



# Sustainability Framework

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# Objectives

The objective of this document is to provide UWC Costa Rica with a sustainability framework for the future San Isidro de Heredia campus, along with a set of proposals and recommendations for implementing measures and transitioning and building its infrastructure, while at the same time preserving its mission and goals.

**UWC's Mission: UWC makes education a force to unite people, nations and cultures for peace and a sustainable future.**

This project provides a systemic, socioecological, and transdisciplinary approach to sustainability in line with UWC's mission of forming agents of positive change in the world through transformative education, interconnection, adaptation, and transparency.

The process requires taking a stand on education, sustainability, and reciprocity that cuts across the school's entire structure and actions.

**Six months** of listening, participating, and collaborating have gone into the Sustainability Framework's design. The work plan started out with a need to activate two action layers: putting together the knowledge and posing the challenge of **how to create a culture of sustainability that is integrated into the school's values.**

Sustainability is considered on the basis of ecology, economy, and social aspects. The ecological perspective of sustainability is addressed with regard to its ecosystemic approach, creation of an affection-based community, mobility, gender and space, visibilization of the processes, enrollment of users, and the need for intervention in the macro and micro relationships of the processes.



# Methodology

The process for producing this **Sustainability Framework** has consisted of understanding the challenges, exhaustively researching the assignment's structural aspects, analyzing best practices, interviewing and holding work meetings with different agents within and outside UWC Costa Rica (team, architects, experts, etc.), and conducting fieldwork (on the Santa Ana and San Isidro de Heredia campuses during February 2021).

The **prototyping** conducted with sixty students during **Service Week** (February 15-19, 2021) merits special methodological mention. The goal of this "experiment" was to learn by doing with students, testing ideas and proposals centered on sustainability (using the spaces, putting the two-campus management logistics to the test, learning in nature, coexisting with nature, designing learning spaces, discussing the educational challenges, living together, managing wastes, living and eating on the future campus, etc.).

The result is an executive proposal with the following scheme:



- **Guiding principles for sustainability**, called "**Sustainability Principles**" which will govern the transition to an exemplary school in terms of sustainability and inherent values.
- **Action lines**: five action areas in UWC Costa Rica, arising from the preceding Sustainability Principles, for implementing the Sustainability Framework. These lines will combine recommendations, guidelines, inventories, and best practices:
  1. **Nature-based education**
  2. **Strategy and governance**
  3. **We are how we consume**
  4. **Architecture, infrastructure, and landscape**
  5. **Alliances/partnerships and community relations/engagement**
- **Next steps**: A guide to potential implementable actions on a timeline. In the previous section an icon code is used for guidance on the scale of priorities in implementing the action lines.
- **Background**: Context and detailed review of the process that has been followed in the six months of work recording and assessing deployable resources. An interesting chapter for replicability in other projects and even other spaces.
- **Annexes**: The report is appended with information that attests to the research that has been done and other relevant documentation: a mapping of key agents who have been contacted or those who should be contacted; reports, articles, and readings; and a route to the drive with miscellaneous information accompanying the process.





# Sustainability Principles

To take on the huge global challenges of today, we need to make structural changes in our system of living and **put sustainability of life and the planet at the core** of any strategy, action, structure, or proposal. The goal of caring for people and the planet has to coexist harmoniously and sustainably with care linked to economic and social development.

Progress is already being made in global agendas on proposing organizational changes to facilitate the crosscutting incorporation by governments and civil society of an intersectional and egalitarian vision into their UN SDG plans and climate actions, through solutions for consolidating more inclusive, equitable and sustainable societies that put life at the center.

One of the many things we owe to feminist theory is that we are starting to put **care** - everything we do to preserve the world we inhabit for future generations - as one of the priorities of social organizations

(or organizations concerned with improving their internal and external processes and their roles in a complex, globalized society). A care-based perspective starts with recognizing the interdependent relationships that constitute both us and the planet. It has to do with highlighting a multitude of microrealities.

