaching and learning approaches; (2) fostering participatory methods; (3) including direct action components; (4) focusing on local community settings; (5) connecting learning to personally relevant information; and (6) collaborating with experts and stakeholders. While the review finds no single universal model, it concludes that programmes integrating these elements are more likely to strengthen people–nature relationships and support evidence-informed conservation and sustainability efforts.

All six of these themes are evident across the climate action projects enacted and supported by the LEVERS project, emerging through real-world collaboration, prototyping and iteration. Across its 'Learning Ventures' in nine European countries, LEVERS demonstrates how these elements were woven together in diverse contexts, creating learning environments where action, reflection, and justice-oriented meaning-making develop in tandem. Examples from the nine locations are presented in Chapter 2 of this document. Patterns across the cases are examined in Chapter 3 and discussed further in Chapter 4.

Overview: Learning Ecosystems and Action as the Driver

A central insight emerging across the LEVERS Learning Ventures is that learning for climate action rarely follows a linear sequence in which knowledge acquisition precedes action. Instead, learning and action co-evolve. In many cases, action became the entry point: learners engaged with concrete situations, experimented with responses, collaborated with others and then deepened understanding, reframed assumptions, and articulated values.

This orientation aligns with a growing body of work conceptualising climate education through the lens of learning ecosystems. As articulated by Ibourk and Morrison (2026), climate learning ecosystems foreground the interconnected social, institutional, material and ecological conditions through which learning unfolds over time. From this perspective, learning is not confined to formal educational settings, but emerges through relationships among people, places, practices, infrastructures, and the more-than-human world (Abram, 1996). The LEVERS Learning Ventures exemplify this ecosystemic logic in practice. Learning took place across classrooms, schoolyards, community spaces, industrial workplaces, coastal and rural environments, innovation hubs, libraries and science centres. Learners worked alongside educators, community members, industry partners, researchers, and policymakers, engaging with locally relevant climate justice challenges while drawing on diverse forms of expertise and knowledge.

Across the cases analysed in this report, all six themes identified by Ardoin et al. (2026) are present:

- diverse pedagogies, including experiential, place-based, and transdisciplinary learning;
- participatory approaches, positioning learners as co-inquirers and collaborators;
- direct action, through prototyping, experimentation, and community-based initiatives;
- local grounding, connecting learning to specific places, histories, and socio-ecological realities;
- personal relevance, through issues tied to livelihoods, identities, and everyday practice; and
- collaboration with stakeholders across education, civil society, industry, and policy.

Rather than being implemented as discrete components, these elements interact dynamically within each learning ecosystem, shaping how learning develops over time. Designing for learning in this context involves cultivating a repertoire of practices that support action-oriented learning within complex systems: practices that enable participation, distribute responsibility, embrace uncertainty, and create space for reflection.

Once learning ecosystems are made visible, educators and partners can design learning that moves through them intentionally, even in small and manageable ways.

These insights point toward a broader shift underway in climate and sustainability education, increasingly moving beyond lessons *about* climate change, toward what UNESCO has described as the greening of education as a whole — across subjects, sectors, roles, and learning environments (UNESCO, 2025). This involves a move away from education as primarily knowledge transmission, toward approaches that invite critical inquiry, collective action and shared responsibility. In some cases, this shift goes further still, toward education *as* sustainability (Mochizuki & Yarime, 2015), where learning itself becomes a form of sustainable practice: embedded in real contexts, oriented toward action and inseparable from the social and ecological systems it seeks to transform. From this perspective, sustainability is not only an outcome of education, but something enacted through how learning is organised, who participates, what is valued, and how responsibility is shared.

The LEVERS project is situated within this evolving landscape. Rather than proposing a single model or prescriptive solution, LEVERS explores how action-oriented climate learning can emerge through diverse learning ecosystems. Guided by the LEVERS Learning Framework (D1.1), across nine European locations, learners, educators, community organisations, industry partners, researchers, and policymakers worked together on real sustainability challenges, learning through cycles of action, reflection, and collaboration.

This report draws on those Learning Ventures as a cross-case synthesis. It examines how learning was organised across contexts, what conditions enabled or constrained action, and what forms of change became possible over time. The chapters that follow present these learning cases as analytic sites for understanding how action-oriented, ecosystemic, and justice-informed climate learning can be designed, supported, and sustained across diverse educational landscapes.

1.4 Actions Drive Beliefs

A foundational premise of LEVERS is that action precedes and shapes belief. Rather than beginning with awareness-raising or knowledge transfer in the hope that understanding will eventually motivate behaviour change, the Learning Ventures were designed around the inverse: that learners do something first and, through doing, come to understand why it matters (LEVERS Learning Framework D1.1; LEVERS Capacity Building D2.1). This principle draws on established findings in behavioural and social psychology, where the assumed link between attitudes and behaviour has long been recognised as weaker than intuition suggests (Wicker, 1969; Ajzen & Fishbein, 2000).

More recent work in neuroscience and climate communication indicates that human cognition is not a linear process running from information to understanding to action, but a recursive one in which experience, identity and social context continuously reshape what people believe and how they behave (De Meyer et al., 2021). Foregrounding the role of action in climate and sustainability learning shares some common ground with the construct 'Action Competence for Sustainability' or 'Action Competence in Sustainable Development' (Sass et al., 2020; 2023). However, there are some differences in the two approaches, with action competence in sustainable development defined as comprising three components: knowledge of action possibilities, confidence in the influence of one's action making a difference or having an impact and willingness to act. In particular, the component "knowledge of action possibilities" implies that knowledge is a precondition for action. LEVERS inverts this sequence, positioning action not as the endpoint of learning but as its primary engine (Figure 1). This perspective departs from the prevailing model in climate education which often assumes a linear progression from knowledge acquisition to concern and subsequently to behavioural change. How this played out in practice across nine diverse settings is examined in Section 3.7.

2. Case Narratives - Climate Action in Nine LEVERS Learning Ventures

This chapter presents narrative accounts of the projects and learning programmes in the nine Learning Ventures. Each case follows a common structure: the context and entry conditions that shaped the venture, the actors involved, what happened in practice and what shifted as a result. The accounts are written to be read individually or comparatively and are intentionally concise; fuller details of activities, participants, timelines and outputs are provided in the Appendices A & B. Chapter 3 draws on cross-case analysis of these accounts to identify patterns, tensions and insights across the nine cases.

2.1 Belgium: Karavan'ke – Youth-Led Climate Adaptation in Molenbeek

Led by Stickydot, Brussels

Context and challenge

Molenbeek is a dense, highly urbanised municipality of Brussels where summer heat is not only an environmental issue but a social one. Concrete-heavy streets, limited green space

and housing inequalities mean that heatwaves hit hardest those with fewest resources to adapt. For many teenagers growing up in these neighbourhoods, extreme heat is a daily lived experience, but one they had never been asked to respond to.

The Learning Venture

Stickydot coordinated the work in close collaboration with La Maison des Cultures et de la Cohésion Sociale (MCCS) in Molenbeek, drawing on two community maker spaces (Fablab'ke and FabWest) and three external mentors: a designer, an architect, and a physicist from the Belgian research centre VITO. The learners were two groups of local teenagers aged 13–17, approximately 30 participants in total, already engaged in MCCS creative workshops. Many lived in neighbourhoods particularly affected by urban heat, making the project immediately relevant to their daily lives.

What happened

The Learning Venture set out to transform lived experience of heat into a collective making and learning journey. The central action was the co-creation of Karavan'ke: a colourful, mobile shade structure designed and built by the teenagers to provide relief from extreme heat in public spaces.

The process began with place-based exploration. Teenagers mapped where and how they experience heat in schoolyards, streets, public squares and homes, foregrounding questions of equity and justice: who has access to shade or green spaces? Rather than being given a predefined solution, they were encouraged to imagine their own responses. Early ideas included shaded seating, water misting systems, solar-powered lighting and mobile structures that could travel between locations.

Over the course of the 2024–2025 academic year, ideas were translated through sketches, scale models and eventually a life-size structure. Teenagers worked with wood, fabric, metal and digital fabrication tools, learning through welding, 3D printing, assembly and testing. The mentors did not provide ready-made answers; instead, they posed questions that challenged assumptions and made constraints visible: *Who carries this? What happens in the wind? Where does the heat go?*

The project culminated in a public unveiling at the Fiesta des Ateliers on 7 June 2025, where Karavan'ke was installed and used by families and neighbours. Community members contributed to its identity through flag-making and a public vote on its name. What had begun as a design exercise had become a shared story rooted in place and collective effort.

What shifted

Teenagers moved from tentative sketches to defending design decisions in front of professionals and neighbours, articulating why certain materials were chosen, how airflow works, and what trade-offs were involved. New skills in fabrication, collaborative problem-solving and public presentation emerged through practice. One young person initially started out skeptical during the first meeting with the Stickydot facilitators, asking pragmatic questions about the purpose of climate projects at that scale. This forced the facilitators into reckoning with this question and shaping the subsequent sessions around it, shifting much more towards telling stories of action rather than opening with scientific facts about climate change. By the end of the project, this young maker was one of the most active and vocal in sharing the group design and defending her decisions in creating it. Mentors refined their ability to guide learning through questions rather than solutions.

The project strengthened partnerships between Stickydot, MCCS and the maker spaces, and the public unveiling fostered shared ownership, with neighbours contributing to the structure's identity and voting on its name.

What continues

Karavan'ke, a mobile, functional shade structure, now exists as both infrastructure and inspiration. Partners are exploring how similar co-creation processes could address other local climate challenges, such as rainwater management or greening schoolyards.

Challenges and adaptations

Construction constraints (balancing mobility, durability, airflow and cost) required constant negotiation. Some early designs proved impractical at full scale, leading to moments of frustration. A key learning was the importance of making constraints visible early, and of planning for what happens after a project's public moment, including storage and maintenance.

2.2 Cyprus: Green Entrepreneurship and Coastal Communities

Led by CSI, Nicosia

Context and challenge

Cyprus faces pressing environmental challenges (climate change impacts, water scarcity, waste generation and biodiversity loss) combined with a growing need for meaningful youth engagement, green skills and community-driven solutions. Prior to LEVERS, many sustainability initiatives on the island were fragmented: educational activities were

disconnected from real-life practice, industry engagement was limited and local knowledge from coastal and rural communities was underrepresented in learning processes.

The Learning Venture

CSI designed the Cyprus Learning Venture as a learning ecosystem connecting education, community knowledge, industry expertise and climate justice. The venture engaged a wide range of partners, including environmental NGOs, social enterprises, universities, innovation hubs and community groups and worked with diverse learners: young people, adult professionals and coastal community members including small-scale fishers. Over the course of the project, 381 learners participated across activities in locations ranging from innovation hubs to coastal fishing communities.

What happened

The Learning Venture evolved through several interconnected strands. In February 2025, the EcoAction Bootcamp brought together climate activists, aspiring entrepreneurs and innovators for two intensive days of workshops on climate justice, sustainable business models and prototyping. The bootcamp culminated in a Pitch Day during the Women in Business & Beyond Conference,where teams presented solutions including a solar-powered cooling vest for high-heat work environments, a carbon-negative hempcrete construction method, a platform connecting travellers with local cultural experiences, and an upcycling initiative transforming discarded materials into functional objects. Although the winning team was unable to continue, several others progressed beyond the bootcamp: one participant registered her company and developed a website with CSI mentoring support, while another was invited to co-deliver upcycling workshops through other European projects. The bootcamp demonstrated that short, intensive interventions can catalyse sustained entrepreneurial activity when followed by ongoing support.

A different kind of learning unfolded along the coast. Between May and June 2025, CSI and partner Enalia Physis delivered workshops for small-scale fishers in Larnaca, Zygi, Limassol and Paphos. In a community hall in Zygi, early evening light filtered through open windows as fishers gathered around a table scattered with ropes, hooks and model traps. An experienced fisher demonstrated a modified trap design that reduces bycatch, while participants leaned in, testing knots and debating techniques. Conversations shifted from daily fishing challenges to rising sea temperatures and shrinking catches. By the end of the session, the atmosphere had changed from cautious curiosity to shared purpose. These workshops acknowledged fishers not only as learners but as knowledge holders, linking climate justice with livelihoods and cultural heritage.

Building on these connections, CSI began developing a collaboration with Plastic Precious and Enalia Physis to collect old fishing nets and daily plastic waste from fishers, process the materials and transform them into new products, creating a circular system that addresses marine pollution while generating local economic opportunities.

What shifted

The fisheries workshops produced a vivid shift. On the first day in Zygi, when the 17 participants arrived, initial conversations were around frustrations and problems relating to fishing life. The facilitators had planned to open with the rationale for sustainable practices, but the fishers were not ready to listen. So the team stopped, sat down, and listened instead. By the second day, having been heard, the fishers' stance changed: they began asking questions and engaging with the techniques being demonstrated. By the end of the four-day programme, the group had built enough trust for a frank conversation about waste. When facilitators asked what happened to old nets, plastic and cans collected at sea, fishers admitted the disposal process was inadequate, but also expressed frustration at a previous group who had come to the area and promised they would do something about the same issue but then did not follow through. Gaining their trust and not wanting to repeat the broken commitments of earlier projects led to increased determination for the Learning Venture, and to starting a process to get dedicated recycling bins at harbours, and connecting fishers with Plastic Precious for net processing. The CSI team regard this as a personal obligation to honour, reflecting that gaining the fishers' trust was the biggest challenge, and not losing it is now what drives the follow-through.

At the organisational level, CSI and its partners have begun integrating action-based learning approaches more consistently into their programmes, including modular courses in green entrepreneurship and participatory hackathons. The venture also sparked new initiatives such as citizen-led energy communities inspired by the Energy Cafés.

What continues

The Green & Social Entrepreneurship Course continues through early 2026. The fishing net collection system with Plastic Precious and Enalia Physis is under development. Partners plan to maintain circular economy workshops, and a new Hackathon collaboration with Alexander College Larnaka is planned for February 2026.

Challenges and adaptations

The breadth of the Learning Venture, spanning entrepreneurship, fisheries, energy, circular economy and higher education, created richness but also fragmentation. The challenge of maintaining a coherent learning journey across so many activities and audiences required

continuous adaptation. Early dialogue-focused formats were replaced by hands-on, participatory approaches when it became clear that learners responded more strongly to doing than to discussing.

2.3 Greece: Carbon-Neutral Schools Through Theatre and Action

Led by LATRA, Lesvos and Athens

Context and challenge

When the Greek Learning Venture began, the idea of a carbon-neutral school was largely unexplored in the country. There were no ready-made toolkits, no clear models and very little shared language around what it might mean for a school community to actively work toward sustainability. In many Greek schools, teachers are interested but overstretched, funding is scarce and there are few structured ways to involve families or local actors. On Lesvos, these challenges are intensified by geography: school buildings are often old, resources limited, and access to climate education opportunities more restricted than in large cities, even though island communities are directly affected by climate pressures.

The Learning Venture

LATRA brought together a diverse alliance of cultural organisations - NGOs working in science and sustainability education, schools, public service providers and parent associations - around a shared practical goal: supporting action and advocacy towards carbon-neutral schools. The learners were primarily primary school children aged 5–11, and the work took place across Lesvos and Athens. A mentoring ecosystem gradually formed, connecting children with universities, public utilities, local government and social inclusion organisations, linking children's ideas to real systems like energy, water, waste and mobility, without taking ownership away from the learners.

What happened

Theatre became the entry point. Because school visits to performances are already part of Greek school life, this created a familiar and accessible starting point. LATRA co-created an interactive performance exploring climate justice through story and participation rather than instruction. Children were invited into the story, contributing drawings and ideas that became part of the performance itself. Crucially, the experience did not end when the applause stopped. Immediately afterwards, children moved into hands-on workshops focused on simple, everyday actions, often linked to food, such as planting edible herbs to take home or grow at school.

In one Athens neighbourhood, the Learning Venture performed in a community garden, one of the few green spaces among tall blocks of flats, tended by local families who grow seasonal vegetables in small allotments. There was no stage; benches were arranged under the trees while most people sat on the ground. At the end of the performance, the team handed out edible seeds and prepared to begin a workshop on food security. But before they could say much, the children scattered, running to their family plots and shared flower beds to plant the seeds straight away. No instructions were needed. The planned workshop ended up happening after the activity, not before.

From there, the work deepened. In the second stage, activities moved fully into schools. Learners explored their own school environments (where energy comes from, how water is used, what creates waste) and developed concrete proposals for change. Across the sessions, children produced more than 50 written proposals for making their schools more sustainable. Parents, teachers, and LATRA staff turned these into a public advocacy campaign that reached 300,000 people, showing learners that their voices could travel well beyond their own classrooms. Over the course of the project, LATRA delivered more than 15 theatre performances, 75 workshops and 25 field trips, engaging over 1,000 students.

What shifted

For learners, the programme created a visible shift from learning about climate to doing something about it. Children planted herbs, cared for them over time, and shared food with classmates and parents, experiencing that everyday actions can have real value. Seeing people outside their classrooms engage with their proposals helped students realise their opinions mattered. The quality of children's own proposals illustrates this shift. Among the 50+ written suggestions which formed the basis of an online public engagement and advocacy campaign were ideas such as "*Let's place barrels and collect rainwater. That way we can water our plants without wasting clean water!*" and "*Let's write down everything we do for the environment in a small booklet and give it to other schools too!*" These are quotes from children who had watched a performance, and then harnessed the power of their imaginations to create these practical and systemic proposals for how their school and others could operate differently and more sustainably.

For teachers, a key change was discovering how well hands-on cultural and science-based activities outside the classroom could connect with what they were already doing inside it. Some teachers reported that instead of trying to convince students to care, they saw genuine engagement emerge from shared experiences and that classroom discussions became richer as a result.

For partner organisations, the project opened new pathways. The theatre company involved in the Learning Venture later received a national grant to produce a sustainability-focused play; the funders cited the company's demonstrated experience in sustainability education as a key reason.

