

# Youth Action for Nature and Well-Being

## Pedagogy Design Guide



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# Introduction

## Youth Action for Nature and Well-Being (YAFNAW) technical background

YAFNAW was an Erasmus-funded Key Action 2 Strategic Partnership for Innovation project led by ECO-UNESCO. YAFNAW involved a collaboration between six European environmental educational organisations: Resilience.Earth, The Rural Parliament of Slovakia, Youth for Smile, Ecowellness Consulting, Gaia Education and ECO-UNESCO (herein referred to as *the partners*). The project number was 2020-3-IE01-KA205-082885, and it ran from 01/05/2021 to 31/08/2023. The project engaged 102 participants to co-produce five intellectual outputs that focused on developing action competence and positive well-being among young people within the context of eco-activism. The five intellectual outputs are:

1. **Educational Toolkit** (a physical book designed to support young people throughout their eco-activism)
2. **Case Study** (a paper documenting the transformative learning of project participants)
3. **Pedagogy Design Guide** (a paper documenting the pedagogy design process of the project)
4. **E-learning Course** (an online resource designed to increase access to the educational toolkit)
5. **Evaluation Tool** (a framework for use alongside the educational toolkit, which guides the evaluation of transformative learning)

In pursuing the delivery of these five intellectual outputs, the partnership sought to realise its purpose statement for the project:

*Co-create personal and collective regenerative action and resilience tools/frameworks (with youth and youth workers) to transform the way we understand, relate, and respond to nature, as nature*

To facilitate the production of the intellectual outputs, YAFNAW hosted four international youth events to trial new teaching and learning methods and co-design a set of educational tools with collaboration from target beneficiaries. This participatory approach created a unique pedagogy which informed the production of the project's main output, the educational toolkit. A series of transnational meetings between the partners allowed for periods of intensive collaboration. The documentation and discussion of the project's pedagogy design processes occurred during such meetings.

## Why was this pedagogy design guide written?

The pedagogy design guide served/serves two purposes:

**(1)** The pedagogy design guide creation process gave focus to the development of the project's intellectual outputs (in particular, the educational toolkit) as the partners used the working pedagogy design guide to articulate individual and collective strategies for curriculum development.

**(2)** The finished pedagogy design guide presents a pedagogical development process for educators outside the project in formal and non-formal sectors. The ambition is for this pedagogy design guide to allow educators to establish new partnerships and pedagogies for various contexts, using lessons learned from the YAFNAW project to create their own teaching and learning methods appropriate for the communities they work with.

The pedagogy design guide will interest stakeholders working for educational change in their practice or more widely. Specifically, those teachers, programme developers, and youth workers interested in education for sustainable development (ESD) or transformative learning may find particular relevance. However, the content and implications of this guide may have applications for various education stakeholders, as readers will explore a strategic partnership's approach to education development and the creation of a unique pedagogy landscape.

## What is the structure for this pedagogy design guide?

This guide is presented across five chapters, using the YAFNAW project as a backdrop to accompany the reader through an entire pedagogy development process. This journey begins in chapter one by defining the terminology. The theories which guided the YANFAW project are then presented in chapter two, to illustrate the importance of creating a pedagogy landscape as a starting point. Then, chapter three describes examples of how to develop existing theories and literature into a new practical model that works for a given context. The finished pedagogy product is provided in chapter four, with a concluding chapter five featuring recommendations highlighting lessons learned throughout the YAFNAW's pedagogy development process.

# Chapter 1: Designing a Pedagogy

## What is Pedagogy?

In contemporary literature, the term ‘pedagogy’ broadly denotes the art, science or profession of teaching and is commonly used as a concept to facilitate discussions on the theory of teaching and learning.<sup>1</sup>

Pedagogy’s etymology comes from the Greek words: *pais* (“of a child”) and *agogos* (“leader”). In ancient Greece, the person responsible for leading a child to and from school each day was the “παιδὸς ἄγωγός” (roughly “pedagogue”).<sup>2</sup> This child would have been a boy and the person leading him to school would have been a slave, a reflection of the privileges and lack thereof which shaped many formal education structures. Daddario and Zerdy point out that the related practice “παιδαγωγικός” (roughly “pedagogikos”), which meant “suitable to a teacher or trainer” was also used in another context; to refer to a system of medicine that “waited upon [or treated] a disease.” As Daddario and Zerdy highlight, this dual meaning illustrates that the ancient Greeks conceptualised knowledge through the same lens as physical health; “to maintain health of mind, one must ward off the illness of ignorance with good teaching”.<sup>3</sup> From its linguistic birth then, pedagogy has been something of great value.

In Western history, philosophers drove some of the earliest discourses on pedagogy. Famously, the Socratic method used argumentative dialogue and critical thinking techniques to lead one into identifying flaws in their assumptions and holes in their logic<sup>4</sup>. Although many ideas around pedagogy have since evolved, critical thinking is a value that has remained relevant right through to the more modern critical pedagogy movement propelled by Paulo Freire in the latter half of the 20<sup>th</sup> Century. Freire’s *Pedagogy of the Oppressed* saw education theory incorporate social justice issues like never before, representing a significant shift in how progressive practitioners would come to understand their role as teachers.<sup>5</sup> This was essentially a move away from teachers being authority figures and guardians of knowledge “whose occupation is to instruct” towards an emphasis on “the process of attending to people’s needs, experiences and feelings”, centring learners and reconceptualising teachers as facilitators.<sup>6</sup> The social justice issues explored by critical pedagogy are often circulated through grassroots movements which leverage the power of storytelling and acknowledge the importance of perspective. These elements are among the foundations of many indigenous pedagogies, along with mutual respect and mutual learning

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<sup>1</sup> Merriam-Webster Dictionary: <https://www.merriam-webster.com/dictionary/pedagogy>

<sup>2</sup> Online Etymology Dictionary: [https://www.etymonline.com/word/pedagogy#etymonline\\_v\\_30327](https://www.etymonline.com/word/pedagogy#etymonline_v_30327)

<sup>3</sup> Daddario, W & Zerdy, J. Inviting Abundance: <https://invitingabundance.net/blog/2017/9/12/pedagogy>

<sup>4</sup> Fabio, M. *How the Socratic Method Works and Why Is It Used in Law School*: [thoughtco.com/what-is-the-socratic-method-2154875](https://thoughtco.com/what-is-the-socratic-method-2154875).

<sup>5</sup> Freire, P. (2009). *Pedagogy of the Oppressed*. New York, NY: The Continuum International Publishing Group Inc. ISBN 978-0-8264-1276-8.

<sup>6</sup> Smith M. *What is Teaching? A Definition and Discussion*: <https://infed.org/mobi/what-is-teaching/>

opportunities.<sup>7</sup> As is the case in various fields, the discourse (particularly written) has been dominated by the West. Yet, it is essential to note that many fundamental concepts of modern pedagogy theory (such as experiential learning) were prevalent in indigenous cultures, such as the First Nations people, long before modern Western scholars began co-opting and writing about them.<sup>8</sup>

Pedagogy has provided a space for educators to think deeply about their profession, allowing them to develop their frameworks and understandings. For a long time, practitioners have known the importance of exploring their key terminology. Paul Hirst concluded that how teachers understand teaching “very much affects what they actually do in the classroom”.<sup>9</sup>

To summarise, pedagogy represents the complex history and development of educational theory informed by contested and evolving ideologies. Yet, pedagogy is quite simple at its heart, asking:

*How do we **learn**, and how should we **teach** in our communities?*

In a globalised society, pedagogy increasingly needs to look towards bridging the gaps across cultures while celebrating the diversity and uniqueness of our contexts.

## How does one begin to create a pedagogy?

Creating a specific pedagogy for a particular context will provide a framework to explore appropriate teaching methods and effective learning strategies. A historical understanding can guide the exploration of contemporary pedagogy theory. It is, therefore, worthwhile to start any pedagogy creation process with a literature review and historical examination. In the case of the YAFNAW project, pedagogy development activities would be situated within a context of European youth-led environmental action. The partners sought to explore the relevant historical and contemporary pedagogy literature, including education for sustainable development, transformative learning, peer education and nature-based therapies. Other contexts will undoubtedly have different theories underpinning the construction of curricula. Whatever the driving topic and context, the starting place for pedagogy design will involve some kind of literature review to frame the current landscape and carve out a unique cross-section of applicable theories. The following

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<sup>7</sup> Simon Fraser University Library. *Indigenous Knowledge and Pedagogy*: <https://www.lib.sfu.ca/help/academic-integrity/indigenous-initiatives/icrc/indigenous-knowledge#indigenous-pedagogy>

<sup>8</sup> Condappa, C. (2018). *A Phenomenographic Study on On-reserve First Nations, Métis, and Inuit Students' Experiences in a One-year College Transition Programme Thesis*, University of Liverpool: <https://core.ac.uk/download/pdf/201001393.pdf>

<sup>9</sup> Hirst, P (1975) in Smith, M. *What is Teaching? A Definition and Discussion*: <https://infed.org/mobi/what-is-teaching/>

chapter presents the YAFNAW's example literature review in a condensed form. This provides some insight into the early research processes.

## Chapter 2: Engaging with Theory

### How the YAFNAW project used theory

The YAFNAW project was delivered by a partnership between six very different organisations. Each partner brought their working methods and styles into the project and had their pedagogical assumptions. ECO-UNESCO brought a peer education and education for sustainable development framing, Resilience.Earth came with transformative learning and systems thinking pedagogy, Youth for Smile came from an adventure and experiential Learning background, Ecowellness Consulting came from a nature-based therapy background, Gaia Education came from a holistic education approach, and the Rural Parliament of Slovakia came from a civic engagement and learner mobility approach. The partners began by sharing their understanding of these theories through virtual meetings and establishing collaborative research spaces. The relevant hallmarks of these theories were documented so that the project's initial youth event and early toolkit drafts would be focused on a consistent set of themes, topics and assumptions.

### Peer education

The partners knew early on that the project would feature some version of peer education strategy. The project's focus on young people and its use of international events would create an environment for peer-peer engagement and learning.

