

BREATH

3rd Training



April, 2024
Seville, Spain



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1. Aims and scope

The report presented here is a work document recording the training was held in Seville city, Spain, during the days of the 13th, 14th & 15th March, 2024, and organized and conducted by Taph Taph Association.

This 3rd training, as pointed out in the BREATH Project proposal: *Training entitled "Bio-construction: the living designer of buildings?.. The people who are part of our target audience main are the learners of this training, and in particular those whose profession is related to the building sector."* But the training was called by the organizing entity, Taph Taph Association, *"Bio-architecture and Bio-construction inspiration"*.

2. Program and Venue

Venue: Association Taph Taph. Parque del Alamillo, Seville city, Andalusia, Spain.

Date: 13th, 14th & 15th March, 2024

Duration: 18.50 hours (without breaks)

Nº of learners: 21 (+2 trainers of the training stay as learners during some activities)

Nº of learners expected in the BREATH project proposal: 12

Schedule:

Wednesday 13th March, 2024 - 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 presentations 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

o

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
17.30 h	Conclusions of the day
18.00 h	Closure

Thursday 14th March, 2024 - Transmissive, discovering 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 - Visits (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

3. Training Approach

3.1. Pedagogical Aims

The main aim is *"Inspiring nature-based solutions for constructive systems - Laying the theoretical and methodological framework of the BREATH approach."*

The specific aims are linked to the Key project performance indicators required:

- Involve more a 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

3.2. Pedagogical methods

The kinds of pedagogical methods used, following the BREATH research reports, are as follow:

- Transmissive: 25,68%
- Experiential: 40,54%
- Demonstrative: 0%
- Interrogative: 14,86%
- Active discovery: 18,92%

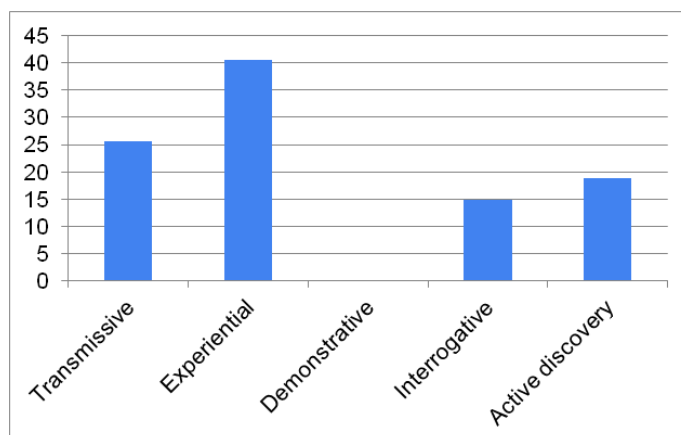


Figure 1. Kinds of pedagogical methods used in the training. Author: Arturo Jiménez Viera

4. Trainers profile and activities

*The training organization missed the trainer Aniceto Delgado Méndez, Anthropologist from the Andalusian Historical Heritage Institute, and his lecture about “*Andalusian vernacular architecture: nature and ecology*” because of mandatory family troubles. The expected time for this activity was dedicated to have more time of discussion for the speech of Benito Sánchez-Montañés.

**Because of some delay and the long and tiring training journey, the activity called “*Outdoor group games*” could not be undertaken.

*** The 3rd BREATH Dissemination event took place the same day that the end of the training, so the trainees could attend to this public event which include pedagogical content, good practices of case study, and professional networking. (see 3rd Dissemination event report document)

- **Arturo Jiménez Viera:** Speaker conducting the 3rd Training. Coordinator of the BREATH Project in Spain. Architect, Trainer and Researcher (Taph Taph partner)



The training scheme was presented and explained to the trainees, following a round of personal presentations of every trainee.

BREATH Project

- **Florian Guillotte:** Speaker about the BREATH Project aims and approach, and partners organizations. Main coordinator of the BREATH Project, and in France. Project Manager, Engineer, Financial Management (Les 7 Vents partner))



Figure 2. Transmissive approach about bio-architecture and bio-construction. Author: Les 7 Vents and IAMB

Local trainers and training activities

- **Benito Sánchez-Montañés Macías.** PhD Architect, Higher Education Trainer and Researcher at the University of Seville. Speech entitled “*Bio-architecture concepts and the Expert Course on Bio-architecture at the University of Seville*”.