The “green economy” concept proposed in the Río+20 Conference has been rejected by some sectors that feel the drastic resource use reduction needed to shrink CO2 emissions, halt the loss of biodiversity, and prevent the general destruction of our ecosystem will not be achieved as long as the economic model continues to depend on unremunerated or poorly remunerated care (provided especially by women).<sup>1</sup>

Structural changes need to be made in the economic system, emphasizing integration and distribution aspects of sustainable development.

<sup>1</sup>A Caring and Sustainable Economy: A Concept Note from a Feminist Perspective. CĂCILIE SCHILDBERG (ED.) October 2014.

The capability approach pioneered by Amartya Sen and Martha Nussbaum proposes to facilitate a good life for every individual and represents a concrete step towards sustainable development in that direction, supporting human rights and ensuring the integrity and productivity of nature. We need a new economic and social system where care and social equality are as important as environmental sustainability.

Transformation of society through **education** is the DNA of UWC Costa Rica. Placing care at the center of education is just as relevant as doing so with any other process. This is true from the standpoint of not only regulated education but also any experiential pedagogical format within or outside the classroom. Education is a force for union, solidarity, liberty, commitment, and the future. Nothing holds up as much in people's lives as education - that which has been received and that which is still to come. A sustainability framework of an innovative, people-centered organization should always prioritize the education of its members. It should prioritize transformative thinking and education for the future, construction and sharing of knowledge, preservation of memory, access to information for all, learning by doing in different contexts in and with nature. It should prioritize adaptive and collaborative teaching and learning that upholds diversity and whose final goal is to guide people's lives towards a better, sustainable, committed and critical future, never forgetting reciprocity towards the environment.

The sustainability of UWC Costa Rica should focus on promoting and protecting **diversity** in any of its aspects, issues, environments, and spaces - diversity of people, their contexts, and where they are from, but also of nature, objects, materials, climates, foods, and professional teams, etc.

And sustainability, as obvious as it may seem, also starts with remembering that **nature** has to take priority, first and foremost - the continuity of wild nature, revealing the many ways in which human communities can nurture, adapt, and prosper together with their wild non-human relatives. The manifestations of life are everywhere, from the amazing adaptations of the animals and plants living in Costa Rica and its forests to the Indigenous lands and gathering ceremonies, from the back yards to the recovered urban industrial sites, from the microcosms to the bioregions and atmospheres. This challenges us to reframe what wild nature could be and how we can regain it in our lives and, by doing so, to unearth a deeper, wilder understanding of what it means to be human.

A sustainable project necessarily passes through a fair organizational structure. This is a basic principle, a fundamental value for achieving peaceful coexistence and progress in any community. It promotes the equitable distribution of goods and services for the ultimate goal of achieving full personal development. **Social and ethical justice** consists of sustaining ethical processes where there is no insecurity and equal opportunities are guaranteed. UWC Costa Rica's sustainability has to consist of fair processes, fair wages, and justice-based staff selection, and this will have to be extended to its relations with third parties, suppliers, and employees. Social justice is a deciding factor for the sustainable development of any activity; the future cannot be guaranteed unless the present is possible and, therefore, sustainable.

The school will likewise be sustained by two key principles: that of weaving relationships of mutual correspondence (inter- and intra-personal and with its environs, contexts, and different ecosystems), and that of ensuring its sustainability



over time, ensuring the continuity and durability of its actions, making sure they do not end or depend on expiration dates but rather evolve with a capacity for adaptation to change and perpetuation. **Reciprocity and continuity** will be secured by positioning the school in a mutual respect for nature. In the words of Jeff Norris: *“The concept of reciprocity is deeply rooted in indigenous ways of knowing, based on experience, observation, experimentation, but it also invokes a somewhat spiritual component or kinship. Humans are part of nature.”*

Reciprocity and its relationship to continuity refers to what is human and what is not human: wildness indicates autonomy and agency, a willingness to be, a unique expression of life. However, two opposing ideas of wild nature permeate the modern debate: either nature is wilder without a polluting human presence, or nature is completely humanized and nothing is truly wild. Our challenge will be to find actions of reciprocity and interrelationship with nature and to contribute to the wellbeing of the places where we people live, work, and play. Nature exists in variations: from cultivated soils to primary forests, going through individuals living in cities.

