

Children in Permaculture Pedagogy

Children in Permaculture (CiP) is an Erasmus+ project in which seven European organisations are working together to improve the education of children in formal, informal and non-formal settings through the development of resources such as case studies, curricula, session plans, films and other resources. These resources will enable kindergarten and school teachers, permaculture practitioners, parents and other educators to engage in holistic, sustainable education with children based on permaculture ethics and principles.

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Introduction

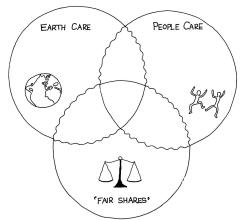
Children in Permaculture pedagogy is the methods, practices and the underlying principles used when doing permaculture with children. It is about 'how' we practice permaculture with children, rather than the 'what' we do with children (which are outlined in Chapters 3-6).

Below is an outline of the main points of permaculture pedagogy. The lists of questions can be utilised to facilitate a critical reflection process in order to adapt any plans to better reflect permaculture, whether they are lesson plans in a formal education setting, or plans for non-formal sessions.

These guidelines can be approached and integrated into teaching practice step-by-step. The ethics provide the starting point and are fundamental for beginning to integrate permaculture into the curriculum. The other principles and guidelines can be introduced gradually. It is not recommended to try to change everything all at once, but rather to approach bringing permaculture into working with children as a playful journey that supports and inspires both the adults and children involved.

1. The Foundation: Permaculture Ethics

Ensuring that the three ethics of permaculture are well reflected when designing session plans is what differentiates a permaculture session from other types of environmental education. Using the permaculture principle of 'Design from pattern to detail' by first reflecting on the ethics helps to keep the bigger goals in mind throughout the planning and implementation process. However, ultimately the ethics are made visible primarily through the example of the adult acting in a thoughtful, compassionate and ecologically aware manner. Including the ethics directly in the content (via stories, songs, games etc) helps to reinforce them further.



People care

People care means addressing the needs of children, parents, educators and other people in the community, and treating them with respect and compassion. Cooperation, empathy, communication, wellbeing, and inclusive thinking are encouraged.

During the process of preparation and implementation of the session plan, remember to be mindful of your energy levels and that of other the adults involved (avoid burnout). Also, if an educator plans their session with too many activities, it can lead to adults being more focused on trying to get through their plan than the things which arise in the moment from children or nature. The enthusiasm or stress of the adults will directly transmit to the children and influence how they perceive the whole experience. Ensure that enough support is available for you and the adults so that the session with the children is not overwhelming and stays enjoyable.

Reflection questions for People Care:

Educator's well-being:

- Do you, as the educator, have realistic expectations for the session with the children (amount of preparation, ratio of children to teacher etc.)?
- Is the session designed in such a way as to give space for the educator's own creativity, or anything which arises from children and/or nature?

Children's well being:

- Can you offer the opportunity to think or act with compassion about people, animals, plants or other elements of nature?
- Is it possible to build connection to nature and include fresh air and exercise?
- How are you promoting the children's health and wellbeing?
- Is there a way to include children with special needs or some that might need a different approach?
- Do the children have equal opportunity to participate?
- Is it appropriate for the age of the children and the group size?

Content:

• Is the ethic of people care reflected in the content / experience? Do children and adults learn how to look after themselves or others?

Earth Care

Earth care is about working in harmony with nature and understanding natural laws, ecological systems and the needs of other living beings and elements.

When considering what materials to use, and activities to do, always consider the possibilities to "refuse, reduce, reuse, repair and/or recycle." Together with the children, think about ways to minimise our impact on the environment. Including wood, stones, crystals, flowers, and other natural objects in the classroom decorations and toys helps to stimulate a greater aesthetic appreciation for nature. When studying nature, or presenting a new topic or theme, consider if you can create a direct experience, rather than relying on photos, pictures, information, videos or other virtual experiences.

