



GAIA YFS!

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An Introduction to the Gaia YES! Curriculum and Pedagogy



"There is no 'correct' pedagogy for Education for Sustainable Development, but there is a broad consensus that it requires a shift towards active, participative, and experiential learning methods that engage the pupil and make a real difference to their understanding, thinking and ability to act. "Gaia YES! Curriculum

In this chapter we will review the Gaia Youth Education for Sustainability (Gaia YES!) Curriculum from the perspective of Gaia Education inspired teaching and learning pedagogy. Here you will find an orientation to the curriculum and suggested approaches and methods to help you navigate and share the resources offered through the Gaia YES! Curriculum.

The Gaia YES! material is intended for use for a wide variety of people and contexts, including formal and non-formal educational environments. Participants may include public school teachers and administrators; university programs training educators; homeschooling parents, groups, and mentors;



youth workers on exchange programs, or after school or summer camps; and the youths themselves, who may wish to independently explore the materials. Gaia YES! Curriculum is open to anyone wishing to support sustainability education for youth.

The curriculum is intended to be adaptable, rather than to be rigidly or prescriptively applied in distinct segmented sequential subjects. The aim is to provide flexible and inspiring sustainability educational material to draw from and build on. The dimensions and modules are thematic, so they can be integrated into existing education curricula, informal learning environments, and a variety of other learning contexts. Educators and youth facilitators are encouraged to apply the materials appropriate to the interests that best suit their learning environments and students. By personalizing your teaching and learning, we hope educators can empower themselves, students, and the educational environments and communities they are a part of.

There are common patterns in the approaches and methods used by Gaia Education that have inspired the development of the Gaia YES! Curriculum These include:

- Flexibility in application: Gaia YES! encourages a personalized and contextual application of the curriculum that includes building on the existing knowledge and interests of each unique student and educator, appropriate to their learning context and interests. Gaia Education has been applied in five continents and recognizes the value of honoring diversity of application on cultural and individual levels. Gaia YES! aims to inspire and empower youths and educators alike to find their own creative voice and use it as part of the Gaia YES! curriculum.
- Holistic design and systems thinking: The Gaia YES! Curriculum offers a comprehensive and interdisciplinary approach that aims to support the emotional, social, ethical, physical, and creative needs and desires of students. The approach is integrated learning, for the whole person, living within whole systems. Using the power of a holistic systems thinking approach, Gaia YES! aims to instill the value of building an understanding and appreciation of connections within and between systems, concepts, and topics. Rather than presenting subjects separately, Gaia YES! encourages them to be presented, as practically possible, transdisciplinary, as part of one interrelated, braided, whole. The strength in application is in weaving education topics together so they become increasingly congruent in all aspects of the learning curriculum, pedagogy, culture, and environment.
- Sustainable and solution oriented with real life applications. The curriculum encourages thinking innovatively to co-create positive future solutions to real life problems using approaches such as collaborative applied sustainability project based learning. Gaia YES! encourages practical experience and lifelong skills building that are relevant and empowering to the students, engaging them in the value of their education. This solution orientation approach can be scaled to address both local and global sustainability challenges through community projects and global initiatives such as the Sustainable Development Goals (SDG).
- Participatory, cooperative, and inclusive The SDG recognizes the importance of citizens to be able to work collaboratively and collectively, to better address present and future challenges and opportunities. Gaia YES! recognizes that participants are unique and come to the curriculum with their own cultural perspectives, knowledge, interests, and experiences that add value to the curriculum. The challenge can be in learning how to use the strength of diversity while working collaboratively. As facilitators, educators can support collaborative learning, such as peer to peer, project based and collaborative co-inquiry learning approaches and dynamics that provide insight, empathy, and communication skills that can help



participants become lifelong collaborative learners and builders of a transformational sustainable culture.

• Aligned and transformative. Students learn from the educational environment they are in; the culture of the whole community and/or the school, the place, and setting. Gaia recognizes learning comes not just from what we teach but, the way we teach, as well as the place we teach from. The "real world" around us is the most effective teacher. Gaia YES! encourages that the teaching and learning methods and community are aligned with the subjects taught, and the place they are taught in. The learning environment from the physical and energy structures, to the meals served, to the social organization, can grow together in alignment and transformation, as an example of the sustainable, regenerative, and just world we are inspired to work towards.

The **Gaia YES! Curriculum** offers an accessible curriculum framework based on the four dimensions of sustainability in the Gaia Education for Ecovillages program: Ecology, Social, Economics, and World View. Supporting each dimension are five topic modules that include suggested activities, links to SDGs, and learning outcomes. The **Gaia YES! Educators Manual** includes chapters on providing educator and learner support, and a curriculum companion with a wealth of activities, stories and suggestions on implementing Gaia YES! into formal and informal education systems.

In this chapter we offer an orientation of the Gaia YES! Curriculum and suggestions for integrating the four dimensions and their accompanying modules, into a living, holistic learning experience, applicable in a variety of educational environments. We will start by reviewing the Gaia YES! framework of four dimensions and their accompanying modules and explore holistic approaches to sharing and integrating the material across a variety of contexts. Following we *review* some of the methods commonly used in Gaia Education that can be applied and shared through Gaia YES! Curriculum.

We hope this chapter inspires your own creative approach to sharing and building on Gaia YES! holistic sustainability education.