Peer education (within youth work) is commonly understood as the process whereby trained young people undertake educational activities with their peers (as defined by age, background or interests).<sup>10</sup> This strategy is often used when more traditional and authoritative teaching structures have proved unsuccessful – in the case of sexual health work, for example.<sup>11</sup> In these instances, the target beneficiaries are primarily those whom peer educators interact with. However, many organisations (including ECO-

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<sup>10</sup> Lazdane, G & Lazarus, J. (2003). *Does Peer Education Work in Europe?* *Entre Nous* 56, 2003:

[https://www.researchgate.net/publication/341618626\\_Does\\_peer\\_education\\_work\\_in\\_Europe\\_Entre\\_Nous\\_56\\_2003](https://www.researchgate.net/publication/341618626_Does_peer_education_work_in_Europe_Entre_Nous_56_2003)

<sup>11</sup> Abdi, F & Simbar, M. (2013). *The Peer Education Approach in Adolescents- Narrative Review Article*. *Iranian Journal of Public Health*. 42. 1200-6: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4499060/>

UNESCO) offer accredited peer education courses whereby the beneficiary is the peer educator themselves, equipping them with the communication and teaching skills necessary to thrive in non-formal educational settings. Selection processes for youth peer educators are much discussed, with a common assumption being that natural-born leaders with high confidence are most suitable. Another factor is background, as the literature shows a preference for many programmes to engage and train peer educators with the same identity markers as their target audiences; in terms of cultural, ethnic, and social-economic contexts.<sup>12</sup> While this remains a dominant trend, notable exceptions and frameworks prioritise cultural diversity within peer education, emphasising the importance of alternative worldviews and perspectives.<sup>13</sup> In most cases, despite acknowledgement that peer education can and does happen everywhere, there are two unifying hallmarks of the pedagogy: (1) Peer educators are identified as being specifically trained, and (2) peer education aims to effect change in individual behaviour.<sup>14</sup>

In the YAFNAW project, peer education theory was used as a holistic link between other major theories (such as transformative learning, systems thinking, and nature-based therapy), operating as a framework that would encourage dialogue and reflection, as well as the sharing of ideas and knowledge among the project's participants. The theory, however, was identified as a potential area for innovation, with the project seeking to challenge peer education's prescriptive nature and examine its manifestations outside of programmatic contexts.

## Education for sustainable development

With the United Nations' sustainable development goals (SDGs) playing such a prominent role in environmental action and discourse, the partnership recognised the importance of developing tools that framed potential local issues within a globalised context. The theories of education for sustainable development (ESD) offered a lens that linked local spaces to a collective planetary one.<sup>15</sup> This is why ESD is internationally recognised as an essential tool to help realise the SDGs.<sup>16</sup> ESD proposes that programmes undergo a rethinking to place sustainability at the heart of the purpose. In doing so, programmes must navigate social justice, environmental concern and economic fairness while remaining inclusive of cultural

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<sup>12</sup> Topping, K.J. (2022). *Peer Education and Peer Counselling for Health and Well-Being: A Review of Reviews*. *Int. J. Environ. Res. Public Health* 2022, 19, 6064: <https://www.mdpi.com/1660-4601/19/10/6064>

<sup>13</sup> SALTO Cultural Diversity Resource Centre. *PEERing In PEERing Out: Peer Education Approach in Cultural Diversity Projects*: [https://www.salto-youth.net/downloads/toolbox\\_tool\\_download-file-585/Peer%20Education%20in%20Cultural%20Diversity%20Projects.pdf](https://www.salto-youth.net/downloads/toolbox_tool_download-file-585/Peer%20Education%20in%20Cultural%20Diversity%20Projects.pdf)

<sup>14</sup> The AIDS Control and Prevention Project, *How to Create an Effective Peer Education Project*: <https://healtheducationresources.unesco.org/sites/default/files/resources/HIV%20AIDS%20198.pdf>

<sup>15</sup> Government of Ireland. (2022). *ESD to 2030: Second National Strategy on Education for Sustainable Development*: <https://www.gov.ie/en/publication/8c8bb-esd-to-2030-second-national-strategy-on-education-for-sustainable-development/>

<sup>16</sup> National Council for Curriculum and Assessment. (2018). *Education for Sustainable Development: A study of opportunities and linkages in the early childhood, primary and post-primary curriculum*: <https://ncca.ie/media/4899/education-for-sustainable-development.pdf>



perspectives. Within this construct, ESD focuses on five key areas<sup>17</sup> which the partners felt resonated with the objectives of the YAFNAW project: (1) *Advancing policy*: youth action processes encouraged in the project would likely intersect with activism and civic engagement. (2) *Transforming learning environments*: natural landscapes and international cohorts used in the project's youth events would offer a radically different learning environment from what participants were accustomed to in the formal education sector. (3) *Building capacities of educators*: the youth events, pedagogy design guide, and the partnership itself would likely strengthen the capacity of the respective organisations and external stakeholders. (4) *Empowering and mobilising youth*: the project's toolkit aims to contribute towards youth empowerment within environmental spaces. (5) *Accelerating local level action*: the grassroots approach to action promoted by the partner organisations would likely catalyse a localised youth response strategy within the toolkit.

Noticing the intersections above, the partnership sought to use ESD to focus the project's objectives and advocate a move from subject teaching towards a holistic, connected understanding of environmental advocacy and action. Much like peer education, ESD was found to encompass many of the values and assumptions featured in other theories (such as systems thinking and holistic learning) used by the project during this initial planning phase.

## Holistic learning and a worldview dimension

Seeking further holistic approaches in line with ESD, the partnership became interested in the four dimensions model (ecological, economic, social and worldview) which has been used by Gaia Education over the past 20 years. This approach builds on the foundations of sustainable development championed by the UN since the Brundtland report in 1987.<sup>18</sup> As seen within ESD, the ecological, social, and economic pillars remain paramount. However, a fourth dimension can be explored using this approach, dealing with the cultural and spiritual aspects of reality, distinct from the social dimension. This fourth dimension can be named worldview.

The worldview dimension adds a dynamic layer to the sustainability concept, interrogating the world's perception of people involved in a project, community, or learning processes. An inherent cultural background and the way one perceives reality tends to impact any actions taken, the kind of decisions that

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<sup>17</sup> UNESCO. (2020). *Education for Sustainable Development: a Roadmap*: <https://unesdoc.unesco.org/ark:/48223/pf0000374802>

<sup>18</sup> United Nations. (1987). *Report of the World Commission on Environment and Development: Our Common Future*: <https://www.are.admin.ch/are/en/home/media/publications/sustainable-development/brundtland-report.html>

are made, and how relationships are built. The worldview dimension often overlaps with the other three dimensions, promoting holism.

Holistic thinking is perceived in indigenous and traditional knowledge from around the world. It is a counterpoint to the reductionism developed in modern society as a result of separation from nature and cartesian thinking. Holistic thinking is concerned with the whole contained by multiple parts.

The partnership considered the worldview dimension as an important piece of transformational learning. A worldview or paradigm is essentially a belief system that defines the way any particular culture interprets the world at a particular time. Typically, paradigms are very resistant to change. Those interpreting the world do not think of their worldview as characteristic of their culture and time, but rather see it as "the way things are". As the partners intended the Youth Action for Nature and Well-Being project to challenge paradigms of nature separation, the four dimension model of sustainability, holistic learning and in particular, the worldview dimension was an attractive pedagogy to explore.

## Systems thinking

Systems thinking looks at connected wholes rather than separate parts. It provides a holistic lens from which to explore and understand the interconnected patterns of our world, and ourselves as an integral part of this system. A system in this case refers to a set of things that work together as part of a complex whole, such as a person, a community, a forest, a bioregion, or the planet. For YAFNAW, the partners agreed that systems thinking ought to be one of the theoretical foundations of the project, given its catalysing role in the following fields:

Ecology & TEK: Ecology is founded in systems thinking and was in fact the first scientific discipline to emerge from this holistic science, a science that was and continues to be deeply inspired by Indigenous TEK (traditional ecological knowledge).<sup>19</sup>

Sustainable Development: Sustainable development also comes from the field of systems thinking and is a concept that began to circulate for the first time in the early 1970s, by Barbara Ward as founder of the International Institute for Environment and Development.<sup>20</sup> Twenty years later, sustainable development

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<sup>19</sup> *Inuit Circumpolar Conference. (2020): <https://www.inuitcircumpolar.com>*

<sup>20</sup> *Ward, B & Dubos, R. (1972). Only One Earth: The Care and Maintenance of a Small Planet. New York, NY: W. W. Norton and Company, Inc. ISBN 0393063917, 9780393063912*

became known around the world thanks to the UN Conference on Environment and Development, in Rio de Janeiro, launching a new paradigm of human development for our globalised society.<sup>21</sup>

**Leverage Points:** One of the world's leading systems thinkers was Donella Meadows, who pioneered the concept of leverage points in 1997, after over 20 years of studying how social change works. Leverage points refer to places in a system where we can act to effect change, big or small. A low leverage point is when a small action causes a small change in the system. A high leverage point is when a small action causes a big change in the system. These high leverage points accelerate social change.<sup>22</sup>

**Resilience:** Also known as adaptive change, the field of resilience has revolutionised our understanding of change in general, and how we can learn to be more adaptive in contexts of deep systemic crisis and transformation.<sup>23</sup> Through the Stockholm Resilience Centre, critical research in resilience has revealed that we are in the Anthropocene, a new geological era characterised by human impact, and that there are clear planetary boundaries that we have to stay within in order to be as adaptive as possible during the current cusp of the 6th mass extinction.<sup>24</sup>

**Regenerative Development:** Lastly, this budding field proposes that we can no longer “sustain” the ecological context that we are facing, because it is inherently degenerative (consistently depleting energy from the system), and that we have to consider ways of thinking and doing that go beyond sustainability, restoring our ecosystems, reconciling our societies, and seeding hope.<sup>25</sup>

The partners wanted to align the project (and particularly the youth events) with systems thinking, so as to be able to engage youth from a hopeful place, providing a transformative and tested approach to teaching them how to understand, design and implement climate justice initiatives that take care of wellbeing in the most holistic sense, from self to planet. One of the main challenges to implement sustainable development is the lack of attention it receives in the formal educational system. Systems thinking is very scarce, and there is a general lack of skills in this approach for the general population. As Einstein once said “We cannot solve problems at the same level of thinking that we were at when we created those problems”. Which unfortunately is what we are doing, applying sustainability from a mechanistic paradigm - the one

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<sup>21</sup> UN Conference on Environment and Development in Rio 1992: <https://www.un.org/en/conferences/environment/rio1992>

<sup>22</sup> Meadows, D. (2009). *Leverage Points: Places to Intervene in a System. Solutions for a sustainable and desirable future:* <https://donellameadows.org/archives/leverage-points-places-to-intervene-in-a-system/>

<sup>23</sup> Holling, C & Gunderson, L. (2002). *Panarchy Understanding Transformations in Human and Natural Systems.* Washington DC. Island Press. ISBN 1-55963-856-7

<sup>24</sup> Rockström, J., Gupta, J., Qin, D. et al. (2023). *Safe and just Earth system boundaries.* *Nature* 619, 102–111). <https://doi.org/10.1038/s41586-023-06083-8>

<sup>25</sup> Reed, B. (2007). *Shifting from ‘sustainability’ to regeneration,* *Building Research & Information*, 35:6, 674-680, DOI: 10.1080/09613210701475753

that generated our unsustainable development model in the first place. The partners sought to make this type of thinking and these systemic concepts accessible to youth, so that together we could better understand and be able to innovate ways to restore, reconcile and regenerate our planet.

## Adventure-based learning

The partners had ambitions to situate the theoretical knowledge that would arise from systems thinking and ESD in a place-based setting that would leverage the power of the natural environment. Adventure-based learning (ABL) was an interesting area to consider here. Used for the last 15 years by Youth for Smile, ABL has provided an adaptable framework to address social issues, behavioural problems, and the needs of young individuals facing addiction.

