BREATH
LEARN TO DO FROM NATURE

BREATH Project

2022-2024

Enhancement document of BREATH training cycle on ecological transition

This document is produced as part of the European BREATH Project – *"Biomimicry Resilience Ecology Alliance Training Holistic"*- (2021-1-FR01-KA220-VET-000033004) supported by the ERASMUS+ program of the European Union, a program for education, training, youth and sport.

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Preamble

This document is produced as part of the European BREATH Project (2022-2024) - *Biomimicry Resilience Ecology Alliance Training Holistic* - a Key Action 2 Project for Cooperation Partnership on Vocational Education and Training. It is supported and financed by the Erasmus+ program working for the development of educational projects and for the production of formal or non formal training for professionals adults. Four partners from three European Union countries: France, Slovenia and Spain were involved.

The BREATH project is a response to the need to implement the Green Deal for Europe to face crises. It aims to multiply approaches inspired by Nature in the field of agriculture, energy, building and spatial planning. The project objective is the adoption of new concepts and techniques to facilitate global approaches to ecological transition, by improving professional competences of the advisor profession through vocational training.

The project partners and authors of this document are:

The collective interest cooperative society Le 7 Vents has been working since 1998 to accelerate changes towards sustainable systems, particularly in the energy and ecological fields. Our non-profit company supports communities, businesses and individuals in reducing their footprint on the planet by drawing on their lived experiences.

The cooperative Arban was created in 2010 by a citizen's initiative to find housing solutions in rural areas. Arban works in different fields : local development, urban planning and eco-renovation in the Limousin mountains (rural mid-mountain area). Arban aims to meet the challenges of ecological transition and revitalize rural town centers.

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The Institute of Applied Mycology and Biotechnology was founded in 2016. Its aim is to protect fungal biodiversity and spread the knowledge about the use of fungi in biotechnology and applied mycology. The Institute's main activities are research, mycelium production, education and project work.

The "Asociación Taph Taph Bioconstrucción, Arquitectura y Paisaje Holístico" is a NGO founded in 2016, whose aims are to promote habitat and shelter construction through horizontal, participative and healthy methodologies. It promotes assembly culture, gender equality, consensus decision and open pedagogy. A holistic approach to improve our societies.

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1. Introduction

The actual context of the global environmental crisis is pointing us that there is an urgency for action. European societies have changed along the centuries, promoting education and employment in a continuous adaptation to the national and international policies and projecting new changes like the ones announced by the Green deal for Europe (Fetting 2020).

In the last decade a great impulse has been done and is still going, mainly about green skills and professional competences in terms of employment and education. These policies, projects and actions are slowly implemented in European territory and then they need to be supported by multiplying acceleration measures. Despite more efforts are needed, science is talking about the possibility of a change of paradigm, which will be necessary to face the causes and consequences of the global climatic change, with the need of increasing social resilience, biodiversity and fertility through more inclusive solutions.

In this way, the environmental philosophy of *deep ecology* (Naess, 1973) presents a social movement based in the belief that humans must radically change their relationship to nature. From one that values nature solely for its usefulness to human beings to one that recognizes that nature has an inherent value, and as a whole, it should be respected and regarded as having certain basic moral and legal rights to live and flourish, independent of its instrumental benefits for human use. Based on this, education and employment should also change and, as a consequence, the knowledge, skills and competences linked to the professional occupations and qualifications offered to the European population.

The BREATH project aims to ensure that more and more people are trained in the ecological transition and master the key skills for advising in this area, in particular linked to systemic, cooperation and support for change. The results presented in this document mainly concern the cycle of four experimental trainings carried out during the project, a global approach for the training design for professionals and the key points and recommendations for organizing a training cycle about ecological transition for adults of any kind of field of work or study.

We hope the results here shown could be considered innovative, of a high quality, reusable, transferable, adaptable and tangible.

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2. Aims

The main aim of this document is to highlight the BREATH training cycle, designed for advisors in ecological transition, developed and undertaken during the term of the project. It also aims to provide guidance in how to learn to design training for professionals.

On the other hand, the specific aims are mainly to disseminate the BREATH systemic approach and produce a useful tool for our target public.

The main target public of this document are:

- Advisors, Trainers, Designers, Supporters in the field of agriculture, energy and sustainable development, building and spatial planning
- Anyone interested in applying green competences and global approaches to ecological transition in their respective professions.

3. The BREATH experiential training cycle

Prior to the presentation of the training design procedures and recommendations that we suggest following experiences learned, we focus on the four experimental training sessions carried out during the project, in three different European countries (France, Slovenia and Spain).

3.1. Consistency of the training cycle

The cycle started with a first training of trainers intended for project partners, carried out by Les 7 Vents, in order to anticipate and prepare the next three trainings. This first training focused on important and preliminary issues:

- the BREATH project approach;
- competences needed to facilitate change;
- innovative pedagogical tools and methods;
- skills assessment methods and training design.

The next three training sessions were carried out by each partner in order to test and deploy the BREATH systemic approach with innovative educational tools and methods.

The main objectives of all trainings were as follows:

- improve the professional competences of the target audience through innovative pedagogical tools and methods, together with selected content linked to ecological transition;
- get real experience on how to teach new skills connected to learning from Nature to a group of professionals;
- establish the theoretical and methodological framework of the BREATH systemic approach.

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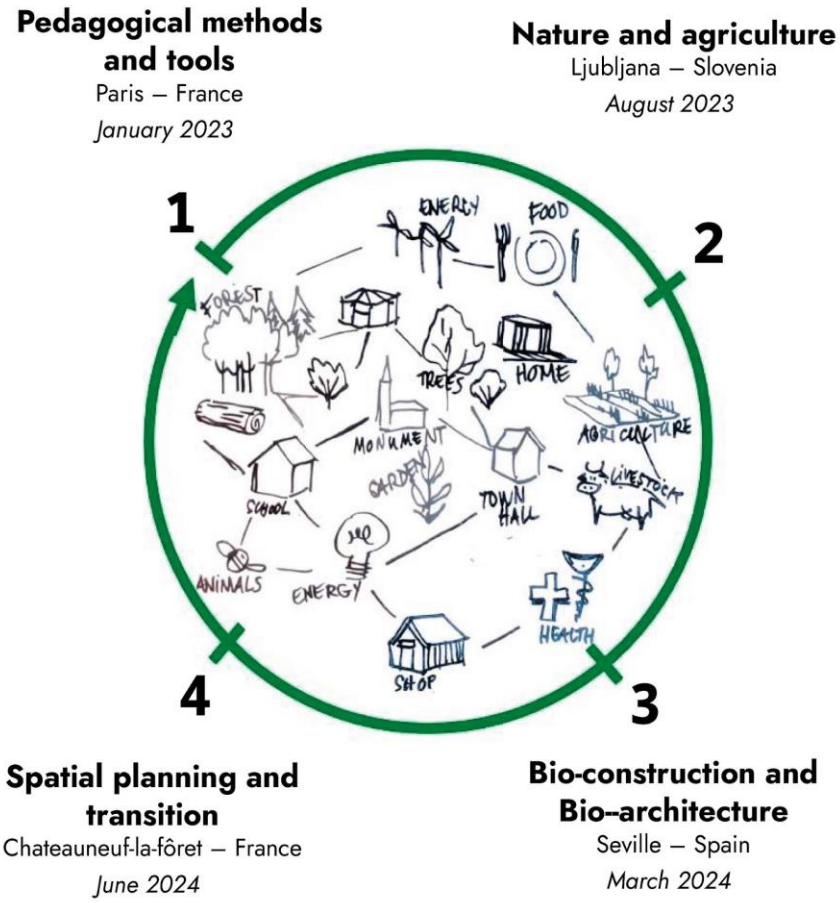
The training sessions undertaken were:



Training 1. *What competences, pedagogical devices and innovative training tools to facilitate change towards sustainable systems?* Coordinated by Les 7 Vents. France, January, 2023.

Training 2. *Nature and agriculture, how to transcend the dominant/dominated relationship?* Coordinated by IAMB. Slovenia, August, 2023.

Training 3. *Bio-architecture and Bio-construction inspiration.* Coordinated by Taph Taph. Spain, March, 2024.

Training 4. *Revisiting the tools available to support spatial planning projects facing the transition*. Coordinated by Arban. France, June, 2024.

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3.2. BREATH competency framework for advisors in ecological transition

Before going with a more detailed description and analysis of the four experimental training done, it is necessary to explain the reference document entitled 'BREATH Competency framework for Advisors in ecological transition' (available on the project website), which compile transversal professional skills, also called soft or interpersonal skills, for teaching and learning purposes about advising in ecological transition.

We believe that achieving ecological transition is only possible by reconnecting with and learning from nature, which is why the BREATH project aims to innovate in the dissemination of new transversal skills. Thus, this conceptual framework aims to equip advisors with the tools they need to navigate and lead the ecological transition, fostering sustainable practices and holistic thinking. It also summarizes the key skills they necessarily need to acquire to integrate nature-inspired approaches into their professional practices. It is designed to be transferable and adaptable to a wide range of professions for training and employment purposes. It is designed to be transferable and adaptable across a wide range of occupations for education and employment purposes.

This competency framework has been built following the European Qualification Framework (EQF) (Publications office, 2018) which defines a professional qualification as "the formal outcome of an assessment and validation process obtained when a competent body determines that an individual has achieved learning outcomes, to given standards of certification". Qualifications serve a variety of purposes. They signal to employers what their holders are expected to know, do and understand, as pointed out through learning outcomes. The EQF classifies education and employment by 8 levels of knowledge, skills and competences, including the levels for Vocational Education and Training, and for Higher Education. This framework is detailed in the following pages.

On the other hand, as other certification systems such as European Credit for Vocational Education and Training (ECVET) do (Publications office, 2021) providing a concrete referential of competences, the BREATH referential can be also used to develop learning units, also officially called learning outcomes, and then develop training contents, methods and activities in a cycle of training.

Following the EQF classification, we evaluated that the level of qualification of the BREATH competency framework is between 4 or 5.