What continues

Several schools continue with projects supporting action and advocacy toward carbon-neutral schools, including community gardens cared for by students, teachers and parents. LATRA continues working with three schools where trust and practice are well established. The Learning Venture has also led to new collaborations, including the Erasmus+ project Flowgen, which builds on the focus on climate justice and action-oriented learning.

Challenges and adaptations

Bureaucracy around non-school organisations working with children proved a major constraint. LATRA responded by approaching schools early and using theatre, which was already accepted within school programmes, as a relationship-building tool before asking schools to commit to a full sustainability programme. On Lesvos, limited local industry made

private-sector engagement difficult, prompting a broader search across more than 100 local, regional and national actors.

2.4 Ireland: Planting Seeds of Change

Led by Trinity College Dublin, Westport, Co. Mayo

Context and challenge

The Irish Learning Venture centred on a very local challenge with national significance: food security and the vulnerability of rural communities to climate shocks. In recent years Ireland has experienced major weather events, notably the 2018 "Beast from the East" which left supermarkets empty for days, and Storm Éowyn in January 2025, that shaped the concerns and motivations of local residents. In Father Angelus Park, a small residential area in Westport, a 15m × 5m patch of ground lay overgrown. Residents were interested in exploring how it might be used differently.

The Learning Venture

Trinity College Dublin's Science and Society Research Group led the project in partnership with Food Forests Ireland and Westport Tidy Towns, both members of the One Westport umbrella group for community climate and biodiversity groups in the town. The learners ranged from local post-primary school students, students from Mayo College of Further Education and Training and a wide mix of community members. Many had never grown food before, though several residents had gardening experience and a strong sense of local pride. As a volunteer organisation, Westport Tidy Towns were motivated to engage in community actions but needed practical guidance and confidence in tackling a climate project, rather than their more typical projects focusing on the visual and aesthetic aspects of the town.

What happened

The Learning Venture unfolded through hands-on, community-led activities that helped people develop new skills while transforming the unused patch of land into a functioning food forest. The heart of the project was collective: residents, students, Tidy Towns volunteers and Food Forests Ireland worked side by side planting fruit trees, berry shrubs and perennial herbs. Weekly Saturday morning tending sessions led by Westport Tidy Towns Biodiversity Officer became a central ritual and, as people built confidence, they added their own contributions, including handmade herb planters and a wooden shelter and gathering area.

Alongside the practical outdoor work, the project offered workshops blending science, heritage and creative practice. During Science Week Ireland 2024, the RE-GENERATION weekend invited learners to explore sustainable food systems through baking workshops, traditional soda bread and butter-making demonstrations, shared meals from local ingredients and talks on regenerative practices. During the shared meal, there was also a presentation from an agricultural scientist about the role of agriculture in Ireland's emissions - a notably contentious issue especially in rural Ireland. The scientist covered social and political angles as well as scientific in his presentation, leading to vibrant debate around the tables. These sessions connected local and cultural knowledge with climate action and attracted diverse age groups.

A first-year geography class from nearby Rice College joined the team to investigate biodiversity on school grounds, mapping an unused space and designing a potential outdoor classroom, with Minecraft-inspired "crafting tables" showing up beside sensory gardens and a polytunnel. Additionally, adult learners at Mayo College of Further Education and Training took part in art-science workshops to investigate the health of the soil in their own gardens. The wider community were invited to attend further workshops on how to compost at home and learn about local biodiversity. The community were also invited to small discussion groups on climate justice. Once established, the Food Forest also became a learning environment where learners explored the existing plants with local biodiversity educators. The project deliberately brought people into action before asking them to talk about climate change. Residents decided what plants should go into the space, which ended up including not only traditional food forest plants but also raised beds, a gooseberry bush to remind one resident of her childhood and flowers for pollinators. Reflections flowed naturally in conversations rather than structured sessions.

What shifted

Learners of all ages showed increased confidence in growing food, identifying local biodiversity and caring for the food forest. As Father Angelus Park became a gathering place, residents used it for informal conversations, shared gardening and seasonal activities. At the level of community, the Biodiversity Officer for Westport Tidy Towns observed engagement deepening in stages. The first was the establishment of a weekly drop-in session for residents to tend to the Food Forest. The second was a 'Sunflower Challenge': a leaflet posted through every door invited residents to the Food Forest for an evening of shared conversation, food and the opportunity to plant a sunflower. Each resident took home a small pot to tend, and a prize was on offer for the best sunflower after ten weeks. This event brought new residents into the weekly sessions and created a reason to return together and an increased number of people joined in the weekly planting sessions after this. A lasting example of community-level change was also evident when residents took ownership of the space themselves, building and erecting a shelter with a barbecue station after a 91-year-old resident expressed a wish to sit among the food forest rather than beside it. These are small acts, but they signal a shift: the food forest becoming the community's own rather than something done for them. Collaborations between Trinity College Dublin, Westport Tidy Towns, Mayo County Council, Food Forests Ireland and Climate Action Louisburgh Locality deepened and new opportunities emerged for coordinated, cross-generational climate education. In October 2025, the project was recognised with a National Climate Action Award at the SuperValu Tidy Towns awards.

What continues

A functioning food forest with multiple layers of perennial planting, a weekly community tending routine and a growing network of people motivated to create more food forests in Mayo are the lasting legacy of this project. Food Forests Ireland have received funding to extend along the Western Greenway in Co. Mayo and are undertaking community consultations as a first step, an approach informed by the LEVERS experience. The local schools (Rice College, Mayo College) are exploring ways to use the food forest for science, geography and wellbeing activities. A new art-science community project, "Testing the Waters," involving the Climate+ Co-Centre for Climate, Biodiversity and Water, Westport Tidy Towns and the Local Authorities Waters Programme (LAWPRO) has also emerged directly from a workshop held as part of LEVERS. A series of talks, lectures and citizen science workshops culminated in an art installation in the Carrowbeg River in Westport in summer 2024, designed to prompt conversation about the use and stewardship of local waterways.

Challenges and adaptations

The most significant challenge was one of fit: between the working cultures of a small research group in a university and community-based organisations with established delivery models, and between the ambition of running a local Learning Venture and the reality of coordinating an eleven-partner European consortium with a very small team. Partners brought different expectations about pace, ownership and co-creation, and aligning these within a single Learning Venture proved more difficult than anticipated. Weather, attendance fluctuations and personnel changes added practical complications. Rather than persisting with a partnership model that exceeded the team's capacity to sustain, TCD redirected its efforts toward collaborations where its educational expertise was the central asset: collaboration with a national network of educators working on sustainability and climate action, and a partnership with a local authority-managed library and makerspace on a schools project. The Westport food forest continues under strong community ownership and weekly tending, while TCD's most generative and ongoing contributions to LEVERS emerged from the pivot. The experience underlines a broader lesson for the Learning Venture model: ambition must be matched to capacity, effective partnerships require not only shared goals but compatible ways of working, and the willingness to adapt when the fit is wrong is itself a form of learning.

2.5 Portugal: Laurissilva Gardens in Azorean Schools

Led by Expolab – Centro Ciência Viva, São Miguel Island, Azores

Context and challenge

The Portuguese Learning Venture was rooted in the unique ecology of the Azores, where the Laurissilva forest, one of the most emblematic and resilient ecosystems of the Macaronesia region, provided both inspiration and urgency. The venture set out to promote awareness within local school communities of the connection between biodiversity protection and climate change mitigation, using an action-first approach to science education grounded in place.

The Learning Venture

Expolab coordinated the work in collaboration with Eco-Schools teacher coordinators across five schools on São Miguel Island, supported by a core group of partners: the Priolo Environmental Centre, the Ponta Delgada Forestry Service, MUSAMI municipal operations, Municipalities, Parish Councils, EU LIFE projects and researchers from the University of the Azores. After a period of prototyping using systemic design approaches, the venture was structured around four action strands, with the Biodiversity Niches Educational Programme at its core. During the 2024–2025 school year, the programme reached 247 students and 23 teachers.

What happened

The central action transformed schoolyards into Laurissilva Gardens, living laboratories linking biodiversity protection with climate change mitigation. Each of the five partner schools designed and planted their own garden using native species, with learners engaged in a sequence of activities across the school year: visiting Laurissilva forests to observe endemic species in their natural habitats, planting native species at school with technical support from local experts, monitoring biodiversity in their gardens, and meeting researchers.

Students acted first (visiting forests, planting species, monitoring change) before engaging with formal explanations. Theory followed experience, giving meaning to what had already been felt and observed. Teachers, researchers and partners acted as guides rather than instructors, supporting decision-making by learners who chose garden locations, species and monitoring methods. During a plantation day involving a classroom of students following an adapted curriculum, facilitators observed a strong connection between this group and the planting activity, as well as their genuine care and engagement, highlighting how action-based learning can create meaningful and inclusive climate participation.

The programme was complemented by a Cross-Community Mentoring scheme connecting learners with researchers and industry stakeholders, and by accredited teacher training on "Biodiversity and Climate Change." A Plantation Week saw five Laurissilva Gardens planted in five different schools over five consecutive days, involving multiple stakeholders and requiring careful logistical coordination.

What shifted

The Learning Venture reshaped how Expolab engaged with partners, fostering a strong sense of belonging from the very beginning. Teachers noted that working alongside researchers and industry stakeholders helped them feel more connected to the content they

were teaching. Students gained new skills in forest management and conservation, composting and waste management.

For partner organisations, a significant shift came through the Seven Insights workshop. One NGO partner described how it gave scientific grounding to practices they had previously carried out on instinct: understanding people's values to reduce communication barriers, identifying common ground to overcome polarisation and learning to reach beyond those already committed. The partner subsequently requested permission to deliver internal training based on the workshop for the rest of their team, extending its reach beyond LEVERS. Eco-School coordinators noted that the practical, hands-on work of the programme consolidated theoretical knowledge they had acquired through earlier awareness sessions but had not previously applied. As one coordinator put it, the project was a way of finally putting existing theory into practice.

What continues

The gardens from Year 1 are being actively maintained by the teachers and participating school – in one case, after the holidays, a group of students and teachers had to work together to clear the weeds that had grown over the summer around the laurissilva plants, to ensure that the space was ready for groups of students to use it again as an outdoor classroom in the 2025-2026 school year.

Both the Biodiversity Niches Programme and the accredited teacher training have been renewed for 2025–2026. The Laurissilva Gardens are living educational spaces that invite ongoing use, care and observation. The project is ongoing, with a new group of teachers joining in the current school year and a sixth school added to the programme. Expolab's goal is to implement the programme in at least one new school each academic year.

Challenges and adaptations

The main challenge was simultaneously implementing the programme across five schools within one academic year, a logistically demanding undertaking that reduced time for internal reflection and iteration. Plantation Week required aligning the availability of teachers, students, researchers and partners across five consecutive days with materials delivered to five different sites. These challenges were addressed through forward-planning and sustained communication. When television coverage prompted a sixth school to request a garden immediately, the team made a deliberate decision to defer to the following year, prioritising quality over speed.

2.6 Serbia: Urban Pollinators and Early-Childhood Learning

Led by Center for the Promotion of Science (CPN), Belgrade

Context and challenge

The Serbia Learning Venture focused on urban pollinators, early-childhood education and climate justice, framed by the loss of urban biodiversity in Belgrade, limited everyday contact between children and non-human urban life and the marginal visibility of pollinators in educational practice despite their central ecological role. Before the project, most participating institutions treated their outdoor spaces as neutral or recreational areas rather than as learning ecosystems.

The Learning Venture

CPN worked in partnership with early-childhood education institutions, teachers, local experts, academia, NGOs and industry partners. Learners were primarily preschool and early primary-school children (ages 4–9), with educators actively participating as co-learners

and facilitators. Activities took place mainly in school and kindergarten yards and selected urban gardens in Belgrade, reaching approximately 120 children across seven workshops.

What happened

The Learning Venture evolved from isolated workshops into routine practice embedded in school life. Core actions included designing and creating garden beds planted with native nectar- and pollen-rich species, installing insect hotels and habitat structures, and conducting hands-on educational workshops where children learned by planting, building, observing and maintaining habitats rather than through classroom instruction alone.

Rather than beginning with lectures on ecology, learners first engaged in planting, building insect hotels and observing pollinators. Conceptual understanding followed: children developed an understanding of pollinator diversity only after directly encountering different insects using the habitats they had helped create. The concept of a corridor was used to foreground systems thinking: learners were encouraged to see individual gardens or insect hotels as part of a larger urban ecological network, reinforcing ideas of interdependence and human responsibility.

Multiple staff members from CPN made the same observation that children who appeared distracted or disengaged during activities later demonstrated things that they had absorbed – appearing inattentive in one moment but in the next revealing things they had taken in, connecting ideas from different activities and drawing their own conclusions. Another noticed this across multiple workshops, noting that some children remembered knowledge shared in sessions held months earlier. Given that working with this age group was a new departure for the CPN team, it helped them to understand more about learning at this age: engagement does not always look like attention, and learning-by-doing can create lasting impressions even if the process may seem chaotic. This reinforced the value of working over longer-than-usual timescales with these young learners.

What shifted

Educators reported that children became able to identify different pollinating insects and recognise which plants and habitat features support them. Curiosity and questioning increased, particularly during observation and monitoring activities. Learners demonstrated a growing sense of responsibility toward the gardens and insect hotels, often reminding peers and adults about care and maintenance.

A notable shift occurred among teachers, from primarily indoor, classroom-based instruction toward outdoor, experiential, garden-based learning. Teachers began integrating gardening and observation into multiple subjects, enabling cross-curricular

connections. At the institutional level, participating schools and kindergartens began to treat their outdoor spaces as learning ecosystems rather than auxiliary spaces.

What continues

The project resulted in physical infrastructures (gardens and insect hotels) that continue to be maintained as part of regular school routines. Educational materials developed during the venture continue to be used by educators. CPN has published two educational brochures.

Challenges and adaptations

The most significant challenge came from the political situation in Serbia, which during the implementation period led to a boycott and suspension of work in much of the formal education system. Many schools were partially or fully unavailable for planned activities. CPN adapted by redirecting work toward early-childhood education institutions (kindergartens) that were not affected by the boycott. This initially reactive shift ultimately strengthened the venture by grounding it more firmly in early-childhood settings and reinforcing the value of responsiveness to local conditions.

2.7 Slovenia: Art–Science for Future Food

Led by Kersnikova Institute, Ljubljana

Context and challenge

The Slovenian Learning Venture was framed by a shared concern: young people encounter food primarily as a finished product, with little contact with the biological, material and environmental processes that shape food systems and their climate impacts. The work set out to change this by enabling learners to work directly with living systems and material processes (growing, fermenting, cooking and experimenting) as a foundation for understanding sustainability.

The Learning Venture

Kersnikova Institute coordinated the work in collaboration with partners from civil society, research, industry and education, including experts in global education, agricultural science,

microbiology, fermentation, and informal STEAM education. Partners were not guest contributors but active co-creators of the programme, helping to shape its structure, content and facilitation approaches across distinct collaborative phases. The primary learners were children aged 9–15 years, participating through either an informal after-school programme or adapted workshops delivered in schools.

What happened

The Learning Venture began with an exploratory intergenerational fermentation workshop in November 2024. The circumstances were far from ideal: following a fire that damaged Kersnikova's main spaces, the workshop took place in a makeshift pop-up lab illuminated by gallery reflectors, heated by a single electric heater. Children and parents sat together in their coats, cutting and salting vegetables with local produce from the market. As they packed jars and drank tea, conversations about everyday food practices unfolded naturally across tables – about what families eat, who cooks and how much goes to waste. A crop specialist who joined the session identified a horseradish as stored rather than freshly dug up, just by smelling it. The activity felt more like a connecting experience than a workshop, despite the facilitator gently leading the conversation towards topics of climate and sustainability. Families left with batches of fermented vegetables (some too salty, some just right!) and a few participants later contacted Kersnikova asking for more jars and recipes for other items from the market that they could ferment.

This first workshop informed the design of OpenLab, an eight-session programme implemented in early 2025. Across the sessions, youth participants cultivated spirulina, grew oyster mushrooms on waste substrates, explored food chains, analysed resource flows, and cooked together. Each session built on the last, with activities consistently beginning with doing (touching, mixing, growing, observing) followed by reflection grounded in participants' own observations.

In the final three sessions, the structure shifted. Mentors stepped back, offering space, materials and facilitation rather than instructions. Children designed their own projects, tested ideas, revisited earlier insights and explored connections between biological processes, food and environmental issues.

One group, inspired by the session on food data, built and programmed a simple robot using an Arduino microcontroller, an ultrasonic sensor and 3D-printed parts: it detects someone approaching the fridge and wags a robotic finger while playing a recorded message about healthy eating. Another learner, curious about using food beyond eating, worked with an organic chemist to extract pigments from cabbage, adjusting pH with natural ingredients to create a collection of handmade organic colours. Both projects moved from a self-identified question to a working outcome. Some learners became deeply

self-directed; others struggled with the openness. Rather than correcting these differences, the team treated them as part of the learning process.

After OpenLab, the core ideas were translated into Spirulaktor, shorter workshops delivered in primary schools and a community centre, testing how action-first learning could function within formal education constraints.

What shifted

At the beginning of OpenLab, many learners waited for instructions and looked to mentors for confirmation before acting. This gradually changed. Children became more confident in making decisions about materials and processes, and began continuing work without guidance. By the final sessions, they initiated experiments independently, compared results across weeks, and asked increasingly complex questions about growth, decay, nutrients and environmental impact. They remembered details from earlier workshops and reused them

spontaneously in new contexts. Participants took spirulina cultures and mushroom substrates home, continuing to care for them in their own environments. Encounters with contamination or stalled growth became part of the learning process rather than reasons to stop. Responsibility for outcomes shifted to the learners, making biological processes feel real, fragile and relational.

Mentors shifted from instructional roles toward facilitation and observation, learning when to remove structure to allow genuine learner agency. Over time, it became clear that less instruction did not reduce engagement; in many cases, it increased it. The transdisciplinary planning with experts from different fields deepened shared understandings of how to support exploratory learning. Partners reported a more experimental atmosphere and greater willingness to try unfamiliar approaches across their organisations.