ABL helps examine and work with two relational ideas: interpersonal and intrapersonal. These concepts support each other in building strong relationships between communities. As the YAFNAW project was concerned with collective project planning, relationship-building pedagogies were particularly interesting. Interpersonal relationships explore communication, cooperation, trust, problem-solving, leadership, and conflict resolution (i.e., how individuals function in a collective). Intrapersonal relationships are related to self-concept, self-efficacy, and spirituality (i.e., how an individual functions within themselves).<sup>26</sup>

ABL does not require extensive infrastructure or resources, instead using the local surroundings and natural beauty as a resource for learning. Within these outdoor environments, the inter- and intrapersonal relationship skills are built through gamification, risk management and physical challenge in collective settings. Deeply rooted in experiential and immersive learning methods, a sense of adventure is cultivated through direct contact with the natural world, collaborative task setting and problem-solving activities. This serves to create a sense of self-awareness associated with positive change brought on by participation, allowing for the personal and social development of learners.<sup>27</sup>

The approach is also connected to peer education, as learners share perspectives with one another to overcome challenges and develop leadership confidence. Reflection is therefore critical within the pedagogy, as learners need time to process and evaluate their approaches to problems, their

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<sup>26</sup> Priest S. (1990). *The semantics of adventure education*. In Miles J. C., Priest S. (Eds.), *Adventure Education* (pp. 113–117). State College, PA: Venture Publishing.

<sup>27</sup> Cosgriff, M. (2000). *Walking our talk: Adventure based learning and physical education*, *Journal of Physical Education New Zealand*, 33(2), 89-98.

communication patterns, and their motivation as it relates to a sense of fun. This process is called the debrief<sup>28</sup> and would align well with the case study component of this project.

The partnership wanted to use the international youth events to provide young people with opportunities to challenge themselves, conquer fears, and develop a sense of accomplishment, enabling them to take greater control of their lives and make positive choices for their future. ABL would be a valued mechanism to help create the conditions for this growth; promoting teamwork, personal development, and resilience, to create a supportive and empowering space where the youth can discover their potential.

## Nature-based therapy

In a Western context, recent research has shown that young people's opportunities for contact and connection with the natural world has reduced.<sup>29</sup> Many young people are spending less time outdoors and more time on screens. The YAFNAW project was inherently concerned with exploring the eco-activism implications of this reality. Suppose we tend to protect what we know and love. How can we expect young people to understand the importance of protecting and advocating for nature if they do not have direct experiences connecting with nature?

The partnership used the nature-based therapy (NBT) pedagogy to frame nature connectedness in a way that transcended mere contact with nature. Under NBT, nature connectedness is a recognised psychological construct that describes an individual's sense of their relationship with the natural world. That is our emotional attachment and beliefs about our inclusion within nature. These aspects affect our being – how we experience the world, our emotional response, attitudes, and behaviour towards nature.<sup>30</sup>

NBT consists of programmes, activities or strategies that aim to engage people in nature-based experiences with the specific goal of achieving improved health and well-being. NBT is specifically designed, structured, and facilitated for individuals with a defined need<sup>31</sup>, taking place in green (parks and forests), blue (beaches, rivers and lakes) and grey (housing estates and city areas) spaces. This structured yet flexible place-based approach further increased the partners' desire to work within the pedagogy. There are many types of NBT, including forest therapy, ecotherapy, nature-based expressive arts,

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<sup>28</sup> Sutherland, Sue & Ressler, James & Stuhr, Paul. (2011). *Adventure-based Learning and Reflection: The Journey of One Cohort of Teacher Candidates 1*. *International Journal of Human Movement Science*. 5. 5-24.

<sup>29</sup> Larson, L. R., Mullenbach, L. E., Browning, E. M., Rigolon, A., Thomsen, J., Metcalf, E. C., Reigner, N. P., Sharaievska, I., McAnirlin, O., Cloutier, S., Helbich, M & Labib, S. M. (2022). *Greenspace and park use associated with less emotional distress among college students in the United States during the COVID-19 pandemic*. *Environmental Research*, 204, 112367. <https://doi.org/10.1016/j.envres.2021.112367>

<sup>30</sup> Richardson, M & McEwan, K. (2018). *30 days wild and the relationships between engagement with nature's beauty, nature connectedness and well-being*. *Frontiers in Psychology*, 1500: <https://www.frontiersin.org/articles/10.3389/fpsyg.2018.01500/full>

<sup>31</sup> Bragg, R & Atkins, G. (2016). *A review of nature-based interventions for mental health care*. *Natural England Commissioned Reports, Number204*: <https://publications.naturalengland.org.uk/publication/4513819616346112>

horticultural therapy, and animal-assisted therapy, yet underpinning them all are three essential theories. Firstly, the biophilia hypothesis believes that we have an innate connection to nature and that psychological stress and disease can occur if we separate ourselves from it.<sup>32</sup> The second theory is the attention restoration theory.<sup>33</sup> This proposes that spending time in natural settings can restore our attention and promote cognitive restoration, responding to the exhaustion experienced from over-engagement with technology and screens. The final theory is the stress reduction theory.<sup>34</sup> This explains that natural environments reduce psycho-physiological stress in the mind and body and promote relaxation. These theories highlight the importance of the natural environment in promoting positive health and well-being amongst the young people the project would be working with. The theories promote self-care, which is essential for the sustainability of their climate activism work and reduces the possibility of burnout due to overworking or eco-anxiety.

The partners believed NBT was an important aspect of the project for three main reasons: (1) In 2021, a scoping review of interventions for the treatment of eco-anxiety recommended ecotherapy interventions and connecting young people with nature as one of five key themes.<sup>35</sup> (2) One of the outcomes of NBT is that it can enhance the connection between young people and the natural world. There is a link between strong nature connectedness, positive well-being, and pro-environmental behaviours which aligned well with the action-orientated purpose of the project.<sup>36</sup> (3) NBT promotes reflection and contemplation, strengthening personal development and self-awareness and promoting leadership. Based on their experiences within the youth sector, the partners felt that these qualities were essential for young people engaged in climate activism.

## Civic participation / engagement

As with peer education, the partners recognised early on that civic participation would be an important angle for the project to consider. This type of participation centres around the involvement of individual constituents or communities in local, state, and national government. Civic involvement can include voting,

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<sup>32</sup> Kellert, S. R & Wilson, E. O. (1993). *The Biophilia Hypothesis*. Washington D.C: Island Press. ISBN 1559631481

<sup>33</sup> Ohly, H., White, M. P., Wheeler, B. W., Bethel, A., Ukoumunne, O. C., Nikolaou, V., & Garside, R. (2016). Attention Restoration Theory: A systematic review of the attention restoration potential of exposure to natural environments. *Journal of Toxicology and Environmental Health, Part B*, 19(7), 305-343: <https://pubmed.ncbi.nlm.nih.gov/27668460/>

<sup>34</sup> Ulrich, R. S., Simons, R. F., Losito, B. D., Fiorito, E., Miles, M. A., & Zelson, M. (1991). Stress recovery during exposure to natural and urban environments. *Journal of environmental psychology*, 11(3), 201-230: <https://www.sciencedirect.com/science/article/abs/pii/S0272494405801847?via%3Dihub>

<sup>35</sup> Baudon, P & Jachens, L. (2021). A scoping review of interventions for the treatment of eco-anxiety. *International journal of environmental research and public health*, 18(18), 9636: <https://www.mdpi.com/1660-4601/18/18/9636>

<sup>36</sup> Martin, L., White, M. P., Hunt, A., Richardson, M., Pahl, S & Burt, J. (2020). Nature contact, nature connectedness and associations with health, wellbeing and pro-environmental behaviours. *Journal of Environmental Psychology*, 68, 101389: [https://www.researchgate.net/publication/338672711\\_Nature\\_contact\\_nature\\_connectedness\\_and\\_associations\\_with\\_health\\_wellbeing\\_and\\_pro-environmental\\_behaviours](https://www.researchgate.net/publication/338672711_Nature_contact_nature_connectedness_and_associations_with_health_wellbeing_and_pro-environmental_behaviours)

political activism, volunteering, environmentalism, and community engagement.<sup>37</sup> In short, it is the participation of people in government and democratic processes. Whether participants of the project were interested in grassroots movements or traditional political lobbying, a system of global and regional governance exists, and young eco-activists would need to be aware of the ways in which engagement was most effective. Civic participation is essential because it allows youth citizens to influence policy, values, and priorities. This, in turn, leads to a higher level of trust and more robust, happier communities and creates agency among youth residents who are often overlooked and underheard. When done well, civic participation can lead to improved physical and mental health and catalyse the creation of next-generation leaders.<sup>38</sup>

The partners were drawn to the broad scope of civic engagement and its ability to advance the quality of life in a community through both political and non-political processes.<sup>39</sup> The mutually reinforcing areas of civic engagement also married well with the project's holistic ambitions. Volunteering, for example, has been shown to enhance further civic engagement among youth as it "plays a valuable role in shaping how youth learn to interact with their community and develop the skills, values, and sense of empowerment necessary to become active citizens."<sup>40</sup> Below are some descriptions of the various practices of civic engagement which resonated most strongly with the partners:<sup>41</sup>

*Activism/Advocacy:* Involves organising to bring about political or social change or to show support for, bring awareness to, or promote a particular cause or policy.

*Civic Learning:* Acquiring knowledge of community, government, social issues, or political issues with or without the application of the knowledge.

*Community Service/Volunteerism:* Engaging in activities to benefit others or one's community; such activities may or may not involve structured training and reflection.

*Service Learning:* Involves intentionally linking service activities with student learning objectives to mutually benefit the recipient (community organisation) and the provider (student) by addressing real community needs while students apply what they have learned and advance that learning through active engagement and reflection.

*Philanthropy/Fundraising:* Collection of resources (e.g., money, food, clothing, etc.) to benefit charitable organisations or agencies.

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<sup>37</sup> Michelsen, E., Zaff, J. F & Hair, E. C., (2002) *Civic Engagement Programs and Youth Development: A Synthesis*, *Child Trends*: <https://search.issuelab.org/resource/civic-engagement-programs-and-youth-development-a-synthesis.html>

<sup>38</sup> ZenCity Community Engagement Platform: <https://zencity.io/glossary/what-is-civic-participation/>

<sup>39</sup> Erlich, T. (2000). *Civil Responsibility and Higher Education*, Connecticut, NE, Greenwood Publishing Group, ISBN 1573562890

<sup>40</sup> USA's Youth.gov: <https://youth.gov/youth-topics/civic-engagement-and-volunteering>

<sup>41</sup> Center for Civic Engagement, Illinois State University: <https://civicengagement.illinoisstate.edu/faculty-staff/engagement-types/>

*Political Engagement:* Developing one's political understandings and views that may be expressed by challenging the political ideas of others and influencing policies or political positions.