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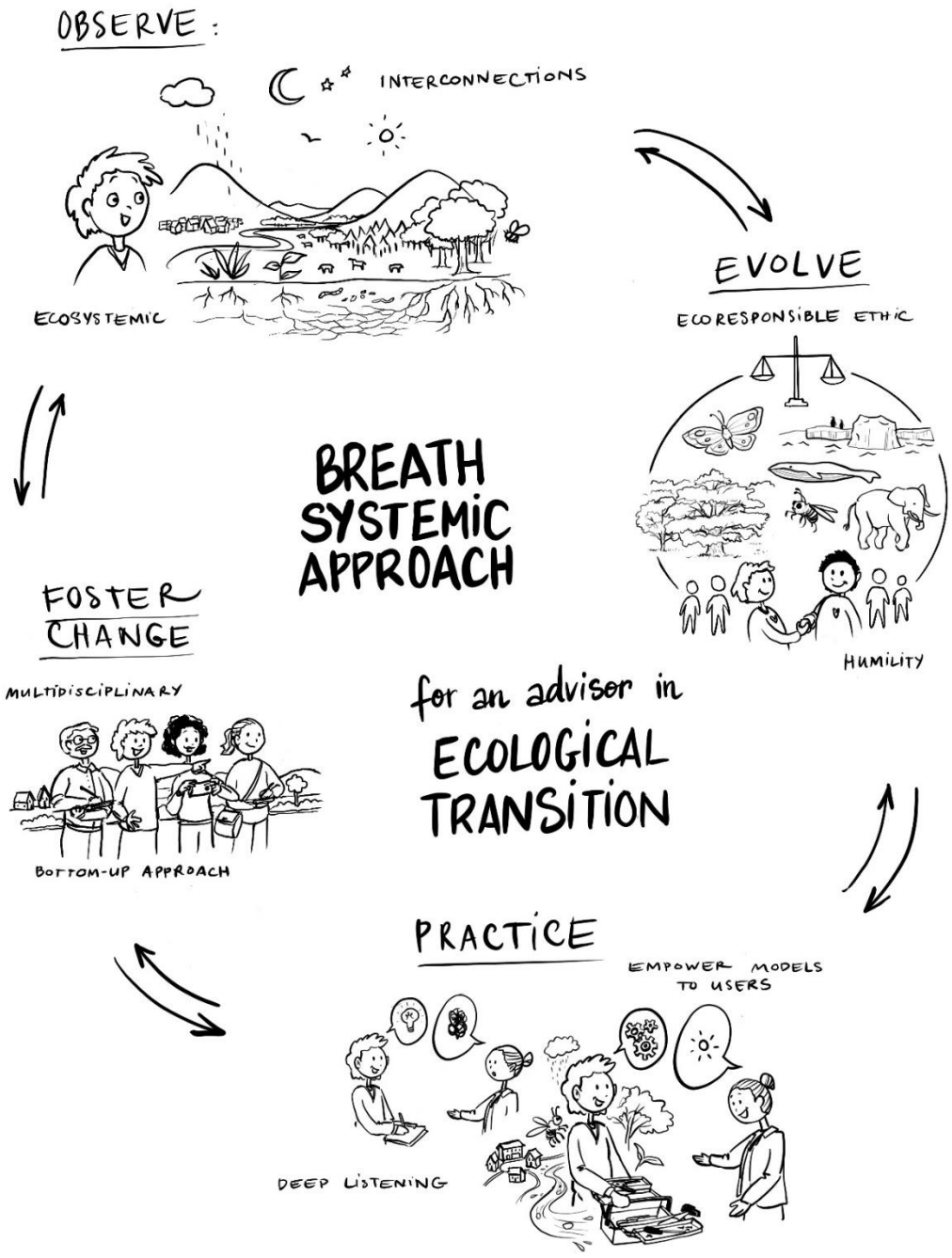
The BREATH competency framework for advisors in ecological transition is divided in four blocks of competences, which are:



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1. **Observe and understand Natural Complexities of Systems**: This competence focuses on understanding the intricate and interconnected nature of ecosystems, promoting a holistic view of ecological transition.
2. **Evolve within an Eco-Responsible Ethical Framework**: Advisors are encouraged to act within a set of moral principles that prioritize environmentally responsible behavior and decision-making, acknowledging the intrinsic value of all organisms within an ecosystem.
3. **Put in practice Advice Inspired by Nature**: This involves offering equitable, fair, and empowering models to users, adapting advice to meet the needs of both humans and the natural world.
4. **Lean on One's Environment to Foster Change**: Advisors are guided to rely on their environment and harness collective strengths, empowering individuals to be responsible and autonomous.

Advice inspired by Nature refers to principles derived from observing nature.

It is about asking which principles from nature can help us provide sensible advice for ecological transition. Before defining these principles, we defined what nature means. Depending on the context, nature may be:

- a place (in nature) – not opposed to an urbanised space for example;
- an element, which has its own personality in certain cultures (mother nature);
- a concept linked to identity, to genes (it's your nature);
- a concept that shelters living things and natural resources (universal nature).
- a cosmovision of humankind existence into the Universe.

The BREATH approach to nature

We have agreed on a vision of human beings within the environment. For us, human beings are an entity in and within nature. Human life is part of a collective life and all natural phenomena are present in its existence. A human being is by definition a living being and an organism. There is an indispensable continuity between nature, society and culture (Chuboda, 2015).

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Principles inspired by nature

We have identified five main principles that are easily adopted for this purpose:

Circular Thinking, Closed-Loop Systems, Happy sufficiency[1] – In nature, there is no such thing as overproduction or waste; everything that is produced has a purpose, and is then recycled and reused. A product for one organism is an input for another.

(Example from Nature: When a tree dies, it becomes food for fungi, which then become food for organisms in the soil and for animals.)

Locally Sourced Materials and Knowledge – This understanding of local specifics – materials and knowledge – ensures that solutions meet local needs and resources.

(Example from Nature: When a beaver searches for materials to build a dam, it uses local materials. Animals also learn through observation, imitation and learning from one another, passing specific environmental knowledge to their offspring.)

Collective Intelligence or "Swarm Intelligence" – The whole is greater than the sum of its parts (Aristotle).

(Example from Nature: An individual ant has limited capabilities, but within a colony, complex processes are developed, enabling targeted food searches and nest construction.)

Interdependent and Interconnected Solutions – It is important that while searching for solutions we connect multiple local human and non-human actors, thus making them interdependent, which limits the impact on the environment and ensures resilience. *(Example from Nature: The soil food web includes various organisms such as nematodes, bacteria, protozoa, and fungi that are interdependent and interconnected, providing minerals and nutrients for plants.)*

Support Biodiversity – When seeking advice, it is important to support social and ecological biodiversity, involving multiple stakeholders, cultures, and species.

(Example from Nature: A diverse plot of land, unlike monocrops, features various species)

[1] Happy sufficiency is a concept which seeks to go beyond the negative, declinist aspect of sobriety, to offer an emancipatory vision of sobriety. Using the expression 'fewer goods, more connections', this concept seeks to go beyond the limiting vision of reducing consumption, to emphasize access to sources of pleasure rather than material goods (excluding vital needs), in particular human relationships, which would enable individuals to achieve real fulfillment

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Furthermore, the definition of the profession of advisor as we understand it is made up of the abilities to:

- Be expert in the respective topics or field of work.
- Analyze a context, an ecosystem, techniques, and technologies: advisors are skilled in assessing various environmental and technological factors to understand the broader context of their work.
- Advise, train, support, facilitate assimilation, empower, and give meaning to their work: advisors not only provide advice but also support and empower others, facilitating learning and ensuring that their work is meaningful and impactful.
- Change scale, catalyze, support emergence, facilitate cooperation, and work in a network: advisors are adept at scaling their efforts, catalyzing change, supporting new initiatives, and fostering cooperation within networks.
- Understand a culture, key issues, relationships, and interdependencies.

Finally, for the design of any possible training cycle focused on ecological transition, this BREATH competency framework should be used. This is the case for the next explanation of the four experimental trainings carried out during the project.

3.3. The four training sessions

The whole BREATH training cycle sheltered the presence of international trainees, composing a great variety of professional profiles. Each of the specific training programs are available in annex of this document and in the project website. All training reports are available on the project website.

Training 1 – What competences, pedagogical devices and innovative training tools to facilitate change towards sustainable systems?

The first training was coordinated by Les 7 Vents and held in Paris (France), during the 25th and 26th January, 2023. It was a training of trainers intended to project partners, with the strategic objective to bring autonomy to the trainees and to anticipate the organization of the next trainings.

The pedagogical aims were:

- Understand complexities behind the notion of a sustainable system.
- Understand the competences needed to facilitate change.
- Learn about innovative educational devices and tools.
- Anticipate training 2 to 4 and develop innovative content and methods.

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The training program scheme was:

Day 1 « Scenario of the participants and illustrated theoretical contributions »

- Interknowledge of participants, expression of expectations, points of vigilance, and objectives of each
- Theoretical contributions on systemic, ecological footprint, change (SCIC Les 7 Vents)
- Illustration by case studies (Institute of mycology)

Day 2 « Deepening nature-based solutions in 4 conceptual frameworks »

- Highlighting **constraints and opportunities** - Workshop for the systematic exploration of feedback from participants (agriculture, construction, public policy),
- Make an inventory of the recommendations needed to **facilitate nature-inspired approaches,**
- Express the **needs for expertise, analysis, identification of skills,** to bring to knowledge in each of the areas concerned,
- Draw up a draft **detailed training plan for trainings 2 to 4**, as well as an action plan to implement these trainings.

The aim of this training was to teach to all partners some innovative pedagogical tools and methods to conduct a training following the BREATH pedagogical approach : "*Learning by doing!*" (active pedagogy best for andragogy).

Through the structure of the two days program and pedagogical resources, key elements were given to each partner to prepare their training.

The first day was built with the following pedagogical objectives:

1/ Take into account each context, look for constants and specificities.

2/ Deepen the notion of transitions towards sustainable systems.

The second with the following pedagogical objectives:

1/ Testify to the realities of supporting change towards sustainable systems.

2/ Search for specificities relating to the interest of nature-based approach.

During both days different pedagogical methods were used, such as:

- Participative method with some icebreakers fostering the group dynamic and the collection of participants feelings, as well as a moving debate for positioning participants in the posture of knowledge.
- Experiential method through some practical workshops: "*the Caen Film Festival*" (your transition experiences), "*the Caen Universal Exhibitions*" (how tell a story to a particular audience), "*The wild boar race*" (introduction to chronobiological rhythms of a typical working day), "*How to design a training*" (what are my needs and desires as a learner in a training?), and "*How to design your training*" (how to make a training meta plan and adapt it based on the expectations of the participants).
- Transmissive method with the presentation of the BREATH approach, the 8 teaching strategies and the 3 main families of assessment.

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As well as different assessment modes:

- An interactive quiz in relation to the targeted competences allowing partners to self-position themselves.
- A self-assessment about trainees feeling: *Nugget, Stone, Swiss Army Knife*, in order to know how participants feel themselves after the first day.
- Collective assessments : "*Caen film festival*" and "*Caen Universal Exhibition*" to discuss on the videos made by every partners about personal and professional experiences about ecological transition.
- Assessment of the training with a satisfaction questionnaire.
- Skills self-assessment of trainees: before the training (registration form) and at +2months after the training.