Gaia YES! - The Four Dimensions and Modules

WORLDVIEW & LOCAL WISDOM MODULES	SOCIAL MODULES
Worldview & Story-telling	Communication & Social Skills
Who am I? Learning to know oneself	Leadership & Empowerment
Planetary & Personal Health	Building Community & Embracing Diversity
World View & Language	Heritage & Local Wisdom
Connection to Nature	Education & Social Transformation
ECOLOGY MODULES	ECONOMIC MODULES
	ECONOMIC MODULES
Whole Systems Approach to Regenerative Design	Shifting Global Economy towards Sustainability & Regeneration
	Shifting Global Economy towards
Regenerative Design	Shifting Global Economy towards Sustainability & Regeneration
Regenerative Design Affordable Clean Energy	Shifting Global Economy towards Sustainability & Regeneration Community Banks & Currencies

An orientation to the Gaia YES! four dimensions and accompanying modules

The Gaia YES! Curriculum is built around Gaia Education's mandala wheel of four dimensions: Worldview & Local Wisdom, Ecological, Social and Economic (Gaia Education,). These in turn are supported by five topic modules which present activities and ideas for application, incorporating three aspects of learning: the cognitive, socio-emotional, and behavioral (Delors, 1996), referred to as "Head, Heart and Hands".

Each Dimension starts with a general introduction to the theme, the following modules present accompanying topics and offer a series of clarifying questions and answers about the module topic: Why is it relevant? How can it be conveyed? And What are some of the outcomes, actions, and understanding that come from exploring the module topic. In addition, in each module the Curriculum includes suggestion on the following:

Sustainable Development Goals (SDG): Each module lists associated Sustainable Development Goals (SGD) with which to help align the topic. The target 4.7 of SDGs requires that, "by 2030, all learners acquire the knowledge and skills needed to promote sustainable development." The guidance is for an interdisciplinary approach that, in addition to providing subject knowledge, is transformative - with applied sustainability as an explicit outcome.

A bridge to scholastic subjects: There is also a list of subjects and discipline titles that could be associated with the module topic. This is to help bridge the Gaia YES! Curriculum with scholastic subjects that may be more familiar and accessible to the educational environment and institutions



they are working with. It also can help to guide how the topics could be enriched and embedded into traditional scholastic subjects.

Learning outcomes: Within each module there's a table of potential learning outcomes that reflect some of the elements of understanding the Gaia YES! Curriculum hopes to convey. The outcomes are divided into three branches of learning: "Head" (cognitive), "Heart" (Social -emotional), and "Hands" (active- experiential) and reflect various learning activities, skills, knowledge, and accomplishments students can engage in to develop a better understanding and first hand experience of the topic.

Suggested activities: In the curriculum each module has suggested activities to help convey the topic and involve the student in meaningful experiential understanding. More activities and leading stories are suggested in the Curriculum Companion and on the web site.



Options in presenting the "Four Dimensions" of Gaia YES!

For practicality the four dimensions are presented separately in the curriculum. This way an educator-learner can dive deeply into one subject and/or include it into a standard academic subject as a complement- such as the Ecology Dimension within a biology or environmental science



curriculum. In some Gaia EDEs the four dimensions are offered as separate modules or as independent online courses.

There are also interesting differences in the order in which they are approached. Some Gaia EDEs start with the social dimension to help provide collaborative communication, power sharing, group agreements, and decision making tools to students to assist them in working through projects that might include the rest of the dimensions. Others may initiate with the World View dimension to help students connect with their inner voice and view of the world through stories and self exploration. Still others may start off by grounding into place with the Ecology Dimension and so forth. The order of presentation is left to the discretion of the educators and learners, who best understand their own context.

A holistic approach to the Gaia YES! Curriculum

"..nothing exists alone"...Rachel Carson

"everything is related, everything is connected to everything else, everything is perceived through a network.." Jean Piaget

While the Gaia YES! Curriculum presents the four dimensions into four separate themes, ideally they are shared holistically and are transdisciplinary, and are integrated and congruent with other aspects of the students' learning environments and curriculum.

In the holistic approach to the Gaia YES! Curriculum, all subjects are integrated in relationship with each other and as part of an interdependent whole. Gaia YES!, like the EDE, can be described as 'holographic' - meaning "the essence of the curriculum is distributed throughout, and can be reconstituted from any of the parts; thus, an understanding of the whole curriculum can be obtained from any partial participation or exposure". In addition, holistic education refers to the learning experience, beyond the curriculum, to include the experience of the teacher, the learner, and the living and learning environment in which teaching and learning occur.

This holistic approach weaves the dimensions and module material together, ideally through meaningful "real" world applications and relevant personal and shared experiences. Perhaps some of the most powerful projects are those where students design, and implement to the degree possible, a sustainable whole system such as a school, home, or even community together, drawing from the four dimensions in mutual support so they reflect a coherent regenerative whole design that include, ecological, social, economic and world view considerations, and that can be practically applied and experienced.



In the following section we will explore suggestions on how to integrate the elements of the Gaia YES! sustainable holistic curriculum for you to build on and expand and implement in your unique learning environment.

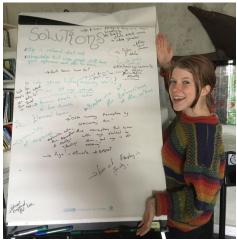


How Do We Integrate Gaia YES! Curriculum?

"Head, Heart, and Hands": an integrated approach to learning

The Gaia YES! Curriculum includes three approaches to learning - the cognitive (head) , socio-emotional (heart) and behavioral (hands), (Delors, 1996) and the learning outcomes associated with each. This reflects a holistic approach to teaching the whole person, as well as taking into account group dynamics - the diverse learning styles, perspectives, and preferences of students and teacher participants. We present each approach here separately, but within a holistic curriculum they can be combined in support of each other in an activity or project .