## International context

While not explored as a coherent theoretical framework, the project did acknowledge the importance of intercultural dialogue. Building on the themes of diversity and alternative perspectives offered in holistic learning and ESD, cultural inclusion was a concept that interested the partners. The project's international youth events would create a backdrop for cultural exchange and the sharing of ideas and strategies. Equally, the collaborations between the partners themselves would encourage intercultural understanding, and the partners recognised that various cultural factors would impact messaging and pedagogy appropriateness.

Understanding the different pedagogies the partners brought into this project created a pedagogy landscape - a starting place for developing ideas, activities and tools for youth eco-activism. Recognising that each partner was striving for similar goals, operating in similar fields, yet approaching their work under different frameworks and theoretical assumptions highlighted the potential for a holistic approach that blended our methods into one cohesive pedagogy. With initial research and knowledge sharing completed, the partnership moved towards building on these theories together.

# Chapter 3 – Building on Theory

## Design-thinking methods

During the proposal writing stage of YAFNAW, the partners envisioned a participatory pedagogy design process. The project opted to use a design-thinking<sup>42</sup> approach to keep the end user of the toolkit ever present in the minds of the partners and actively involved during all development stages. This approach would allow the project to build on the pedagogy theories in a purposeful and youth-led manner. This was accomplished using various methods and techniques across exploration, planning and implementation stages.

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<sup>42</sup> IDEO: <https://designthinking.ideo.com/>



### *Exploration example:*

Empathy mapping<sup>43</sup> allowed the partners to centre young people as direct project beneficiaries, predicting problems and solutions around two topics: (1) Youth action in green spaces. (2) Mental health and well-being in the context of environmental issues. Under these topics, the partners used their experiences with youth work to articulate the things young people say, think, feel, and do. Assumptions derived from this exercise were validated through surveys conducted by ECO-UNESCO exploring youth voices on climate change, building a clearer picture of the needs of the project's target audiences. Design-thinking methods like these helped the partnership build a better understanding of the potential users of the toolkit. This knowledge was used to extract relevant teaching and learning needs and methods from the pedagogy literature review.

### *Planning example:*

Predicting what the project could offer young people, a theory of change was first articulated into a logistical framework.<sup>44</sup> Logic models link inputs with impacts linearly, clearly defining expectations and roles within the partnership. Creating a logistical framework grounded the partners' understanding of the interrelated project components, leading to more formative and constructive feedback during planning and implementation. Robust indicators within the logistical framework enabled the partners to be self-evaluators and critical friends.<sup>45</sup> Developing planning tools like this helped the partners better implement design-thinking processes in strategic ways.

### *Implementation example:*

Four international youth events would provide a space for the project to trial different pedagogies and get formative feedback from target beneficiaries. The events were designed to engage and involve young people, refine innovations, and keep the toolkit/pedagogy development responsive. The events were called Learning, Teaching and Training (LTT) events. With each LTT event building on the previous one, potential toolkit users would have a chance to see the progression of the concepts, the creation of activities and the reflection of their ideas and contributions into the final version. The partners considered these LTT events human-centred, collaborative, optimistic and experimental – featuring many of the typical hallmarks of design-thinking methods.<sup>46</sup>

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<sup>43</sup> Mural: <https://app.mural.co/template/e039541c-944d-4d99-8cdb-74979fd2f7c8/ce11b718-75c3-4501-b058-0c8604d0124b>

<sup>44</sup> Tools4Dev: <https://tools4dev.org/resources/how-to-write-a-logical-framework-logframe/>

<sup>45</sup> SPEAR: <https://gender-spear.eu/blog/post/14/the-critical-friends-approach>

<sup>46</sup> Hobson, S. *Design Thinking for Educators*: <https://teachonline.asu.edu/2013/05/design-thinking-for-educators/#:~:text=Design%20Thinking%20is%20optimistic%2C%20human,to%20generate%20and%20evolve%20ideas.>

Across the project, a design-thinking approach established tools and structures that would allow the pedagogy landscape shown in chapter two to develop. The aim was to oscillate between convergent and divergent thinking to encourage meaningful collaboration<sup>47</sup>, following five basic steps to expand the partners' pedagogical understanding. These design-thinking steps were:

- 1.) **Discovery** (identifying pedagogy theory)
- 2.) **Interpretation** (predicting which parts of the theories might resonate with potential toolkit users)
- 3.) **Ideation** (creating new tools for young people that build on the pedagogies)
- 4.) **Experimentation** (hosting international LTT events to trial the new tools)
- 5.) **Evolution** (reflecting and collaborating on the refinement of tools and pedagogy)

These steps reflected an iterative development process underpinning a transformative approach to collective learning. A conceptual model for the project was created ahead of the first LTT event which can be found in the appendix of this paper.

## The Learning, Teaching and Training events (Part 1 – establishing a unique pedagogy)

The core design-thinking method used to develop the project's pedagogy came in the form of LTT events. The partners organised and hosted four LTT events over one year to pilot the pedagogy being employed and developed in the project. The events would build on each other yet stand in isolation to allow for new and returning participants. This would help create some continuity, opportunities for peer education and more longitudinal design-thinking spaces.

Each event occurred in a different context (Ireland, Slovakia, Latvia and Catalonia) with a unique purpose and focus. A period of three months in between events allowed the partners to redesign and advance the pedagogy and the toolkit. Each event saw groups of young people from the four regions come together in a shared space for five days of cultural exchange and educational activities. While an initial flow diagram was created for these events, depicting the themes, overlaps and structure, the partnership recognised that the events would need to adapt to feedback and have the flexibility to explore new ideas put forward by the youth. A flow diagram of the LTTs can be found in the appendix of this paper.

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<sup>47</sup> Choudhary, S. *Design Thinking: Divergence and Convergence Cycles*: <https://medium.com/@i.shubhangich/design-thinking-divergence-and-convergence-cycles-3ce7a6f27815>

In preparation for the first event (LTT1), a series of activities were developed which aligned with the initial pedagogy theories explored as part of this project. Many of the activities were directly inspired by pre-existing tools used by the partners within other programmes they ran. These included activities which explored nature-based therapies, transformative learning, and systems thinking. These activities were delivered to 33 young people (ages 18-25) who participated in LTT1 in Ireland. The cohort of participants provided feedback (post-event and after 3+ months), sharing their views on which tools/pedagogies were practical and relevant and which had a lasting impact on their lives. These focus groups would form part of a case study, serving as another of the project's intellectual outputs (IO2).

After LTT1, the partners thematically analysed the feedback provided by participants, learning that the young people valued diverse community spaces united by shared values with clearly defined goals. These community spaces were seen to be foundational in establishing informal education structures that scaffold knowledge and promote regular reflection. In turn, skills and emotional development would be allowed to manifest and transformative learning could occur. Long term, young people felt that maintaining community was a critical aspect of keeping this transformative mindset alive. The nature connection activities conducted at LTT1 were well received. Pedagogically speaking, the partners delved deeper into the project's conceptualisation of NBT, exploring deep ecology principles that built on the learnings from LTT1 and nature connection sessions. In addition, there was a call for more practical planning tools to be included in subsequent events. The learnings from LTT1 were summarised into a process model, which can be found in the appendix of this paper.

The partners worked to develop the tools used in LTT1 based on participant feedback, refining the activities and putting together another five-day schedule, which would serve as LTT2 in Slovakia. For LTT2, the project targeted a slightly younger demographic (ages 16-21), seeking to understand if the tools would resonate with those with less experience in eco-activism. LTT2 focused on civic engagement pedagogy and project planning tools, responding to the desires of the previous cohort to have more tangible frameworks to raise funds and pitch ideas to external stakeholders.

LTT2 allowed the partnership to trial second-generation tools and begin to piece together a narrative structure of the toolkit, seeing how individual tools could fit together and reinforce each other in a structured way. Another round of feedback resulted in the formation of a peer learning theory of change, with participants reaffirming learnings from the previous event. The peer learning theory of change can be found in the appendix of this paper. It was found that diversity can create a space for tolerance and empathy, enhancing communication skills that establish deep connections based on values. Self-organised safe spaces then emerged, allowing participants to push each other out of their comfort zones, gaining

appreciation and exposure to new ways of thinking and perceiving. The recognition that multiple realities exist and that multiple interpretations of that reality are valid led to a transformative environment where participants changed how they approached learning opportunities. The civic engagement pedagogy used by the partners began to evolve based on youth feedback, becoming more integrated with nature connection and system thinking principles.

After LTT2, the partners had learned enough about successful teaching methods to create a new, more contextual pedagogy landscape for the project. This conceptual framework would highlight the assumptions guiding the theory of change and shape any future developments the partners would make to the toolkit.

## A new pedagogy landscape

Throughout the project, a series of transnational meetings between the partners allowed for intensive periods of collaboration and development. After LTT2, the partners held one such meeting in Latvia to co-create a new pedagogy landscape. This would articulate the key learnings from the project to that point and enable new activities to be created out of the theoretical and conceptual constructs.

The partners began by discussing the central pedagogies used in the project up until that point. This included some of the original guiding theories, some new ones that had manifested over the first two LTT events, and some of the ways in which we had evolved particular approaches. A mind map was created to demonstrate the links between the various pedagogies. The mind map can be found in the appendix of this paper. The table below highlights the significant theories making up the new pedagogy landscape.

Pedagogy used in YAFNAW	What does this usually entail?	How YAFNAW was expanding or using it?
<i>Transformative Learning</i>	Changing <i>HOW</i> we learn	Education is viewed as a ' <i>community glue</i> ' to promote collective learning, which impacts everyday lives and transforms the ability to engage with prospective
<i>Peer Education</i>	Young people learning from each other	A space for diversity with consistent values is created to foster an informal learning opportunity that is mutual  Peer education helps young people find different ways to approach a problem and understand that we all have the potential to change our perspective
<i>Enquiry-Based Learning</i>	Beneficiaries directing learning goals	A collaborative approach to learning involves a structured approach of 3rds (Facilitators, Youth and Nature doing a 3 <sup>rd</sup> of the work each)
<i>Civic Engagement</i>	Citizens engaging with society and its development	Community-led local development is promoted to take action that gains momentum at the grassroots level  Sustained links to community (especially rural) that increases engagement, supports physical and mental wellness and fosters leadership are encouraged
<i>Adventure Based Learning</i>	Outdoor, practical and fun learning	Natural environments situate practical activities in the context in which they apply  Content stays flexible, responding to the needs of a group  Conflict resolution/communication, responsibility/teamwork, leadership/ goals and risk management are explicitly discussed
<i>Well-Being Awareness</i>	Valuing mental health and well-being in education	Mental health and well-being are viewed through a bio-centric lens (our well-being

	<p>is linked to the environment)</p> <p>Resilience is improved through an understanding of self-awareness</p>
<i>Systems Thinking</i>	<p>Uncovering the big picture to discover systemic interconnections</p> <p>A framework to understand leverage points is provided to realise strategic action</p> <p>Systems thinking helps reduce burnout and increase capacity for scaling activism</p>
<i>Place-Based Learning</i>	<p>Using local, regional, and community places, resources, systems, and themes as a context for learning</p> <p>A connection to land and a relationship with nature is formed to develop the ecological self - knowing we are not dominant over nature – we are nature!</p> <p>Deep ecology is explored - when we are part of something, we want to love it and look after it</p> <p>Wisdom is gained through the landscape's insights, and we have the potential to understand nature's processes better</p>
<i>Experiential Learning</i>	<p>To learn through sharing and doing</p> <p>Immersive learning with community can make room for reflective practice and 'not knowing'</p>

The partners sought to organise these ideas thematically to understand the synergies better and summarise the pedagogy landscape's core concepts. The project's name was used to group and connect various theories, highlighting the four domains with which the pedagogies most aligned: *Youth, Action, Nature, or Well-Being*

<b>Youth</b>	<b>Action</b>	<b>Nature</b>	<b>Well-Being</b>
Transformative Learning		Place-Based	
Peer Education	Adventure-Based		Systems Thinking
Enquiry-Based Learning	Civic Engagement		Well-being Awareness
	Experiential Learning		

The partners also identified that strength-based, transparent and holistic approaches were common, overarching frameworks running through the pedagogy landscape.