Spending time in natural environments, children learn to appreciate nature by developing their connection to it. Therefore, it is recommended to spend as much time outdoors as possible. This can include a balance of both 'unstructured' play as well as structured experience. However, it is important to emphasise that the time outdoors must be enjoyable. Children need to learn to enjoy the elements, but if they are uncomfortable and basic needs are not met (warmth, food, water) they can easily become demotivated and prefer indoor play. So make sure you supply adequate clothing, bring plenty of spares with you if it is likely to be cold or wet, and if it may rain for a long time, put up a tarp for shelter. Most importantly, make sure the children are comfortable and enjoy themselves!

Reflection questions for Earth Care:

Educator's awareness of earth care:

- Are the materials for the session local, recycled, organic, compostable, and low energy?
- When outdoors, how can awareness be raised about keeping the natural environment clean and making sure there is minimum impact on it? "Leave nothing but footprints, take nothing but photos".

Children's awareness of earth care:

- If the plan is to be inside, could some or all of the session be outdoors?
- Are children given the opportunity to spend time in nature?
- Do children learn how to take care of other species, the earth, water etc.?
- Are children given any guidance about their responsibilities to protect nature what they can and cannot do eg picking up fallen leaves rather than the living tree or bush?

Fair Share

Children understand the need to be fair. In permaculture, equality between different people is strived for (regardless of skin colour, gender, country of residence etc), and we seek equality

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between humans and other species too.

This third ethic is also expressed as 'Set limits to population and consumption' or 'Share the surplus back to people care and fair share'. Think about how to make sure that everyone's contribution is fairly appreciated, and to be aware of taking only what we need and sharing what we don't. It's also good to recognise that there are limits to how much we can give and how much we can take.

The concept of "being fair" can be discussed through stories, games and narratives that give the opportunity for children to reflect and respond to open-ended questions. The concept of sharing the surplus can be reinforced with songs about sharing, stories and practical experiences of sharing not only with other children, but also with other creatures, plants, etc

Reflection questions for Fair Share:

- Are children encouraged to share between themselves, with other people, and with other beings in nature? What other species live in this space?
- Do the children have a chance to reflect on the needs of other beings?
- Can the activities be designed that respect and value the abundance of nature through sharing it?
- Do the children get to talk about being fair?

2. Holistic Planning

Permaculture is a holistic approach to design, so when setting objectives for a session, the following set of reflection questions can be of guidance to plan to engage the children in a rich, multi-dimensional learning experience. It is preferable to plan for a good balance of learning using yes, Head, Heart and Hands (EHHH) so that it is involving the whole child.

EYES

One of the permaculture principles is to "observe and interact", and another to "accept feedback and apply self-regulation" - so it is important when designing sessions to start out by first observing carefully the interests, and needs of everybody involved. Please note that observation can occur through all of the senses, not only through the eyes, which are used here symbolically.

Reflection questions:

- Is it possible to take some time to observe the children and their individual needs before creating the objectives?
- Are the children given opportunities to use different senses carefully to directly experience their environment and discover things to be curious about?

HEAD

This is where the educator plans the main content of the session and may require some research of background information in order to be effective.

Within planning, this is where the logical thinking is stimulated through exploration, questioning, and sharing of information, learning new vocabulary etc.

Keep in mind that even more interesting learning opportunities maybe evolve than what were initially planned for. Take the time to document such unplanned developments when they occur so that learning can continue to build on these experiences.

Reflection questions:

- What are the main learning directions planned?
- What information do I as an educator need to explore or learn about either beforehand or together with the children in order to enrich the experience?
- Have open ended questions been designed into the session plan in order to stimulate critical thinking, analysis, discovery, curiosity, and to support the children's own thinking?

HEART

Plan also from the start to create experiences that evoke joyfulness, love, and involve the children's emotional and spiritual dimensions. This will enhance the memorability of the session and reach the child on deeper levels.

The use of creative metaphors, artistic or aesthetic experiences etc. can also be part of planning to include the "heart".