What continues

The OpenLab format has been integrated into Kersnikova's regular annual programme. Spirulaktor will continue as part of the institute's offer to schools. Partners now actively consider one another in future proposals and programme development. Insights from the Learning Venture are also being embedded into a revised mentorship programme, extending the project's impact on the local learning ecosystem.

Challenges and adaptations

The July 2024 fire was the most significant external challenge, displacing activities and narrowing the scope of experimentation. OpenLab was delayed by two months and the team worked from borrowed spaces throughout. A further learning point was that co-designing across disciplines was enriching during planning but needed more joint facilitation during implementation, something Kersnikova would prioritise in future iterations.

2.8 Switzerland: Fresh Water, Making and Youth

Led by Onl'fait, Geneva

Context and challenge

In Geneva, Onl'fait, a community makerlab, chose to focus on fresh water and glaciers. Fresh water is central to everyday life in the region because of lakes, rivers and torrents, while glaciers are a major source of public concern. The theme proved particularly relevant because, as a makerlab, Onl'fait could explore changes in consumption habits: most of Switzerland's water consumption actually comes from abroad and it is not easy to explain why water should be a concern in an environment perceived as water-rich. The glacier theme was largely abandoned when it proved difficult to connect to the core LEVERS

principle that actions drive beliefs; instead, it tended to highlight the perceived powerlessness of individual action in the face of Swiss glacier melt.

The Learning Venture

Onl'fait brought together a working group of 16 Geneva-based associations, of which seven participated regularly. With support from the sustainability teams of the Municipality and the Canton, the venture decided to target teenagers directly, not via schools, recognising this as a very challenging group but believing they could be reached through the collective resources and expertise LEVERS offered. Monthly meetings over nearly two years (20 in total) combined expert speakers, shared learning and collaborative planning, each ending with a shared lunch.

What happened

During the first year, the Learning Venture organised 11 activities during a Climate Week in November 2024, including a militant action with water graffiti, a movie-and-pizza night on climate and a disco soup using vegetables that were being wasted. Despite strong enthusiasm and the involvement of five teenagers from the network, external participation was extremely low: fewer than 30 people across all activities. This was a wake-up call.

In early 2025, Onl'fait facilitated an honest reflection on the failure. Rather than planning more activities and hoping for better attendance, the team worked backwards, starting from the change they wanted to observe and only then defining the activities that might produce it. This pivot led to a series of longer-term, learner-led projects: classroom activities on water co-created by a secondary school class at the School of Commerce; an artistic maquette using recycled materials with teenagers experiencing school dropout; and seven youth-led water projects financially supported through the À nous de jouer platform.

One of these projects brought Lake Geneva into the Learning Venture meeting room. Two female engineering students from EPFL placed a planktoscope on the lunch table, a small, simple tool to observe plankton. They talked about their expedition on the lake, about stopping, observing and taking time to look closer. They explained why plankton matters: it is the base of everything, reacting quickly when the lake changes. The planktoscope is not only about science; it is about making knowledge accessible. The room was calm, but between bites of lunch, questions and ideas appeared.

What shifted

The Geneva Learning Venture became an entry point for exchanges with the Municipality and the Canton on issues related to education and sustainability, an outcome Onl'fait is

particularly proud of. The Learning Venture has been invited to contribute to the Maison de l'Avenir programme, a new municipal initiative and to present on youth and climate to Geneva municipalities.

For learners, the team believes participants experienced new ways of working: co-creation, making, multidisciplinarity. Some of the teenagers who participated in the art/making project at Onl'fait continue to visit the makerlab, either to create something or simply to spend time in an environment they find inspiring.

What continues

The Learning Venture working group is expected to continue in some form, evolving and adapting as the Maison de l'Avenir develops. Onl'fait plans to develop sustainability-focused modules for vocational training and to refocus on making, technology and science as core offerings. The Learning Framework will continue to serve as a guiding reference for daily work.

Challenges and adaptations

The biggest challenge was engaging teenagers outside of school. The venture never managed to work with groups larger than five learners, and regular participation was also an issue. This was a calculated risk (trying to reach teenagers without intermediaries) but it required constant adaptation. A second challenge was integrating researchers meaningfully into co-creation processes. The team came to question whether co-creation is the right methodology when participants lack a sufficient knowledge base, suggesting that a mixed format, with researchers establishing the framework and co-creation focused on parts participants already master, might be more effective.

2.9 United Kingdom: First Hand – Place-Based Learning for Green Skills

Led by Forth, London

Context and challenge

With the scale and pace of change required to address climate change, and the slow response of industry and learning institutions to upskill the workforce, Forth, a creative research studio, set out to experiment with alternative ways to learn outside traditional classroom-based skills development. The premise was that by going straight to the places and people driving sustainability and change (waste plants, factories, farms, repair hubs), learners could be immersed in contexts that inspire, challenge and equip them with relevant ideas, knowledge and skills.

The Learning Venture

Forth developed a tailored curriculum drawing on the European GreenComp sustainability competence framework (Bianchi et al., 2022), Skills Builder essential skills, and the Edge Foundation's signature practices of project-based, real-world and community-connected

learning. The Learning Venture operated under the name First Hand, an event-led climate learning platform. A Community of Practice launched in March 2024 met every six weeks, with a 71% attendance rate. Typical participants included representatives from local government, advocacy organisations, community groups, researchers, designers and postgraduate students. Over the project, 252 people engaged across 20 live and online events.

What happened

The Learning Venture delivered two series of place-based learning events and walking tours in 2025, connecting participants to London's most innovative sustainable food and material systems actors.

At the iconic Victorian Thames Tunnel, 30 people from industry, education, local government and community organisations explored what it took to upgrade London's 12th-century infrastructure: innovation, creative problem-solving, resilience, communication and collaboration. Participants took part in workshops drawing parallels with contemporary infrastructure transition, and UCL's Kris de Meyer shared insights from behavioural neuroscience on the power of self-persuasion.

At the Fixing Factory, a community repair hub dedicated to extending the life of everyday electronics, a small group took a behind-the-scenes walking tour, starting and ending in the local library for a skills primer and an imaginative exercise on envisioning possible futures. Along the Thames, participants explored two major urban infrastructure projects, with one attendee reflecting: *"I loved the silent walk; it made me feel more connected to the group in a relaxed way."* At urban farms and food hubs across London, participants explored sustainable food systems from surplus redistribution to regenerative growing.

What shifted

All participants reported gaining new knowledge, skills or insights applicable to their own work. All reported making new contacts or connections. One local council officer described gaining *"ideas of different ways of approaching the food landscape"* and noted that the most immediate takeaway was the model of how their team might support the system to learn better together.

The Community of Practice generated several collaborations: Engineers Without Borders were invited to a podcast interview with The Green Edge (a newsletter with reach in 78 countries); The Felix Project drew on a fellow member's retail expertise to develop a new food preservation venture; and one member negotiated a revision to their job description to include formal responsibility for sustainability at a major British retailer. Participants

adopted frameworks shared during sessions, particularly Three Horizons and the Seven Insights, and applied them in their own organisations.

What continues

The Community of Practice will continue with expanded membership. Open Works, a new database and knowledge hub for open and place-based learning, launched in autumn 2025 and has already attracted interest, with over 30 practitioners and speakers mobilised from local government, education and the third sector. Forth sees this growing group of allies as a signal that a movement for open and place-based learning is building.

Challenges and adaptations

Industry engagement proved unexpectedly difficult, with a noticeable shift away from climate as a corporate priority through 2024–2025. This led Forth to pivot toward local government and advocacy organisations as primary audiences. Ambitious plans for immersive field trips to Orkney and Barcelona fell through: building trust and relationships remotely required more time and resources than anticipated. Free events brought high drop-out rates, while weather (both storms and the first warm day of spring) affected attendance unpredictably. Being a small creative studio rather than an institution offered agility but limited convening power and reach.

3. PATTERNS ACROSS THE LEARNING VENTURES

This chapter presents the key patterns that became visible across the climate action projects and portfolios of projects outlined in Chapter 2. The analysis draws on the case narratives presented there, but also on longer accounts provided by consortium members for this deliverable, as well as site visits made by the coordinator to consortium member locations, publicly available materials created by the consortium and Learning Ventures, background documentation including the original proposal for LEVERS and, to a small extent, data collected for the evaluation task (D6.3).

The chapter is organised around seven themes explored through the cross-case analysis. It begins with the conditions under which Learning Ventures became possible (3.1) and the partnerships that formed to sustain them (3.2), before turning to how science learning manifested across very different settings (3.3) and the role that nonhuman actors and living systems played in shaping what was possible (3.4). It then turns to what happened when things did not go according to plan (3.5), what forms of legacy are emerging (3.6), and finally, an assessment of the principle that actions drive beliefs in climate learning contexts (3.7). These themes are not standalone but interconnected and the analytical approach was structured rather than emergent, drawing on the six categories described in Section 1.2 (entry conditions, actor constellations, key constraints, major shifts, nonhuman influences and forms of continuation). These were developed in advance as relational prompts to guide a comparative reading of the cases. This is not a grounded theory approach in which themes arise inductively from open coding, but rather an interpretive analysis shaped by the commitments of the LEVERS Learning Framework and informed by the scholarship outlined in Chapter 4. The seven themes presented here reflect what became visible when the cases were read through that lens and it is acknowledged that a different framework would undoubtedly foreground different patterns.

3.1 Entry conditions

Across the sites of learning described in Chapter 2, starting or entry conditions played a key role in shaping what emerged. These entry conditions include central or driving climate issues, relationships and the role of place, infrastructure or material conditions.

The LEVERS Learning Framework v1.0 (D1.1) guides towards selecting a central "social justice climate issue" as a starting point / entry condition, inspired by the central role of a "social justice science issue" in Youth Participatory Science (Morales-Doyle & Frausto, 2021). In practice, this did not always play out in a linear manner. For example, in several

cases, the entry condition was itself a justice issue: extreme heat in Brussels falls hardest on communities with the least access to green space and housing that can be easily cooled; declining catches in Cyprus threaten livelihoods that are already economically precarious; and on Lesvos, the condition of school buildings reflects longstanding underinvestment in island infrastructure. In many others, the issue was identified through a more deliberate process of scoping and negotiation between the coordinating partner and the local actors they convened. In Westport, Ireland, for example, a highly active community group and a social enterprise with established expertise in perennial polyculture helped shape the direction of the project, linking a specific site with a widely-experienced but locally-grounded climate issue: the vulnerability of food systems and the challenge of growing and accessing plant-based food locally. In São Miguel Island, Azores, Expolab's team - a selected group of Eco-School teacher coordinators and a broader group of collaborating institutions - jointly tailored an educational programme to foster the protection of their native forest biodiversity, replicating Laurissilva gardens in several schoolyards.

This diversity of entry points is not a weakness of the model but a feature of how climate partnerships form in practice. As Davies (2026) observes in the context of science communication, activities under this umbrella term frequently serve purposes beyond the communication of science itself, including organisational sustainability, professional identity and institutional positioning. Climate education partnerships are no different: organisations join for a range of reasons, and the climate issue is not always the primary one. Partners may be rowing in the same direction but for quite different reasons: one organisation may be motivated by community wellbeing, another by the opportunity to diversify its funding base, another by a personal sense of climate urgency among its staff. The Seven Insights capacity building programme recognises this as a normal feature of collaboration rather than a problem to be solved. What matters is not that motivations align perfectly, but that they are surfaced and understood, because when they remain unexamined, the climate dimensions of the work can quietly become secondary to other agendas. Across the nine cases, the strongest ventures were those where entry conditions, whatever their origin, were honestly examined.

In other cases, the entry conditions pointed beyond any single climate issue to systems and infrastructures: for example, the need for rapid, affordable upskilling in industries facing climate disruption in the UK and the ageing school buildings on Lesvos that made the case for schools themselves to work toward carbon neutrality in Greece. In both cases, the infrastructure of learning itself became part of the problem to be addressed, suggesting that education for the green transition cannot be separated from the material and economic systems in which it takes place.

3.2 Actor constellations and how they evolved

Across the nine cases, two patterns of formation are visible. In some Learning Ventures, the actor constellation was assembled in response to the entry condition: a challenge was identified first and partners were then sought who could address it. In others, the constellation came first — existing relationships and institutional capabilities shaped what the Learning Venture became. In practice, most cases involved elements of both patterns, with the balance shifting over time as the work and resultant projects evolved.

In general, constellations proved complementary, regardless of how they formed. The project's framing around climate justice and the design commitments of the Learning Framework meant that partners across all nine ventures were working within a shared set of principles (transdisciplinarity, place-based learning, participatory methods, equity), even when their local configurations were very different. The common feature is what these carefully-structured collaborations made available to learners from within their own local learning ecosystem. Children in Serbia encountered insects in habitats they had helped build, an experience made possible because an entomologist, a kindergarten teacher and a botanical garden curator had planned it together along with the LEVERS consortium member CPN. In Brussels, teenagers had the opportunity to work with a physicist, an architect and a Stickydot team member with a background in the museum sector, with each contributing something the others could not to the process of creating the design of the final shade structure. The breadth of the actor constellations determined the range of knowledge, practices and perspectives that learners could access. This was visible in individual moments as well as programme design. In Brussels, a young student interrogated a mentor about her choice to work in sustainable design practice, asking her about her values and whether sustainability was more important to her than money - clearly recognising the complex decisions facing those working in climate-focused sectors. The question could only arise because the mentor was present as a collaborator in work the students were undertaking themselves, rather than simply a guest speaker.

3.3 Modes of Science Learning

The LEVERS project emerged from a European Commission call focused on Open Schooling for Science Education. The consortium is grounded in science education research and practice across formal and non-formal contexts, with deep expertise in public engagement with science and participatory science communication. In recent years, the consortium members' activities have reflected a growing concern with climate change, biodiversity loss and socio-ecological disruption, and a recognition that science education cannot remain peripheral to these realities. Across the project, consortium members

converged on a shared understanding that science education must play a central role in shaping just and liveable futures and that climate and sustainability education are strongest when they are grounded in genuine scientific inquiry rather than treated as a separate domain of awareness-raising and values work.

Throughout the LEVERS project, the focus for the Learning Ventures was to support meaningful participatory projects tackling climate justice issues of consequence for the communities and learners involved. The LEVERS Learning Framework prescribed commitments to transdisciplinarity as well as equity, inclusion, accessibility and belonging and so the role of science and science learning varied greatly across the learning scenarios.

Across the cases, science was used by participants towards environmental and sustainability goals as part of their climate action projects, developing 'environmental science agency' - described by Ballard et al. (2017) as the " ways that young people use science learning and participation as a foundation for action related to environmental sustainability" (p. 67).

Cross-case analysis of how science featured across the nine Learning Ventures revealed three distinct modes of science learning, each producing different relationships between learners and scientific knowledge.

In the first mode, which we describe simply as '*learning science*', learners acquired scientific knowledge, methods and vocabulary through direct engagement with living systems. This was most evident in Portugal, Serbia and Slovenia. Students in the Azores identified endemic species, monitored biodiversity over successive seasons and contributed to ecological restoration. Children in Belgrade learned entomology, urban ecology and habitat relationships through sustained observation of pollinators. Young people in Ljubljana worked with spirulina cultures, fungal growth and bacterial fermentation and in self-directed projects demonstrated the full cycle of scientific reasoning from problem identification through experimental design to working outcome. What these cases share is that science was embodied, sensory and observational, with theory following experience and action producing scientific understanding.

We title the second mode *'learning through science'* and, in this case, scientific concepts were present and active but they were not necessarily always named as such or approached through the framing of a science lesson or activity. This was characteristic of Belgium, Greece and Ireland. Young makers in Brussels worked with thermodynamics, airflow and material properties as design constraints and had a physicist as a mentor, but science was mainly framed as in service of the making, rather than the central goal. Children in Greece analysed school energy and water systems with genuine analytical rigour but understood themselves to be proposing practical improvements, not conducting scientific inquiry.

Community members in Ireland learned about soil health, composting and biodiversity - in some cases from scientists - but the learning was always framed as being in service of the crops in their food forest rather than science or climate literacy. In these cases, science was the medium rather than the message.

In Cyprus and the UK, we encounter a third mode that we title *'learning to live with science*': contexts in which the sciences of planetary systems change are fundamentally reshaping livelihoods and landscapes. Fishing communities in Cyprus are coming to terms with the reality of marine biodiversity loss and climate change - for them, it is a lived reality of dwindling catches warming seas rather than the graphs and charts of science. Professionals in the UK encountered food, waste and energy systems that exist because of historical scientific and engineering decisions but which are now grappling with climate-change-induced stress. In both cases, the learning is about developing a relationship with consequential changes that rely on science, rather than learning how to produce scientific knowledge. As a result, they are developing agency within a world being reshaped by what science reveals. This is arguably the most urgent mode for adult and community learners whose lives depend on navigating scientifically-driven change, even if they will never conduct scientific research themselves.

Switzerland demonstrates aspects of all three modes: lectures and researchers supported *science learning*; participatory projects allowed for *learning through science*, and the abandonment of the glacier theme offered a moment for *learning to live with science*, indicating that when despair is generates despair, it is time to take a side-step and find a path towards productive action.

Overall, the modes of science learning in these newly established Learning Ventures can be identified broadly, opening up avenues for further and more fine-grained scholarly investigations of these types of science learning, embedded within climate learning ecosystems rooted in principles and ethics of care (Ibourk & Morrison, 2026, see Section 4.2).

3.4 The role of more-than-human actors and living systems

Across the cases presented in Chapter 2, more-than-human actors and living systems showed up as active participants in shaping what became possible for participants.