This exercise revealed that the project's pedagogy intersected some synergistic theories of education, which could be thematically described under the project title. The partners found that YAFNAW's pedagogy fit neatly under the umbrella of transformative learning, with a particular focus on peer education, systems thinking, community building and nature connection. Creating a new pedagogy landscape also revealed some gaps in knowledge that could be pursued in subsequent LTT events. Leadership, intergenerational peer learning, living systems modelling, moving from informal to formal spaces, indigenous wisdom learning, deep ecology and connection to land were key concepts identified as potential growth areas.

## The Learning, Teaching and Training events (Part 2 – refining and testing the pedagogy)

LTT3 occurred in Latvia and continued targeting the 16-25 age range. In Slovakia, LTT2 revealed that younger participants (16) could engage and assist well with tool development. The partnership was interested in exploring how these younger participants conceptualised principles of teamwork and leadership. This became a focus of LTT3 and responded to and investigated a gap identified during the creation of the new pedagogy landscape. As well as leadership, LTT3 focused on outdoor, experiential, and adventure-based learning, with a whole day dedicated to cultural activities. The systems thinking tools developed by the project thus far were also featured in LTT3, and feedback from the cohort led to some important methodological decisions.

A consistent concern from participants (throughout all LTTs) was their confidence in using the systemic models featured in the project's pedagogy. Young people often sought more precise step-by-step instructions, a 'right' and 'wrong' answer, and a defined process to follow. However, these systemic tools aim to promote a way of thinking about the world. There are often multiple pathways through the tools and no strict process requiring rigid adherence. After LTT2, the idea of including a human character and a narrative concept within the toolkit emerged. This aimed to bridge together specific tools. A significant development in LTT3 occurred when the partnership began to expand the narrative, allowing the human character to meet and interact with a diverse set of animal characters. The animal characters would provide examples of alternative pathways through various tools. Toolkit users could then project themselves onto the human character, receive specific examples from multiple animal characters, and make the leap in thinking that there is no strict 'right' or 'wrong' way to approach the systemic tools; as each animal approaches exercises in unique ways based on their strengths and perspective. The imagery would reinforce the transformative, enquiry-based and systems thinking pedagogies used by the project, providing an insight into perspective that toolkit users could engage with.

Feedback from the LTT3 revealed that open-minded and diverse groups who understand the value of peer education should establish co-designed community goals, rules, and roles to create a structure that supports mutual respect and mutual learning. These spaces can unlock the inner child and boost the confidence of group members. Leadership strategies can emerge organically by scaffolding knowledge and using visual examples and reflection periods. The findings echoed the same sentiments of previous LTT event cohorts and were summarised in a diagram which can be found in the appendix of this paper.



Taking on board this feedback, the partnership created the characters and narrative structure of the toolkit. An illustrator was brought into the team to contribute to the creative processes. A final event was designed to be held in Catalonia. The partnership felt that this final cohort should represent a more mature (experientially) eco-activist group that would resemble the demographic that would first engage with the toolkit as leaders in their communities. Peer education, deep ecology and living systems modelling activities were developed as the final pieces of the pedagogy puzzle.

LTT4 took place in Catalonia and targeted experienced eco-activists in the 18-25 age range. The event had the largest proportion of returning participants (compared to previous LTTs). The core pedagogies were experienced by participants in four days of nature-based, systems thinking, community building and peer education activities. New sessions were introduced that aligned with the project's pedagogy, including constellation sessions where community dynamics and roles were identified. Trust-building systems dynamics games were also experimented with, as well as teamwork and communication games. Indigenous wisdom and land connection were explored through guest speakers and practical exposure to the five pathways to nature connection model. Formal spaces and civic engagement / further opportunities were also covered in the event, filling all the gaps identified from the pedagogy landscape creation exercise. A draft toolkit was shared on the fifth and final day, allowing the group to engage with the output and provide feedback.

Feedback from LTT4 revealed that the event was particularly successful regarding community formation. Returning participants expressed that the Catalanian event had created a space where age difference and experience level did not matter as much as previous events. An area where peer education was alive and dynamic. Additionally, each new activity explored was well received, potentially due to their alignment with the project's now-proven pedagogy. Self-organisation and emergent leadership strategies were considered foundational principles of governance that worked alongside communal learning to build well-being, connectivity and independence. The peer education process model was seen to work well, with participants returning to their communities and hosting workshops with local schools to share the frameworks featured in the toolkit. The peer education aspect of the project's pedagogy landscape reached a level of maturity during LTT4, where young people were supported into leadership and peer educator roles outside of a programmatic context or formalised training. Holistic thinking (particularly links between mental health and nature connection) improved among the cohort as well, reflecting an important thread joining various pedagogies together. A bridge between governance considerations and productive outputs was made and a model on this can be found in the appendix of this paper.

The LTT events allowed the partners to develop a pedagogy framework tailored to the project's context and beneficiaries. A co-creation and co-design process with the youth ensured a participatory approach best articulated in the case study intellectual output from the YAFNAW project. Conducting the research into pedagogy and the LTT events gave a strong focus for the production of the educational toolkit.

## Toolkit development

The project's toolkit was under development and continual refinement throughout the LTTs. During the project's first transnational meeting with the partners, a six-step approach was conceived to assist young people in implementing action projects:

Step 1 – Create and Connect

Step 2 – Selecting an Issue

Step 3 – Mapping

Step 4 – Action

Step 5 – Amplify

Step 6 – Transform

The six steps were loosely based on a six-steps-to-success action-project framework used by ECO-UNESCO in other programmes. It was decided that an early toolkit draft called the Action Project Framework (APF) would be created. At first, the APF would contain a series of ideas, session plans, activities and tools from the initial three steps (Create and Connect, Selecting an Issue & Mapping). The partnership began compiling and creating tools for the APF, using the guiding pedagogies to help shape the content.

During LTT1, participants could browse the APF and provide feedback. The partnership took on board the feedback and focused on the most impactful and valuable tools from the APF. These tools underwent further revisions ahead of LTT2. Structurally, the APF was altered to promote a holistic, circular and flexible approach to education. The six steps were developed into six phases, which mutually reinforced each other yet could stand alone (just as the LTTs themselves).

The concept of showcasing the APF was dropped after LTT1, as the sheer volume of content was overwhelming, and time constraints dictated that focusing on tools with immediate practical application would be more appropriate for the participants of future LTTs.

LTT2 enabled the partnership to further hone in on successful tools, trialling them with younger beneficiaries. As the project's pedagogy began to build on the assumptions uncovered during the theoretical literature reviews, the content for the toolkit became more responsive to the contextual needs of the young people the partners were collaborating with. A project planning tool was created to provide a simple framework to consolidate toolkit learnings under the mapping phase. Peer education received more attention within the toolkit, as it was found to be an important catalyst for eco-activism projects. Interestingly, diversity among the peer group increased the impact and effectiveness of the pedagogy, representing a departure from much of the literature.

From LTT2 onwards, returning participants provided critical feedback and insights, which resulted in the formation of a narrative structure to guide users through tools and activities. The decision to include characters in the toolkit was derived from the returning participants who valued visual learning and wanted to see activities be linked together through imagery. At this stage (after LTT1 and 2), the APF was reduced in size and turned into a recognisable first draft of the educational toolkit.

LTT3 allowed the partnership to explore topics yet to be tested in the toolkit concept. Using the pedagogy landscape, sessions covering leadership, peer education, communication and systems thinking helped consolidate the learnings from the project and validate the partners' pedagogical approaches. The toolkit content was organised, and the six phases underwent further development, with a new structure emerging:

Phase 1 – Knowing Yourself

Phase 2 – Finding Community

Phase 3 – Mapping Action

Phase 4 – Evaluating Action

Phase 5 – Amplifying Action

Phase 6 – Transform

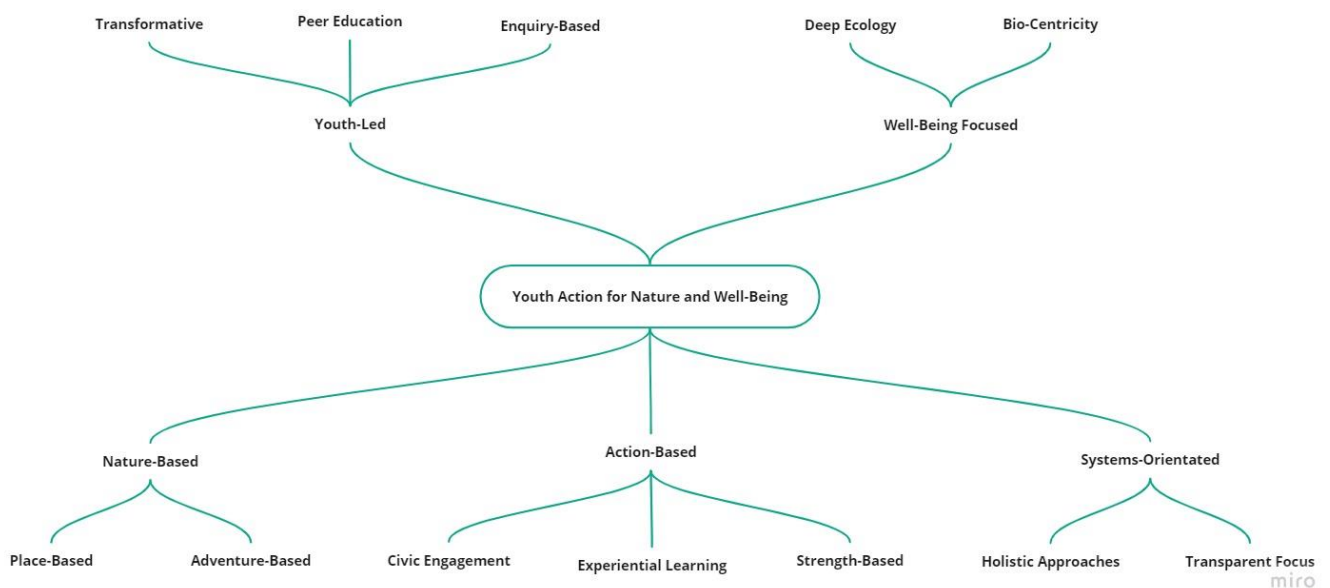
LTT4 allowed the cohort to engage the toolkit structure directly. The feedback was rich, with suggestions ranging from language choices to the inclusion of activities and larger concept designs for the characters and their progression. As the emerging final vision for the project's toolkit would be inherently visual, the partners sought to engage an illustrator to become part of the creative decision-making processes. Sketches of the principal character were created and shared with participants of the LTTs. A designer was brought on board to help produce the toolkit. The partners worked collaboratively to produce content

under the six phases, directly informed by LTT successes. The write-up process (from draft to final edit) took three months, with regular meetings between the design team and the partners.