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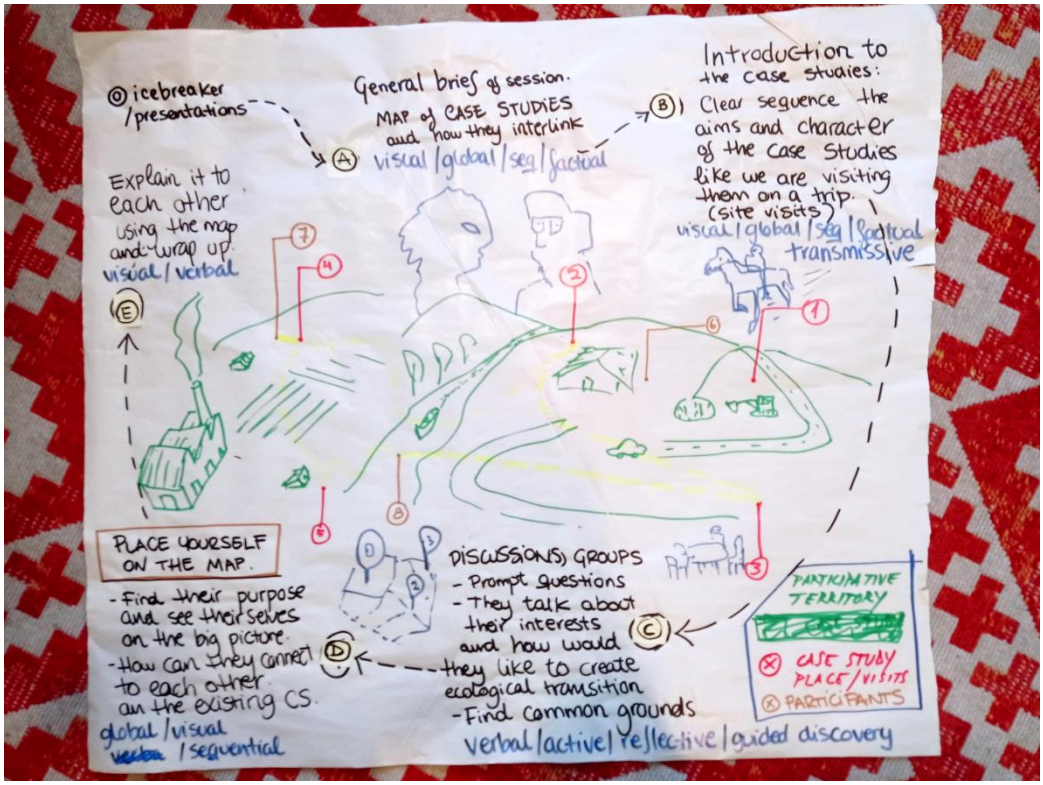
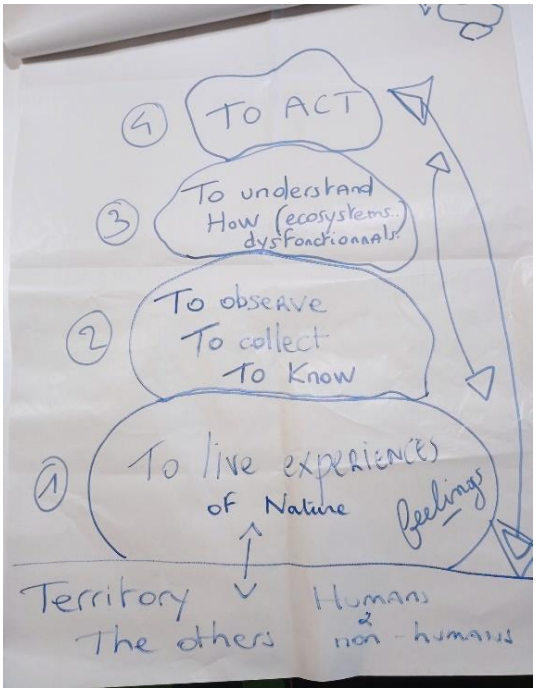


At the end of the 1st day, we had the intervention of François Lenormand from "Collective Educate about Nature" – *Commission of Graine Normandie* – with constructive exchanges about our links to Nature.



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Training 2 – Nature and agriculture, how to transcend the dominant/dominated relationship?

This training was coordinated by IAMB and held in the city of Ljubljana (Slovenia) during the days 23th and 24th August, 2023. The main objective was the teaching about experimental acquisition of new skills to learn from Nature and implement this in professional practices.

The pedagogical aims were:

- Understanding the complexities behind paradigm change in agriculture.
- To cultivate deep listening skills among participants.
- Agricultural practices and Inspiring nature-based solutions for agricultural systems.
- Presentation of the experiential learning methodology.
- Establish the theoretical and methodological framework of the BREATH approach.

The training program was scheduled in this manner:

Day 1 « What is the dominant relationship between humans, nature and agriculture?»

- prologue, introduction of participants, expression of expectations and objectives
- setting the group environment for the content to emerge
- tools to ground what we have come to know

Day 2 « Where do we want to be in 20 year and how can we get there »

- dragon dreaming – where do we want to be in 20 years?
- demonstration of the paradigm shift model and collection of feedback. Is this even something we want?

The two-day workshop began with icebreakers and group activities to build a positive atmosphere and foster group dynamics. Using participative methods, participants were encouraged to share their motivations and expectations. The deep listening workshop immersed participants in experiential learning about the relationship between Nature and agriculture. A factual approach was used to connect agricultural practices with listening techniques, followed by open debates where participants shared their insights. Each day concluded with the use of a harvesting tool and reflective teaching methods to help participants reflect on their experiences.

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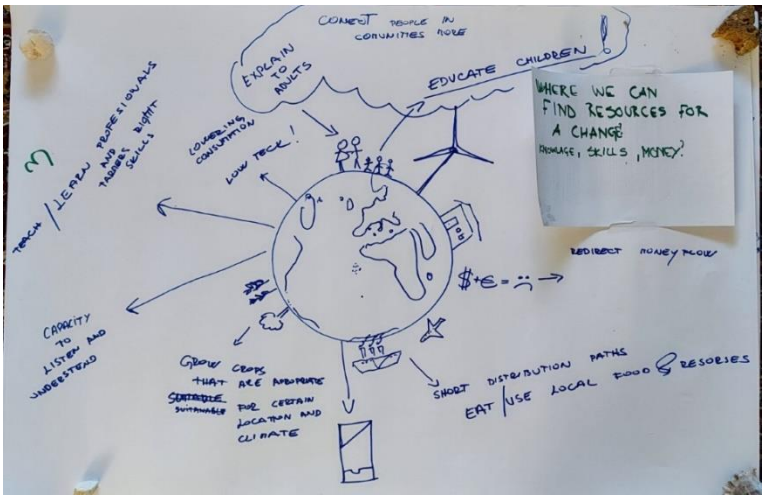
Pedagogical methods used:

- Transmissive, to explain the *disciplinary study on agriculture* to make the participants understand the main models and practices of agriculture. Also to explain what deep listening is, what differences there are between regenerative and conventional agriculture, and understand how each approach impacts the environment.
- Experiential approach, deep listening and searching connections to agricultural practices.
- Transformative, with the celebration circles and reflections.
- Participative with open debates, world cafe, discussion and brainstorming, promoting teamwork.



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Training 3 – Bio-architecture and Bio-construction inspiration

The third training was coordinated by Taph Taph and held in the city of Seville (Spain) during the days 13th, 14th and 15th March, 2024. The main objective was *Inspire nature-based solutions for constructive systems*.

The pedagogical aims were:

- Involve more and more professionals and entities in the BREATH Project approach.
- Produce Direct impacts in the local, regional and national context of the event entity organization.
- New tools for consulting professionals and support, providing good practices by case study.
- Contribution and improvement of skills for better sustainability, relevance and effectiveness of the supported projects.
- Promotion of jobs linked to the environment and better employability, providing good practices by case study and examples of systems of non formal certification of professional competencies through ECVET Earth program.
- Promotion and description of natural methods and skills, providing good practices by case study.
- Knowledge of new methods inspired by nature, providing good practices by case study.
- Recognition of the impacts of these methods, and implement and maintain them locally.

The training program had an scheme of:

DAY 1

- The BREATH Project approach, scheme and tools. Florian Guillote. Les 7 Vents. Coordinator of the project
- Bio-architecture concepts and the Expert Course on Bio-architecture at the University of Seville
- Andalusian vernacular architecture: nature and ecology
- Regional, natural and healthy resources for construction in Western Andalusia
- Building teams and construction capacities

DAY 2

- Non-formal learning on structural carpentry and experiential training. Personal experiences
- ECVET Earth, professional competences certification and training on earth construction
- Natural painting workshop
- Earthen architecture and construction, professional expertise and dissemination
- Outdoors group game
- Guided visit to the Botanical garden of the Vivero del Parque del Alamillo

DAY 3 (Volunteer activity)

- Guided visits to the archaeological sites of El Carambolo and Itálica
- Disemination event of the BREATH Project plus invited conferences at the Andalusian Historical Heritage Institute

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The pedagogical methods developed during the training were mainly focused on basic knowledge and skills about building, with the specialties of bio-architecture and bio-construction, and pointing out some of the main theoretical basis, references of case studies and testimonies of experienced professionals. Some time was dedicated to the explanation of the BREATH approach. However, the organizer considers that more participative, group exchange and experiential activities should be important to comply with the expectation of the participants.

The activities and methods undertaken were:

- Transmissive through some presentation about: the BREATH Project approach; basic bio-architecture and bio-construction knowledge and professional competencies of university expert course; ECVET earth building certification and training design system for Vocational Education and Training EQF levels; personal and professional experiences of accredited building professional of VET and Higher Education.
- Experiential: through workshops for the identification, production and workmanship of local, natural and healthy construction material; team building participative workshop.
- Active discovering: doing guided technical visits to archaeological sites to understand the historical environmental impact of past cultures; survey at the botanical garden of the park to discover its biodiversity.

Finally, the 3rd BREATH Dissemination event took place the last training day, so the trainees could attend this public event which included pedagogical content, good practices of case study, and professional networking. For both, the 3rd training and the dissemination event, videos were produced by Taph Taph association (Taph Taph, 2024).

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Training 4 – Revisiting the tools available to support spatial planning projects facing the transition

The fourth and final training was coordinated by L'Arban. It was held at the rural village of Châteauneuf-la-Forêt (France) during the 26th and 27th of June, 2024.

The main pedagogical aim was to introduce to participants tools enabling them to renew their support for spatial planning projects, based on a systemic, ecological and democratic approach.

The specific pedagogical aims were:

- Understand the key knowledge, skills and competences required to support spatial planning projects in the face of ecological transition.
- Discover different methods for a sensitive, shared approach to place.
- Discover and adopt working methods that enable us to draw on the environment in the search for collective solutions.
- Learn about and try out the facilitation protocol for collective decision - making.