In Ireland and the Azores, plants were of central importance, as the learners grew to know more about them, as well as the soil, insect and bird life they are in reciprocal relationships with. In Serbia, the pollinators took centre stage, while in Switzerland, plankton became the teachers, with the humans learning to pay attention differently to what they can tell us about the lake. In Slovenia, the Learning Venture dealt with the unpredictability of fungi and

spirulina cultures as well as an unexpected fire in their premises. Projects in their OpenLab allowed students to follow their interests and blend together plants and technology in sophisticated inquiries in the more-than-human realm. Weather, both good and bad, affected plans and activities in the UK and Ireland on multiple occasions. In Belgium, extreme heat shaped lived realities and was the impetus for the Karavan'ke project. In Cyprus, the sea became a central actor, as changing fish stock, fishing policies and marine pollution continually affect coastal livelihoods. In Switzerland, the retreat of glaciers was a pervasive lived reality, shaping the emotional and intellectual landscape of the Learning Venture so profoundly that the team ultimately set the glacier theme aside when it produced paralysis rather than agency.

These encounters highlight a recurrent issue in education projects: living systems have different rhythms and tempos than academic calendars or funding cycles, and therefore invite a more relational ontology and productive relationship with unpredictability. Care emerged as a central organising principle across many of the cases: care for plants and organisms as well as for the humans tending them. The practice of an ethic of care for a living other or a living system invites a different kind of reflection on accountability, interdependence, and vulnerability, emerging as a powerful driver of learning and engagement with sustainability and climate action.

Principles of place-based learning and ecopedagogy were central to the LEVERS Learning Framework (D1.1) and across the nine cases, the consortium extended their conception of 'place-based' to include all beings that inhabit, shape and are shaped by a place. This required a fundamentally non-Anthropocentric stance: considering the world as part of Nature, rather than Nature as something beyond the human which exists only to provide for the needs and wants of humans (Misiaszek, 2023). This non-anthropocentric stance also carries justice implications. In Portugal and Serbia, and in activation events in Ireland, the intergenerational aspect of socio-ecological challenges was highlighted through connections to past and future generations. The question of whose knowledge counted - whether scientific, traditional, professional or experiential - ran through every actor constellation.

The material outcomes (living or otherwise) of these cases exist as learning infrastructures that outlast the formal duration of the project. They continue to grow and decay: native biodiversity niches, pollinator corridors, a food forest, gardens, insect hotels, compost systems, monitoring practices and cultures of stewardship. Creating each of these was in itself a climate action, but their contributions to learning and planetary wellbeing go far beyond a quantitative measure of carbon sequestered from the atmosphere. Rather, these projects are better understood as a series of experiments in utopian pedagogy (Webb, 2017) - summoning the radical imagination of groups of participants to support them to

collectively and lovingly bring positive and hopeful futures into being in the present (Meadows, 2008).

3.5 Failure, honesty and adaptive capacity

The period 2023–2026 has been far from straightforward for educational projects in Europe. Geopolitical instability, record-breaking global temperatures and extreme weather events including storms, floods, heatwaves and wildfires have formed the backdrop against which every Learning Venture has operated [1]. Many of the cases in Chapter 2 faced specific adversities and how they responded reveals important features of experimental educational work in uncertain times.

In Slovenia, a fire at Kersnikova's facilities in summer 2024 meant that the educational spaces and biolab and maker equipment were unavailable for a long period during the LEVERS project lifetime. The team adapted with characteristic resourcefulness, including moving venue and using borrowed lighting and heaters and a makeshift sink. The story of their fermentation workshop in this space featuring lively conversation and salty preserves conjures up images of family camping trips and was likely a memorable experience for all involved.

In Serbia, political instability meant that the majority of the formal educational institutions in the country were completely shut down for a prolonged period, generating multiple challenges for CPN as they came into the main period of delivery and meaning that they had to jettison their original plans to work with primary schools. However, the commitment of the already established Learning Venture proved a strength here. The core group of collaborators, including academic researchers and staff from the botanic garden, continued to work together and elected to switch their efforts to working with kindergartens that were not affected by the boycott and suspension of activity. This pivot led to unexpected learnings and new potential avenues of future activity for CPN and other Learning Venture members in the early childhood education sector. The relative ease of the shift in focus is a testament to the capacity-building and joint visioning carried out in advance of engaging students, a key design feature of the Learning Venture model.

In contrast, in Switzerland, low youth turnout and engagement with events that had been meticulously planned led to an honest reckoning on what went wrong and a deeper commitment and re-engagement with the systemic design process, reaching a stronger and more focused position in the second iteration of their Learning Venture activities with students. The productive grappling with 'failure' is a key feature of the Swiss case. The

[1] Source: European State of the Climate (ESOTC) annual report compiled by the Copernicus Climate Change Service (C3S): https://climate.copernicus.eu/ESOTC

reflection also highlights the tensions felt by the Onl'fait team – on the one hand, recognising positive outcomes for the transdisciplinary climate projects, but on the other hand, regretting that science, technology and making did not play a stronger role in the work of LEVERS in Geneva, especially given that it is their core institutional focus.

Adversity was not the only catalyst for adaptation. In several cases, partners chose to move beyond their institutional comfort zones, with results that reshaped their understanding of their own organisations. In Belgium, Stickydot - an organisation familiar with working on participatory science, citizen science and science policy - took their first foray into working locally with educational organisations and young people, something that has strengthened their relationships with other institutions in their community and opened up promising new directions for future work. In Ireland, the mismatch between university and community partner working cultures led TCD to reconsider its role within the Learning Venture. Rather than persisting with a partnership model that did not play to its strengths, the team redirected toward alternative collaborations at national scale in formal education, work that proved both more productive and more aligned with their expertise in teacher education and educational policy. The Westport project continues under strong community ownership, while TCD's most meaningful contributions emerged from the pivot. The UK Learning Venture also changed direction after reflecting on initial prototyping: in their case, as a response to changing priorities in the UK in relation to Environmental, Social, and Governance (ESG) policies in the industries they were targeting.

The human cost of partnership difficulties should not be understated. Political or climate instability, institutional pressures or the gap between what a team envisions and what proves possible can lead to tension, affecting morale, wellbeing and engagement with the project. Changes in personnel can leave already-stretched team members absorbing months of lost capacity. These experiences are rarely documented in project reports, but they shape outcomes as surely as any methodological choice. The Learning Venture model asks a great deal of the people who hold it together, and the emotional and institutional pressures on the humans undertaking this work deserve acknowledgement alongside the pedagogical findings. Climate work is demanding not only intellectually but also personally and a model that depends on sustained relationships, honest reflection and adaptive capacity must extend the same care to its practitioners as it aspires to offer its learners.

3.6 Forms of continuation and legacy

A recurring question for funded projects is what remains when the funding ends. Across the nine Learning Ventures, continuation takes several distinct forms, and the variety itself is instructive. As described in D2.2 (Learning Ventures Long-Term Sustainability Report), planning for continuity from the outset can significantly strengthen the likelihood of projects, partnerships and infrastructure lasting beyond the funded lifetime of a project.

The most visible legacies are physical - native biodiversity niches in schoolyards, pollinator corridors, a food forest, a mobile shade structure and public art installations that double as insect hotels and multimedia storytelling devices. These are living infrastructures that require ongoing practices of care and can act as vessels to tell the stories of action that are so needed in community climate action (De Meyer et al., 2021).

A second form of continuation is programmatic. In Portugal, the Biodiversity Niches Programme and accredited teacher training have been renewed for 2025–2026, with a sixth school added and a goal of expanding by one school per year. In Ireland, the success of embedding LEVERS approaches into a teacher education programme on climate and sustainability has led to the development of a proposed micro-credential module at TCD aimed at in-service teachers. In Slovenia, the OpenLab format has been integrated into Kersnikova's regular annual programme and Spirulaktor continues as part of their offer to schools. In the UK, the Community of Practice will continue with expanded membership and Open Works, a new database and knowledge hub for place-based learning which was launched in Autumn 2025. These are cases where LEVERS activities have been absorbed into organisations' core work and adapted for different contexts rather than remaining as standalone projects.

A third form is relational. Partners who worked together through LEVERS now consider one another for future proposals, funding bids and collaborations that would not have existed otherwise. In Greece, the theatre company involved in the Learning Venture received a national grant for sustainability-focused work, with funders citing their demonstrated experience in sustainability education. In Switzerland, Onl'fait has been invited to contribute to the Maison de l'Avenir, a new municipal programme and to present on youth and climate to Geneva municipalities — institutional recognition that emerged directly from the Learning Venture. In Slovenia, partners now actively seek one another out for programme development. These relational legacies are harder to measure than infrastructures or renewed programmes, but they may prove more durable.

The networks built through Learning Ventures also created pathways that amplified the visibility of climate work beyond the consortium and the projects described in Chapter 2. In Ireland, several rural organisations who participated in LEVERS activation events were invited as guest speakers for START 2024, Trinity's European Researchers' Night[2], while in Portugal, a young climate activist was overjoyed to show her family her photograph in Expolab's LEVERS interactive game at Macaronight[3], part of European Researchers' Night

[2] https://www.start-ern.org/2024-talk-tent

[3] https://macaronight.eu/

2025 of Macaronesia, her activism given a starring role in a game played by over 2500 visitors.

Learnings also travelled from the Learning Ventures back into professional practices beyond the consortium. In Portugal, one NGO reported recreating LEVERS trainings for colleagues who had not been involved in the initial Learning Ventures, while in the UK, Community of Practice members adopted frameworks from sessions and applied them in their own organisations, with one member negotiating a revision to their job description to include formal responsibility for sustainability. While less visible, these may be the most significant kinds of legacies: when what someone learns through a Learning Venture changes how they work after it ends, the project's reach is no longer bounded by its funding period.

The LEVERS twinning programme, which paired ventures with complementary strengths, added a further dimension and in some cases these cross-national exchanges became part of the learning experience itself. The twinning between LATRA in Greece and Kersnikova in Slovenia, which connected theatre-based climate justice work with art-science pedagogical approaches, led to the co-creation of new non-formal learning models and a joint Erasmus+ project to develop them further. The twinning model suggests that actor constellations need not be bounded by geography: the most productive partnerships may be those that connect different ways of knowing across contexts rather than assembling all necessary expertise in a single location. The structural features of how Learning Ventures were assembled and how partnerships between ventures were facilitated through twinning are documented in detail in LEVERS deliverables D1.2, D1.3 and D3.2.

3.7 Actions drive beliefs: how the principle played out in practice

The principle that actions drive beliefs, introduced in Section 1.4, was not merely taught through the capacity-building programme but tested across all nine Learning Ventures. The cases illuminate this principle at three different levels. Firstly, for learners, it is visible in Serbia, as children built insect hotels and developed an understanding of pollinators that they could draw on months later. In the Azores, students planted and monitored endemic species and became actors in biodiversity protection. In Brussels, students who initially felt powerless in the face of climate change built something in service of their community and confidently demonstrated their knowledge as they presented their work to professionals with pride. In Greece, children who audited their school's energy and water use and proposed fifty practical interventions had moved from watching a performance about sustainability to reimagining how their school could work. In each case, action created and sustained the conditions in which learning was personally relevant and necessary. A common feature is the youth as producers: of new knowledge, proposals, objects and arguments. The shift in agency was not a precondition for action but a consequence of it.

Secondly, for educators and professionals, the principle manifested in a shift in professional understanding. As described in D2.1, the capacity-building programme delivered by UCL Climate Action Unit did not provide climate content for consortium members to deliver but, rather, equipped them with an understanding of the science-based principles that underpin effective engagement with climate initiatives. This includes the insights that awareness-raising alone does not change behaviour, how actions shape beliefs rather than the reverse, and how to navigate polarisation and build common vocabulary across different value systems. In Portugal, a Learning Venture member reported sharing the insights back to colleagues. In the UK, Community of Practice members adopted frameworks from the programme and applied them in their own organisations, with one member negotiating a formal sustainability remit into their job description.

The LEVERS project as a whole was designed as an experiment in applying the principle structurally. It created conditions for climate and environmental education: a shared framework, capacity building grounded in evidence, systemic design tools, and sustained support, in which consortium members' own experience of doing climate education differently would reshape their practice. The "turtles all the way down" metaphor used in D2.1 captures this well. Collaborative capacity had to be built at every level, from the consortium itself to the core Learning Ventures to the extended partnerships to the learners. At each level, the mechanism was the same. People were not persuaded that action-first approaches work; they experienced action-first approaches working and drew their own conclusions.

4. Discussion, Reflections and Implications

This chapter steps back from the individual cases and cross-case patterns presented in Chapters 2 and 3 to consider what the LEVERS experience means for the broader field. It begins by situating the findings within the current landscape of environmental and climate education research (4.1), before examining what the cases reveal about designing for climate learning ecosystems and where the project fell short of its own ambitions (4.2). It then addresses the limitations of this report (4.3) and concludes with a reflection on what this work contributes, what remains unresolved and what would be needed to bring these approaches into formal education at scale (4.4). Throughout, the tone is deliberately reflective rather than conclusive. Three years of working across nine countries with diverse partners has generated as many questions as answers and we have tried to honour both.

4.1 Implications for Education in the Anthropocene

The current era is marked by rapid and unprecedented change across technological, socio- and geo-political, environmental and climatic domains. Education in these contexts is necessarily contextual, relational and adaptive. As such, there is no universal model for environmental or climate education (Ardoin et al., 2026), education for sustainable development (UNESCO, 2020), or environmental education for the Anthropocene (Cole & Malone, 2020). Nonetheless, the synthesis of findings across 546 studies by Ardoin et al. (2026) identifies six themes in education which can be effective for fostering environmentally valuable outcomes. All of these can be identified in LEVERS Learning Ventures, indicating the potential of the approach to be scaled and adapted to other contexts.

Table 4.1: Themes that contribute to effective environmental education

Theme	Description
1	Employing diverse teaching and learning approaches
2	Fostering participatory methods
3	Including direct action components
4	Focusing on local community settings
5	Connecting to personally relevant information
6	Collaborating with experts and stakeholders

(Source: Ardoin et al., 2026)

These six themes appear across the Learning Ventures as interconnected consequences of the model itself, rather than discrete programme features. Intentional and long-term alliances with external cultural, scientific and academic actors (Theme 6) made diverse approaches to teaching and learning possible (Theme 1): learners encountered meaningful experiences through walking, dining, fermenting and brewing, forest cinema, games, theatre-making and music, as well as practical activities in gardens, classrooms and labs. The place-based and climate justice commitments of the Learning Framework meant that in all cases, learning was locally grounded (Theme 4). Participatory approaches and shared decision-making led to learning that was personally consequential (Themes 2 and 5) - particularly evident in the choices and decision-making by learners in Brussels, Slovenia and Switzerland. Most significantly, Ardoin et al. (2020; 2026) identify embedding action directly into programmes (Theme 3) as the most effective pathway to observable environmental impact and report that sustained action produces stronger outcomes than one-off events. This aligns with LEVERS focus on action-orientation[4]. The action projects, such as those undertaken in the majority of LEVERS cases described in Chapter 2, were designed for deep, sustained engagement and, as documented in Section 3.4, several have produced living infrastructures that act as catalysts for ongoing stewardship of the more-than-human world.

Finally, we situate LEVERS in the ongoing debate around the purpose and scope of science education (Rudolph, 2022; Osborne & Allchin, 2024; Bazzul, 2020, Tolbert, 2026). The LEVERS Learning Framework (Figure 1.1) that underpinned the projects developed by the nine Learning Ventures is rooted in a critical ecopedagogy foundation (Misiaszek, 2023). It advocates for a transformative activist stance (Stetsenko, 2014), in which educators and learners are equipped to resist extractivist, colonial, patriarchal and modernity-infused ways of being and to act instead in pursuit of just and sustainable futures. Through this lens, science education need not be a means to an end, directed toward economic competitiveness, technological advance or domination over Nature. As evident in the three modes of science learning identified in Section 3.3, LEVERS adopts an expansive understanding of science education: a way of learning to live with the world as it is now (Avraamidou & Torres Olave, 2025) and a means to equip learners of all ages to "imagine and fight for a world in which they and others would thrive" (Morales-Doyle, 2019, p. 489). The nine cases documented in this report are, in their different ways, experiments in what that understanding looks like in practice. They offer inspiration as well as practical tools for researchers and practitioners interested in exploring science education for just and sustainable planetary futures.

[4] cf. LEVERS D5.2: Putting Action First: Towards Whole-School Approaches to Learning for Climate & Sustainability

4.2 Climate Learning Ecosystems

A growing body of literature argues that the scale and urgency of the climate crisis demands forms of education that are not merely updated but fundamentally restructured. Leite (2024) calls for transdisciplinary, transgressive and transformative climate change education, while noting that implementation research into the collaborative infrastructure needed to sustain such approaches remains scarce. In their comment introducing a new section on climate change and environmental education in the prestigious journal Science Education, section editors Sezen-Barrie et al. (2025) describe "transformative climate and environmental education" and observe that modern systems of education are not equipped to integrate the "deep understandings of climate, solutions, and justice" that the present era of polycrisis demands (p. 5). In the European context, recent policy work by the European Education Area Working Group on Schools and Learning for Sustainability has made similar arguments, calling for curriculum change, whole-school approaches, leadership development, teacher education, and partnerships with communities and NGOs (European Commission, 2025).

Ibourk and Morrison (2026) bring these threads together in their model of a Communal Learning Ecosystem, a framework that foregrounds the partnership and relational infrastructures necessary to support and sustain transformative climate and environmental education. Their model emphasises co-design, adaptive strategies, relational trust-building and land-based positionality, arguing that caring, relationality and positionality must be central rather than peripheral concerns. They claim that such a model can serve as a framework for addressing structural challenges, sustaining collective action and co-creating just and sustainable educational futures.

The LEVERS Learning Ventures share significant common ground with this vision. The cases documented in this report demonstrate co-design across sectors, adaptive strategies in the face of institutional and climatic disruption, trust-building across very different professional cultures and a deepening engagement with place and living systems. The LEVERS Learning Framework's design commitments, particularly place-based learning ecosystems, systemic design and diversity, equity, accessibility, inclusivity and belonging, align with the direction Ibourk and Morrison (2026) advocate.