## Chapter 4: Producing a Pedagogy

### YAFNAW's pedagogy

Documenting the pedagogy development process helped guide and translate the project's learnings into action. Creating this design guide allowed the partners to frame the context and foundation of key methods, keep track of innovations, test assumptions and develop a final pedagogy landscape. The diagram below presents the overall pedagogy landscape of the YAFNAW project and educational toolkit.



YAFNAW and the educational toolkit do not try to reinvent the wheel. Instead, it draws from a wide range of pedagogy to create a unique landscape. The toolkit invites young people to use informal peer education and systems thinking to take strategic action as nature, for nature, in place-based settings to enhance their well-being. This transformative process fosters community resilience and connections at the grassroots level. A glossary of all pedagogical terms used in the framework can be found in the appendix of this paper.

# Chapter 5: Recommendations

## Lessons learned

During collaboration on this design guide, the partners curated a list of important learnings to help others in the field(s) working to drive pedagogy development. These are presented as recommendations below:

- Choose collaborating partners who share objectives yet have different approaches to implementation and celebrate your differences often.
- In collaborative spaces, make room for genuine dialogue and mutual learning by rotating meeting sites and hosts, sharing expertise, reflecting on progress and practising gratitude for personal growth.
- Create a contextual backdrop as a foundation for your pedagogy development by conducting a literature review and comparing pre-existing teaching and learning methods.
- Directly engage the beneficiaries of your pedagogy and trial the methods you are interested in. Provide a space for formative feedback.
- Do not rush the process. A nuanced understanding of the successful approaches for your beneficiaries will take time to manifest.
- Rather than creating a new approach, explore the possibility of building on literature and theoretical frameworks.

## Building on this pedagogy

The partners would recommend others working in the field to expand on this pedagogy. It would be useful to understand its use for vulnerable or marginalised groups. Further explorations of peer education, its youth-led definition, and manifestations outside of programmatic contexts are other areas for potential

development. A holistic framework approach to pedagogy design and selection could be elaborated on, with a discussion on its application for formal and informal learning contexts.

Increasing access to the toolkit and its pedagogy is of paramount importance to the partners. Should readers of this guide have any questions or wish to share the learnings or toolkit with others, the contact information for the partners is provided on the YAFNAW website.

# Appendix

Concept Model

LTT Flow Diagram

Eco-Activist Process Model – Developed from thematic analysis of LTT1 focus group data

Theory Of Change – Developed from thematic analysis of LTT2 focus group data

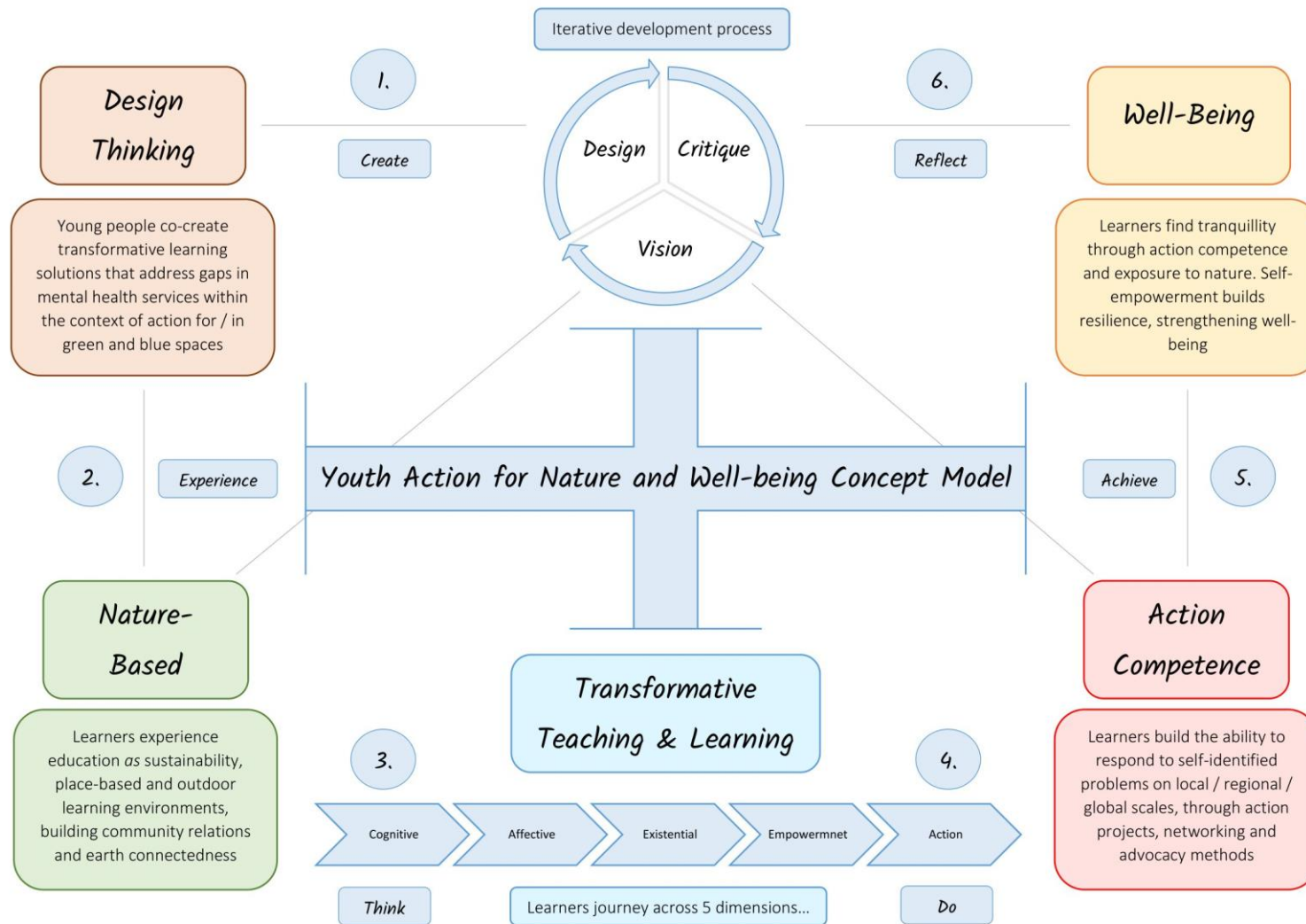
Pedagogy Landscape Mind Map – Created after LTT2

People / Spaces / Content - Developed from thematic analysis of LTT3 focus group data