Head (the cognitive)





"A well-educated mind will always have more questions than answers." Helen Keller "Children should be taught how to think, not what to think." Margaret Mead "The mind is not a vessel to be filled, but a fire to be kindled." Plutarch

In modern adolescence education there is strong emphasis on cognitive skills related to conceptual, intellectual, reasoning and critical thinking (Jean Piaget, etc..). Gaia YES! Education sees the value and potential of cognitive learning and pushes beyond accessing and memorizing facts, information and even concepts. In a world overcome with easily accessible information the ability to discern truth from fiction, fact from opinion, and recognize disinformation through critical thinking, evaluation, and analysis is vital. In the recent past, providing information was a big part of teaching, now a student can often find the answer on their phone before the question is even finished. Therefore the shift is from providing information to encouraging the ability to critically research, evaluate, analyze, synthesize and integrate information into a broader context. Perhaps even more so, is to encourage students to imagine, create and innovate into whole new areas of thought, ideas, and solutions. As one educator said "We are preparing students for a future we cannot even imagine--for careers that



don't even exist yet, they will need to imagine, to innovate, think with agility, adapt, and problem solve creatively."

Examples of how teachers can incorporate cognitivism into Gaia YES! Curriculum includes encouraging students to recognize connections and patterns, in and across systems; linking concepts together and to real-world examples, finding and creating new explanations or building on existing ones, through exploration, research, discussions and problem-solving. The teacher is seen as a facilitator encouraging students' natural curiosities, to ask questions, explore ideas, and encouraging them not to be afraid to make mistakes while exploring and experimenting, to learn through experience, through trial and error.

The gift of the intellect, can be applied across all the dimensions of the Gaia YES! Sustainable Education Curriculum: whether it's designing an economy of local sustainable purchasing that is ecologically congruent in a school, developing a decision making process for a class, writing a story or editorial about an issue they care about, or researching responses to changing weather patterns in the local bioregion. Many suggested activities and projects can be found in the Gaia Curriculum and Curriculum Companion.

Heart (socio-emotional)



"..personal, collective and planetary well-being are undeniably intertwined."

Looby Macnamara

"Just as we take for granted the need to acquire proficiency in the basic academic subjects, I am hopeful that a time will come when we can take it for granted that children will learn, as part of their school curriculum, the indispensability of inner values such as love, compassion, justice, and forgiveness." The DalaiLama, the Education of the Heart.

"School is boring - all about competing to pass exams and get grades, they usually make me learn stuff I'm not interested in, and don't care about what I need now." student interviewed

Not all students feel this way about their education, but too many do. Many teachers and students complain about current education systems creating an atmosphere of competition and anxiety through over-focusing on exams and grades while not providing support and guidance for students' social-emotional and mental well being. What do the teens care about?

Feedback from participants in the development of Gaia YES! Curriculum often remarked how their social experience of their teen years had the greatest influence on them, and was not always easy, as they did not have sufficient social skills or awareness. In adolescence we begin to develop a sense of self (me) as a part of our social belonging, our place in relationships, community, and culture (we). Belonging and acceptance is vitally important. Finding ourselves as well as our tribe is a natural pathway to development as a social person. For many youths this can be a time of emotional turmoil and intensity. Hormones and brain development are dynamic and add to the challenges.



"Heart centered" education approach, often referred to in education as social emotional learning (SEL), includes qualities and tools to help adolescents navigate these challenges with skills such as self-awareness, self determination and regulation, empathy, social awareness, relationship and communication skills, power sharing, responsible decision making, and problem-solving.

The Gaia YES! holistic approach to education recognizes that supporting these competencies, in addition to the cognitive skills, is critical for the well being of youth as well as for helping them develop the social wisdom needed to co-create a sustainable future, and a regenerative, more free, just, and peaceful culture..

Gaia YES! Curriculum and Curriculum Companion suggests activities and learning outcomes, to help teens cultivate their own wise and guiding heart through all the dimensions: examples such as developing deep listening-communication skills, learning to develop and hear your own voice and set your own goals, connecting with and protecting nature in ecology and world view dimensions, running effective meetings and decision and power sharing in the social dimension, developing systems of fair share and material justice in the economic dimension.

From a congruent holistic view, the same social emotional qualities we encourage for youths through the Gaia YES! Curriculum need to be integrated and practiced in the classroom, school, and community of education. In practice educators can find ways to empower students to develop their own supportive and inclusive culture through developing group agreements, deepening listening and communication skills, settling visions and goals, and understanding how to create effective inclusive meetings. Students can be given more control over their education and pace of learning. These experiential steps are critical to develop into self-actualized empowered adults.

In a climate of growing economic and ecological stress and public polarization, we can challenge ourselves as holistic educators and learners to connect, cultivate empathy, understand other perspectives and seek common ground. Gaia YES! encourages a broad and deep sense of "Me" and "We" awareness especially in the social dimension, but also through all of the dimensions as it helps us understand our values in the context of the whole picture of understanding and building relationships and connection with each other and the planet.

The responsibility for a heart centered education lies not only with the educators, it rests with the whole educational community; "Social emotional skills and competencies develop in a complex system of contexts, interactions, and relationships and it is not just about the skills that students and adults possess and deploy; it is also about the features of the educational setting itself, including culture and climate" Meena Srinivasan, 2021.