However, an honest assessment is that the LEVERS Learning Ventures did not reach the depth and maturity of a Communal Learning Ecosystem model. Ibourk and Morrison's framework offers a more sophisticated account of care, relationality and positionality across the diverse relational pathways in a given socio-ecological system than anything reported on in this deliverable or captured elsewhere in the LEVERS project. Several areas that their work foregrounds were not sufficiently developed in LEVERS: long-term evaluation and

implementation research, sustained attention to emotional engagement with climate learning and, most significantly, the transgressive dimensions of climate education as described by Leite (2024): attending to power, politics and structural injustice within partnerships and learning processes. While enshrined in the project title, LEVERS did not engage as deeply with climate justice as initially intended. This is not, however, a binary distinction between success and failure. Moving along a spectrum toward increased engagement with issues of power, politics and justice is itself a valid and necessary outcome. The Learning Ventures are now equipped with experience, relationships and infrastructure that position them to move further into this territory. The relational groundwork laid through LEVERS, including the capacity building, the honest reckonings documented in Section 3.5, and the adaptive responses to partnership difficulties, provides a foundation from which deeper justice-oriented work can grow. We would characterise LEVERS as moving toward a Communal Learning Ecosystem model, with the recognition that realising an ethics of care across diverse relational pathways requires ongoing, sustained and deliberate attention that extends well beyond a single project cycle.

The implications for policy follow from this. If the goal is to scale climate learning, the temptation is to standardise: to develop curricula, training packages and assessment frameworks that can be rolled out uniformly. The LEVERS evidence suggests that this approach may be self-defeating. What worked in these cases was not a curriculum but a set of design principles, applied differently in each context, by people with the capacity and confidence to adapt them and the honesty to admit when things did not go as planned. The policy briefs produced by LEVERS for youth education (D5.4, D5.2) and adult education (D5.5) make this case in detail, arguing for investment in learning ecosystems, place-based partnerships, portfolio and whole-institution approaches, and in educator capacity rather than standardised content. The challenge now is to build the relational and evaluative infrastructure that would allow such ecosystems to learn from themselves, and from one another, over time.

4.3 Limitations and open questions

Donna Haraway's (2016) phrase "staying with the trouble" refers to the need to stay grounded in present challenges and accountabilities to others (people, Land, species) rather than rushing to neatly resolve and reduce complexity. This report is grounded in a commitment to staying present to the uncertainty, complexity and messiness of learning-in-action, as it unfolds. As such, the limitations in this report are described here in that spirit, as potentially productive sites for future attention.

Learner experience remains the most significant gap. While the narratives in Chapter 2 offer rich descriptions of the cases as they unfolded, they offer less systematic insight into how learners themselves experienced these processes over time. The nature and quality of

learning is largely inferred from activity and outcomes rather than investigated through the kinds of rigorous, analytical methods that learning sciences and science education research would bring to bear. Reflections on learning, shifts in perspective, emotional responses, or changes in sense of agency are often inferred through facilitator observations, participation levels, or follow-on engagement, rather than captured through sustained learner-centred data collection. As a result, this report should be considered as speaking to how learning was organised and enabled, rather than offering fine-grained analysis of individual learning trajectories.

This gap is a direct consequence of the nature of the project itself. LEVERS was funded as a Coordination and Support Action, meaning that its primary purpose was to establish partnerships, build capacity and develop shared frameworks rather than to conduct primary research on learning outcomes. This report reflects that orientation: it documents what was built, what happened and what shifted, but it does not offer the fine-grained, longitudinal evidence of learning processes that a research-oriented project would produce. The composition of the consortium both enabled and constrained what was possible. The majority of LEVERS consortium members are science centres, cultural organisations, community labs, social enterprises and NGOs. This was a strength: these organisations could operationalise the Learning Framework's design commitments with speed, creativity and community credibility. But it also meant that most partners did not have a local research partner available to deeply study the LEVERS processes as they happened. The only Learning Venture lead that is also a research-intensive university is TCD, and while they supported the project in Westport described in Chapter 2, ultimately, they pivoted to a more fitting role, that of a research partner working with a network of schools and educators at a national scale.

This in itself offers insights: the skills and institutional cultures required to build and sustain a community-facing Learning Venture are not the same as those required to research the formation of one, or to research learning and environmental action in a functioning one. The implication is that to support learning and long-term school- and community climate justice projects, Learning Ventures require funding models that can support different types of partners in different configurations, catering to the necessarily distinct but complementary roles. Much like living infrastructures and systems, the institutions and individuals responsible for research, practice and community engagement in climate action all operate at different rhythms, tempos and scales. LEVERS was an ambitious attempt at European scale, but the distances (geographically and operationally) between the different types of consortium members limited what type of research could be embedded. A nationally, regionally or locally organised Learning Venture, with dedicated research capacity embedded from the outset, would be better positioned to generate the kind of evidence this report can only gesture toward. Future iterations with increased research capacity could

invest in participatory and arts-based methods for data generation to capture learner experience, in line with the LEVERS commitment to participation and transdisciplinarity. The Learning Ventures now exist as established partnerships with willing participants, living infrastructures and tested pedagogical approaches: precisely the conditions in which embedded research-practice partnerships could thrive. This is already emerging in Ireland through the collaboration with the Irish Schools Sustainability Network and other climate education stakeholders and represents a natural and necessary next step for the model.

These challenges are not unique to LEVERS. The findings generated by Ardoin et al. (2026) across a range of reviews of environmental education point to the numerous benefits of participatory approaches to teaching and learning, but also highlight precisely the kinds of issues that were at play in the LEVERS project, namely the resource- and time-intensive nature of the processes, evaluation difficulties, challenges with competing agendas and power imbalances and the need for additional sensitivity in working in changing and challenging contexts. The limitations of the present report force us to echo the recommendations of Ardoin and colleagues, in suggesting that for Learning Ventures to reap the benefits of the worthwhile endeavour of participatory approaches in climate and environmental education, researchers and practitioners "must continue to develop context-specific methods, build and strengthen partnerships, engage in ongoing evaluation and reflection, and create supportive institutional environments for such approaches" (p. 7).

4.4 Contributions & Future Directions

This report has attempted to document nine experiments in climate and science learning, each shaped by its own unique contours of people, place and relations, while drawing out the patterns and principles that connect them. In doing so, it makes several contributions.

The nine cases presented in this report document learning in action. In many cases, the projects and programmes of the Learning Ventures are ongoing, being sustained beyond the lifetime of the LEVERS project. The accounts share honestly not only what went well, but also what did not; how challenges and obstacles were addressed, what was adapted and what remains unfinished or a work-in-progress. They are accounts of what happened when cross-sectoral partnerships tried to create the conditions for climate learning in real schools and communities and what became of the opportunity.

The report uses an analytical approach that aims to read practice relationally, exploring emergence feedback, and transformation and attending to unanticipated outcomes, tensions and learning-through-action. The interpretive approach described in Section 1.2, which used relational prompts rather than rigid coding schemes to support comparative sense-making, was designed to surface patterns without flattening the particularities of each case.

The three modes of science learning identified in Section 3.3 (learning science, learning through science, learning to live with science) are one such distinction: a way of recognising the breadth of scientific engagement present across the Learning Ventures without privileging formal inquiry as the only legitimate form. The third mode in particular, which accounts for adult and community learners whose relationship with science is not one of practice but of navigation, extends the terrain covered by existing work such as Ballard, Dixon and Harris's (2017) Environmental Science Agency. These modes are not claiming to be a typology, but simply a useful vocabulary to describe science learning embedded in ecosystems supporting climate action.

The proposed update to the LEVERS Learning Framework (Figure 1.1) which names reflection explicitly in a central role and which places action as the central engine of learning, is a response to what the cases revealed about climate learning, as opposed to a theoretical revision. Whether the three modes hold up as robust analytical categories and whether the centrality of action as a driver of learning will operate consistently across other contexts and climate justice challenges are two of the compelling empirical questions that future research embedded in Learning Venture settings would be well placed to investigate.

The report documents the principle that actions drive beliefs not as a theoretical claim but as a pattern observable across nine very different contexts, age groups and institutional settings. This is visible in examples like a kindergarten student in Belgrade remembering pollinator behaviour from months earlier and a professional in London negotiating sustainability into their job description. As argued in Section 3.7, the principle operated not only for learners but for the educators and organisations building the ventures, as well as the consortium itself - generating self-conviction through the process of embedding action-oriented approaches.

A further open question is what counts as evidence in this kind of work. The Learning Ventures produced community and school gardens, a travelling shade structure, recycling infrastructure, monitoring and data collection practices, advocacy campaigns, new relationships and changed professional identities. They also led to a range of emotional responses, including joy, pride, frustration and exhaustion. As described in Section 4.3, and as indicated by authors such as Sezen-Barrie et al. (2025) and Ibourk and Morrison (2026), the field is moving towards models of climate and environmental education that take care, relationality, and positionality seriously. The LEVERS project gestures towards this territory, and have produced a Field Guide (D1.3) to assist in navigating this terrain, but fully inhabiting it will require the kinds of sustained, embedded research-practice partnerships described in Section 4.4, and recognition and reward for the kinds of evidence that do not typically fit into impact frameworks. A model of climate learning that takes action seriously

must also take seriously the full range of human experience that action entails, including the toll it takes on the people who sustain it. The care that these projects extended to living systems must also be extended to the humans who inhabit them.

What remains unresolved begins with a question of scale. The Learning Venture model is labour-intensive. It depends on skilled facilitation, patient relationship-building, institutional support and sustained funding. The capacity-building programme led by UCL Climate Action Unit represents one pathway to scale: not replicating ventures but replicating the capacity to create them, by equipping practitioners with evidence-based principles they can carry into their own professional contexts independently. To borrow the familiar analogy "teach a man to fish and he'll never go hungry a day in his life": the ambition is not to catch more fish or even to teach more people to fish, but to move upstream and build the conditions in which others can understand the river and learn to fish for themselves. The evidence that this transfer is already occurring, in the trainings recreated by partners, the frameworks adopted by practitioners, and the proposals written and grants won using approaches developed through LEVERS, is encouraging. It suggests that the principle of actions driving beliefs may apply not only to individual learning but to the spread of effective practice: the most effective way to scale may not be to run more Learning Ventures but to equip others to run their own, grounded in the same evidence base. Whether this upstream approach can operate beyond the scaffolding of a funded European project of the scope of LEVERS remains an open question.

A related question is how these findings enter formal education. LEVERS was created in response to a European Commission call on Open Schooling for science education, a funding stream that has supported cross-sectoral partnerships between schools, science centres, community organisations and research institutions since 2017. Open schooling, with its emphasis on place-based, transdisciplinary, challenge-based learning through partnerships between formal and non-formal educators, is in many ways ideally suited to climate and sustainability education. As documented in the LEVERS policy brief on learning for sustainability in schools and communities (D5.4), open schooling principles align closely with the European Commission's recommendations on learning for the green transition, with the GreenComp sustainability competence framework (Bianchi et al., 2022), and with the call in the Eurydice Report (European Commission, 2024) for whole-institution approaches, enhanced educator training and cross-sectoral collaboration.

It must be noted, however, that the most generative Learning Ventures in this report operated alongside schools rather than within them. Schools featured as partners in several cases, notably Portugal, Serbia and Greece, but the learning that this report documents largely happened in gardens, makerspaces and community venues in both urban and rural neighbourhoods, rather than in classrooms. This is not a failure of the model but a reflection

of the structural barriers that the policy brief identifies: centralised curricula that leave little room for locally responsive work, assessment systems focused on content mastery rather than sustainability competences, a lack of financial support for schools to engage in cross-sectoral partnerships, and professional learning that is directed at individual educators rather than at the collective and institutional levels where change needs to happen. The Eurydice Report (European Commission, 2024) found that only a third of the 39 European education systems examined provide financial support to schools even for small-scale sustainability infrastructure such as school gardens and that dedicated sustainability coordinators with expertise in school contexts are available in only 11 of those systems. In most cases, they note that available funding is competitive or selective. The LEVERS findings are highly relevant to schools and school policymakers butbringing them into formal education requires infrastructural support that does not yet exist on a sufficient scale. Schools need non-selective access to resources for whole-school sustainability approaches, autonomy for educators to work across subject disciplines on locally relevant climate challenges, and mechanisms for funded partnerships with the kinds of organisations that led the Learning Ventures documented here: science centres, cultural organisations, maker educators, community groups and researchers. The accredited teacher professional learning programme led by Expolab and the proposed teacher professional learning micro-credential under development at TCD represent steps towards bridging this gap, but they rely on the initiative and capacity of small groups or organisations. Scaling Learning Ventures would require systematic provision of the kind of cross-sectoral support networks, curricula change, educator training and capacity building, and partnership funding that the LEVERS policy briefs (D5.4, D5.2, D5.5) and the broader open schooling community have been advocating for[5].

This report does not speak for the LEVERS project as a whole. The project has created a suite of outputs and deliverables, including the LEVERS Learning Framework (D1.1), and a report on the Learning Ventures Capacity Building (D2.1). The Learning Ventures Field Guide (D1.3) documents Learning Venture typologies and business models andshares the systemic design principles used in the process of creating them. Further reports document twinning between Learning Ventures (D3.2) and mentoring (D4.1), both key aspects of the LEVERS journey. Impact evaluation is documented in D6.3, while public-facing outputs include policy briefs on youth and adult education (D5.2, D5.4, D5.5) and a series of open educational resources and videos aimed at educators (D4.2 and D4.3). Taken together, this body of work provides the evidence base and practical grounding for policy advocacy: that **open schooling approaches grounded in action-oriented climate learning, supported by cross-sectoral partnerships and capacity building rooted in behavioural**

[5] Open Schooling Declaration: https://connect-science.net/wp-content/uploads/2023/06/2023-ODS-June-20th-2023-3.pdf

science, represent a credible and scalable pathway for embedding learning for sustainability across European education systems.

The proposition this report leaves behind is this: if the most powerful way to change what people understand about climate is to give them the experience of acting on it, then the most effective investment is not in more content but in more conditions for action. This might mean more partnerships, more places for learning and experimentation, more trust and more people equipped to hold the space in which learning from action can occur. That is what the nine Learning Ventures attempted, and what their ongoing lives beyond this project will continue to test.

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6. Appendix A: Supplementary Context by Learning Venture

This appendix provides additional context on Learning Venture activities and strands that were not foregrounded in the main case narratives (Chapter 2) but that formed part of the broader work. Not all Learning Ventures require a supplementary entry; entries are included where significant activity strands were omitted from the compressed narrative.

A.1 Cyprus: The Wider Learning Ecosystem

The main narrative (Chapter 2) focuses on three core strands: the EcoAction Bootcamp and women-led entrepreneurship, the sustainable fisheries workshops and fishing-net plastics collaboration, and the broader green entrepreneurship trajectory. However, the Cyprus Learning Venture encompassed a significantly wider set of activities that together formed a learning ecosystem across the island. Key additional strands are summarised here.

Empowering Youth for a Sustainable Future (at the UNECE ESD FORUM)

On 27–28 June 2024, CSI participated in the UNECE Forum on Education for Sustainable Development in Limassol, Cyprus, themed "Empowering Youth for Sustainable Futures: Entrepreneurship Education and Youth Engagement."CSI contributed by facilitating a World Café session titled "Youth as Catalysts for Agile Policy Development." The session explored pathways for meaningful youth participation in policymaking, addressing barriers to influence and highlighting participatory policy development, contextualised learning, and multi-actor engagement as practical approaches to strengthening youth impact.

Tackling Microplastic Pollution: Youth Workshop in Kathikas

On 21 July 2024, CSI facilitated a workshop on microplastic pollution at the Environmental Youth Camp in Kathikas, Paphos, organised by Friends of the Earth Cyprus. The session introduced young participants to the sources, environmental consequences, and policy dimensions of microplastics, encouraging critical thinking and more sustainable everyday choices.

Participants took part in hands-on environmental activities, including forest walks, decorating reusable bags, and conducting a beach waste audit at Lara Beach, where microplastics were detected even within a Natura 2000 turtle-nesting area. By linking field observations with scientific evidence and policy discussions, the workshop highlighted the balance between urgent climate activism and evidence-based solutions. Reflection

exercises and a World Café session enabled participants to co-design practical strategies, marking a shift from immediate reactions to more strategic, systems-oriented approaches to plastic use and community-led climate action.

Webinar Series and University Engagement

In March–April 2025, CSI hosted a three-part webinar series on Climate Activism, Climate Justice and Green Entrepreneurship in collaboration with the University of Nicosia Law Department. An additional classroom session at the University of Nicosia connected environmental engineering students with Learning Venture partners Gardens of the Future and Plastic Precious Company for interactive demonstrations of urban agriculture and circular economy practices.

Cultivating Change: Linking Nature, Innovation, and Sustainable Enterprise

On 23 August 2025, the Cyprus Learning Venture hosted *Brunch with Nature* at Christoudia Winery in Kato Drys, a hands-on workshop connecting biodiversity, regenerative agriculture, and green entrepreneurship. Participants explored soil health, learned from Ecophysis about pollinators, and crafted beeswax products. After a local brunch, teams co-designed and pitched eco-innovations using the Circular Business Model Canvas, ending the day with a reflective session on how ecological knowledge can drive circular, sustainable ventures.

Youth Innovation

CSI partnered with Junior Achievement Alumni Cyprus to support the E-Innovation Camp (September 2025), a one-day intensive innovation experience for youth aged 15–20 focused on reducing plastic packaging and promoting sustainable consumption. CSI also connected with the Young Cities programme, a national participatory initiative empowering young people to design solutions for local community challenges, inviting participants to engage with LEVERS activities.

Energy Communities

In collaboration with Friends of the Earth Cyprus and the LIFELOOP project, CSI organised Energy Community Café workshops (May 2025), introducing participants to energy democracy and citizen-led renewable solutions. A twinning session with the UK Learning Venture fostered cross-country learning on establishing and running energy communities.