The speech started presenting the professional competencies aimed and learned in *Expert course on Bio-architecture of the University of Seville*: bioclimatism, bio-construction material for building, life cycle assessment, building environmental impact, energy self-sufficiency renewable energies, water cycle management, construction waste management.

The duration of the course is 21 ECTS, equivalent to 525 work-learning hours of the student). The trainees requirement for accessing the course in to have highThe learning mode is face to face, attending master classes, workshops and case study visits. The learning outcomes are divided in 4 modules or units: Start of transformation, Bioclimatism, Bio-construction, Energy and Life Cycle Assessment The target public of the course are Higher education professional, university students and building, architecture and urbanism professionals; building promoters and contractors; and any interested person in a global change to ecology and resilience.





Figure 2. Transmissive, experiential and visits during the bio-architecture course of the University of Seville. Author: Benito Sánchez-Montañés

Bioarquitectura – VISIÓN SALUDABLE Y RESILIENTE DE LA ARQUITECTURA

BIOCONSTRUCCIÓN
SALUD EN EL HÁBITAT
ANÁLISIS DE LOS FENÓMENOS AMBIENTALES (CONFORT)
TÉCNICA BIOCLIMÁTICA
HUELLA ECOLÓGICA
ENERGÍA INCORPORADA
MEJORA DE LA EFICIENCIA DE LOS SISTEMAS (ENERGÍA, AGUA...)

PRODUCCIÓN DE ENERGÍAS RENOVABLES ASOCIADAS A LA EDIF.
ECO-URBANISMO
INTEGRACIÓN SOCIAL
INTEGRACIÓN CULTURAL
TRADICIÓN
NUEVOS MATERIALES
NUEVAS TECNOLOGÍAS



Figure 3. The sick syndrome building and the healthy building. Author: Benito Sánchez-Montañés

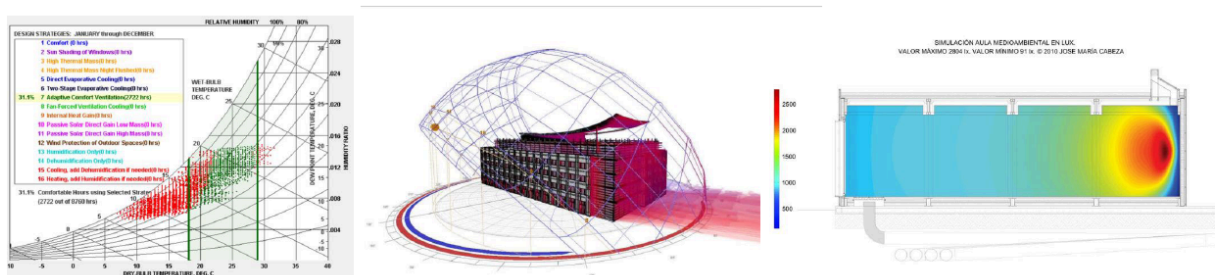


Figure 4. Scientific professional knowledge and skills for tools and method. Author: Benito Sánchez-Montañés

- Arturo Jiménez Viera. Discovering workshop entitled “Regional, natural and healthy resources for construction in Western Andalusia”
 The workshop consisted of showing and testing local, natural and healthy raw material and construction material of the region of the Bottom of the Guadalquivir Valley, the area where the training was undertaken. Some explanations about the origin, transformation, use and recycling of these material were conducted by asking and answering of the activity participants. Besides, the explanation about the experimental constructions presented in the workshop area included a discussion



about the building material and techniques. Finally, the workshop are was explained to the participants: material storage, experiential training, experimental construction tests, water, energy and waste supply, etc.



Figure 5. Regional resources for construction: rock, aggregates, vegetal fibers, pigments, biopolymers.
Author: IAM and Les 7 Vents



Figure 6. Explanation and discovery of building experimentations. Author: IAM and Les 7 Vents

- María del Río, experienced Organizational Advisor. She conducted an Experiential workshop entitled “*Building teams and construction capacities*”.