Hands, experiential, multi-sensory learning - learning by doing







"We are makers, not just consumers. Educators need to appreciate the value of teaching students how to create things with their wonderful hands, given to them by Mother Gaia" Satish Kumar

"Enough of all this Blah blah blah...The time is for action now - let's just do it" Greta Thunberg

Gaia YES! - embraces the Gaia Education approach to living and experiential learning. We learn what we live and when we can reflect on personal experiences. Experiential- hands on learning is a thorough and holistic teacher. When we engage with our whole body, our hands and all our senses, we truly connect with what we are learning - that connection stays with us, it becomes a life experience integrated into who we are. Many studies in education support this: one study compared test scores of teenage students who were lectured about water quality with students who built a water purification device. The students who went through active learning saw much higher test scores and improvement rates. One reason hands-on learning is so effective at information retention involves both physiological and psychological impacts of the learning style.

Hands-on learning better engages both sides of the brain. Listening and analyzing processes occur in the left hemisphere, but visual and spatial processes are handled on the right. By combining multiple styles of learning, the brain forms stronger overall connections and is able to store more relevant information. Brain scans also show increased activity in sensory and motor-related areas of the brain when thinking about concepts they had hands-on experience with. Being able to touch and see something is simply more powerful than only reading about it. As one educator put it: "Looking at bacteria moving under a microscope is more powerful than reading about them in a text book. "Watching somebody drill a screw into a board doesn't compare to feeling the power tool come to life in your own hands". Reading or watching a video about gardening can't compare with the smell and feel of earth you touch as you plant one. Playing in a band, creating a theater production, traveling, or participating in the European youth parliament are all examples of learning by doing. This is why we naturally learn better when we do what comes natural to us: to move, create, observe, and connect with each other.

Experiential and hands-on learning can be challenging in a classroom setting, but outdoor and community excursions and activities in the arts and sciences can provide venues for educators and learners to put the holistic approach to heads, heart and hand's education into practice.

Harmony in head, heart and hands learning:



Sometimes for practically an activity may focus on a learning approach using one for the "H"s of Head, Heart and Hands. The strength of a holistic approach would be to build harmony and encourage as much as possible to braid teaching and learning with head, heart and hands together as mutually supportive and complementary enriching the learning experience. Gaia YES! Curriculum offers many group dynamics and activities that can help bring concepts to life within all the modules and dimensions using the power of combining head, heart and hands. Project based learning that includes co-creating and visioning, discussion, research and creative design and then implementation, can bring these approaches together.

There are many examples of holistic approaches to sustainability education activities and resources in the Gaia YES! Curriculum and Guide, and other publications within Gaia Education. You can also find resources on the partner websites, resources listed and from other educators such as Robin Clayfield's *Teaching Permaculture Creatively* and Rosemary Morrow's *Permaculture Teaching Matters*.

Holistic education is integrated

The teacher-student learning environment includes not only the curriculum, school, or educational environment, but the community and big wide wonderful and challenging world around us. Gaia YES! calls us to take these influences into account and helps us understand the impact of them on the education of our youth. Many youth today have access to social media and are bombarded with information inputs from all parts of the world, with hundreds of perspectives and opinions at their fingertips, immediately, often continuously. This as well as the culture and community activities around them form as much a part of their reality and educational development as any curriculum. So how do we include this reality into a holistic curriculum so that it is authentic, and in touch with the "real" world students are living and engaging with? Gaia YES! encourages us to look at what "the whole" outside of the curriculum and school grounds includes, and explores ideas of how to integrate that reality into the learning process.





Integrating with the community

A student's social experience outside their school world includes the family, community, and social groups they are engaged with. Integrating these influences into a holistic education means taking them into account as part of the students' learning context and building positive bridges through connection and understanding. As adolescents move from childhood to being young adults, part of who they are and see themselves as is reflected to them from and through their community. During the Gaia YES! Curriculum development project many youths mentioned that they want to contribute in a meaningful, authentic way to their community so to be respected and valued. They want to be recognized, not just as learners but as capable contributors. This may be as simple as building a bench for the school playground, putting on a wonderful memorable theater performance for the community, helping set up a local business or food bank, or planting trees in the neighborhood.

Families, community businesses and local groups can be included in the Gaia YES! curriculum as educator participants. The community in turn, can also be invited to learn about the goals of sustainable holistic education and choose to support them. Educators and learners are encouraged to take advantage of the community as an extension of the classroom or learning environment. Relationships with the local community can open doors for youth, through internships and mentorships programs. Through these experiences youth can begin to operate as adults, as they experience first hand the challenges and opportunities of economy, and social organization and responsibilities, innovation and the potential positive change. Through community integration educators and students can also become catalytic change makers, and help their community transition to become more consciously sustainable and resilient.





Integrating with nature and local ecosystems

Any learning environment or school sits on land that is part of a greater ecosystem that it depends on and interacts with. A holistic approach to learning would include understanding that ecosystem, and the influences on it from the humans that interact with it, as well as the connections within the bioregion it is located in. Students can create an interactive web of understanding by starting with systems thinking- patterns that can be followed through their full cycle within the ecosystems. For example students can study the full cycle of where their water comes from, how it interacts in their school and home, and where it goes, in a full cycle, understanding from a holistic multidimensional perspective. To do that, one could blend in with other Gaia YES! themes—such as what are the economic, social-political, and cultural-worldview impacts on the way water moves throughout their community? Perhaps the deepest understanding comes from personal experiences in our environment such as an open ended excursion into natural space just for fun. This type of open exploration through the seasons can deepen our connection and appreciation with place. Understanding where we are locally and bio-regionally is a part of understanding who we are.