Working with and for our **communities**: Although it involves extending the reciprocity in our relationships, we consider it an individual principle to actively listen and adapt to the idiosyncrasies of the communities with which UWC Costa Rica interacts as the underpinning for a sustainable environment. Our task is to reinforce the relationships (from fewer to more) of our school (in the residencies, in the classes, of the students, and of the work teams, teachers, staff, administration, “Tíos” and “Tías”, etc.), but also of the network to which we belong, an international community that knows no borders, as well as with peers (other educational spaces in Costa Rica).

To create and weave community is also to facilitate knowledge of how we do things within so that they serve outside.



*“There will always be trade-offs, but let’s shift the balance sheet from a one-sided view of taking less (i.e., costs) to a more inclusive perspective of giving back (i.e., investments).”*

**Jeff Norris**

The school’s sustainability will also reflect the way it acts within the economic system - the social business model it proposes to ensure medium- and long-term economic sustainability. A **positive economic impact** needs to be one of the pillars of the school’s sustainability framework. This involves the way the school organizes its resources and generates a return (a word that will no longer be linked to “business” but to the life of the project, to the relationship between the benefits provided by the school - tangible and intangible - and the investment or effort made to obtain them). Equally relevant is governance, the formulas for sustainable governance, listening and empowerment, and quick, transparent decision-making.

The **materials** we use, the **resources** and how we use them, their provenance and their **traceability**, will determine the impact we create and the sustainability of the infrastructures. Another imperative social challenge will be to question where these materials come from and what we want them for and to propose second lives for them and how they will be reused or recycled.

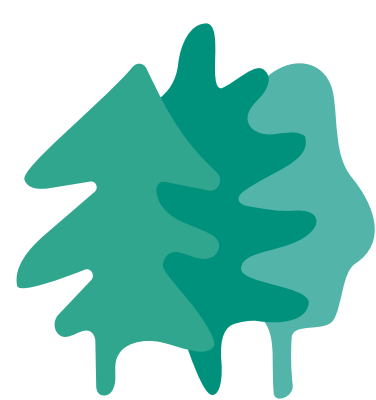


# Sustainability Principles



## Care

Place life at the center of any action, strategy or objective. Care for people and the planet has to coexist harmoniously and sustainably with care linked to economic and social development.



## Nature

Reframe what wild nature could be, and how we can regain it in our lives and with that, unearth a deeper understanding of what it means to be human.



## Education

To develop transformative ways of thinking and futures: construction and sharing of knowledge; preservation of memory; access to information for all; and learning by doing in different contexts in and with nature.



## Community and Diversity

Draw together inclusive, safe, resilient and sustainable communities for all people with respect to the diversity of life and its ecosystems.



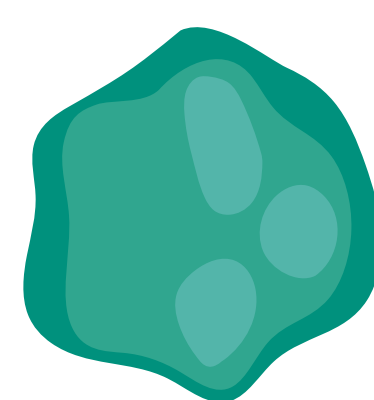
## Social Justice and Governance

Develop forms of sustainable government based on active listening and empowerment, with agile and transparent decision-making. An ethical and responsible future can not be guaranteed without the present being possible, and thus, sustainable.