The training program was designed to offer different modules led by different trainers, as well as to give priority to workshop work using experiential and active methods, in a friendly, sharing environment. Throughout the course, and as part of the facilitation process, one of the members of the teaching team produced a live graphic record of the presentations and interactions during the various training sequences.
The training program was designed to live in two days the 3 stages of a spatial project elaboration process:

- shared diagnosis;
- explore the solutions;
- decision making.

It was scheduled in this manner:

DAY 1

- Welcome, introduction of participants and program.
- Presentation of the theoretical framework for a renewed vision of spatial planning practice.
- Presentation of the stages in the spatial planning process : sensitive approach to the site, shared diagnosis, search for solutions and planning choices.
- Sensitive discovery of a place through a mediation approach between the environment and the user: role and position of the facilitator.
- Drawing up a shared diagnosis: facilitating collective work.

DAY 2

- Leading a collective search for solutions inspired by nature.
- Presentation of the position and role of the facilitator of a collective time involving a diversity of players (elected representatives, residents, shopkeepers, nature conservation organizations... and the living!).
- Introduction to the protocol for decision-making by consent: working stages and points to watch.

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The design of the training program was focused to privilege pedagogical methods based on experience and public participation. The pedagogical aims of the first day, done through a transmissive approach supported by a layout, were:

- Establish the conceptual framework for land-use planning in the face of transition.
- Develop the process of developing a development project by describing the skills, competences and posture of the facilitator/supporter.
- Transmit principles of observing and reading the landscape and perceived space, and learn how to extract information from it.
- Experiment with and identify different animation tools in the context of spatial reading and an outdoor workshop.
- Clarify the posture and role of the guide/facilitator.

Following a predefined walking route studied in advance, the trainer/mediator led the group on a sensitive stroll through the town of Châteauneuf-la-Forêt. During the walk, the trainer worked on reading the space, while questioning the group to allow participants to express their feelings. The objective, centered on the individual, was to bring the participant into contact with the environment. The pedagogical objectives of the second day based on experiential method were:

- Understand and experiment with concrete tools for cooperating and finding solutions collectively.
- Identify the posture and role of the facilitator in the context of collective work.
- Discover the protocol for facilitating decision-making by consent.

Finally, some evaluation methods were tested: we have proposed a number of different methods for carrying out personal and collective assessments of the training:

- On-the-spot assessment.
- The satisfaction form one month after training.
- Skill acquisition process two months after training.

Training has enabled apprentices to experiment and discover different resources (theoretical knowledge, workshops, ice-breakers, etc.). For these resources to become skills, they need to be experienced in the workplace.

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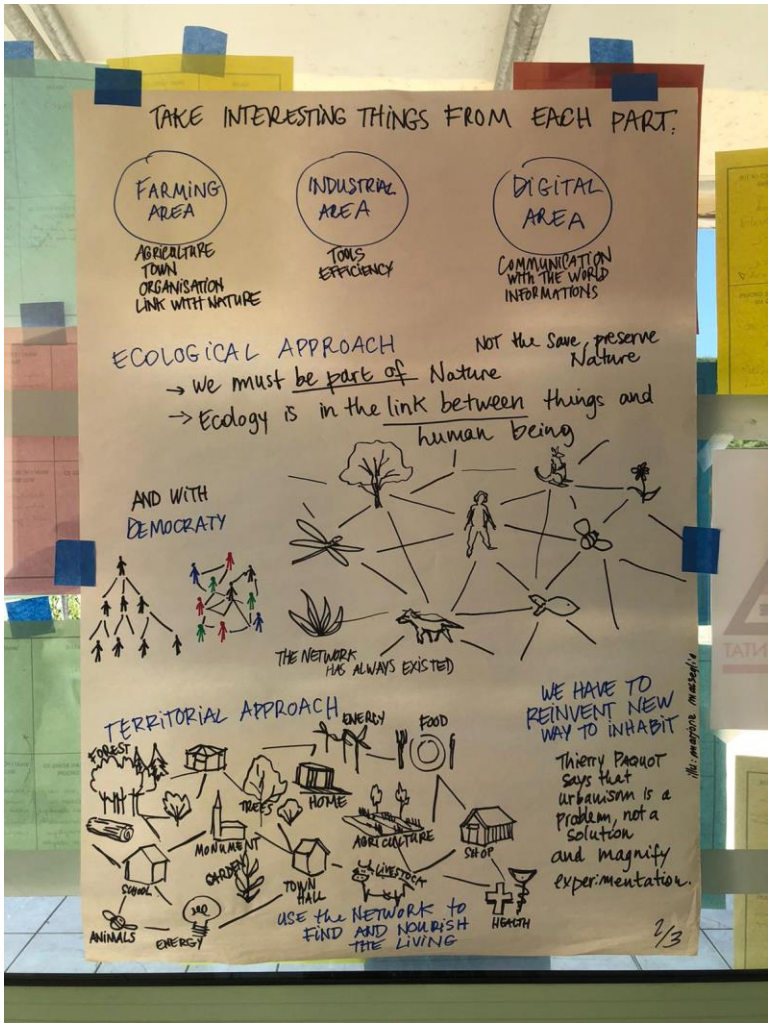

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3.4. Lessons learned from our training cycle

To sum up and ensure the quality of future trainings, some reflections are pointed out after the training cycle experimentation undertaken.

Considering advisors as essential elements for supporting ecological transition in our European societies, it is as well crucial to ensure that more and more people are trained in ecological transition and master key professional competences for implementing advice inspired by nature. To create a cycle of training for ecological transition through transversal skills and professional competences, a great effort must be done to understand the conceptual complexity needed. It is what we could done during almost three years of research and developing important training resources like the BREATH competency framework for advisors in ecological transition or the Guide: Advising in ecological transition, why and how?

Pedagogical methods

During the whole training cycle, many of the main five pedagogical methods were used, complying with the different ways of learning of a wide range of participants profiles: transmissive, experiential, active discovering, interrogative and demonstrative methods. We encourage to use all kinds of methods which could reach the pedagogical aims of the training and the expectation of participants. However, we recommend favoring experiential, interrogative and active discovering methods to let trainees actors of their training and to find answers by themselves. We recommend to use infrequently the transmissive method which refers to a magistral approach for presenting a knowledge. The demonstrative method is used to acquire know-how.

It is good to keep in mind that everyone has their own ways of learning depending on the moment, the subject and the context. Alternating teaching methods and styles makes it possible to meet everyone's needs.

Duration of the training

Following the project proposal, and because our target public are professionals, the duration of each training has been of two days. Partners organizing the third and fourth training added a volunteer day for visiting some sites.

This short duration allows developing training content or learning outcomes of a certain level of difficulty but does not allow to go deeper in each resources presented. Two days of training allow participants to explore and experiment with a variety of resources and approaches (theoretical frameworks, participative workshops, tools, methods, etc.) that can assist in their professional work. However, for these resources to truly become skills, they must be applied and experienced in a professional setting. We therefore suggest that participants identify their personal challenges and set a concrete objective to test and validate the skills acquired during the training.

A longer training could increase the educational contents and their difficulty, taking into consideration that the target public are professional adults.

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Trainees profiles

For each training, each partner could send three trainees that they selected according to the training theme. Trainees profiles were divers and belong to a mix of educational levels of Higher Education, VET and Non formal education, so it is not so easy to adapt the learning outcomes to this wide range of target public. However it is interesting to have this social and professional mix, fostering inter-exchange of professional classes and then facilitating the acceleration of social and ecological transition.

Furthermore, it is important to have previous communication with trainers and trainees to ensure the BREATH approach, learning outcomes and pedagogical methods will be well developed and understood.

Geographical situation

The geographical context of the training place and education facilities is also important. Three of the different training sessions were undertaken in urban areas and one in a small village, answering the transport possibilities of bringing trainees from international origins. Then, it is better to do the training in more rural and natural places to connect with a more pleasant Nature. Besides, the education facilities and buildings would need to meet the criteria of bio-construction and bio-architecture disciplines so that trainees and trainers can enjoy and learn from this.

Training organization

About organization and management, the training cycle participants expressed the very good work of the organizers, highlighting the easy training registration process, the good accommodation conditions, the good group of participants, and the kinds of places visited as volunteers after the official training. The creation of a good atmosphere in the group of participants, the respect of natural rhythm with not too many activities per day is also important. It is also important to ensure that participants remain engaged during the training, and also have the opportunity to know the profile and expertise of other participants, trainers and organizers, through personal presentations and interexchange workshops. To do this it is recommended to incorporate breaks, encourage active participation, allow time for reflection and exchange, and set clear education objectives before, during and after the training.

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4. A global approach to training design for professionals

Before going deeper with the design of a training, there are two important aspects to highlight : the pedagogical theories and methods and the kind of training to develop in terms of education and employment through the EQF classification (in terms of the target public profile, the duration and the main professional competences to be learned by responsibility and autonomy).

4.1. Pedagogical theories and methods

Among some possible definitions, a pedagogical method is a means used to develop learning and to fulfill a specific pedagogical objective. By using pedagogical methods, trainees will gain knowledge, skills and competences about certain learning outcomes which can belong to different fields of work or study.

There are five major theories of learning in training, including the trainer and trainee roles, which we detail below.
It is often said today that the place of the trainer is changing: he is no longer (or in any case should no longer be) the knower who provides his knowledge to passive learners, but rather a facilitator of learning, promoting active and collaborative learning, in which he will organize interactive activities, games and times of reflection to make the learners work and think (Carré, 2005) (Perrenoud, 1996).
What is learning? A Japanese neuroscientist, Koizumi, proposed the following definition: "learning is a process by which the brain reacts to stimuli by creating neural connections that serve as a processing circuit and allow the storage of information" (Koizumi, 2004).

Here, we present a summary of the five major theories of learning:

Behaviorism is linked to transmissive method. Despite some very well known problems and obstacles of this theory, it presents valuable practices:

- The object of learning must be broken down into a series of short elements to allow for the fastest possible reinforcement. This is particularly the case in e-learning.
- It is necessary to start from the simplest contents, to gradually increase the level of difficulty until arriving at the most complex elements.
- Encourage positive reinforcement to promote learning.
- There is no learning without repetition!

Cognitivism theory matches with demonstrative method. For cognitive scientists, learning means adding information to the information already present in memory. The job of the trainer in this model is to transmit new knowledge to learners, but also to help learners put this information in the right place. This theory provides some interesting point to develop a learning method:

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- At the beginning of the training, assess the level of knowledge of the learners on the topic addressed.
- Provide activities and tools to help learners make connections between what they are being taught and what they already know.
- Analyze the errors made by the learners.
- Promoting metacognition or learning to learn, to self-build the own knowledge of trainees.

Constructivism or experiential method, constructing our learning through manipulating objects. We build our knowledge by manipulating objects, by experimenting. These experiments will cause the creation or modification of action patterns, that is to say, structures of actions that can be repeated in similar circumstances.
There are two main features for this kinds of theories:

- Errors are part of the learning process.
- The trainee has previous knowledge and skills before coming to a training.
- Learner proposes solutions and actively participate in building knowledge.