The experiential team activity focused on the development of the work team in charge of developing projects. Through a kind of *drama or work team* situation, the participants could exchange feelings at work, highlighting the responsibility and autonomy in the work tasks, coordination and will.



Figure 7. Towards the human organization. Author: María del Río

- Loris Carboni. Non formal VET trainer and Structural carpenter for building, from the private enterprise called "Caja y Espiga". His speech was entitled "*Non-formal learning on structural carpentry and experiential training. Personal experiences*".

The trainer explained his personal background or lifelong learning, starting from the emotional phases of *challenge, rejection and search*. Then, pointed out the personal values to develop his profession: *sensitivity to the people and a better world*. Presented his first experience building a house of natural construction material, and after having the opportunity of meeting a Traditional Structures Carpentry master, facing the lack of professional training in the Andalusia region for these fields of work and study. Finally, the speech focused on the initiative of a non formal rural bio-construction school called "*Escuela de bioconstrucción Los Guindales*" with the approach of providing a training and life offer for *sustainable development, ecology, training, entrepreneurship and personal growth*. The aims of these school are:

- Develop a space in the rural environment based on the principles of Permaculture and environmental protection.
- Share a model of life based on the principles of Sustainable Rural Development being a reference and living example to combat rural depopulation and offer a model of sustainable living with natural resources.
- Support and accompany youth entrepreneurship with initiatives that are economically and environmentally sustainable, healthy habits and lifestyles for people and natural resources.
- Participate in the field of ecology, education and social issues for the transformation of this society towards a more humane model where caring for life and respect for diversity are a priority according to the bases of ecology and the current climate emergency, through the organization of events on the place and training days in collaboration with other organizations and associations.
- Train young people through participation in our project in different skills that are sustainable in the rural area and increase the connection of young people with nature as the source of life.

- Promote the values that sustain us in our actions: care for life, emotional maturity, mutual help, solidarity, autonomy, autonomy, autonomy, self-sufficiency, self-help, self-determination, self-determination solidarity, autonomy, self-management, respect for diversity and equality.
- Experience life in a group as a space for personal growth and enrichment through diversity.
- Practice a model of life that creates the least possible impact on the natural environment.
- Organise events and training on Ecology, Bioconstruction, Healthy Habits, Emotional Intelligence and other topics related to the objectives of the association, topics related to the objectives of the association

At present, the speaker is preparing a new offer of wooden structures carpentry training 300 and 200 hours.



Figure 8. Learning Wooden structures carpentry at the building site. Author: Loris Carboni



Figure 9. Place of Los Guindales bio-construction school. Málaga Province, Spain. Author: Loris Carboni

- María Brown. Architect, VET Trainer and Evaluator through the non formal system ECVET Earth, and legal representative of the Asociación ESTEPA as the only promoter of the ECVET Earth system in Spain for earth construction. Her speech



focused on “*ECVET Earth, professional competences certification and training on earth construction*”.

This speech “*upgrading the skills and competence on earth building*”, focused on the functioning and contents of the ECVET Earth Building system: Pointing out:

“The aim of ECVET Certificates is to promote professional development by allowing individual learning outcomes to be recorded, presented transparently and in a comparable

way, tested and validated. Regardless of:

- the personal background of the candidates (working experience, formal education, ...)
- the educational level of the candidates
- the learning environment (formal, non-formal, on-site, ...)
- the nature of the training institution (school, university, association, union, NGO, ...)

ECVET EB is a system of independent UNITS of learning outcomes. Each UNIT is defined as the smallest coherent set of knowledge (theoretical), skills (practical) and competence

(responsibilities) concerning one of the different fields of earth building activity.

These UNITS are assessable and lead to a Certificate. Most European countries have an ECVET EB representative institution, the only one entitled to assess and deliver certificates.

ESTEPA association is the Spanish institution assessing abroad since 2021.

Anyone interested in learning about ECVET EB can do so: the units are freely available online and understandable throughout the world, since they exist in English, French, Spanish and Portuguese; languages that are spoken or understood globally. The challenge is not having access to ECVET EB, but knowing how to use it, getting the most out of it. ECVET EB began its diaspora just when it was completed, in 2015, after several European projects involving around 15 countries. ESTEPA association, the Spanish representative, has been constantly assessing ECVET EB in Spain and also encouraging an “adapt and adopt” process in America and Africa. What is ECVET EB bringing, not only to Europe where it was conceived?