Green and Social Entrepreneurship Course

From October 2025 to February 2026, CSI collaborated with ECOPRISE, GREENLAB and the Municipal Centre for Employment, Education and Entrepreneurship (KEEAED) to deliver

a weekly Green and Social Entrepreneurship course for adult learners, covering circular economy principles, sustainable business models and practical tools for green enterprise development.

Water Scarcity Hackathon

CSI supported and facilitated the Water Scarcity Hackathon led by Chrysalis LEAP under the Blue Ecosystem project, mobilising learners and connecting the initiative to the LEVERS learning community.

Together, these activities illustrate how the Cyprus Learning Venture functioned as a broad-based learning ecosystem, with CSI playing a convening and connecting role across sectors, demographics and geographies.

A.2 Ireland: National and Urban Strands

The main narrative (Chapter 2) focuses on the Westport food forest as an exemplar of the Irish Learning Venture's local, place-based work. However, the Irish Learning Venture was conceived as operating at two levels: a local exemplar project and a broader national strand exploring climate learning ecosystems across the Irish education system. This appendix briefly documents the additional strands.

Exploring Climate Learning Ecosystems with the Irish Schools Sustainability Network

In partnership with the Irish Schools Sustainability Network (ISSN) and supported by a Research Ireland New Foundations grant, in 2024 Trinity College Dublin launched Ar Scáth A Chéile, a project strengthening evidence for whole-school and cross-sector approaches to education for sustainability and climate action.

In an event co-hosted by LEVERS and Ar Scáth a Chéile, on November 20th, 2025, Trinity's School of Education and the ISSN convened educators, students, policymakers, industry representatives and researchers at the Trinity Long Room Hub for a one-day workshop to co-create a Field Guide for Climate Action in the Irish Schools Ecosystem. Following a presentation on LEVERS and the principle of "actions drive beliefs" by LEVERS PI Mairéad Hurley, the event featured talks from eight invited guests from climate and sustainability education, from primary and secondary schools, local and national government, NGOs, civil society, industry and academia. A panel discussion was hosted with school students and teachers, and throughout the day, participatory exercises were facilitated, including a walking debate and a time-travel-to-2030 visioning exercise, with students and adults working together across all aspects of the day to generate ideas for the future of the climate education ecosystem in Ireland. Key themes that emerged included: knowledge equity and

equitable access to climate and sustainability initiatives; place and play; and the role of the Irish language in sustainability education.

The project is using the LEVERS systemic design approach to explore the national climate learning ecosystem. It represents an incomplete but deliberate step toward a future national-level Learning Venture operating on LEVERS principles, illustrating that systemic approaches are necessary but slow work at a national scale. The next stage of the project is to create a dynamic site for community building and exchange, inspired by the Community of Practice and Open Works database created by Forth as part of the UK Learning Venture.

Place-Based Climate Action in South Dublin

In partnership with the Critical ChangeLab EU project, South Dublin County Council and Tallaght Library Makerspace, a team from Trinity's School of Education worked with approximately 15 Transition Year students (aged ~16) from Mount Seskin Community College. From November 2024 – February 2025, students explored relationships to their local area, biodiversity, cultural heritage and climate change through climate workshops, makerspace activities and field trips. They designed six outdoor installations for public spaces, each drawing on Irish folklore and mythology (including An Cailleach, Oisín in Tír na nÓg, and the Morrigan) to frame messages about reflecting on the past to guide present and future climate action. Students demonstrated learning across GreenComp Framework indicators (Bianchi et al., 2022) including systems thinking, problem framing, promoting nature, collective action and political agency.

Early Prototyping

The Irish Learning Venture also included an initial series of approximately six workshops in a secondary school (St Joseph's, Rush, Co. Dublin) testing approaches to climate justice around waste and fashion, and two outdoor events in Sligo and Donegal ("Tae in the Bog"), linked with peat bogs and traditional arts, exploring place-based and intergenerational learning, in partnership with the Wild Atlantic Nature LIFE project. These events used walking, traditional music and storytelling alongside expert ecologists working with local farmers, showing how bogs are part of cultural heritage as well as being important for climate protection.

A.3 Portugal: Teacher Professional Learning and Institutional Partnerships

The main narrative (Chapter 2) focuses on two core strands: biodiversity niches educational programme in Eco-Schools projects and a cross-community mentoring scheme connecting learners with researchers and industry stakeholders, and by accredited teacher training on "Biodiversity and Climate Change." However, the Portuguese Learning Venture encompassed two more actions that are worth mentioning here, that together engage more than 170 students, 12 teachers and +85 mixed learners (adults, families).

LEVERs Young Ambassadors at Expolab´s Ciência Viva School

Implemented at Expolab's Ciência Viva School, this action engaged primary students (4th grade students, 9/10 years old) in hands-on activities focused on learning about the importance of our native forest and planting endemic species. It aimed to foster early ecological awareness, responsibility, and a sense of agency through direct contact with local biodiversity. The Ciência Viva School of Expolab is an educational project of Ciência Viva - The National Agency for Scientific and Technological Culture, developed in partnership with municipalities and schools across the country, and integrated into a dynamic network of non-formal learning spaces. In these settings, preschool and primary school children spend a full week participating in activities at Ciência Viva centers, accompanied by their teachers, where school curricula are combined with hands-on experimentation and resources from scientific museology. Its mission is to support experimental science education and promote scientific and technological culture, fostering students' autonomy, critical thinking, collaborative work, and enthusiasm for discovery, with the support of scientific and higher education institutions.

Expolab's Laurissilva Community Garden

Located at Expolab's yard, created with families and community members in April 2025, this garden extended learning beyond schools. It promoted intergenerational learning, community engagement, and long-term stewardship of Laurissilva species through collective planting and monitoring activities. Since then, the Garden is now an educational tool, used in our day-to-day activities with schools, Expolab's Science Clubs, participants of our summer camps, serving also as a complete nature-based solution (NBS).

A.4 Switzerland: Teacher Professional Learning and Institutional Partnerships

The main narrative in Chapter 2 foregrounds the Learning Venture working group, the 2024 Climate Week, the pivot to learner-led projects and the challenges of engaging teenagers. Two additional strands merit brief documentation.

Teacher Professional Learning

Through collaboration with UCL, Onl'fait delivered two teacher-professional learning sessions to the Geneva community, reaching 15 participants. Three Learning Venture members also participated in a round table on climate for approximately 120 teachers.

Institutional Engagement and Industry Collaboration

Exchanges with the Municipality and the Canton (particularly representatives from the Departments of Education and Economic Affairs) were strengthened throughout LEVERS. Onl'fait participated in and gave a lecture at an official meeting gathering all municipalities of the Canton on the topic of climate and youth. In terms of industry collaboration, the most notable initiative was the production of LEVERS beers for climate in partnership with a local brewery, exploring the possibility of using recycled water in beer production. This resulted in 1,000 LEVERS beers, sold to fund the Association pour la Sauvegarde du Léman.

A.5 United Kingdom: Community of Practice and Open Works

The main narrative in Chapter 2 describes the place-based learning events and key outcomes. Two elements of the UK Learning Venture's infrastructure are documented in more detail here.

Community of Practice

The First Hand Community of Practice launched in March 2024 and met every six weeks, including two in-person meetings held as walking tours and learning events. The group maintained a 71% meeting attendance rate. Members included representatives from local government, advocacy organisations, community groups, researchers, designers and postgraduate students. The Community of Practice served as a mutual support structure and a space for potential collaboration, with several documented outcomes including cross-sector partnerships and professional development (see main narrative, "What shifted"). A Community of Practice Exit Interviews Report and two editions of participant feedback surveys have been compiled.

Open Works

Open Works is a database and knowledge hub for open and place-based learning developed in autumn 2025. The site includes a growing collection of place-based learning projects for climate and community in the UK, alongside learning resources to support a place-based learning movement for climate. It was developed through the mobilisation of over 30 practitioners and speakers from local government, education and third-sector organisations.

7. Appendix B: Activity Documentation by Learning Venture

This appendix provides standardised documentation of activities, participation, partnerships and outputs for each Learning Venture.

B.1 Belgium

Table 7.1: Belgium Learning Venture details

Lead partner	Stickydot
Location(s)	Molenbeek, Brussels
Project period	July 2024 – June 2025
Total learners engaged	~35 (5 summer school + ~30 main programme)
Total staff/facilitators	Stickydot workshop leaders + MCCS community facilitators + 3 external mentors
Learning Venture partner organisations	5 (MCCS, Fablab'ke, FabWest, CIVA, VITO)

Table 7.2: Belgian Learning Venture list of activities

Date	Activity	Location	Facilitator(s)	Learners (n)	Age range
July 2024	Summer school pilot (1 week)	CIVA / Molenbeek	Stickydot, CIVA team (insect specialist, nature guide, city policymaker, heritage expert)	5	9–12
Sept – Oct 2024	Weekly creative workshops: place-based exploration and ideation	Fablab'ke / FabWest	Stickydot, MCCS	~30	13–17

Nov 2024 (x3 sessions)	Mentoring sessions: design constraints and prototyping	Fablab'ke / FabWest	Independent designer, independent architect, physicist (VITO)	~30	13–17
Nov 2024 – Apr 2025	Weekly creative workshops: hands-on making and construction	Fablab'ke / FabWest	Stickydot, MCCS	~30	13–17
May 2025 (x3 sessions)	Mentoring sessions: testing and refinement	Fablab'ke / FabWest	Independent designer, independent architect, physicist (VITO)	~30	13–17
May – June 2025	Weekly creative workshops: identity, naming and final construction	Fablab'ke / FabWest	Stickydot, MCCS	~30	13–17
7 June 2025	Public unveiling, Fiesta des Ateliers (flag-making, community naming vote)	Molenbeek public space	Stickydot, MCCS	Community event	All ages

Partners involved:

Table 7.3: Belgian Learning Venture collaborators

Name	Type	Role
La Maison des Cultures et de la Cohésion Sociale (MCCS)	Community organisation	Co-delivery, facilitation, community anchoring
Fablab'ke	Community maker space	Workshop venue, digital fabrication tools

FabWest	Community maker space	Workshop venue, fabrication tools
CIVA	Architectural heritage institute	Summer school collaboration
VITO	Belgian research centre	Mentor (physicist)
Independent designer	Professional	Mentor (6 sessions)
Independent architect	Professional	Mentor (6 sessions)

Locations used: Fablab'ke, FabWest, CIVA, Molenbeek public spaces, schoolyards, streets and squares (for place-based heat mapping)

Materials used: Wood, fabric, metal, digital fabrication tools (3D printer, laser cutter), welding equipment, sketching and model-making materials, flag-making materials

Key outputs created:

- Karavan'ke mobile shade structure
- Co-designed flags and visual identity
- Scale models and prototypes
- Article: Co-creation as a Learning Process
- Video documentation

B.2 Cyprus

Table 7.4: Cyprus Learning Venture details

Field	Data
Lead partner	CSI (Centre for Social Innovation)
Location(s)	Nicosia, Limassol, Larnaca, Paphos, Zygi, Kathikas, Kato Drys
Project period	June 2024 – February 2026
Total learners engaged	381
Total staff/facilitators	CSI team + partner facilitators
Learning Venture partner organisations	13+

Table 7.5: Cyprus Learning Venture list of activities

Phase 1: Exploration and Early Engagement (June – November 2024)

Date	Activity	Location	Facilitator(s)	Learners (n)	Age range
27–28 June 2024	UNECE Forum: World Café session "Youth as Catalysts for Agile Policy Development"	Limassol	CSI	16 (+ 120 panel)	Mixed
21 July 2024	Environmental Youth Camp: microplastic pollution workshop	Kathikas, Paphos	CSI, Friends of the Earth Cyprus	20	15–25
29 Nov 2024	Seeds of Change kick-off event	Gardens of the Future, Nicosia	CSI, UCL CAU	15	Mixed

Phase 2: Building Skills and Action-Based Learning (February – April 2025)

Date	Activity	Location	Facilitator(s)	Learners (n)	Age range
8–9 Feb 2025	EcoAction Bootcamp (2-day intensive)	ARTos House, Nicosia	CSI, Chrysalis LEAP, UCL CAU	21 (Day 1), 8 (Day 2)	18–30
Mar–Apr 2025	Webinar series: Climate Activism, Climate Justice, Green	Online	Univ. of Nicosia Law Dept	5	Mixed

	Entrepreneurship (3 sessions)				
6 Mar 2025	Transforming Communities through Climate Initiatives (Young Cities pitch event)	Limassol	CSI	18	15–25
Apr 2025	Pitch Day, Women in Business & Beyond Conference	Limassol	Unity Growth, CSI	20	18–60

Phase 3: Community and Sectoral Actions (May – November 2025)

Date	Activity	Location	Facilitator(s)	Learners (n)	Age range
17 May 2025	Energy Community Café workshops (x2)	Various	CSI, Friends of the Earth Cyprus, LIFELOOP	15	Mixed
16–21 June 2025	Sustainable Fisheries workshops (x4)	Larnaca, Zygi, Limassol, Paphos	CSI, Enalia Physis	32	Adults
23 Aug 2025	Brunch with Nature: A Taste of a Green Future	Ktima Christoudia, Kato Drys	CSI, Ecophysis	44	Mixed
17–18 Sept 2025	Water Scarcity Hackathon (2-day)	Nicosia	Chrysalis LEAP, CSI	20	18–35
11 Oct 2025	E-Innovation Camp (1-day intensive)	PwC Offices, Nicosia	JA Alumni Cyprus, CSI	26	15–20
15 Oct 2025 – 18 Feb 2026	Green & Social Entrepreneurship course (weekly, Wednesdays 17:45–19:00)	KEEAED, Nicosia	CSI, ECOPRISE, GREENLAB	17 (avg. 15/session)	Adults
20 Nov 2025	University of Nicosia Environmental Engineering session	Univ. of Nicosia	CSI, Gardens of the Future, Plastic Precious	15	18–25

Phase 4: Public Awareness and Advocacy (November 2025)

Date	Activity	Location	Facilitator(s)	Learners (n)	Age range
Nov 2025	World Fisheries Day campaign (5-day video + media)	Online / media	CSI, Enalia Physis	Public reach	N/A

Phase 5: Ongoing and Future Actions (2026)

Date	Activity	Location	Facilitator(s)	Learners (n)	Age range
19 Feb 2026	Hacking the Supply Chain for Sustainable Products Hackathon	Alexander College, Larnaka	CSI, Alexander College, Socialtech Lab	16	18-30

Summary of sessions: Environmental Youth Camp workshop (1), UNECE World Café (1), Learning Venture Kick-Off Event (half-day), EcoAction Bootcamp (2-day), Webinar series (3 online. 3 hours each), Energy Community Café workshops (2), Sustainable Fisheries workshops (4), Circular Economy workshops (3), Green & Social Entrepreneurship course (weekly, Oct–Feb), University of Nicosia classroom intervention (1), E-Innovation Camp (1 full day), World Fisheries Day campaign (5-day), Water Scarcity Hackathon (2-day), Young Cities pitch event (1, 3 hours), Hacking the Supply Chain for sustainable products (1)

Partners involved:

Table 7.6: Cyprus Learning Venture collaborators

Name	Type	Role
Enalia Physis (Marios Papageorgiou)	Environmental NGO	Fisheries training, community engagement
Friends of the Earth Cyprus (Natasa Ioannou, Elena Scordi)	Environmental NGO	Youth camps, Energy Cafés, Bootcamp speakers,twinning workshop
Chrysalis LEAP (Stelios Procopiou, Prof. Alexandros Charalambides)	Innovation hub	Hackathons, facilitation
Gardens of the Future (Dr Natasa Christou, Peggy Spineli)	Social enterprise	Urban agriculture, sustainability education
Plastic Precious (Alexandros Ioannou)	Social enterprise	Circular economy workshops, plastic transformation

University of Nicosia (Dr Odysseas Christou)	Academic institution	Webinars, engineering class collaboration
Junior Achievement Alumni Cyprus (Nicolas Pantelis)	Youth organisation	E-Innovation Camp
Unity Growth (Hess Adnani, Andreas Mathikolonis)	Conference organisers	Pitch Day, entrepreneurship conference
KEEAED / ECOPRISE / GREENLAB	Training / enterprise	Green entrepreneurship course
Cyprus Institute (Prof. Theodoros Zachariades)	Research	EcoAction Bootcamp speaker
Agnos Grocery (Demetrios Michaelides)	Industry	E-Innovation panel
FreyiaLabs (Greta Skemaite)	Industry	E-Innovation panel
Burak Dolulay (Sequela ai, Social Tech Lab and CyprusInno Co-Founder)	Industry	E-Innovation panel
Social Tech Lab	Industry	Hacking the supply chain for sustainable products
NEEMA LAB	Industry	Hacking the supply chain for sustainable products
Alexander College	Academic Institution	Hosting the hackathon

Locations used: ARTos House (Nicosia), Gardens of the Future (Nicosia), Kathikas (Paphos), Limassol (UNECE Forum, Lab Restaurant Bar), PwC Offices (Nicosia), University of Nicosia classrooms, KEEAED Training Centre (Nicosia), Ktima Christoudia (Kato Drys), coastal communities (Larnaca, Zygi, Limassol, Paphos), online platforms, Alexander College

Materials and tools used: Circular Business Model Canvas templates, business plan development tools, plastic recycling and prototyping equipment (Plastic Precious), vertical gardening and urban agriculture demonstrations, fishing gear and trap demonstration tools (Skarka), presentation and video storytelling equipment, workshop facilitation kits and post-it mapping tools, online webinar platforms

Learner artefacts: Startup and social enterprise business models, pitch presentations and prototypes, circular economy product samples, video interviews with fishers, hackathon solution proposals, business plan drafts, workshop sketches and system maps

Key outputs created:

- EcoAction Bootcamp startup ideas and pitch decks
- Circular economy product prototypes

- Energy community engagement outcomes
- Sustainable fisheries training materials
- Video storytelling campaign (World Fisheries Day)
- Cyprus Mail article: "Our Shared Ocean"
- Webinar presentation materials
- Green & Social Entrepreneurship course materials
- Hackathon solution proposals

- 2 registered start-ups

Links and media:

- UNECE Forum blog post
- Environmental Youth Camp blog post
- Seeds of Change blog post
- EcoAction Bootcamp blog post
- Fisheries blog post
- Fisheries Instagram
- Brunch with Nature blog post
- Cyprus Mail article
- Young Cities event

B.3 Greece

Table 7.7: Greece Learning Venture details

Field	Data
Lead partner	LATRA
Location(s)	Lesvos and Athens
Project period	September 2024 – ongoing
Total learners engaged	1,000+
Total staff/facilitators	20+ (teachers, head teachers, educators; excludes LATRA staff)
Learning Venture partner organisations	6 core (+ 15 collaborating)

Table 7.8: Greece Learning Venture list of activities

Date	Activity	Location	Facilitator(s)	Learners (n)	Age range
Sept–Oct 2024	Theatre performances + workshops (1st round)	Lesvos	LATRA, 451 AMKE	Part of 1,000+	5–11

Oct–Dec 2024	Theatre performances + workshops (1st round)	Athens	LATRA, 451 AMKE	Part of 1,000+	5–11
Dec 2024	Public presentations at school festivals	Lesvos / Athens	Schools	Mixed	Mixed
Mar 2025	Theatre performances + workshops (2nd round)	Athens	LATRA, 451 AMKE	Part of 1,000+	5–11
Apr–June 2025	Theatre performances + workshops (2nd round)	Lesvos	LATRA, 451 AMKE	Part of 1,000+	5–11
Mar 2025 – ongoing	School and community projects	Lesvos / Athens	Schools, LATRA	Ongoing	5–11
June–Oct 2025	Carbon Neutral Schools awareness campaign	Online	LATRA, schools, parents	300,000 reach	N/A

Partners involved:

Table 7.9: Greece Learning Venture collaborators

Name	Type	Role
451 AMKE	Non-profit SME	Theatre performance and workshop production
Iliaktida AMKE	Non-profit SME	Community anchoring, child protection, DEI expertise
THEORI AMKE	Non-profit SME	Educational workshop production
University of the Aegean	Academic institution	Expertise and mentoring
DEYAL	Public service provider	Expertise and mentoring
Municipality of Mytilene (Cultural Office)	Public authority	Public anchoring, in-kind support

Additionally, 15 organisations collaborated on a one-off basis, contributing expertise or resources to specific events/workshops (including sponsors). LATRA contacted 50+ industry and public service organisations and reached out to 200+ schools.