Governance and Outcomes – Created after LTT4

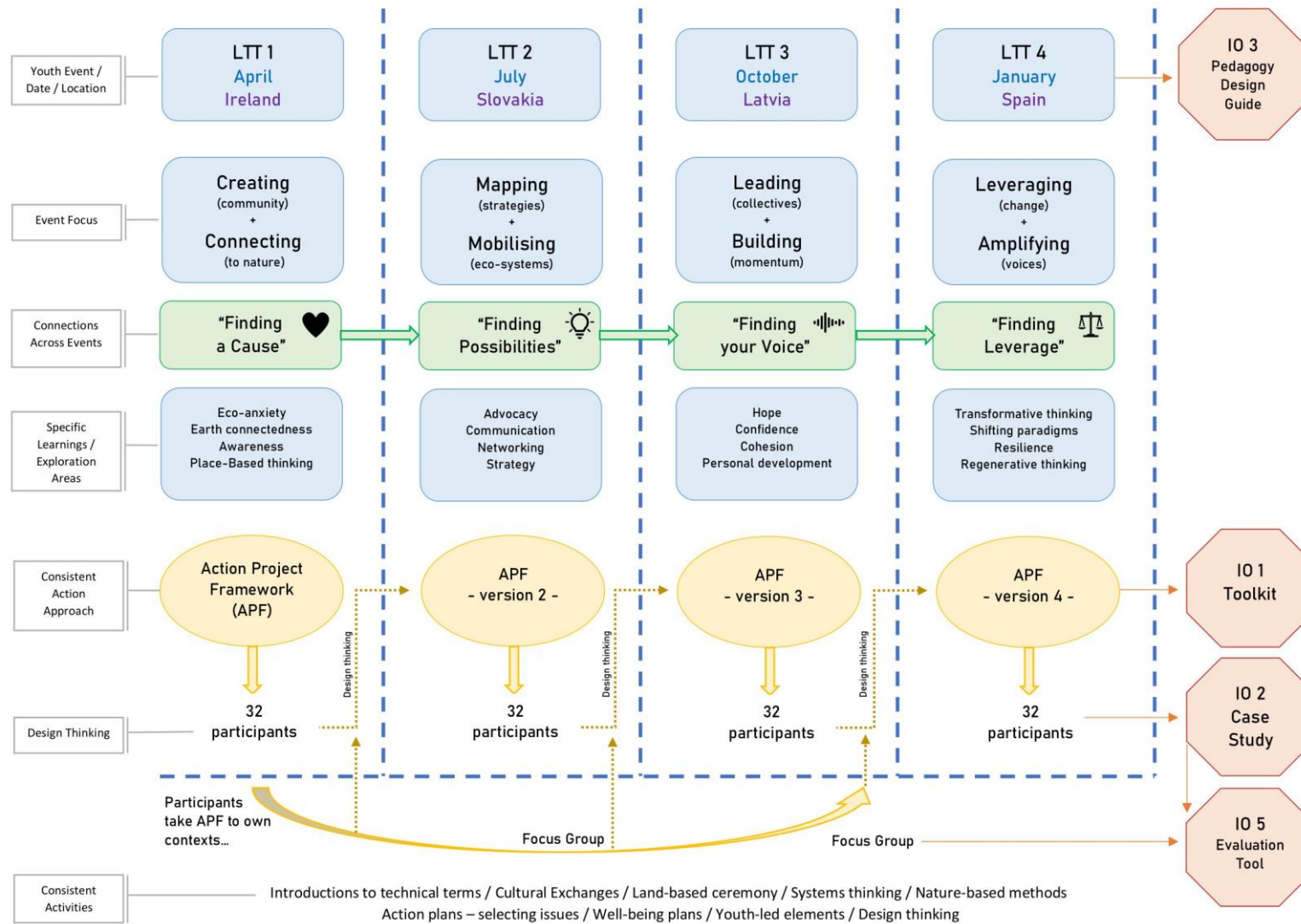
Pedagogy Landscape Terminology Glossary

# Concept Model – Developed ahead of LTT1

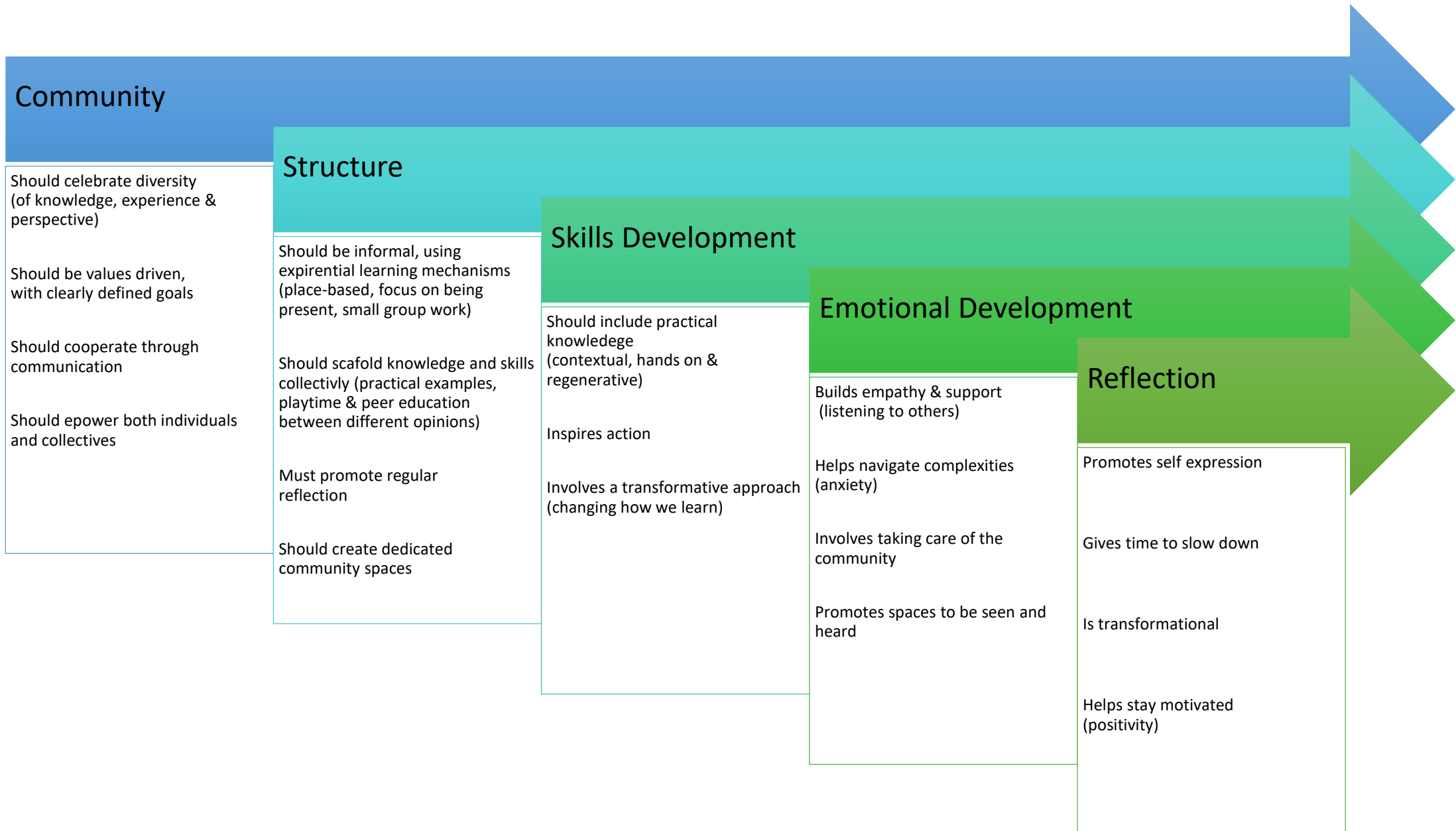




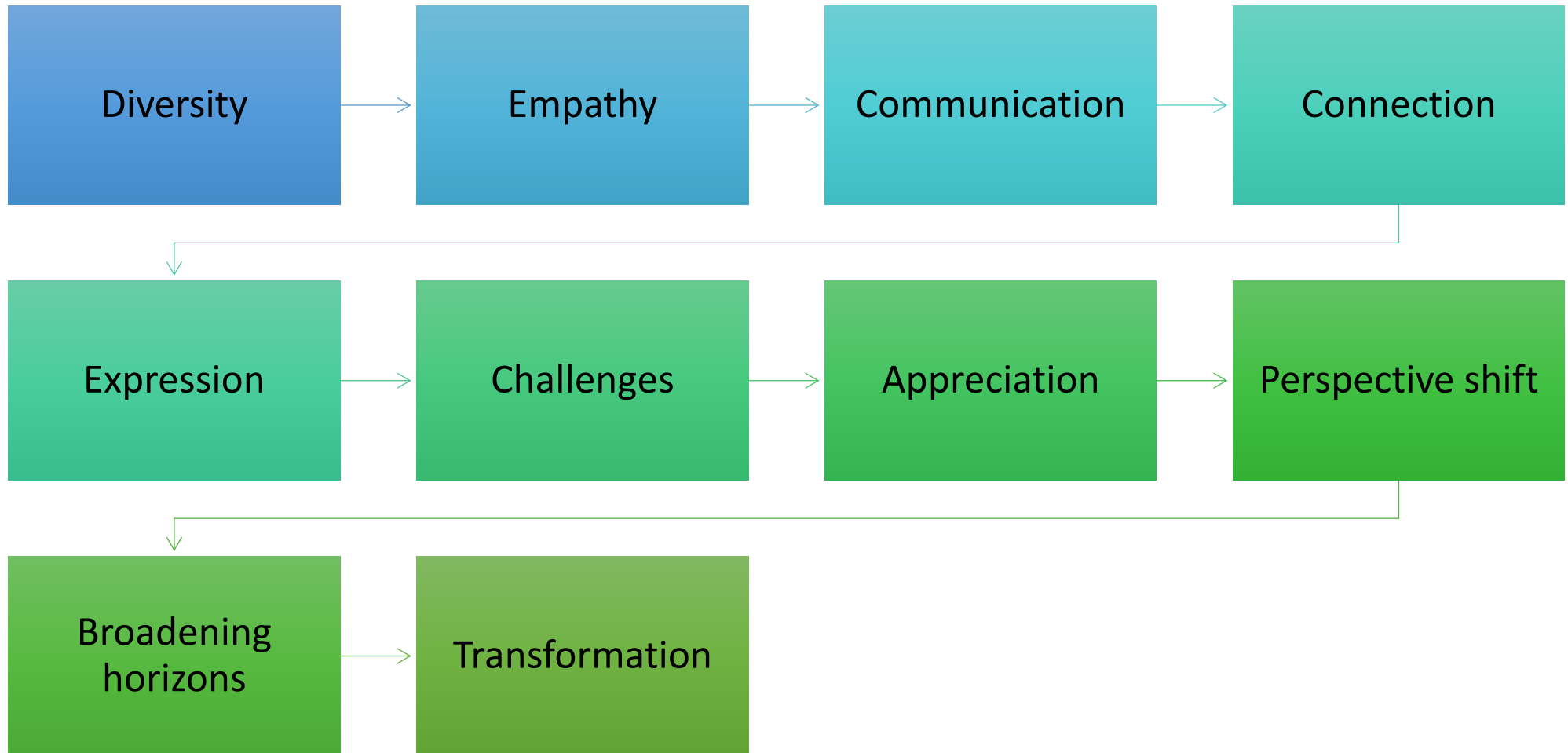
# LTT Flow Diagram – Developed ahead of LTT1



# Eco-Activist Process Model – Developed from thematic analysis of LTT1 focus group data



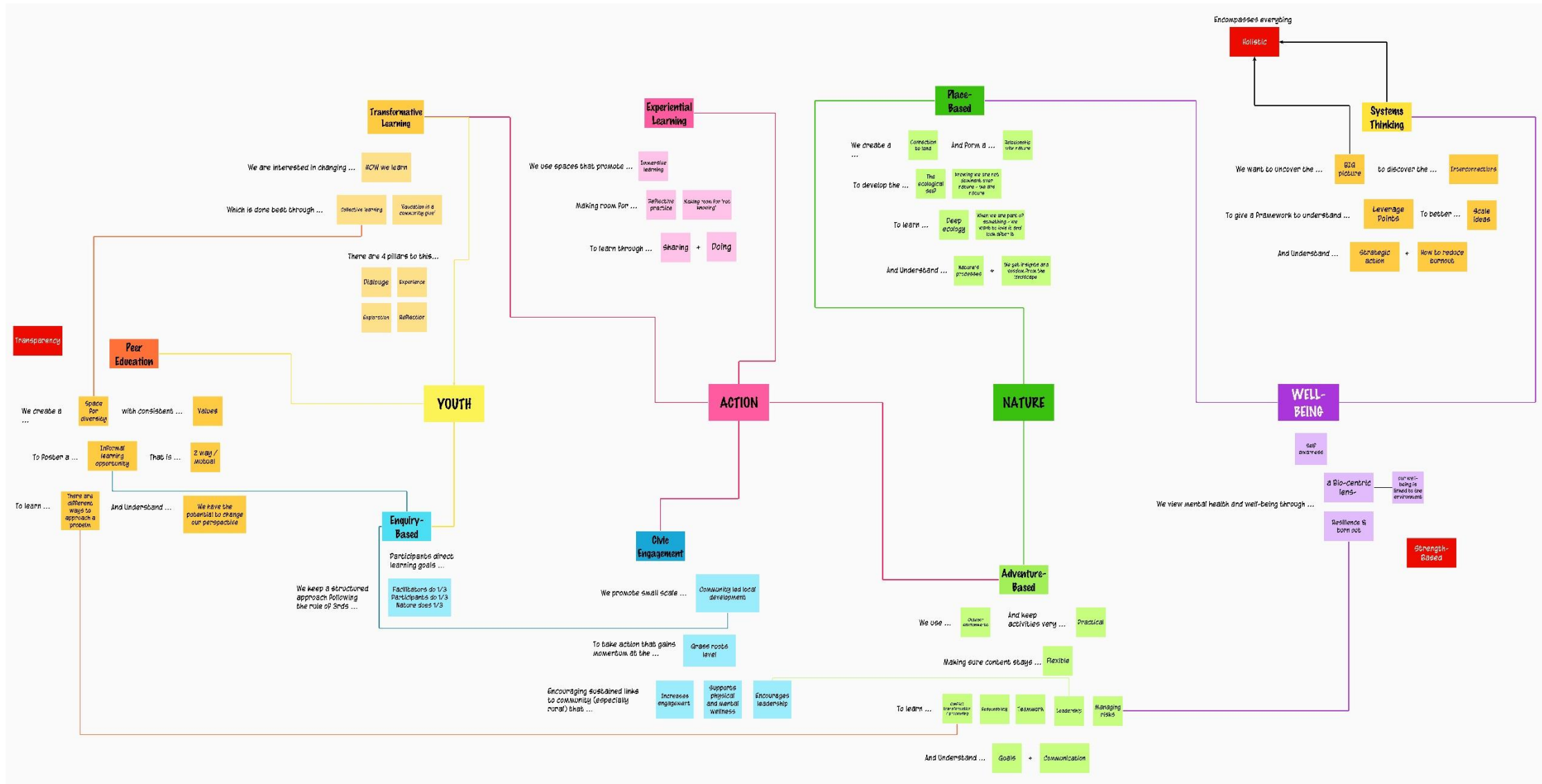
# Theory Of Change – Developed from thematic analysis of LTT2 focus group data