Integrating with patterns of place and time

Gaia YES! encourages cultivating the power of observation and appreciation of patterns found in the relationships of space and time in local culture and its connection to place. A holistic perspective is scalable, it includes connection with the seasons and patterns in climate, and the local cultural responses to them through rituals, celebrations and norms. It includes understanding history and our place in it, and how our perceptions of the past influence the present and future, locally and globally. These perspectives can be explored and integrated into all of the dimensions and modules, and can help bind the topics together. They are particularly explored in the Worldview dimension, and can deepen our understanding of where we come from, where we are, and would like to go.



Integrating Gaia YES! into existing educational systems

Not all youth educational systems, spaces, curriculums, visions and goals, or cultures are the same. While educational systems may vary, most aim to support youths to become capable adults who live fulfilling lives, pursue lifelong learning, and contribute to the betterment of society. The flexibility built into Gaia YES! can be brought into both formal and informal educational settings.

Traditional schools: The Gaia YES! Curriculum can be adapted in a variety of ways into an existing



school curriculum. The educators can simply follow the curriculum as outlined, as an elective for upper students to choose. The time dedicated to the Gaia YES! Curriculum is also flexible and could include anywhere for a month, semester or a year depending on what best suits the context. Alternatively dimensions or individual modules can be included into existing classes - such as selections of ecology modules into biology class, or Gaia YES! social or economics modules can be brought into the humanities and so forth.

Alternative schools: Some schools may wish to adapt the Gaia YES! Curriculum as their primary curriculum spanning several years of upper school course work- diving deeper into the subjects and using the Gaia Education books for each dimension (The Four Keys) and other materials to help guide the students. Standard requirements in math and language can easily be met and included into the Gaia YES! Curriculum. This model is being adapted by one of the Gaia YES! partner schools.

University and teacher training programs: The demand and directives for sustainability education in our schools is increasing with enormous strides. Gaia YES! Curriculum can help prepare teachers and youth workers to meet these directives and demands. Gaia Education has worked with the UN to promote the SDG into their curriculum and inspired Gaia YES! to do the same. Teachers in training at the university have the time and openness to take on new ideas about education as they are not yet overwhelmed with actual teaching yet. In many ways Gaia YES! Curriculum may have its strongest impact here, as a multiplier effect - teaching teachers in training programs to share the Gaia YES! Curriculum resources..





Homeschooling and unschooling

An ever growing number of families and learners have chosen an educational path outside of institutional learning systems or places. Not all homeschooling is the same. Some learners work closely with a standard curriculum through distance learning programs and interacting with accredited teachers online, or in educational resource centers with homeschool support groups. In some countries learners are able to follow a free path of self-education with less structure, exams, or requirement standards other than obtaining an education that prepares the learner as a capable functioning adult in society. The Gaia YES! Curriculum can be readily used by homeschoolers and help guide them and create the approach and topics that most interest them. Some distant learning homeschooling programs are looking at Gaia YES! as a possible curriculum for homeschoolers to build on as part of their education.



Erasmus Gaia Youth exchange, Italy, 2017



Youth exchanges- summer camps-after school programs.

There have been a growing number of opportunities for young people to engage in Eramus type youth exchanges and summer programs as part of their sustainability education. Program organizers, youth leaders and workers can take advantage of Gaia YES! Curriculum and build it into their activities. Gaia Education has supported such integration within youth exchanges through their Gaia Youth programs. The Gaia YES! Curriculum can provide resources to these programs for young people as part of their experiential sustainability education in informal educational settings.



Gaia YES! Approaches, Methods, and Practices

Across diverse learning contexts there are similar patterns of practices used in Gaia Education that can be brought in to support Gaia YES! holistic sustainable education. These methods and approaches of sharing the curriculum content have been used in the many workshops and accreditation courses through Gaia Education that have proved useful, engaging and effective. The partner groups who have supported the creation of Gaia YES! Curriculum have also contributed many of these practices in their own educational settings, as we imagine many of the readers have too. While some of them may be familiar to educators and learners, we will introduce them in light of their relevance to sustainability education in particular. We encourage educators to expand and deepen this incomplete list with their own methods and approaches to create a rich, engaging and effective learning environment for the learner participants.



• Whole System thinking-and design is at the heart of holistic and sustainability education. To follow a system such as water, energy paths, food systems or materials and waste systems, one must travel full cycle through the whole network of pathways and connections. Most failings in operating sustainability in our world today is due to a lack of appreciation of the full cycle - the lack of experience of feedback loops from our actions. To address this we can engage in creative and congruent observation and design throughout whole processes. Whole system design is also scalable - a student can follow water movement through their school, and extend that to the community and bioregion. Likewise system thinking is transdisciplinary, economic and power sharing social organization, also can be viewed as systems that are either sustainable or not. Following a system through its cycle can involve cognitive analysis of material and social economic impacts as well as emotional and tactical explorations in creating art - flow maps, stories or scaled models to reflect the systems.