Locations used: Classrooms, school and public playgrounds, theatres (indoor/outdoor, public/private), community spaces and gardens, public fields and gardens, university classrooms and spaces, community spaces of other organisations

Materials used: Promotional materials (posters, banners, leaflets, brochures), stationery (papers, markers, stickers), plants and seeds, gardening tools, watering supplies and kits, supplies relevant to the theatre performance (timber, fabric)

Key outputs created:

- Interactive theatre play on climate justice
- Workshop content and facilitation materials
- School and community gardens
- Carbon Neutral Schools online advocacy campaign (300,000 reach)
- Extensive stakeholder mapping and inventory of contacts (schools, industry)
- Promotional materials (videos, soundbites, posters, banners)

Links and media:

- LEVERS blog: Planting the Seeds of Change
- LEVERS blog: Transformative Learning Through Art
- LEVERS blog: LATRA-Kersnikova Twinning (Flowgen)
- LEVERS blog: Climate Justice Across Borders
- Carbon Neutral Schools Facebook page (includes student drawings, proposals, quotes)
- Theatre performance Facebook page
- 50+ media links (search: ενας σπουδαιος ανθρωπος)

B.4 Ireland

Table 7.10: Ireland Learning Venture details

Field	Data
Lead partner	Trinity College Dublin (Science + Society Research Group, School of Education)
Location(s)	Westport, Co. Mayo (primary); Dublin, Sligo, Donegal (additional strands)
Project period	Autumn 2023 – ongoing
Total learners engaged	500+
Total staff/facilitators	25

Learning Venture partner organisations	One Westport - including Food Forests Ireland and Westport Tidy Towns, Irish Sustainability Schools Network

Table 7.11: Ireland Learning Venture list of activities

Date	Activity	Location	Facilitator(s)	Learners (n)	Age range
Nov 2024	RE-GENERATION	Westport	TCD, Teagasc, Food Forests Ireland, Westport Tidy Town, BiOrbic Research Centre, Rudi-lee McCarthy, Wild Atlantic Nature LIFE project	~200	8 - 80
9th Dec 2024	'Soil Your Scarf' Knitting and Participatory Science Workshop	Westport	Jess Leonard (TCD)	30	17-60+
14th February 2025	Climate Cuppa Workshop	Westport	Dave Whelan	8	50+
28th February 2025	Design the Ideal Outdoor Classroom Workshop	Westport, Rice College Secondary School	Marcus Collier (TCD)	20	12-13
28th February 2025	Climate Cuppa Workshop	Westport	Chelsea Beardsley (TCD)	3	50+
19th March 2025	Biodiversity Workshop	Westport Community Garden	Sheila Murphy and Pat Fahy	51	13-60+
26th March 2025	Composting Workshop	Westport Community Garden	Sharon Cameron	40	17-60+
7th August 2025	Biodiversity and Organic Gardening Workshop	Father Angelus Park Food Forest	Áine Bell	9	50+
17th October 2025	Soil Your Scarf 2	Westport Library	Jess Leonard (TCD)	4	20+

October 2025-Ongoing	Student Climate Action Workshops and Prototyping	Tallaght Library	Shaun Ussher, Caitlin White (TCD); William Davis (South Dublin County Council)	12 (over 3 months)	16-17
January 2024-Ongoing	Weekly tending sessions at Father Angelus Park	Father Angelus Park Food Forest, Westport	Pat Fahy	~10	10-60+
20th November 2025	Ar Scáth A Chéile Event	Trinity Long Room Hub, Trinity College Dublin	Mairéad Hurley, ISSN, Róisín Markham	~50	15 - 60+
September 2023	Tae in the Bog	Co. Sligo, Ireland	Mairéad Hurley, Wild Atlantic Nature LIFE project	~50	5 - 70+
August 2024	Tae in the Bog #2	Co. Donegal, Ireland	Mairéad Hurley, Wild Atlantic Nature LIFE project, Cairde na hEaragaile	~20	15 - 70+
April - May 2023	Student climate justice workshops	St. Joseph's Secondary School, Rush, Co. Dublin	Mairéad Hurley, Jess Leonard (TCD)	~15 (over 6 class sessions)	15 - 17

Partners involved:

Table 7.12: Ireland Learning Venture collaborators

Name	Type	Role

Food Forests Ireland	Environmental social enterprise	Food forest design, planting, workshops
Westport Tidy Towns	Community voluntary group	Local coordination, weekly tending
One Westport	Umbrella organisation of local climate and environmental organisations & industry in Westport	Convening wider network, administrative support.
Mayo County Council	Local authority	Expertise, support
Rice College	Post-primary school	Student participation, school grounds mapping
ISSN	Education network	National strand partnership
South Dublin County Council	Local authority	Mount Seskin project partner
Critical ChangeLab	EU project	Mount Seskin project collaborator

Key outputs created:

- Father Angelus Park food forest (fruit trees, berry shrubs, herb planters, gathering structure)
- "Seeds of Change" project report publication
- Outdoor classroom design proposals (Rice College)
- Six outdoor installations for South Dublin (Mount Seskin Community College)
- Ar Scáth A Chéile workshop outputs and graphic harvest
- National Climate Action Award (SuperValu Tidy Towns 2025)

Links and media:

- Mayo News: Tidy Towns awards
- RE-GENERATION: Sustainable Food for the Ages, Kick off event in Westport
- Soil Your Scarf: Participatory Workshop in Westport
- Designing the Ideal Outdoor Classroom with students
- Biodiversity Workshop in Westport
- Composting Workshop in Westport
- Seeds of Change: Document Launch

- LEVERS training co-hosted with ISSN & UCL

B.5 Portugal

Table 7.13: Portugal Learning Venture details

Field	Data
Lead partner	Expolab – Centro Ciência Viva
Location(s)	São Miguel Island, Azores
Project period	April 2024 – ongoing (renewed 2025–2026)
Total learners engaged	493 students + 93 teachers/staff + 85 community members
Total staff/facilitators	Expolab team + Eco-School teacher coordinators (27)
Learning Venture partner organisations	11 core + 13 extended

Table 7.14: Portugal Learning Venture list of activities

1. Biodiversity Niches Educational Programme (core action): 34 activities

Year 1 (2024–2025):

Date	Activity	Location	Facilitator(s)	Learners (n)	Age range
24 Apr 2024	1st meeting with Eco-School teachers	Expolab	Expolab	8	Teachers
2 July 2024	Stakeholder workshop (7 Insights, prototyping)	Expolab	Expolab	16	Adults (teachers, researchers, industries, policy, ONGs)
3 Oct 2024	UCL workshop (7 Insights of Climate Action)	Expolab	UCL, Expolab	17	Adults (teachers, researchers, industries, policy, ONGs)
Nov/ Dec 2024	3 Eco-School Council presentation	3 Eco-Schools: EBI Lagoa - Fisher ES Lagoa	Expolab, Eco-Schools Teachers Coordinators	114 15	Students Mixed (Teachers/ Staff)

		JE João de Deus			
Nov 2024	4 Field visits to Priolo Centre and Laurissilva forest of Eco-Schools Learners	Priolo Environmental Centre	SPEA/Priolo Environmental Center, Expolab	123 47 23	10–12 14-15 Teachers
9 Jan 2025	5 Visits to future garden sites (5 schools)	5 schoolyards: EBI Lagoa-Dr. FCC EBI Lagoa-Fisher ES Lagoa EBI Ginetes JE João de Deus	Expolab, SPEA	36	Mixed (teachers/staff)
Jan 2025	5 Laurissilva Garden Plantation Days	5 Eco-Schools: EBI Lagoa-Dr. FCC EBI Lagoa-Fisher ES Lagoa EBI Ginetes JE João de Deus	Expolab, SPEA, Ponta Delgada Forestry Service, MUSAMI S.A., Municipality of Lagoa, Municipality of Ponta Delgada, Parish Council of Ginetes, Parish Council of São Pedro, CEFAL	213 34 27 12	9–12 14-15 Teachers Mixed (staff, policy)
Mar 2025	Science in the Garden	EBI Arrifes	Expolab	31 3	10–12 Teachers
May 2025	3 Talks with a scientist	3 Eco-schools: EBI Lagoa-Fisher EBI Ginetes JE João de Deus	Expolab, 3 researchers from CIBIO-Açores research center	93 3	10–12 Teachers
May/ June 2025	3 Garden presentation to school community	3 Eco-schools: ES Lagoa EBI Ginetes JE João de Deus	Eco-School team, Expolab	34 81 9	10–12 14-15 Teachers

22 Sept 2025	2 Twinning: visiting to Laurissilva Gardens	2 Eco-schools: ES Lagoa JE João de Deus	Expolab, TCD	5	Mixed (teachers, staff)

Year 2 (2025–2026):

Date	Activity	Location	Facilitator(s)	Learners (n)	Age range
17 Sept 2025	Meeting with new Eco-School (EBI Arrifes)	EBI Arrifes	Expolab	2	Teachers
4 Nov 2025	Field visit to Priolo Centre and Laurissilva forest	Priolo Environmental Centre, Native Forest	Expolab, SPEA	46 4	14-15 Teachers
15 Nov 2025	Visit to future garden site	EBI Arrifes	Expolab, SPEA	4	Mixed (teachers, staff)
3 Dec 2025	1st follow-up workshop (2024–2025 Eco-Schools) & Twining	Expolab & remote	Expolab, TCD, Irish Schools Sustainability Network	11	Adults
15 Jan 2026	Laurissilva Garden Plantation Day	EBI Arrifes	Expolab, SPEA, Forestry Service., MUSAMI S.A, Parish Council of Arrifes	16 8	14-15 Teachers
11 Feb 2026	Training: Monitoring Laurissilva Gardens (1h)	EBI Arrifes	Expolab, SPEA	14	14-15

2. LEVERS Trainings for Teachers: 5 activities, 58 teachers

Date	Activity	Location	Facilitator(s)	Learners (n)	Age range
1st edition	Accredited training:	Expolab São Miguel Island, Priolo	Expolab & 10 partners (ForLag, Priolo Centre,	20 + 18	Teachers

8 & 15 Feb 2025 *2nd edition* 2, 3 ~& 4 July 2025	Biodiversity and Climate Change (15h, 0.6 credits)	Environmental Centre, native forest, Laurissilva Forest Nurseries	SPEA, 4 LIFE projects, 2 research centers: cE3c-GBA and CIBIO-AÇores)		
12 Mar 2025	Training: Monitoring Laurissilva Gardens (1h)	ES Lagoa	Expolab, SPEA	5	Teachers
22 & 29 Mar 2025	Accredited training: Discovering Living Beings (15h, 0.6 credits)	Expolab Santa Maria Island, native forest, Laurissilva Forest Nurseries	Expolab & 7 partners (ForLag, 4 LIFE projects, Santa Maria Forest Service)	18	Teachers
11 Feb 2026	Training: Monitoring Laurissilva Gardens (1h)	EBI Arrifes	Expolab, SPEA	4	Mixed (teachers, staff)

3. LEVERS Young Ambassadors at Expolab's Ciência Viva School: 12 classrooms, 170 students, 12 teachers

Date	Activity	Location	Facilitator(s)	Learners (n)	Age range
2023/24 school year	3 Learn & Plant as Endemic Three activity	Expolab Ciência Viva School & Garden	Expolab	41 3	9–10 Teachers
2024/25 school year	9 Learn & Plant as Endemic Three activity	Expolab Ciência Viva School & Garden	Expolab	129 9	9–10 Teachers

4. Expolab's Laurissilva Community Garden: 4 activities, 85 participants

Date	Activity	Location	Facilitator(s)	Learners (n)	Age range
17–18 Mar 2025	Garden preparation	Expolab yard	Municipality of Lagoa (5 gardeners)	5	Adults
4 Apr 2025	Community Plantation Day	Expolab yard	Expolab, SPEA, MUSAMI, Forestry Service	43	Mixed (families)
29 July 2025	1st monitoring activity (summer camp)	Expolab yard	Expolab	19	Mixed (families)
5 Nov 2025	2nd monitoring activity (C&T Clubs)	Expolab yard	Expolab	18	Mixed

Partners involved:

Table 7.15: Portugal Learning Venture collaborators

Core partners (11):

Name	Type	Role
Dr. FCC School (EBI Lagoa)	Primary school	Eco-School implementation
EBI Lagoa School (Fisher)	Primary school	Eco-School implementation
ES Lagoa Secondary School	Secondary school	Eco-School implementation
EBI Ginetes School	Primary school	Eco-School implementation
JE João de Deus, Ponta Delgada	Primary school	Eco-School implementation
EBI Arrifes (Year 2)	Secondary school	Eco-School implementation
SPEA / Priolo Environmental Centre	Environmental NGO	Biodiversity expertise, field visits, planting support
Ponta Delgada Forestry Service	Government agency	Native species provision, technical support
Municipality of Lagoa	Local authority	Garden preparation, logistics
MUSAMI	Municipal company	Environmental operations, planting support

Extended partners (13):

Name	Type	Role
ForLag	Training entity	Accredited teacher training delivery
Municipality of Ponta Delgada	Local authority	Garden preparation, Logistics
Parish Council of Ginetes	Local authority	Garden preparation, logistics
Parish Council of São Pedro	Local authority	Garden preparation, logistics
Parish Council of Arrifes	Local authority	Garden preparation, logistics
CIBIO-Açores, University of Azores	Research centre	Research expertise, scientist talks, training contributions
ABG-cE3c, University of Azores	Research centre	Research expertise, training contributions
LIFE IP AZORES NATURA	EU project	Training contributions, educational tools/games
LIFE BEETLES	EU project	Training contributions, educational tools/games
LIFE IP CLIMAZ	EU project	Training contributions, educational tools/games
LIFE SNAILS	EU project	Training contributions, educational tools/games
TRANS-lighthouses	EU project	Research expertise, dissemination contributions
Regional Science and Technology Fund - FRCT	Local authority	Policy contribution

Locations used: schoolyards, classrooms, school playgrounds, community spaces, Expolab's garden, laboratories, amphitheaters, Laurissilva Forest, community spaces of other organisations.

Key outputs created:

- 6 Laurissilva Gardens in school grounds (5 in Year 1 + 1 in Year 2)
- 1 Laurissilva Community Garden at Expolab
- Biodiversity Niches educational programme (replicable format)
- Field notebook for students (Portuguese and English)
- 2 accredited teacher training courses (Biodiversity and Climate Change; Discovering Living Beings)

- 1 Training: Monitoring Laurissilva Gardens (1h)
- Cross-community mentoring scheme
- Video: Implementation of the Biodiversity Educational Programme 2024-2025 (showcased at the European Researchers Night 2025)
- Video: Plantation Day - Açores Hoje TV, RTP Açores (4 Feb 2025), edited with subtitles in Portuguese and English
- 1 hands-on game "7-insights"Picture1 Picture2
- 1 hands-on game "Cards Game on Climate Action"
- 1 hands-on game "Discovering Laurissilva Forest Biodiversity" Picture1 Picture2 Picture3

Links and media:

- LEVERS blog: Science Festival in António Borges Garden (Dec 2023)
- LEVERS blog: "May the Force be with you!" (Oct 2024)
- LEVERS blog: School Playgrounds Come to Life (Aug 2025)
- Açores Hoje TV, RTP Açores (4 Feb 2025)
- GreenSavers Magazine (30 Jan 2025)
- Jornal Açores 9: 2nd edition (14 Jan 2026)
- Video: Biodiversity Programme at a Glance
- Açoriano Oriental Newspaper (16 Jan 2026)
- +200 publications at Expolab's social media (Facebook, Instagram, LinkedIn)

B.6 Serbia

Table 7.16: Serbia Learning Venture details

Field	Data
Lead partner	Center for the Promotion of Science (CPN)
Location(s)	Belgrade (primary); Kula
Project period	October 2024 – December 2025
Total learners engaged	~120 children (ages 4–9)
Total staff/facilitators	CPN team + partner facilitators
Learning Venture partner organisations	7+

Core cohorts: Two preschool groups (ages 5–6) + two lower-primary classes (ages 8–9) + kindergarten groups (ages 4–6). Group size typically 20–30 children; teachers stayed with groups and co-facilitated transitions.