Reflection questions:

- What opportunities are there to experience joy, empathy or love for nature or each other?
- What will children experience in this session?
- What subtler messages can be highlighted that promote emotional, interpersonal, transcendent or naturalistic sensitivities?

HANDS

In these sessions, it is important to plan for and prioritise practical, authentic experiences - not just theoretical learning. "Learning by doing". As much as possible, it is great to interact with real, natural objects and in natural environments if possible.

Reflection questions:

- What practical, hands on activities have been designed in?
- Are there activities that involve movement?
- Are the different senses involved?
- Have abstract ideas (that have been presented) been translated into practical experiential activities?

3. Natural Flow

This section helps to structure the learning flow in an organic way that takes its inspiration from nature: "**sowing**" the seeds of inspiration and motivation for the session theme, "**growing**" which develops the theme through multi-sensory activities and "**harvesting**" which brings closure and helps to more deeply assimilate the experience by taking time to appreciate and reinforce learning outcomes. These stages were inspired by the Neohumanist Education Curriculum developed by AEN in Romania.

The key reflection question in planning is:

• Does the session flow in a natural, organic way using a good balance of the different stages sowing, growing and harvesting?

SOWING

The seed of inspiration for a session may come from observations of children's interests (through watching and listening) or questions, or from an interest of the educator.

Children send out lots of seeds which can inspire an educator. The educator can nourish a seed through caring and feeding it, by supporting and building on children's inspirations, interests and initiatives.

The sowing stage takes the "seed" of the idea that the educator wants to develop with the children and through inspiring the children's involvement it begins to germinate and grow. In this stage, the teachers think about how to care for that seed using different approaches:

Songs, stories, games are also wonderful ways to get children energized and enthusiastic, and can already be related to the "seed".

The educator may set up the environment in a way to stimulate curiosity and exploration. The educator may use a questioning / dialogue process to engage the children's interest and critical thinking.

Reflection questions:

• How does the session plan build on observations of the children?

- Can the children be the ones to "plant the seed of inspiration" for the session?
- What is creating the interest / inspiration to engage the children?
- Is attention given to using a holistic process that engages the whole body / heart /mind to be ready and excited about learning?

GROWING

In this stage, the focus is on process. Educators become facilitators of the children's process - they have given a seed, and watered it but it may grow in unexpected ways. The educator is like a trellis that helps support growing vines to reach up higher.

To be effective, the process needs to be utilising the head, heart, and hands, and facilitated according to "eyes" - observation of what is actually happening with the children and what they are noticing and engaging with most.

Keeping in mind the people care ethic - the process is one that should both address children's needs and inspiration as well as the adults - creating a harmonious, exploratory relationship between children and adults, and the environment (the third teacher!)

The permaculture principles, such as valuing diversity, can be of guidance to develop this stage.

Reflection questions:

- Does the plan leave space for the children to contribute creatively and grow it in unexpected directions?
- If not how can it be adapted to create more opportunities for spontaneity and supporting children's leadership and participation?
- Is a diversity of ways of learning valued and planned for?
- Have activities been planned for that expand, enrich and support the theme introduced in the sowing stage?

HARVESTING

This is an important part of the process - it is part of the process where learning is consolidated through celebration and joy.

It also reflects the permaculture principle of "Obtain a yield", and the ethic of sharing the surplus. Children naturally love sharing things with parents for example - but also other ways of sharing with the community, animals, plants etc can be explored.

Reflection questions:

- Are open ended questions used to encourage critical thinking?
- Has a way to celebrate the outcomes been included?
- Is there a game or activity that helps to consolidate the learning gained in the main growing process?
- Can the results be shared with others? Is there something that can be shared with animals, plants or that would make the environment more beautiful or helpful?

- Is there a result that can be displayed or given away or celebrated?
- Is the diversity of results appreciated, listened to with interest and respect?
- Are children's ideas and feedbacks harvested for integration in the next learning pathway?