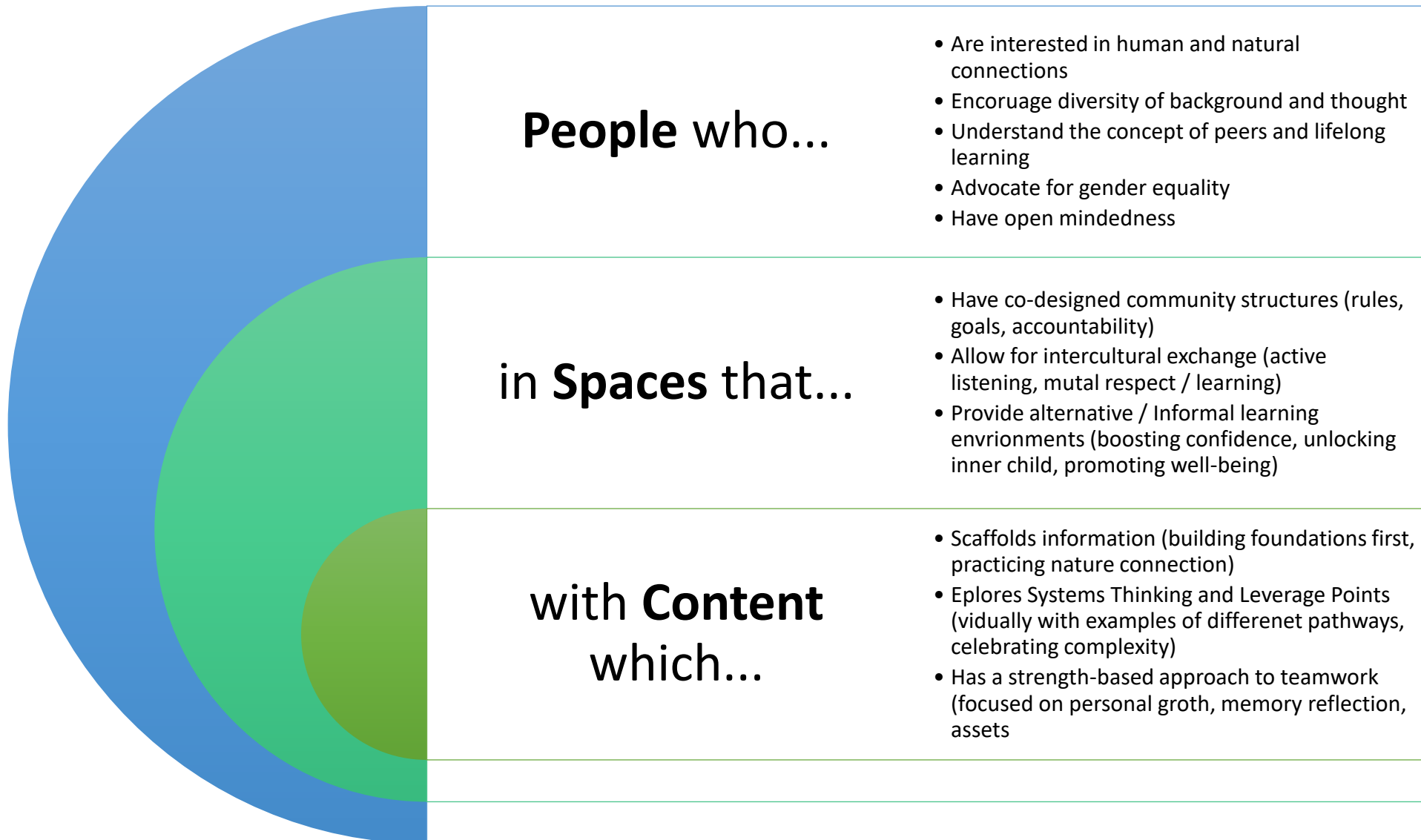
<b>Stage</b>	<b>Example</b>
Intercultural / Intergenerational exchange	The event brings young people from different backgrounds together
Creating a space for <b>diversity</b>	A specific workspace is provided for all
Developing tolerance and <b>empathy</b>	Groups' rules, roles, and responsibilities are co-created and agreed upon
Enhancing <b>communication</b> skills	With a co-defined structure, group members begin to dialogue freely
Forming genuine <b>connections</b> based on values rather than geographic or social markers	Group members develop bonds, understanding their united purpose and interest in eco-activism
Establishment of space spaces for emotional <b>expression</b>	Armed with the knowledge that common values unite each group member, individuals can be vulnerable and articulate their needs better
Pushing each other to step outside of comfort zones with <b>challenges</b>	Because group members can be vulnerable, others will know when people need extra support and encouragement

Gaining an <b>appreciation</b> for diverse perspectives	Going through challenges shows people that there is great power in collective thought and collaboration
Exposure and understanding of alternative worldviews, <b>perspectives</b> , and problem-solving methods	The power of collectives is experientially known now - It moves from theory into practice, as group members have seen how different perspectives can solve problems
<b>Broadens horizons</b> and realisation that multiple realities and ways of learning exist	At a paradigm level, group members now value their mental growth and frame it within the context of group and peer learning
<b>Transformative</b> experiences	Those involved with peer education have changed how they learn (valuing diversity and perspective), and they can incorporate that into everyday lives

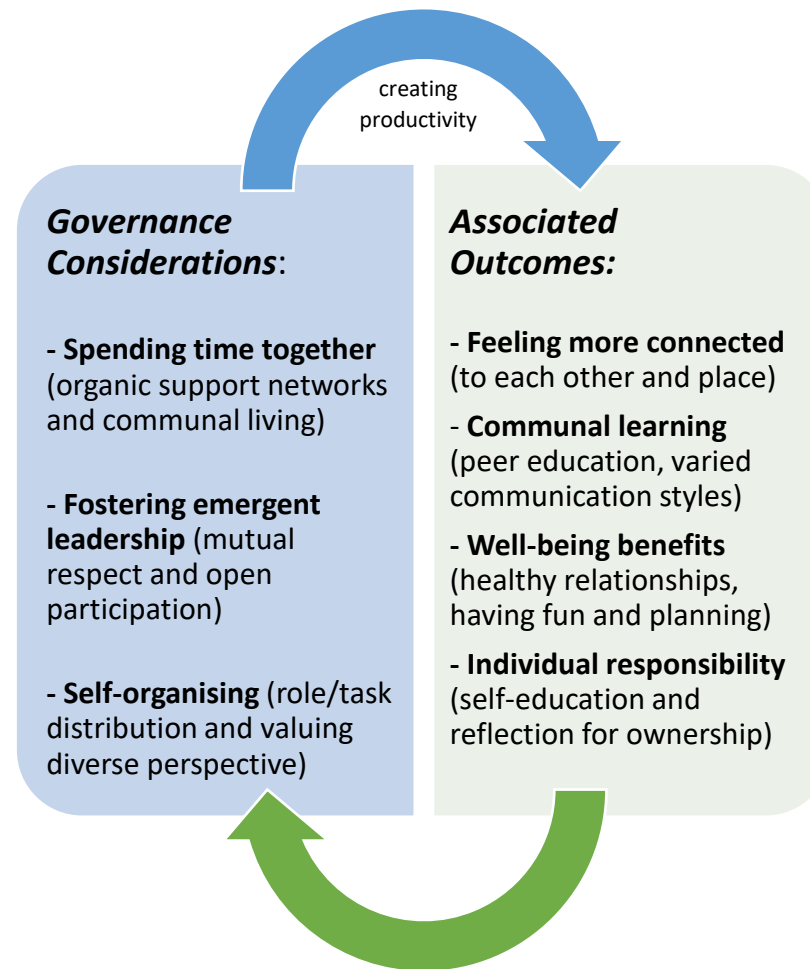
# Pedagogy Landscape Mind Map – Created after LTT2



# People / Spaces / Content - Developed from thematic analysis of LTT3 focus group data



# Governance and Outcomes – Created after LTT4





# Pedagogy Landscape Terminology Glossary

Transformative Learning	Changing how we learn through collective learning and viewing education as a community glue. Four pillars of dialogue, experience, exploration, and reflection help foster transformational experiences.
Peer Education	Creating a space for diversity with consistent values to foster an informal learning community that is two-way (mutual). This learning promotes engagement with alternative perspectives and creates a recognition that there are multiple ways to approach and solve complex problems.
Enquiry-Based Learning	Learners direct the learning goals and take part in facilitation where possible, reflecting a structured approach following a rule of 3rds (leaders, learners and nature shoulder 1/3 <sup>rd</sup> of the work required for learning).
Civic Engagement	Promoting community-led local development to take action that gains momentum at a grassroots level. Encouraging sustained links to community (especially rural) to increase engagement, support physical and mental wellness and promote leadership.
Experiential Learning	Using spaces that promote immersive learning, making room for reflective practice and 'not knowing, to learn through sharing and doing.
Place-Based Learning	Creating a connection to land and forming a relationship with nature to develop the ecological self – knowing we are not dominant over nature; we are nature! Learning deep ecology and understanding nature's processes to get insight from the landscape.
Adventure-Based Learning	Using outdoor environments that keep activities practical and flexible. Learners guide processes to work through conflict processing, responsibility, teamwork, leadership and risk management themes, understanding goals and communication.

Bio-Centric Well-Being	Viewing mental health through a natural lens and recognising our well-being is linked to the environment. Prioritising nature connection as a stress reduction process builds resilience and reduces activism burnout.
Systems Thinking	Uncovering the big picture to discover interconnections and create frameworks to understand leverage points to better scale ideas. Recognising which actions are strategic and how to avoid burnout.