Table 7.17: Serbia Learning Venture list of activities

Date	Activity	Location	Facilitator(s)	Learners (n)	Age range
1, 7, 14, 15 Oct 2024	"Flower Friends: Discovering the World of Flowers and Insects"	Jevremovac Botanical Garden, Belgrade	CPN, Ana Graovac (EcoHub)	~80	5–9
29 Apr 2025	"Exploring the World of Bees"	Honey Garden / Medonosni vrt Silosi, Belgrade	CPN, David Marešić (BeeCenter)	~20	4–6
16 May 2025	"Exploring Pollinators"	Leptirić Kindergarten, PU "Dečji dani", Belgrade	CPN	~20	4–6
25 June 2025	"Urban Plants and Pollinators"	Leptirić Kindergarten, Belgrade	CPN, Ekonaut NGO	~20	4–6
Autumn 2025	"Magični svet pčela" (within CPN's 10th art+science festival)	Honey Garden Silosi, Belgrade	CPN, BeeCenter	Various	Mixed
Autumn 2025	Spatial interventions: garden beds, tactile paths, insect hotels	3 preschools in Belgrade + Primary School "United Nations"	CPN, Ekonaut NGO	N/A	4–9
Dec 2025	Workshop + insect hotel installation	Primary School "Petefi brigada", Kula	CPN	[n]	8–9
23 Dec 2025	Publication of 2 educational brochures	N/A	CPN	N/A	N/A
[Date]	Twinning session: climate justice (online)	Online	CPN, Stickydot (Belgium)	N/A	N/A

Partners involved:

Table 7.18: Serbia Learning Venture collaborators

Name	Type	Role
David Marešić, BeeCenter	Industry	Bee expertise, workshop facilitation
Dr Jovana Bila Dubaic, Univ. of Belgrade (Faculty of Biology)	Academic	Expert input
Dr Uros Glavinic, Univ. of Belgrade (Faculty of Veterinary Medicine)	Academic	Expert input
Dr Tomica Misljenovic, Jevremovac Botanical Garden	Academic/public	Venue, facilitation
Ana Graovac, Jevremovac Botanical Garden / EcoHub	NGO	Wildlife biology, early-years field learning facilitation
Koozmetik	Industry	Sustainable bee products in natural cosmetics
MadMed	Industry	Organic honey production and honey products
Sabina Kerić, Ekonaut NGO	NGO	Urban ecology, community gardening, outdoor environmental education, spatial interventions

Host institutions / locations used: Jevremovac Botanical Garden (Belgrade), Honey Garden / "Medonosni vrt Silosi" (Belgrade), Leptirić Kindergarten, PU "Dečji dani" (Belgrade), Primary School "United Nations" (Belgrade), three preschools in Belgrade ("Čika Jova Zmaj", "Filmić", "Petar Pan"), Primary School "Petefi brigada" (Kula)

Spatial interventions installed:

- Insect hotels (kindergarten yards; Kula school)
- Learning-and-play elements: garden beds, tactile paths, insect hotels (Belgrade preschools "Čika Jova Zmaj", "Filmić", "Petar Pan" + Primary School "United Nations")
- Pollinator-support habitats: gardens/garden beds, small pollinator patches in school yards

Key outputs created:

- Garden beds with native pollinator-friendly species (multiple sites)
- Insect hotels (multiple sites)
- Tactile paths and learning-and-play elements
- Educational brochure 1: "Vodič kroz svet urbanih oprašivača"
- Educational brochure 2: "Vodič kroz svet medonosnih pčela… kako do vrta za oprašivače?"
- Twinning article in Elementi magazine (English-language special edition)

Links and media:

LEVERS website:

- Preschoolers workshop at the Honey Garden
- Exploring Pollinators at Leptirić Kindergarten
- Urban Plants and Pollinators with Ekonaut
- Pollinators Publications
- How Bees and Butterflies are Saving Our Planet
- Understanding the Social Aspect

CPN website:

- LEVERS u Botaničkoj bašti
- Urbani oprašivači i klimatska pravda
- Prostorne intervencije i radionice

B.7 Slovenia

Table 7.19: Slovenia Learning Venture

Field	Data
Lead partner	Kersnikova Institute
Location(s)	Ljubljana
Project period	November 2024 – November 2025
Total learners engaged	106
Total staff/facilitators	4
Learning Venture partner organisations	11 (mentors and partners)

Table 7.20: Slovenia Learning Venture list of activities

Date	Activity	Location	Facilitator(s)	Learners (n)	Age range
26 Nov 2024	Intergenerational fermentation workshop	Kersnikova pop-up lab	Nastja Ambrožič	7 children + parents	9–15 / 30+
24 Jan 2025	OpenLab 1: Introductory workshop	Centre Rog	Bibi Erjavec, Jakob Grčman	13	9–15
31 Jan 2025	OpenLab 2: Spirulina growing	Centre Rog	Bibi Erjavec, Jakob Grčman	13	9–15
7 Feb 2025	OpenLab 3: Mushroom growing	Centre Rog	Primož Turnšek, Rok Zalar, Bibi Erjavec	13	9–15
14 Feb 2025	OpenLab 4: Global food chains	Centre Rog + FoodLab	Živa Kavka Gobbo, Bibi Erjavec	13	9–15
22 Feb 2025	OpenLab 5: Data and food security	Centre Rog	Damjana Žnidar, Bibi Erjavec	13	9–15
14 Mar 2025	OpenLab 6: Project work 1	Centre Rog	Bibi Erjavec, Jakob Grčman	13	9–15
21 Mar 2025	OpenLab 7: Project work 2	Centre Rog	Bibi Erjavec, Jakob Grčman	13	9–15

12 Apr 2025	OpenLab 8: Project work 3	Kersnikova Rampa	Bibi Erjavec, Jakob Grčman	13	9–15
5 June 2025	Spirulaktor	Bežigrad Elementary School	Bibi Erjavec, Eva Debevc	15	12–14
20 Oct 2025	Spirulaktor	Podbočje Elementary School	Jakob Grčman, Bibi Erjavec	15	12–14
3 Nov 2025	Spirulaktor	Savsko naselje Elementary School	Jakob Grčman Martin Krauser	12	12
24 Nov 2025	Spirulaktor	Ledina Elementary School	Jakob Grčman, Ana Jerina	24	10
27 Nov 2025	Spirulaktor	Skupna točka Moste (community centre)	Martin Konič	13	10–14

Partners involved:

Table 7.21: Slovenia Learning Venture collaborators

Name	Type	Role
Živa Kavka Gobbo, Focus Association	Civil society	Global education and climate justice
Damjana Žnidar, Agricultural Institute of Slovenia	Research	Crop science
Rok Zalar, Gobnjak	Industry	Bionics engineering
Primož Turnšek	Industry	Microbiology, permaculture
Bibi Erjavec	Education	STEAM education, organic chemistry, art
Estera Popovič	Education	Geography
Nastja Ambrožič	Education	Fermentation

Key outputs created:

- OpenLab programme (8-session format, replicable)
- Spirulaktor workshop format (school-adapted)
- Workshop - open educational resource (PDF)

B.8 Switzerland

Table 7.22: Switzerland Learning Venture details

Field	Data
Lead partner	Onl'fait
Location(s)	Geneva
Project period	April 2024 – December 2025
Total learners engaged	~170 (across all activities; see breakdown below)
Total staff/facilitators	Onl'fait team + 15 speakers + 3 scientific researchers (mentors)
Learning Venture partner organisations	16 associations (7 regular participants)

Participant breakdown:

- TechDays workshops: 60 teenagers
- Climate Week 2024: ~35 participants/learners
- Long-term programmes (teenagers): ~20 participants
- School of Commerce students: ~20
- À nous de jouer seed-funded projects: ~20 young beneficiaries
- Teacher training (UCL): 15 teachers
- Teacher round table: ~120 teachers (audience)

Table 7.23: Switzerland Learning Venture list of activities

Date	Activity	Location	Facilitator(s)	Learners (n)	Age range
Apr – Dec 2024	Learning Venture monthly meetings (9 meetings)	Geneva	Onl'fait + guest speakers	Learning Venture members	Adults
Nov 2024	Climate Week 2024 (11 activities including water graffiti, movie + pizza night, disco soup, orienteering course)	Various, Geneva	Learning Venture members	~35	Mixed
Jan – Dec 2025	Learning Venture monthly meetings (11 meetings)	Geneva	Onl'fait + guest speakers	Learning Venture members	Adults

2025	TechDays workshops (6 x 2 hours)	Geneva	Onl'fait	60	Teenagers
2025	School of Commerce: co-created water and water bottles activities	Ecole de Commerce, Geneva	Co-created with students	~20	15–18
2025	Art maquette project (recycled materials)	Onl'fait makerlab	Onl'fait, Kersnikova (twinning)	~5	Teenagers
2025	Sculpture and video art project (water/glaciers)	Onl'fait makerlab	Onl'fait	~5	Teenagers
2025	7 youth-led projects funded via À nous de jouer	Various	Youth-led	~20	Teenagers
2025	Teacher professional learning (2 sessions, with UCL)	Geneva	UCL, Onl'fait	15	Adults
2025	Teacher round table on climate	Geneva	Learning Venture members	~120 (audience)	Adults
2025	7 meetings with researchers	Various	Onl'fait, researchers	Learning Venture members	Mixed

Additional project-level data:

- 20 monthly Learning Venture meetings total (with 15 speakers across the programme)
- 7 projects funded via À nous de jouer platform
- 4 long-term programmes led by young people
- 7 meetings with scientific researchers

Partners involved:

Table 7.24: Switzerland Learning Venture collaborators

Name / Type	Role
16 Learning Venture member associations (7 regular)	Co-design, co-delivery, speakers
Ecole de Commerce	School partner: co-created water activities
Municipality of Geneva (sustainability team)	Institutional support and promotion

Canton of Geneva (Depts of Education and Economic Affairs)	Institutional support
Icebeerg	Industry: orienteering project
3 scientific researchers	Mentors
Artists (via Kersnikova twinning)	Twinning: art maquette project
À nous de jouer platform	Seed funding for youth-led projects
Local brewery	Industry: LEVERS beers production

Locations used: Classrooms (Ecole de Commerce), outdoor spaces, Onl'fait makerlab, community spaces, Jardin Anglais (orienteering)
Materials used: Electronics, recycled materials, machines and tools (makerlab equipment)

Learner artefacts:

- Maquette about water with recycled materials
- Sculpture about water and glaciers
- Sensors to measure the flux of water
- Water graffiti
- Water bottles (School of Commerce)
- Music installation

Key outputs created:

- 7 youth-led water projects: Sailowtech, Cap'Able board game, Chalet denfer toilet project, Mosaïque de la jonction, Constance & Annaelle art expo, De Vibes Creativ' artwork (in progress), Pinklodie film (in progress)
- 1,000 LEVERS beers (industry collaboration with local brewery, sold to fund Association pour la Sauvegarde du Léman)
- Classroom water activities (School of Commerce)
- Orienteering course
- Art installations (maquette, sculpture, video)
- Videos and exhibitions

Links and media:

- Course d'orientation (LEVERS blog)
- Online workshops: pedagogical approaches (LEVERS blog)
- Climate action through local action (LEVERS blog)
- The ocean under acid (LEVERS blog)
- Projet O: 3x1000 à gagner (LEVERS blog)
- Maker education for sustainability (LEVERS blog)

B.9 United Kingdom

Table 7.25: United Kingdom Learning Venture details

Field	Data
Lead partner	Forth
Location(s)	London
Project period	Autumn 2023 – ongoing
Total learners engaged	252 (across walking tours and sharing sessions)
Total staff/facilitators	Forth team + 15 guest speakers
Learning Venture partner organisations	5 programme partners + 16 Community of Practice members

Table 7.26: United Kingdom Learning Venture list of activities

Programme timeline:

Phase	Period
Prototyping	Autumn 2023
Community of Practice launch	Winter 2024 (March)
Learning programme soft launch	Summer 2024 (June)
Partnerships campaign and programme marketing	Autumn 2024
Learning programme launch	Winter 2025
Programme delivery: Spring Edition	Spring 2025
Cross-mentoring programme	Summer 2025
Programme delivery: Autumn Edition	Autumn 2025
Open Works database launch	Autumn 2025

1. Place-based learning events: Material systems

Date	Activity	Location	Facilitator(s)	Learners (n)	Audience
10 July 2024	First Hand soft launch: Thames Tunnel	Thames Tunnel, London	Forth, Dee Halligan, Kris de Meyer (UCL CAU)	30	Industry, education, local govt, community orgs

20 Mar 2025	Fixing Factory walking tour	The Restart Project / Queen's Crescent Library, London	Forth, The Restart Project, Possible	Small group	Mixed
10 Oct 2025	Thames Systems / WRWA immersive experience	Blackfriars Bridge, Tideway, Western Riverside Waste Authority	Forth	11	Majority local government

2. Place-based learning events: Food systems

Date	Activity	Location	Facilitator(s)	Learners (n)	Audience
4 Apr 2025	The Felix Project: surplus food tour + skills workshops	The Felix Project warehouse, London	Forth, The Felix Project	8	Professionals
2 May 2025	Walworth Neighbourhood Food Model walking tour	Walworth Garden, Alberta Fruit Commons, East Street Market, London	Forth, Pembroke House	11	Mixed
10 June 2025	Walworth Neighbourhood Food Model (repeat)	Walworth, London	Forth, Pembroke House	[n]	EIT Food Operations team
26 Sept 2025	New Covent Garden Market tour	New Covent Garden Market, London	Forth	13	Mixed

3. Community of Practice: 12 meetings over 20 months

Period	Activity	Format	Facilitator(s) / Speakers	Members
Mar 2024	CoP launch	Online	Forth	10 founding members

Mar 2024 – Nov 2025	12 meetings (10 online, 2 in-person site visits)	Online + in-person	Forth + guest speakers; themed around GreenComp competence areas	Growing from 10 to 16 members

Notable CoP sessions included:

- Three Horizons framework session (facilitated by Bramble)
- Seven Insights session (Kris de Meyer, UCL Climate Action Unit)
- Systemic design session

Attendance rate: 71%

4. Cross-mentoring programme: 5 sessions

Date	Activity	Format	Location	Facilitator(s)	Learners (n)
Summer 2025	Session 1	Online	N/A	Forth, We Rise, Change Agents UK	Small group
Summer 2025	Session 2	Online	N/A	Forth, We Rise, Change Agents UK	Small group
Summer 2025	Session 3	Online	N/A	Forth, We Rise, Change Agents UK	Small group
Summer 2025	Session 4	Online	N/A	Forth, We Rise, Change Agents UK	Small group
Summer 2025	Session 5	In-person	Western Riverside Waste Authority, Wandsworth	Forth, We Rise, Change Agents UK	Small group

5. Other events

Date	Activity	Format	Learners (n)
Jan 2024	Programme launch / sharing session	Online	67

Partners involved:

Table 7.27: United Kingdom Learning Venture collaborators

Programme partners (5):

Name	Type	Role
Engineers Without Borders UK	Professional body	Headline partner
Change Agents UK	Sustainability skills consultancy	Content partner, cross-mentoring
We Rise	Youth engagement practice	Content partner, cross-mentoring
Soil Association	Network organisation	Curriculum partner
Skills Builder Partnership	Skills framework	Curriculum partner

Event hosts and collaborators:

Name	Type	Role
Thames Tunnel / Brunel Museum	Heritage site	Soft launch venue and context
The Felix Project	Food redistribution charity	Food systems tour host
Pembroke House	Community organisation	Walworth food model tour host
New Covent Garden Market	Wholesale market	Food systems tour host
The Restart Project / Fixing Factory	Repair charity	Material systems tour host
Possible	Climate charity	Co-developer, Fixing Factory
Western Riverside Waste Authority	Public waste authority	Material systems tour host, cross-mentoring venue
Bramble	Sustainability leadership consultancy	CoP session facilitator (Three Horizons)
UCL Climate Action Unit	Research	Seven Insights, behavioural neuroscience input

EIT Food	EU body	Walworth tour participant group

Community of Practice members (16): Representatives from local government, advocacy organisations, community groups, industry, researchers, designers and postgraduate students.

Host locations (9): Small Beer Brewery, Westminster Kingsway, The Felix Project, Walworth Neighbourhood, Walworth Garden, New Covent Garden Market, Western Riverside Waste Authority, The Restart Project / Fixing Factory, Thames Tunnel

Additional itinerary locations: Queen's Crescent Library, Alberta Fruit Commons, East Street Market, Blackfriars Bridge / Bazalgette Embankment, Thames Clipper, Mission Kitchen, WIP Space Artists Studios, 3Space International House (rooftop)

Tools and frameworks used:

- Donella Meadows' Places to Intervene in a System
- Berkana Institute's Two Loop Model
- Bill Sharpe's Three Horizons Framework
- UCL Seven Insights from Neuroscience and Psychology
- Common Cause Foundation's Values Map
- Liberating Structures (1-2-4-All, Crowdsourcing)
- Action Learning Sets
- Circles of Influence
- Collective imagination exercises
- Problem framing
- Skills mapping

Key outputs created:

- First Hand website and event platform
- Community of Practice resource hub
- Open Works database and knowledge hub
- First Hand Showcase page on LinkedIn
- Open educational resources
- Community of Practice Exit Interviews Report
- Participant feedback surveys (Spring and Autumn editions)