- Story based learning: Listening, reading or creating a story around an idea or group of ideas can help process and connect multiple concepts and feelings together. Stories can help educators weave the dimensions and modules of Gaia YES! into meaningful and inspiring context. The Curriculum Companion chapter offers a rich collection of stories built around the dimension and models of Gaia YES! Curriculum, which can be used to inspire deeper holistic understanding of the concepts they touch on.
- Inquiry based learning invites teachers and learners to use questions to explore ideas and find answers that are relevant and meaningful to them. Instead of reading about the human body and health recommendations, a question might be: "What does well-being mean to you? How do you think you can bring well-being into your life?". Teachers can do the same: they can ask- "What are some of the ways I like to teach? What seems most fun, effective and engaging for my students?" or "How can I find support to teach the way I would like to?" The answers to open questions are often dynamic and it can be interesting to watch them change. Answers to asking students what they see as relevant problems and solutions to sustainability challenges may change over their upper school years, and seeing that pattern of change might be meaningful to them. When people look for the answer to questions they have asked and are genuinely curious about, they are more likely to come up with creative answers that they are more likely to remember, and draw on in the future. A relevant example of inquiry based learning can be found in Daniel Wahls book, Designing Regenerative Cultures. Daniel Wahl is an important contributor to Gaia Education, and his book is based on relevant questions to engage the reader to explore themes on designing sustainable and regenerative cultures.
- Self directed learning can support students to co-create their educational experiences and direct it in the way that best suits their wonderfully unique self with their own characteristics, preferences, interests and styles of learning. By empowering students to help set their education goals, areas of focus and pace of learning, students can develop a deeper sense of self awareness, direction and responsibility. Respecting the differences of the students will likely help create adults who carry that same respect for diversity and self determination into adulthood and into the society they interact and help build. Using the Gaia YES! Curriculum, students can map out a pathway based on their interests, whether working alone or in groups. The degree of self direction may be influenced by the learning context, but even in more structured environments students can be given responsibility and freedom to participate in creating their learning path.





- Participatory and small group learning is experiential by design and creates opportunities for multidimensional learning. Gaia YES! offers suggestions in the social dimensions for activities to build skills useful to participating and working together that are applicable to all of the dimensions. Working in groups or teams can include peer to peer learning and teaching where students learn from each other. Humans are social animals that live in interconnected social environments. Learning the skills to work well in groups is critical for personal and global success. Creating a sustainable-regenerative world will require us to work cooperatively and effectively, facing our differences and valuing our diversity of approaches.
- Project based learning can provide an effective holistic way to bring many topics and learning skills together. Whether the project be pursued independently or as a group, it provides a means to creatively explore the layers of topics in depth with a variety of approaches and skills. Group projects that are presented to a class are used by Gaia Education as part of their EDE course, as well as by certified permaculture design courses. These projects tend to be based on designing proposed sustainable living (or learning) spaces, sustainable business, or community projects, such as community gardens. Working as a group toward creating such a sustainability project is holistic sustainability education in practice and sometimes becomes the catalyst for the implementation of the projects. For example a group of learners could design and implement a school garden, a community lunch program, or propose a school event.
- Integrating creative and living arts as an integral part of holistic learning and expression is
 considered essential in Gaia YES!. The arts can contain and harmonize themes in the
 dimensions from creative stories of hope, to reflections in drawings, videos and memes, to
 theater and music productions. Art is how we process, express and share our feelings with
 the world. The creative arts are our delightful and powerful human medium that can capture



collective sentiments and create movements, Gaia YES! would encourage teachers and learners to bring art into everything, in every module, and let it help connect, celebrate, and harmonize the curriculum.





• Learning incidentally-unplanned and spontaneous and through experience and experimentation is how we learn throughout most of our lifetime. Allowing open time to explore without a structure or prescribed educational intent can open the door to learning we didn't realize was important or had planned for. Incidental learning can happen through excursions or simply allowing students to explore books, videos or ideas on the computer. It can happen during play and games. Gaia EDEs often leave unplanned open time for students to simply explore and discuss issues of interest to them. In this freedom is often when the most interesting insights can occur. Gaia YES! Curriculum offers a lot of interesting materials but also encourages "open space" - or free time for spontaneous learning and insight.





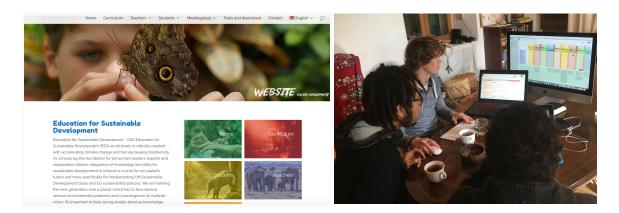
- Learning through authentic contribution and service can build confidence, a sense of belonging, value and self respect for adolescents. Actions such as planting trees in the community offer more than a learning opportunity; they are a contribution the student can feel proud of, perhaps revisit, and become a part of who they are. The ESD pedagogies suggest we should "create conditions for pupils to know how to collaborate, solve complex problems, think systemically and creatively, and be ready and willing to take action, filled with a shared sense of responsibility." Community service projects can help install a shared sense of belonging and responsibility as well as build useful bridges of relationships with the larger community.
- Learning through celebrations and rituals activities form important social identity, sense of belonging, and glue for communities and groups. Celebrating seasonal, cosmic events such as cycles of the moon, rites of passage, and local and global events can empower us and link us to our culture and the accumulated group wisdom of our communities. These rituals can help us manage the chaos and find continuity in our changing world. Celebrations give us time to reflect collectively in gratitude that we are supported where we are through shared experiences of togetherness and belonging. Educators and students can build on community or create their own celebrations and rituals of support.



Learning through exploring and connecting with other groups has become more accessible
through programs such as Eramus and other sustainability youth programs. Creating
networks of support through local and international youth groups can expand the learning
environment to reach out all across the globe. This creates great opportunities for cross
pollination, broadens horizons and perspectives, and strengthens our collective senses of
interconnecting global citizens. Many of these programs encourage holistic sustainable



learning allied with the SDG. Gaia YES! Curriculum can be used in these youth exchanges as part of their informal learning platforms. The modules lend themselves well to workshops and activities that can be incorporated into these events.