- the validation of technical training for higher quality works
- the gradual professionalization of those already involved in these trades
- the expansion of job prospects for vulnerable groups
- the flexibility of possible training itineraries
- the social recognition given by a prestigious certificate
- the grounds for a common technical language throughout Africa, enabling the future creation of an earth building network.





Figure 10. Place of Los Guindales bio-construction school. Málaga Province, Spain. Author: Loris Carboni

- La Mari Muriel. Artistic painter and illustrator, trainer in non formal training about natural painting. Her experiential workshop focused on *Natural painting* using local, natural and healthy resources.



Figure 11. Natural painting experiential workshop. Author: IAMB and Les 7 Vents



- José María Sastre. Technical architect, disseminator and professional networks of earth building. Manager of the Iberoamerican Arquiterra network. His speech was called “*Earthen architecture and construction, professional expertise and dissemination*”.

The speaker showed through a presentation the main history and features of Earthen architecture and construction techniques and material. A wide range of earthen architecture examples covering huge area of the planet were shown and explained, since protohistory to contemporary times. Besides, the trainer explained some personal professional experiences, as the involvement of bioclimatic earthen housing, the development of national earth building standards and the creation of an iberoamerican network about earthen architecture called Arquiterra.

- David León Muez. Biologist and manager of the *Hombre y Territorio Association* and expert on nature conservation. His discovering activity was called “*Guided visit to the Botanical garden of the Vivero del Parque del Alamillo*”.

The activity consisted of an explanation of the training area in terms of natural conservation and diversity. After, a collective activity to discover, by two trainees teams, hidden pictures of animals in different areas of the botanical garden.



Figure 12. Experimental pond for aquatic life research at the training area. Author: Asociación Hombre y Territorio

- Francisco José García Fernández, Historian and PhD Professor at the Faculty of Archaeology of the University of Seville. As an expert on the topic, he conducted the visit called “*Protohistory Archaeological site El Carambolo*”. This activity was volunteer but demanded by almost all the trainees through the training registration form.

The visit focused on the importance of history and human processes for the evaluation of nowadays cultures and environmental impacts. Besides, the professor pointed out some of the main ecological features that the area of Seville city and the



archaeological site have for historical human settlements: soil, communication, climate, etc.



Figure 13. Visit to the archaeological site of El Carambolo. Author: IAMB and Francisco José García Fernández

- Sebastián Vargas Vázquez, Historian and PhD Professor at the Faculty of Archaeology of the University of Seville. He conducted the visit called “*Ancient Roman Archaeological site of Itálica*”. This activity was volunteer but demanded by almost all the trainees through the training registration form.

The professor taught about the settlement: origin, buildings, construction material and techniques, natural resources, environmental impact, etc. The main aim of this activity was to transfer scientific knowledge to the trainees about the local history and demonstrate the importance of history as a field of work and study for the inspiration of future ecological transition actions.





Figure 14. Visit to the Roman archaeological site of Itálica. Author:IAMB and Les 7 Vents

5. Attendees profile

Target public expected following the BREATH project indicators:

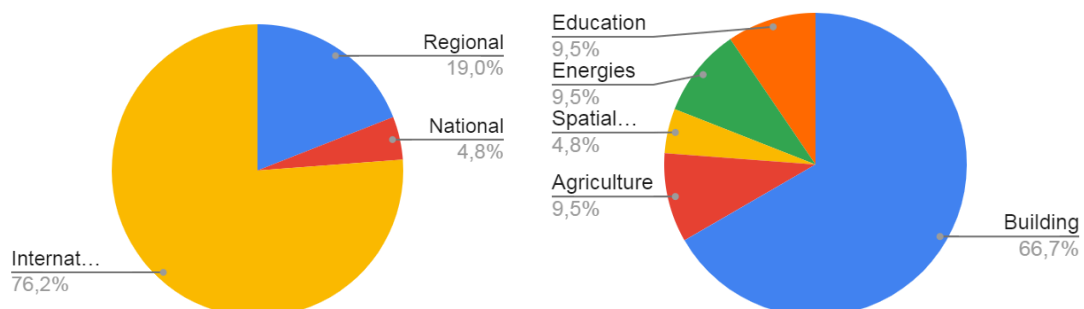
- Primary: Advisors, Trainers, Support in the field of agriculture, energies and sustainable development, building and spatial planning, Designers.
- Secondary: General public and professionals from other sectors, Users/Inhabitants, Teachers.