## Reciprocity and Continuity

Weaving relationships of mutual correspondence (inter and intra personal and with our surroundings, contexts and diverse ecosystems) to assure their sustainability over time.



## Impact and Economy

The sustainability of the school is also reflected in how it carries out its functions within the economic system. Its impact will focus on positive measures for its surroundings and the environment, aimed at preserving, caring for and regenerating ecosystems: responsibility, reduction and action.



## Responsible Use and Resources

Adapt materials to their uses; study the future implications of our infrastructures; consider the second lives and re-utilization of resources; use less; track materials' origins and destinations. Each element, its composition, use and provenance, counts; recycling, re-using and adapting are part of a sustainable model.



# Action lines

Having established the Sustainability Principles (SPs) as a general framework, our big challenge now is to put them into practice (individually and collectively) towards the paradigm shift needed for a sustainable future.

Below are the action lines proposed as strategies for guiding and organizing the different activities for each action area in order to achieve greater integration, coordination, and continuity of efforts to fulfill UWC Costa Rica's mission of being a sustainability-oriented school.

## 1. Nature-based education:

This action line refers to a curriculum and program approach and actions from and in nature.

## 2. Strategy and governance:

This action line refers to the team and governance structures needed for working sustainably.

## 3. We are how we consume:

This action line focuses on activities for building awareness, re-valuing resources, and changing our habits of consumption, use, and waste.

## 4. Architecture, infrastructure and landscape:

This action line frames actions for design, construction, and responsible and regenerative resource management.

## 5. Alliances/partnerships and community relations/engagement:

This action line underlines the need to network and work cooperatively and in partnership with communities, institutions, organizations and governments.

Each of these action lines addresses different challenges, the nature of their focus and structure varies and may include suggested actions or recommendations, relevant references and examples (whether best practices, potential projects, **or actions currently being undertaken by the school**). Some of them consider more direct, concise suggestions, others more strategic and even more ideological ones (proposing new discourses or reflection spaces).

The action lines also combine the different Sustainability Principles with which they are related and represented **iconographically** together with their level of priority, as follows:

Sustainability Principles (SPs)







# 1. NATURE-BASED EDUCATION

We know that to achieve sustainability we need to change our perception of the world and education is the way to do this. Nature is our best teacher: experiencing it, learning from its processes, and being in it leads us to understand ourselves as part of a community of life and to take responsibility for the care it needs. It leads us to an interconnected perception of the world. Our education models must reflect this perception and take approaches that lead to perceiving the world in terms of totalities rather than fragments, processes rather than results, networks rather than hierarchies, cooperation rather than competition, reciprocity rather than extraction, and contextual and creative knowledge rather than objective and finite knowledge.

The following list of recommendations and potential actions for the school, built on UWC Costa Rica's holistic model based on competencies and the fostering of experiential learning, is aimed at three overarching areas: the first is the curriculum and program approach; the second refers to fostering physical spaces in nature for both the school's educational community and the outreach learning communities; and the third is the new pedagogies that will arise in response to the first two and in their future dissemination and continuity.

## Actions:

- 1.a Complex-systemic and transdisciplinary approach to Curriculum and Program Design**
- 1.b Facilitate Spaces for Connecting with Nature**
- 1.c Pave the way for education of the future: UWC Costa Rica Sustainable Pedagogies**



# 1.a. Complex-systemic and transdisciplinary approach to curriculum and program design

The social-ecological problems we face as humans on this planet can no longer be solved from a conventional scientific and disciplinary approach characterized by fragmented thinking and sectoral, compartmentalized, non-collaborative work methods. We must build new paradigms (educational, scientific, and cultural) that focus on creating bridges and visibilizing interconnections between knowledge areas to generate cooperative actions and visions.

This implies implementing curricula and programs based on a culture of sustainability and leading to the rise of alternative currents of thought.