Socio-constructivism belongs to interrogative method. It considers that the learning of trainees is a social construction, a socio cognitive process. It offers the same pedagogical solutions as constructivism, with the difference that all exploratory activities are carried out in groups.

- Start by asking a question or presenting a problem to the learners.
- Then give them time to brainstorm a solution either in small groups or in collegial discussion.
- In the case of work in sub-groups, ask each group to quickly present its solution.
- If not, propose a solution based on input from all learners.

For connectivism theory and the related active discovery method, learning is an individual and internal process that also depends on the trainee environment through different means of communication. The environment is an important part of the learning process. (Sydologie, 2019).

There are different forms of environmental education that can be used in vocational training. In particular, education in the environment and through the environment, *the environment is both a learning environment and a pedagogical resource* (Sauvé, 1994). This environmental education *corresponds to a pedagogical strategy: it involves learning through contact with the environment, either through the environment outside the school or through the biophysical or social context in which one lives*. The objective, centered on the person, is to connect the participant with the environment.
Through environmental education, *we learn to solve and prevent environmental problems as well as to manage collective resources, the environment becomes a goal* (Sauvé, 1994). The education in the environment aims to build a solid link between the person and his environment, develop values, and promote empathy. Besides, the environment can be understood as a system to learn, with the understanding of the operating principles, and creating what is called *systemic thinking*.

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Moreover, there are some other interesting learning-teaching activities which can improve the quality of the training:

- hands-on experiential and participative workshops in real contexts;
- assign participants a project related to the training objectives and support it by mentoring;
- empower the training group by building and telling personal histories.

4.2. The European Qualification Framework (EQF) for education and employment levels linked to transversal and specific skills.

The EQF is an 8-level learning outcomes-based framework for all types of qualifications that serves as a translation tool between different national qualifications frameworks. It covers all types and all levels of qualifications, and the use of learning outcomes makes it clear what a person knows, understands and is able to do (knowledge, skills and competences):

Knowledge – the body of facts, principles, theories and practices that is related to a field of work or study. Knowledge is described as theoretical and/or factual, acquired by expertise or study.

Skills – the ability to apply knowledge and use know-how to complete tasks and solve problems. Skills are described as cognitive (involving the use of logical, intuitive and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments).

Competences – understood as responsibility and autonomy, is the proven ability to use knowledge, implement skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development.

Transversal or soft skills - skills that are typically considered as not specifically related to a particular job, task, academic discipline or area of knowledge and that can be used in a wide variety of situations and work settings (for example, organizational skills).

In this framework the professional competences assigned to every level are described in terms of what a person is able to do with a certain level of responsibility and autonomy. Designing a training should follow this framework, understanding the target public, the main transversal competences to be gained and certified, and the possible duration of the training program.

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Education and professional certification of competences through qualifications	Title	Level	Main transversal competences	Usual Duration	Usual Official education equivalence
University	Doctor PhD	8	Critical thinking. Analysis. Diagnosis and assessment. Adaptation to needs. Highest responsibility. Scientific research vanguard.	4 or plus years	Postgraduate
University	Master degree	7	Project design and execution. Organization. Workteam planning. Complexity. High responsibility. Enable specific jobs like engineer, architect, lawyer	1-2 years	Postgraduate
University	Bachelor degree	6	Project design and execution. Organization. Workteam planning. Complexity. High responsibility	3-4 years	Degree
VET (Professional training) High grade (plus possible specialization courses)	High technician	4-5	Technic-scientific approach. Work team coordination. Responsibility of the project execution and supervision	2 years	High school
VET (Professional training) Medium grade	Medium technician	2-3	Autonomy. Plots and project interpretation. Use of techniques and equipment. Small responsibility	2 years	Secondary school
VET (Professional training) Basic grade	Operator	1	Simple. Limited. Repeated operations. Standard procedures. No responsibility	2 years	Secondary school

The usual durations of official training in VET and in Higher Education in Europe, can vary from some years of long careers to only some tens of hours of specialization and micro-credential training.

An example of short duration training is the kind of training called "Specialization courses" of the Spanish VET system, or the micro-credentials of the European system for Higher Education. Both with a respective duration of the learning hours of the trainee, including homework, from 20 to 400 hours, and from 100 to 150 hours (4-6 ECTS credits).

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Grade A Basic grade	Grade B Basic grade	Grade C Basic grade	Grade D High/medium grade	Grade E
Partial professional competences accreditation	**Full professional competences certificate**	**Professional competences certificate** based in the achievement of some professional competences accreditation	**Professional title of a Professional training cycle**	**Specialization courses**
Issue/subject 1	Unit or Module 1+n	Professional accreditation or certificate	Accreditation or vocational certificate plus specific subjects/modules forming part of a specific vocational training qualification (medium or higher grade)	Title of Professional specialization after doing a professional training cycle (high or medium grade)
Issue/subject "n"	Unit or Module "n"	Professional profile "n"		

In the case of Spain, as an example, there are different education and employment sub-levels for the kinds of Vocational Education and Training. From grade A to E, this VET classification is divided into grades which are certified by subjects, specific professional competences, a group of professional competences, a professional training cycle or even specialization courses.

- Grade A: Study a specific content (theme/subject) of a module and obtain a partial accreditation of professional competences.
- Grade B: Study all the contents (them/subjects) of a module and obtain a full accreditation of professional competences.
- Grade C: Study all the modules and subjects of different professional competences accreditation in order to obtain a Professional competences certificate.
- Grade D: With a professional competences certificate plus specific subjects/modules, which are part of a specific Professional title, allow students to obtain the professional title of the Professional Training Cycle (high or medium grade)
- Grade E: Even every student who has been certified in a Professional Training Cycle (high or medium grade), can do a Specialization course to complement his/her/its professional profile.

All these examples are important to understand how to build a training in terms of learning outcomes or learning units, the professional competences taught and learned, and the duration of the training needed.

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5. Training design - Facilitating change with the BREATH systemic approach

As a summary, conclusion and recommendation, here we present an improved model of two days training based on the experiences undertaken during the term of the BREATH project. The objective of this model training is to transmit knowledge, skills and competences of the BREATH systemic approach. This training model must be considered as adaptable and transferable to the needs of any organization focused on any field of education and employment.

Before the training

The first steps to prepare the training are composed by transversal tools to develop:

- Training program.

  The first thing to do is to prepare the training program based on the pedagogical objectives and trainees needs. It also necessary to prepare the certificates of attendance and the assessment forms. The program contents and the pedagogical methods must be adapted to trainees needs when receiving their registration form. Then it is necessary to prepare all training materials and mention the educational reference documents or learning outcomes that will be followed during the training

  The communication of the final program can then be done to the target public profile by e-mail contact list, website, leaflet, social networks, newsletter, etc.

  Furthermore, another interesting factor is to inform trainees about how to arrive, meals, accommodation, etc.

- Registration form prior to the training.

  The collection of basic personal and professional data of trainees are important, such as: job position, studies, work experiences, etc. It is also relevant to have some feedback of what is expected by the trainee in the training proposed, as well as which ones are the professional competences linked to the training the trainee already has. We also recommend to invite participants to define a professional challenge related to the training. The training makes it possible to understand a certain number of resources that can help participants achieve their challenge.

- BREATH Guide - Advising in ecological transition, why and how?

  As a learning outcome or tool, this guide offers the BREATH systemic approach for implementing advice in ecological transition. It outlines how support for ecological transition can be reconsidered through the prisms of observing, evolving, practicing, and fostering. This guide also contains the BREATH competency framework for Advisors in ecological transition, a conceptual framework summarizing the key competences that advisors in the field of ecological transition need to acquire to integrate approaches inspired by nature into their professional practices. It is designed to be transferable and adaptable across a wide range of occupations for learning and teaching purposes.

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During the training

During the realization of the training, it is important to set the dynamic rhythm and the chronobiological key points: respect of timetable, enough breaks, conviviality moments out of the training, etc.

According to this training model, the pedagogical aims are:

- Put into practice the BREATH Systemic approach for advisors in ecological transition.
- Understand the key knowledge, skills and competencies necessary to support ecological transition and facilitate change.
- Develop awareness of the importance of listening to others and adopting a humble attitude when advising them.
- Discover tools to facilitate collective work and empower individuals.

The main contents of the first day are as follows:

- Interknowledge of participants, expression of expectations, give the tone of the training, and objectives of each.
- Theoretical contributions on BREATH systemic approach.
- Observe and understand the natural complexities of systems.
- Evolve within an 'eco-responsible' ethical framework.

The ones of the second day are:

- Put into practice advice inspired by nature.
- Lean on one's environment to foster change.
- Time for discussion on participants' feelings and feedback.

In order to engage trainees in their learning process and to obtain their feelings and feedback, we recommend some assessment modes:

- Self-assessment of the targeted competences of the BREATH systemic approach.
- Individual and collective feedback of the first day.
- Self-assessment of the learning outcomes of the two days training, at the end of the training.
- Satisfaction questionnaire of qualitative aspects of the training such as: organization, framework, pedagogy, group, profit withdrawn, etc.

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Here we present the two days program that we have created:

TRAINING

FACILITATING CHANGE WITH BREATH SYSTEMIC APPROACH

BREATH
LEARN TO DO FROM NATURE

DAY 1

		Description	Objective of the sequence	Pedagogical methods
30 m	Welcome	Discovery of places and people	Set the participatory tone, immerse yourself in the places and the program	
15 m	Introduction	Presentation of the program, the pedagogical objectives and the course of the training	Explain the common thread of the training: back and forth between experimenting with training actions and taking a step back from the objectives, methods and learning.	
30 m	Ice Breaker	Interknowledge sequence, participants and speakers get to know each other	Enable each participant to identify the resources (skills, aptitudes) they already possess and which they can put at the service of the group.	
50 m	BREATH sysmetic approach	Presentation of the BREATH systemic approach	Understand the complexity of the four blocks of competencies of BREATH framework, as well as their interconnection and complementarity.	
30 m	Self evaluation	Self-positioning in relation to the targeted competencies of the BREATH systemic approach. Collection of needs, expectations, and objectives of each.	Better understand how learners' perspectives align with BREATH systemic approach, and enable each participant to identify their strengths and weaknesses within this system.	
40 m	Introduction ecological principles	Presentation of ecological principles and solutions considering eco-responsible ethics	Understand the key elements needed to develop sustainable and environmentally ethical advice.	
15 m	Chronobiological rhythm	A quick game for introducing the chronolobiological rhythms	Experiencing an energizing (and biomimetic) moment as an example illustrating chronobiological rhythms.	
75 m	Workshop natural complexities of systems	Mimicking ecosystem with BREATH systemic approach	Put in practice the BREATH systemic approach to work in a systemic and transversal manner for a global vision of the ecological transition.	
75 m	Workshop eco-responsible ethical	Team building for the identification, production and workmanship of local, natural and healthy material	To be able to consider, understand and respect natural societal limits and constraint in order to adapt its proposal to the human and environmental context.	
15 m	Harvest of day one	Individual assessment + collective debriefing	Time for feedback, sharing everyone's feelings and answering questions.	