• Blended learning - The recent closures of school attendance in many countries due to policy to mitigate the pandemic created an opportunity to develop better online learning resources and programs. Students physically isolated from each other could communicate, learn and share online with their class, educators and fellow learners. This demand for online learning catalyzed creative development of online learning tools and practices. Gaia Education has created a rich and successful interactive online program for all its dimensions. There is a chapter dedicated to exploring online and blended learning as a powerful and effective tool for sharing Gaia YES! Curriculum content and connecting teachers and learners all over the world.





"Never doubt that a small group of thoughtful, committed citizens can change the world.

Indeed, it is the only thing that ever has." Margaret Mead

Valuing Adolescent Challenge to Adult Authenticity

"Being the change" you want to see in education and in the world

Teaching the Gaia YES! Curriculum can offer hope and inspiration to youth. However this intention may be challenged at times by the very people it hopes to uplift and empower.

Most adolescents have a knack for recognizing inconsistencies and questioning systems of authority. They also often have a strong sense for when things feel inauthentic or not congruent. It is critical for their survival to understand the social economic and cultural systems and subtleties they will be living in and from. So it's understandable and healthy for them to explore all the facets, boundaries and especially inconsistencies that reveal how things really work in the "real" world they are entering into.

Many teens will lose interest, even within the most well-intentioned holistic social-emotional learning programs, if they feel they are inauthentic and or patronizing to them. Many teens will be turned off by sustainable holistic education programs that are seen as not relevant or congruent to the communities they live in and fail to address the core psychological needs and motivations for youths in general, which include developing an identity, sense of purpose, being recognized and respected by peers and their community, and finding ways to thrive and succeed in life.



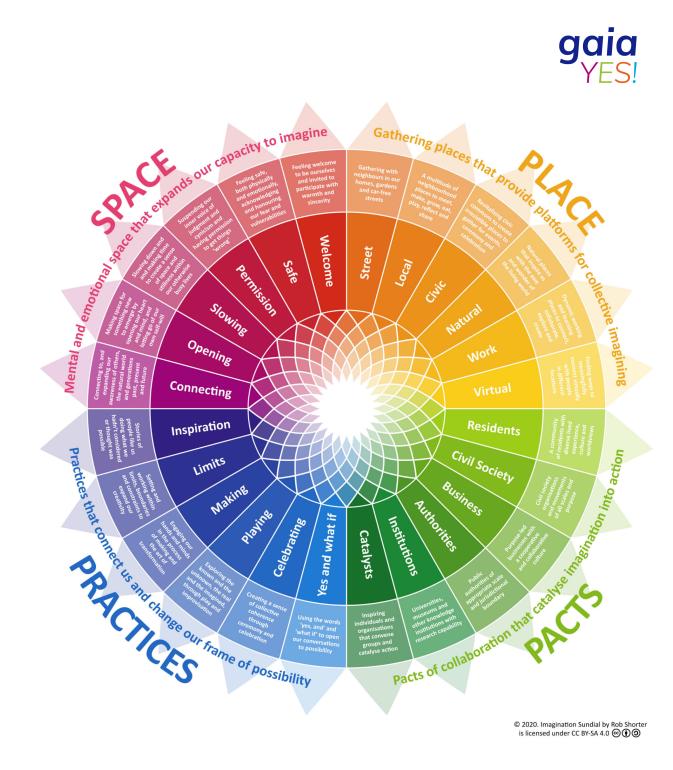
At the same time most youth don't deny there are growing challenges facing their generation and many are frightened by them. As they move into their mid to late teen years they have become aware that there are serious ramifications of threats such as climate change, loss of biodiversity and global socio-economic instability and that these will likely have an impact on their lives. Over 50% of young people now experience what is called 'eco-anxiety'. This is a reasonable response and reflects that they are paying attention. A part of building resilience is to create safe and supportive space for youth and the community to express such anxiety as it arises. The challenges we face can seem overwhelming. People who work with the growing number of people suffering from "eco-anxiety" often encourage using the tools such as the five stages of grief work, (Kübler-Ross) created to help the transition process when facing big changes. Such tools can show youth how to support themselves and each other during times of challenge and change.

The fifth step of grief work is "Acceptance". As Rod Hopkins put it after attending the 2021 United Nations climate change conference (COP26), "It doesn't mean some kind of happy-clappy glossing over of reality. Acceptance means we are changed by what we know. It means we have to reimagine who we are and how we move through the world. It means we have to be willing to speak fearlessly about what is no longer possible, and to be brave and fierce in protecting that. It means everything is up for being reimagined, and that we are genuinely excited about that possibility. "

The success of the Gaia YES! Curriculum lies not only with the recognition there are real challenges, but also offering relevant content and skills to address them. Students need more than content, they need mentors and teachers that they can believe in, that acknowledge the challenges and offer not only tools for solutions, but the passion for "being a part of the solution" and reflect that commitment in their teaching and in their own lives.

The same applies to the learning environment that supports the teacher and student. Is the administration, school, and learning environment open to applying sustainable design into their programs and structures on all levels? Building motivation and trust in the students for the curriculum will be easier if it is congruent with the schools and learning environments orientation, vision, values, policies and goals. Steps to achieving that congruence may take patience and perseverance. Not everyone may be on board. Other sections of this manual speak to that process. The school and learning environment, the practices, and education community commitments speaks louder to the students than its curriculum contents. And that is why a holistic approach that is integrated, implemented, and reflected in all aspects of the educational community is so vital to the success of Youth Education for Sustainability - Gaia YES!. Sometimes, perhaps most times, it is the intentions and first small steps of just one or two teachers and students that gets this critical process rolling.