Target public expected for the 3rd Training:

- Advisors, Trainers, Support in the field of building, Designers, Representatives of the BREATH Project Partners

For a total of 21 participants trained, the quantitative results are presented:

- Kind of representing entity in the event
 - Regional: 19,08%
 - National: 4,80%
 - International: 76,20%
- Kind of professional profile:
 - Building: 66,67%
 - Agriculture: 9,52%
 - Spatial planning: 4,76%
 - Energies: 9,52%
 - Education: 9,52%
 - Employment: 0%

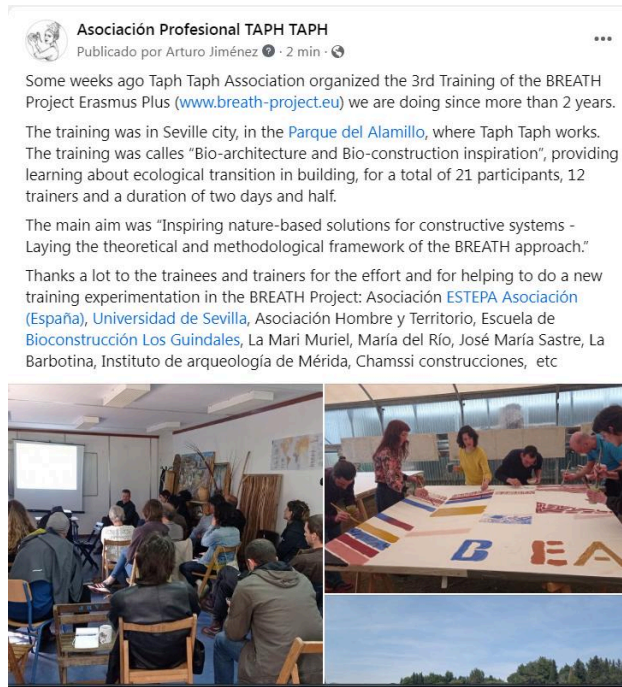


Figures 15. Kind of trainee representing entity and trainee professional profile. Author: IAMB and Les 7 Vents

6. Communication on the training

All the attendees were personally invited by BREATH Project Partners.

Facebook



Figures 15. Social media post-training publication. Author: Arturo Jiménez Viera

Video

Summary of the training: https://youtu.be/7YV--rI09Qo?si=QzpwP6YL_NysCeme



BREATH Project 3rd Training
experimentation Seville March 2024

7. Conclusions and Remarks

Following the Key project performance indicators of the BREATH Project

The training program and pedagogical aims focused on basic knowledge and skills about building, with the specialities of bio-architecture and bio-construction, and pointing out some the main theoretical basis, references of case studies and testimonies of experienced professionals. Some time was dedicated to the explanation of the BREATH approach, introducing the participants in the complexity of the project to after be informed by every partner who has invited the participant and

ECVET Earth systema approach was a very important activity to explain to the participants and the BREATH Project partnes, bringing awareness and providing guidance by an experienced expert, evaluator and trainer.

A set of pedagogical methods was implemented. However, the organizer consider that more participative, group exchange and experiential activities shoul be important to comply with the expectation of the participants. Otherwiese, more time is needed to develop this training, some thing that is very obvious for a so complex training project and its topics.

The trainers profile, as experts in the training topics, was proper and appreciated. However, more involvement for the preparation of the learning outcomes and training activities should be interesting and desirable. As well as the trainees profile, whoe were professionals linked to the building sector, with some motivations to learn about ecological transition inspired by nature. Besides, a better pre-selection of participants should be recommended, considering the professional profile of participants and the motivation, expectation and needs of the trainee, trainers and training aims and scope.

With this training, the BREATH Project partners add and link new stakeholders to the BREATH guild through coming discussion meetings, mailing list, newsletter and social networks, and informing them about the project results and their possible implementation in the stakeholders entities structures