End of the day

Pedagogical methods — *Participative* — *Transmissive* — *Active discovering* — *Experiential*

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TRAINING

FACILITATING CHANGE WITH BREATH SYSTEMIC APPROACH

BREATH
LEARN TO DO FROM NATURE

DAY 2

		Description	Objective of the sequence	Pedagogical methods
	Welcome			
15 m	Ice Breaker	Participants express their mood of the day and feelings	Restart and get feelings of each participant	
10 m	Introduction	Introduction and explanation of the course of the day	Set the tone of the day	
20 m	LISTENING levels	Develop participants' ability to engage in deeper, empathetic listening, fostering collaboration and holistic solutions in ecological transition.	Deepen understanding and develop listening skills	
45 m	PEDAGOGICAL methods	Presentation of different means of communication and pedagogical methods to facilitate the change	Discover expository, interrogative, and demonstrative methods, as well as the commented walk, graphic facilitation, etc. to effectively use them for successful collaborative work	
75 m	Workshop put in to practice advise	Put in to practice advice using different pedagogical methods and means of communication	Sensitize participants to develop common solutions through deep listening to each other and nature	
20 m	Introduction collaborative work	Presentation of the tool 'Bono's hats' : a tool for collective creativity	Enable participants to learn the perceptive qualities of each member of a group, so as to adapt their advice to the needs of each individual	
75 m	Workshop foster change	Experiment a collaborative method to act and cooperate in a social and cultural context to foster change	Rely on one's environment and harnessing collective strengths to empower individuals to be responsible and autonomous	
30 m	Take a step back	Feedback of the experience lived	Collective conclusion and feedbacks on the 2 training days	
20 m	Conclusion	Summary of the 2 training days + conclusion on the follow-up to be given (self-assessment)	Reminding of pedagogical objectives and plan the continuation of the learner's journey	
30 m	Assessment	Individual assessment + Satisfaction questionnaire	Time for feedback, sharing everyone's feelings and answering questions	
	End of the day			

Pedagogical methods *Participative* *Transmissive* *Active discovering* *Experiential*

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After the training

The final steps to be undertaken after the realization of the training concerns assessment and certification of the skills.

The self-assessment appeared to us to be the right tool to use for our trainings due to their short length (2 days), as well as to meet some of the BREATH approaches such as those of empowering and making people responsible in their practice. Thus, with self-assessment participants can test the resources learned during the training and validate the competences acquired in a concrete professional situation. For this, we recommend to give to all participants any useful pedagogical resources seen during the training that they can bring back with them.
We have designed a self-assessment questionnaire (see annex III) in line with the proposed program below, which is a flexible, reusable and adaptable tool for any field of work or study.

Skill acquisition process

When registering, participants are invited to define a professional challenge related to the training. The training makes it possible to understand a certain number of resources that can help participants achieve their challenge. Training is a pedagogical tool and is a means for acquiring resources. However, for these resources to become skills, they must be experienced in a professional environment.

At the end of the training, we give to each participant a self-assessment sheet so that they can, during a concrete professional situation, transfer to the skill based on specific evaluation criteria.

Skills validation process

First, we present some key concepts that underline the validation of skills. The concepts of learning outcomes, knowledge, skills and competences (European Commission, 2008) :

- *"Learning outcomes"* are statements of what a learner knows, understands and is able to do as a result of a learning process, which are defined in terms of knowledge, skills and competences;

- *"Knowledge"* means the result of the assimilation of information through learning. Knowledge is the set of facts, principles, theories and practices that relate to a field of work or study. In the context of the European Qualifications Framework, knowledge is described as theoretical and/or factual;

- *"Skill"* means the ability to apply knowledge and know-how to accomplish tasks and solve problems. In the context of the European Qualifications Framework, competences are classified as cognitive (involving the use of logical, intuitive and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments);

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- *"Competence"* means the demonstrated ability to use personal, social and/or methodological knowledge, skills and abilities in work or study situations and in professional and personal development. In the context of the European Qualifications Framework, competence is defined in terms of responsibility and autonomy.

Another fundamental definition concerns the learning contexts. In the glossary of CEDEFOP (European Centre for the Development of Vocational Training), published in 2004, some definitions of formal, non-formal and informal learning are provided:

- *Formal learning* is distinguished from other types of learning by 4 distinctive elements: place where it takes place, structured and organized planning, awareness of the learner and delivery of formal certifications and qualifications.

- *Non-formal learning* is distinguished from formal learning because it has no structured and organized planning and because it does not deliver formal certifications and qualifications. Furthermore, the place of learning is not decisive.

- *Informal learning* seems to be unstructured: it occurs unknowingly, in everyday life (family, work, free time) and obviously does not deliver any type of certification.

Furthermore, one of the documents developed by CEDEFOP constitute a fundamental reference point for the validation of competences; in fact, these documents identify four phases for the validation process (European Commission, 2015):

- Identification. Validation necessarily begins with the identification of acquired knowledge, skills and competences and it is here that the individual becomes increasingly aware of previous achievements. This stage is crucial because learning outcomes vary from person to person and have been acquired in various contexts: at home, at work or through voluntary activities. For many, the discovery and increased awareness of their own abilities is a valuable outcome of the process.

- Documentation. Documentation will normally follow the identification stage and will include the provision of evidence of the learning outcomes acquired. This can be done through the 'construction' of a portfolio which tends to include a CV and a career history of the individual, with documents and/or work samples that attest to their learning outcomes. Validation should be open to a variety of types of evidence, from written documents to work samples and demonstrations of practice. This evidence should provide sufficient insight into the learning outcomes achieved: simply listing job titles or positions will not be sufficient.

- Assessment. Assessment is normally referred to as the stage at which an individual's learning outcomes are compared to specific benchmarks and/or standards. This may involve the assessment of written and documentary evidence, but also the assessment of other forms of evidence. Assessment is crucial to the overall credibility of the validation of non-formal and informal learning.

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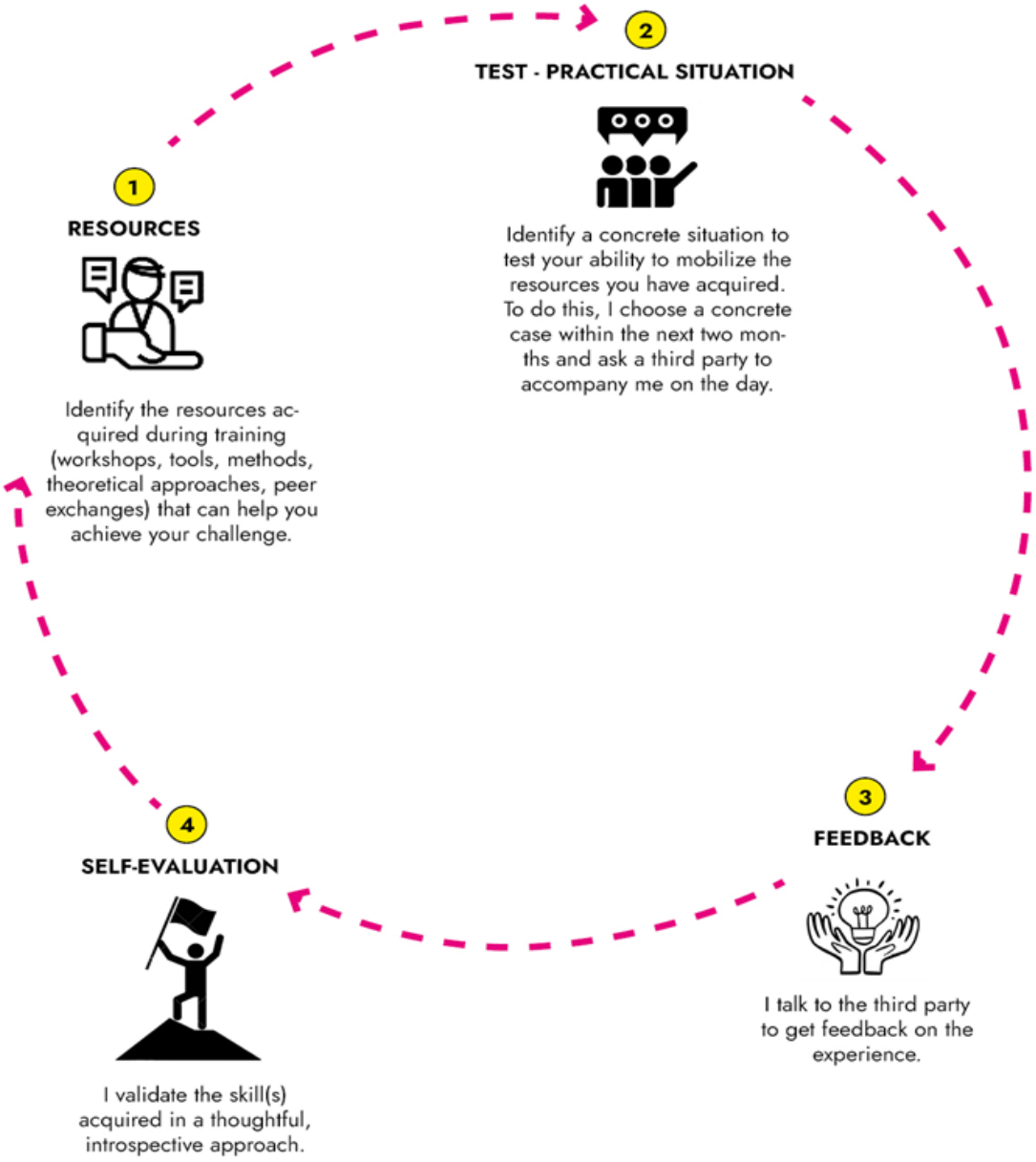
- Certification. The final phase of validation is linked to the certification – and final assessment – of the learning identified, documented and assessed. It can take different forms, but usually involves obtaining a formal qualification (or a partial qualification).

Here, we present the skills validation process used in the BREATH systemic approach in image:



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As we saw above, when registering for the training course, participants are asked to identify their desires and projects in terms of skills enhancement.

At the end of the training course, participants are invited to identify the resources shared during the course (theoretical approaches, participative workshops, tools, methods, peer exchanges, etc.) that could help them acquire the skills they are looking for.

In this way, we propose that participants embark on a four-stage process of skills acquisition, starting with the identification of resources, followed by practical application, external feedback and acquisition. In this four-stage process, the apprentice commits to a work experience enabling him or her to test this new skill, and is accompanied by a third party for external feedback.