"Cultivating Imagination-is cultivating the ability to look at things as if they could be otherwise". John Dewey



"What if?" Cultivating Our Imagination to Dream and Act

Rob Hopkins, cofounder of the Transition Towns movement and author of the recent book "From What Is to What If: Unleashing the Power of Imagination to Create the Future We Want ", speaks to the importance of imagining and cultivating possibilities. He suggests that based on recent research this capacity has been eroding away, is compromised, and needs to be revitalized for us to meet the challenges we face today and in the future. He has helped to develop tools, such as the Sundial (see above) with Rob Shorter, to help communities explore ways to build resilience. He challenges people to consider the "improbable but possible" in a series of "what if " questions in hope to encourage people to work together to make these dreams reality in transition to a more sustainable and regenerative world.

If we take this challenge into the world of Gaia YES! we might ask the question:

"What if our school and learning community decided to use Gaia YES! not just as a curriculum, but as catalysis for real change towards a more sustainable, regenerative and socially progressive school and community?"

From this perspective the school-learning environment itself becomes a living part of the curriculum. The same approach could be taken in youth exchanges and homeschooling environments. Just as young people have a knack for calling out the imperfections, they also can recognize sincerity and commitment and that intention can be infectious and inspiring. The teacher and school need not be perfect, just honest in its intention, orientation, and pursuit of sustainable, regenerative and just pathways. The authenticity is demonstrative in a vision, educational culture, and policies and programs that build resilience and are reflected in an educational environment that "walks its talk".

The curriculum's message, educators teaching style, and the places it takes place, will all be stronger when applied as truly congruent in a holistic approach and practice. Committed and authentic steps taken by the education community to make it so, with youth as full participants, often as leaders, in that transition, will set an inspiring example for them and their community that positive change is possible and worth working towards not only as part of their education but throughout their lives.



References and Resources

For almost two decades Gaia Education has promoted sustainability education and published many educational resources including in-depth books covering the four dimensions (keys) in several languages. The Gaia EDE, Ecovillage Design Education, an in depth sustainability course, has been carried out over 100 times in dozens of countries on six continents since 2005. Building on the resources and insights gathered, Gaia Education now offers regular workshops and teacher training throughout the world and online. Educators and students alike can benefit from these and other resources, many of them freely available, on the Gaia Education website. The Gaia YES! partner organizations too offer many resources on their websites, some in multiple languages. These resources offer useful complements to the Gaia YES! Curriculum with a great deal of material for educators and students to draw from.

Clayfields, Robin and Sky, 1994. *Manual for Teaching Permaculture Creatively*Dynamic Groups: The art and skill of creative facilitation and learning. Dynamicgroups.com.au

Delors, J., 1996. Learning: The Treasure Within- Learning to know, to do, to be and to live together. The Delors Report to UNESCO of the International Commission on Education for the Twenty-first Century. Delors Commission.

Gaia Education, 2012. Ecovillage Design Education - A four-week comprehensive course in the fundamentals of Sustainability Design. Curriculum conceived and designed by the GEESE—Global Ecovillage Educators for a Sustainable Earth. Version 5.

Global University Network for Innovation (GUNi)- Coordination, 2022. <u>New Visions for Higher Education towards 2030</u>. ISBN: 978-84-09-40894-8 <u>Open access: www.guni-call4action.org</u>

Hopkins, Rob, 2019. From What Is to What If: Unleashing the Power of Imagination to Create the Future We Want. Chelsea Green Publishing.

Kumar, Satish (Editor), Cenkl, Pavel (Editor), 2021. *Transformative Learning: Reflections on 30 Years of Head, Heart, and Hands at Schumacher College.* New Society Publishers

Macnamara, Looby, 2021. Cultural Emergence. Chelsea Green. https://cultural-emergence.com,

Macnamara, Looby, 2014. 7 Ways To Think Differently. Permanent Publications

Macnamara, Looby, 2012. People & Permaculture. Permanent Publications

Morrow, Rosemary, 2015. *Permaculture Teaching Matters.* Blue Mountains Permaculture Institute. https://www.bluemountainspermacultureinstitute.com.au

Shorter, Rob and Hopkins, Rob, 2020 . Introducing the Imagination Sundial. https://www.robhopkins.net/2020/06/30/introducing-the-imagination-sundial/

Srinivasan, Meena, 2021. "Belonging: The Heart of Social and Emotional Learning", Inspired Ideas. McGraw Hill.



Tilbury, Daniella, 1997. "A Head, Heart and Hand Approach to Learning about Environmental Problems" New Horizons in Education Vol 38 pp.13-30.

UNESCO, 2017. Education for Sustainable Development Goals Learning Objectives. Section of Education for Sustainable Development and Global Citizenship, Division for Inclusion, Peace and Sustainable Development, Education Sector, UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000247444

Wahl, Christian Wahl. 2016. Designing Regenerative Cultures. Triarchy Press. https://www.triarchypress.net/drc.html

Žižanović, Senka, 2020. "Head, Heart and Hands Learning - A challenge for contemporary education", Journal of Education Culture and Society 4(1):71-82 DOI:10.15503/jecs20131.71.82. at Faculty of Humanities and Social Sciences University of Osijek