Two months after the training course, participants are expected to put the skills into practice and validate them. Thus, based on a concrete professional situation they can fill out the self-assessment sheet received at the end of the training.

The work experience thus enables the learner to self-assess the acquisition of the skill.

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ANNEXES

I. Organizing a long term cycle of training for Ecological Transition

Here are pointed out some recommendations to use in the design of long training, more similar to the duration of official public certified VET and Higher Education specialization training or courses:

- Analyze the employment and education needs and the education programs already offered linked to the training project, in a specific territorial context. Do surveys and research on trades for ecological transition.
- Establish the definition of the professional qualification to be trained and certified through a knowledge, skills and competences framework, like the 'BREATH competency framework for advisors in ecological transition' which is divided in four blocks of competences. Clarify whether these knowledge, skills and competences are specific (hard) or transversal (soft) to one or various fields of study and work.
- Set the pedagogical aims and methods in a training program scheme, trying to focus on a experiential approach but not forgetting other kinds of methods like transmissive or active discovering, and promoting trainees interexchange and professional networking.
- Decide on the preferred training mode or combination of modes for the training project: face to face or on line.
- Decide the kind of target public: VET, Higher Education, or non formal education level of trainees, with more or less expertise as professionals. Search for the target public and how to reach them, deciding the trainees and trainers profile requirements to access the training program.
- Do a communication campaign. Prepare the registration process with its forms, and adapt the training program to meet the final audience needs.
- Think about the production and use of learning guides as tools. Learning outcomes arranged by thematic units or micro-modules, divided by levels following the 8 levels of the EQF classification required for the trainees. Besides, allow that these outcomes can be reached by the trainee through his/her own learning itinerary by independent units or micro-modules, as current ECVET and Higher Education systems propose nowadays.
- Prepare learning activities, exercises and tests to be solved by trainees as part of the learning assessment process. Useful references as case study, professional network and bibliography.
- About the training location, the territory and the education facilities: give priority to teaching centers in wooded areas which promote construction following bio-architecture and bio-construction criteria, so that participants can benefit from them.

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Now, as an example, here is presented a brief scheme of a long term training for advisors in Ecological transition, similar to the scheme of a specialization course of VET or Higher Education composed by micro-modules which can be taught, learned and certified independently one from the other. Facilitating the trainees to choose his/her own learning path. However, in this case presented, the first micro-module should be mandatory to always be the first one of a learning pathway because it presents the fundamentals of the BREATH approach.

The scheme is divided in four modules: BREATH Advisor in Ecological transition, training design and management; spatial planning; agriculture and building. Going from a global to a specific scale. The learning modes are online and face to face, allowing ten hours of online training prior to the sixty hours of face to face training, and finishing with ten hours of online learning and assessment for certification.

Micro-modules	Scope of the BREATH long term Training	Duration (h)	
		Online	Face to face
1	BREATH Advisor in Ecological transition. Training design and management	10+10	60
2	Spatial planning	10+10	60
3	Agriculture	10+10	60
4	Building	10+10	60

On the other hand, the first micro-module can be subdivided in different parts, combining transmissive and interrogative pedagogical methods during the first online training mode in order to introduce participants in the BREATH learning outcome and the Guide *: Advising in ecological transition, why and how?*. After this, two weeks of thirty hours per week (6 hours per training day) will be needed to develop different pedagogical methods and activities following the *BREATH*

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Competency framework for advisors in ecological transition, deeping in the professional competencies needed. Finally, despite a face to face assessment could be done, five hours of accompanied self-assessment by the trainee with the trainer, plus five hours of assessment done only by the trainer to finally certify the trainee.

Week	Scope	Duration (h)	Mode	Method	Learning unit
1	BREATH Project. Guide for advising in Ecological transition	5	Online	Transmissive + Interrogative	1.A
2	BREATH Project. Guide for advising in Ecological transition	5	Online	Transmissive + Interrogative	1.B
3	BREATH Competency Framework Advisor in Ecological transition.	30	Face to face	Experiential + Interrogative + Transmissive + Inter knowledge	1.C
4	Training design and management	30	Face to face	Experiential + Interrogative + Transmissive + Inter knowledge	1.D
5	Assessment 1	5	Online	Accompanied self-assessment by the trainee with the trainer	
6	Assessment 2	5	Online	Assessment only by the trainer + certification	

Finally, the four blocks of knowledge, skills and professional competences presented in the BREATH Competency framework, are proposed to be learned mainly by experiential and active discovering pedagogical methods, and facilitating the interexchange and interknowledge between trainees, trainers and organizers. Something that will foster the creation and facilitation of professional networks and the acceleration of ecological transitions.

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Day of the weeks 3 and 4	Scope	Duration (h)	Mode	Method	Learning unit
1	Approach of the BREATH Competency Framework Advisor in Ecological transition.	6	Face to face	Transmissive + Interknowledge	1.C.1
2	Observe and understand the natural complexities of systems	6	Face to face	Experiential + Active Discovering	1.C.2
3	Evolve within an "eco-responsible" ethical framework	6	Face to face	Experiential + Active Discovering	1.C.3
4	Put in practice advice inspired by nature	6	Face to face	Experiential + Active Discovering	1.C.4
5	Lean on one's environment to foster change	6	Face to face	Interknowledge	1.C.5

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TRAINING

«What competences, pedagogical devices and innovative training tools to facilitate change towards sustainable systems?»

Wednesday 25 and Thursday 26 January 2023

From 9 am to 5 pm

France

@Hostel HI Paris Yves Robert,
20 esplanade Nathalie Sarraute, Paris XVIII

BREATH
LEARN TO DO FROM NATURE

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TRAINING

Wednesday 25 and Thursday 26 January 2023| From 9 am to 5 pm

« What competences, pedagogical devices and innovative training tools to facilitate change towards sustainable systems ? »

PEDAGOGICAL AIMS

- Understand complexities behind the notion of a sustainable system.
- Understand the competences needed to facilitate change.
- Learn about innovative educational devices and tools.
- Anticipate training 2 to 4 and develop innovative content and methods.

Program

Day 1 « Scenario of the participants and illustrated theoretical contributions »

- Interknowledge of participants, expression of expectations, points of vigilance, and objectives of each
- Theoretical contributions on systemic, ecological footprint, change (SCIC Les 7 Vents)
- Illustration by case studies (Institute of mycology)

Day 2 « Deepening nature-based solutions in 4 conceptual frameworks »

- Highlighting **constraints and opportunities** - Workshop for the systematic exploration of feedback from participants (agriculture, construction, public policy),
- Make an inventory of the recommendations needed to **facilitate nature-inspired approaches,**
- Express the **needs for expertise, analysis, identification of skills,** to bring to knowledge in each of the areas concerned,
- Draw up a draft **detailed training plan for trainings 2 to 4**, as well as an action plan to implement these trainings.

Speakers

Justine POREE, Katarina ČESNIK,
Florian GUILLOTTE, Mathieu GONORD

Publics

Counselling and training professionals

Prerequisite

Sensitivity to nature

Methods of active pedagogy !

And after the training ?
Increased autonomy in facilitating ecological transitions

Contact : Justine PORÉE
justine.poree@7vents.eu | phone : 02.33.19.01.38
SCIC Les 7 Vents - 25 rue Docteur Henri Guillard
50200 COUTANCES - FRANCE

BREATH

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TRAINING

«Nature and agriculture, how to transcend the dominant/dominated relationship?»

Wednesday 23 and Thursday 24 August 2023
From 9 am to 5 pm

Slovenia

Faculty of Social Sciences

Kardeljeva ploščad 5

1000 Ljubljana

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PEDAGOGICAL AIMS

- through collective intelligence using participatory approaches we will extract the essence of the current state of agriculture
- co-create the non-formal education format for the needs of the holistic ways of thinking
- to facilitate a paradigm shift - integrated ethical planning and systems thinking

Day 1 « What is the dominant relationship between humans, nature and agriculture?»

- prologue, introduction of participants, expression of expectations and objectives
- setting the group environment for the content to emerge
- tools to ground what we have come to know

Day 2 « Where do we want to be in 20 year and how can we get there »

- dragon dreaming – where do we want to be in 20 years?
- demonstration of the paradigm shift model and collection of feedback. Is this even something we want?

Stakeholders

Tomislav GJERKEŠ, Janez GORENŠEK,
Justine POREE, Katarina ČESNIK

Publics

Counselling and training professionals

Prerequisite

Curiosity and open mindedness

Methods of ethical planning!

During the training

Exchange ideas and knowledge with participants of International Summer School of Political Ecology 2023 - Overcoming the Inequalities of Green Transition.

Contact : info@institute-iamb.com
IAMB Vegova 26, 3000 CELJE – SLOVENIJA
Illustrations by La Mari Muriel

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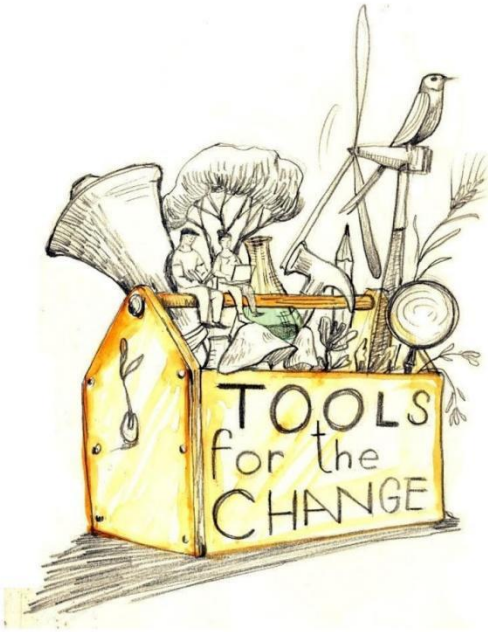
BREATH

Training and Dissemination event

13th, 14th & 15th March, 2024 Seville, Spain

Bio-architecture and Bio-construction inspiration



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Dear participants, trainers and speaker,

You are welcome to Seville city for the BREATH Training "Bio-architecture and Bio-construction inspiration", and the Dissemination and public event to present the BREATH Project to the Spanish public.

We will be close to 25 participants during the training, mainly professional adults linked to architecture, construction, ecology and other fields of work. All the participants have been invited by the partner entities of the BREATH Project. The training will be in English with Spanish consecutive translation. We will have a wide range of pedagogical methods (transmissive, experiential, visits, factual, etc) to adapt the contents to different ways of learning and assessment to professionals with different education and work background.

For the Dissemination event, which will be in Spanish with some translation into English, we expect to be around 50 people.

It is a pleasure to have you during these two events. We expect to enjoy together and develop a little bit more the professional networks needed to accelerate ecological transitions in our societies.

Tuesday 12th March, 2024 - WELCOME

20.00 h - Meeting point to have some drinks at "Bar Casa Vizcaíno" at Feria street, 27.

Wednesday 13th March, 2024 - TRAINING Transmissive and experiential

Venue: Aulario del Vivero del Cortijo del Alamillo. Parque del Alamillo. Sevilla

9.00 h The BREATH Project approach, scheme and tools. Florian Guillote. Les 7 Vents. Coordinator of the project

9.30 h *Personal presentation of participants.* Arturo Jiménez Viera. Asociación Taph Taph

11.00 h *Breakfast*

11.30 h *Training Presentation*. Arturo Jiménez Viera. Asociación Taph Taph

12.00 h *Bio-architecture concepts and the Expert Course on Bio-architecture at the University of Seville.* Benito Sánchez-Montañés Macías. Universidad de Sevilla

12.45 h *Andalusian vernacular architecture: nature and ecology.* Aniceto Delgado Méndez. Instituto Andaluz del Patrimonio Histórico.

13.30 h *Group discussion*

14.00 h *Lunch*

16.00 h *Regional, natural and healthy resources for construction in Western Andalusia*. Arturo Jiménez Viera. Asociación Taph Taph

16.45 h *Building teams and construction capacities*. María del Río. Organisational advisor

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17.30 h *Conclusions of the day*

18.00 h Closure

Thursday 14th March, 2024 - TRAINING Transmissive and experiential

Venue: Aulario del Vivero del Cortijo del Alamillo. Parque del Alamillo. Sevilla

9.00 h *Non-formal learning on structural carpentry and experiential training. Personal experiences.* Loris Carboni. Caja y Espiga enterprise

9.45 h *ECVET Earth, professional competences certification and training on earth construction*. María Brown. Asociación ESTEPA

11.00 h *Breakfast*

11.30 h *Natural painting workshop*. La Mari Muriel

13.00 h *Earthen architecture and construction, professional expertise and dissemination*. José María Sastre. Arquitecto Técnico

14.00 h Lunch

16.00 h *Outdoors group games.* Arturo Jiménez Viera. Asociación Taph Taph

16.30 h *Guided visit to the Botanical garden of the Vivero del Parque del Alamillo.* Arturo Jiménez Viera & David León Muez. Asociación Taph Taph & Asociación Hombre y Territorio

17.30 h *Conclusion of the day*

18.00 h Closure

Friday 15th March, 2024 - TRAINING Visits and factual (Volunteer activity)

Departure: by private bus (Autocares J. Marín bus company)

9.15 h Instituto Andaluz del Patrimonio Histórico. Camino de los Descubrimientos

Visits to archaeological sites:

9.30 h *Protohistory Archaeological site "El Carambolo"*. Francisco José García Fernández. Universidad de Sevilla

11.00 h *Breakfast*

11.30 h *Ancient Archaeological site "Itálica"*. Sebastián Vargas Vázquez. Universidad de Sevilla

13.30 h *Transport by bus to Instituto Andaluz del Patrimonio Histórico*

13.50 h *Lunch at Instituto Andaluz del Patrimonio Histórico*

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TRAINING

Revisiting the tools available to support spatial planning projects facing the transition

'ARBAN SCIC

The profound crisis facing our civilization (global warming, loss of biodiversity, social inequalities, energy crisis...) cannot be resolved without profound changes to our lifestyles. These changes in behavior will have an impact on our relationship with the land, with other human beings and with the rest of the living world. Faced with the challenges of this necessary ecological and social transition, spatial planning practices are themselves bound to evolve.

With this in mind, this course will introduce you to tools that will enable you to renew your support for spatial planning projects, based on a systemic, ecological and democratic approach.

TARGETS

- **Understand the key knowledge, skills and competencies required to support spatial planning projects in the face of ecological transition.**
- **Discover different methods for a sensitive, shared approach to place.**
- **Discover and adopt working methods that enable us to draw on the environment in the search for collective solutions.**
- **Learn about and try out the facilitation protocol for collective decision - making.**

Wednesday 26 and Thursday 27 June 2024

From 9 am to 5 pm

FRANCE

Châteauneuf-la-Forêt, Salle Camille Claudel, 7 Route du Puy Chat

BREATH
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Contents

DAY 1

- Welcome, introduction of participants and program.
- Presentation of the theoretical framework for a renewed vision of spatial planning practice.
- Presentation of the stages in the spatial planning process : sensitive approach to the site, shared diagnosis, search for solutions and planning choices.
- Sensitive discovery of a place through a mediation approach between the environment and the user: role and position of the facilitator.
- Drawing up a shared diagnosis: facilitating collective work.

DAY 2

- Leading a collective search for solutions inspired by nature.
- Presentation of the position and role of the facilitator of a collective time involving a diversity of players (elected representatives, residents, shopkeepers, nature conservation organizations... and the living!).
- Introduction to the protocol for decision-making by consent: working stages and points to watch.

Public

On a local level, the course is aimed at all professionals working in the field of spatial planning and environmental consultancy (designers, urban planners, developers, local authority technicians, project managers). As part of the European BREATH project, this training course is open to the international partners of the Breath project (Spain, Slovenia and the Normandy department in France). *Maximum 25 participants.*

Teaching methods

- *Contribution of knowledge through presentations based in part on experience already gained.*
- *Real-life situations : group sessions followed by group analysis.*
- *Immersion and experimentation activities : role-playing, experience of activities in a natural environment, analysis of practices.*

Source : L'Arban urban planning agency participatory workshops

Team of coaches and trainers

- *Juliana COLIN – Architect-urban planner, participatory urban planning project coordinator - L'ARBAN*
- *Stéphane GRASSER – Geographer and urban planner, facilitator of collective initiatives– L'ARBAN*
- *Jérôme HAMELIN Network project coordinator - FRENE*
- *Clémence RIQUE - Facilitating collective dynamics*
- *Jasmine CULLER - French - English interpreter*
- *Marjorie MASSEGLIA - Graphic Facilitator*

Image credits : La Mari Muriel, Tools y entrevistas, 2022

CONTACT Juliana COLIN, training manager
urbanisme@arban.fr - 06 15 01 10 07

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II. Self-assessment questionnaire for the training "Facilitating change with BREATH systemic approach"

This sheet allows you to self-assess after an experienced professional situation during which you were able to test the implementation of learning and compare it to the reality of your professional practice. Beyond the evaluation grid, it contains an open question which allows the acquisition of skills to be contextualized

You

Name / surname:

Address / city:

Phone:

E-mail:

Organisation:

Function:

What were the real situation(s) where I was able to apply these skills? When ? In what context?

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The criteria below will be evaluated on a scale of indicators such as: not at all (0 points), partially (2.5 points), completely (5 points)

I was able to use the BREATH systemic approach in a relevant way

Note :

The criteria below will be evaluated on a scale of common indicators: very insufficient (0 points), good (0.5 points), very good (1 points)

1. Observe and understand the natural complexities of systems to work in a systemic and transversal manner for a global vision of the ecological transition

In order to validate this skill, I was able to:

Consider the natural complexities of systems in project analysis. For example:

- I understand the interconnections and interactions between different elements of natural environments
- I consider nature as a complex and interconnected living system where each being maintains an intrinsic relationship with other beings.
- I understand the local environment (climate, nature of the soil, wind, rain, living beings, etc.) and I give priority to native species (plants, trees, mushrooms, etc.)
- I understand the regenerative cycles of nature

Note :

Consider environmental factors to develop a sustainable strategy. For example:

- Integrate measures to adapt to climate change: heavy rainfall / heavy heat waves / storms / lack of water / lack of sunshine
- Respect the water cycle
- Preserve agricultural soil and its quality
- Favoring native vegetation
- Preserve native animal life
- Preserve biodiversity
- Take into account natural cycles

Note :

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2. **Evolve within an "eco-responsible" ethical framework to be able to consider, understand and respect natural societal limits and constraints in a humble attitude and listening to others.**

In order to validate this skill, I was able to:

The criteria below will be evaluated on a scale of common indicators: very insufficient (0 points), good (0.5 points), very good (1 points)

Adopt a humble attitude by valuing relationships

- I did not position myself by "knowing"
- I knew how to enrich relationships with my knowledge and ideas
- I surrounded myself with various people for decision-making
- I valued each initiative, even modest ones

Note :

The criteria below will be evaluated on a scale of common indicators: very insufficient (0 points), good (1 points), very good (2 points)

Apply eco-responsible ethics. For example:

- I took into account the natural societal limits and constraints of the local environment
- I have assessed resource management plans (water, waste, etc.)
- I have assessed risks in order to improve resilience
- I took into account biodiversity
- I took into account environmental and public legislation and policy

Note :

The criteria below will be evaluated on a scale of common indicators: very insufficient (0 points), good (0.5 points), very good (1 points)

Establish trust and fosters positive relationships by demonstrating integrity, transparency, responsibility and respect.

Note :

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3. Put in practice advice inspired by nature to offer equitable, fair and empowering models to project leader/owner

In order to validate this skill, I was able to:

The criteria below will be evaluated on a scale of common indicators: very insufficient (0 points), good (0.5 points), very good (1 points)

Adapt my proposal to the human and environmental context to meet the needs of the project leader. For example:

- I took into account human constraints: financial means, time, social class, etc.
- I took into account environmental criteria:
    - Water resources
    - Local, natural and healthy materials (wood, stone, earth, straw, hemp, etc.)
    - Renewable energies (solar, wind, etc.)
    - Local sectors
    - Integration of low-tech solutions
    - Short supply chains
    - Low energy consumption

Note :

The criteria below will be evaluated on a scale of indicators such as: not at all (0 points), partially (1.5 points), completely (3 points)

Alternate between the following three pedagogical methods

- Expository, to transfer my knowledge
- Demonstrative, so that the project leader acquires know-how
- Interrogative, to let the project leader to find answers by himself

Note :

The criteria below will be evaluated on a scale of indicators such as: not at all (0 points), partially (1 points), completely (2 points)

Use simple and effective means of communication such as drawing/diagram, a commented walk, nature, landscape, a video, etc.

Note :

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The criteria below will be evaluated on a scale of common indicators: very insufficient (0 points), good (0.5 points), very good (1 points)

4. Foster changes in the realization of advising missions by relying on one's environment and harnessing collective strengths to empower individuals to be responsible and autonomous

In order to validate this skill, I was able to:

Transmit knowledge to others to increase the power to act.

Note :

Show ability to collaborate to facilitate team work. For example:

- Collaborate with multidisciplinary teams
- Collaborate with various stakeholders
- Maintaining relationships with local elected officials
- Involves citizens and territorial stakeholders in decision-making

Note :

Show knowledge of ecological, social, cultural and local context. For example, I know:

- Actors in the sector
- Local associations
- Projects implemented by the municipality, the community, the region
- Sociology of the territory

Note :

Final note : /20

A minimum total of 10 points out of 20 or more is necessary to validate the test ("admitted" status).

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