For UWC Costa Rica, this starts with a review of the current Distinctive Educational Model (DEM) and International Baccalaureate (IB) curriculum, asking the question: *How can the current academic structure of UWC Costa Rica be adjusted to its future educational needs and to a culture of sustainability?*

**1.a.i Identify what is already being done in the IB and DEM structures for deepening connections between subjects, areas of work, projects, concepts and interests.**

**1.a.ii Facilitate curricular labs or spaces for analysis, reflection and collaborative curriculum and program design**

**3.a.iii Apply principles and methodologies with a holistic approach to sustainability and inspired in nature**







## 1.a.i

### Identify what is already being done in the IB and DEM structures for deepening connections between subjects, areas of work, projects, concepts and interests

Deepening connections between subjects and work areas.

Examples:

#### Theory of Knowledge

Already existing interdisciplinary course centered around open-ended knowledge questions and connection-making across areas of knowledge and themes from the perspective of the Knower.

#### Environmental Systems and Societies (Group 4):

Potential space for delving into systemic social-ecological approaches and connecting different subjects or knowledge areas (between not just the natural sciences but also the social sciences, arts, and letters).

Encouraging collaborative and crosscutting programs that involve different areas of the DEM and the school.

Facilitate more dialogue and reflection spaces that permit connections and transfers to be made between knowledge areas and build awareness of what has been learned.

Promoting more independent research and autonomous and collaborative projects by students according to their interests.

#### This implies:

- Constructivist approaches to knowledge (content according to the student's research and interest)
- Teachers' readiness and willingness to cede control over the content

#### Example:

- "Push IA first – do the project and let concepts come from there" (Jeff Norris)
- More focus on IA (independent assessment) and putting the projects first
- Re-evaluating their percentages

Thinking of potential new approaches to the IB model:

For example, re-think future schedules

Given the projected future in San Isidro and the possibilities of having more learning spaces in nature, how do current schedules interfere with those possibilities?





## 1.a.ii

### Generate curricular labs or spaces for analysis, reflection and collaborative curriculum and program design

1. New spaces could be created, or already existing DEM or IB structures, teams or programs could be enabled.

Among professors. Example:

Foundation Program

With students. Example:

Theory of Knowledge (TOK)

2. Prototype new co-constructed lessons or programs and collect data for sharing with the educational community.

3. Open up teacher and staff participation (according to interest) and advocate the monitoring of newly designed lessons and programs.

4. Prioritize experiential learning and take an emerging approach to projects that fosters spaces for self- and group reflection through dialogue.

5. Emphasize problem-based learning projects and programs.

Transdisciplinary, collaborative and self-directed approach to the solving by students of complex real problems

Application of complex-systemic and critical thinking for delving into relevant topics

6. Facilitate professional development in sustainability for teachers and staff with a holistic approach and systemic application of the methodologies.







### 1.a.iii

## Apply principles and methodologies with a holistic approach to sustainability and inspired in nature (Best practices)

Some best practices, models and references:

#### Permaculture

Based on an imitation of the patterns and relationships found in nature, it establishes ethics and principles for designing and applying to all areas of human life (culture, education, health, governance, technology, economy, land tenure, construction, etc.).

#### Holistic Design for Sustainability: Gaia Education & EcoVillage Design Education Curriculum

Holistic approach to sustainability, integrating the four areas of regeneration - social, cultural, ecological, and economic - by putting into practice the holistic design.

#### Earth Charter

Ethical framework comprised by 16 principles for generating actions aimed at creating a fairer, more sustainable, and more peaceful global society.

#### Biomimicry: Biomimicry Innovation Toolkit

Educational models based on biological processes for finding efficient, sustainable solutions to specific problems.

#### Circular Design (Circular Design Toolkit, Ellen McArthur Foundation)

Creative exploration of solutions for the circular economy, which is based on redesigning the ways we produce, consume, and waste to keep products and materials in circulation and regenerate natural systems.

#### SDG Academy:

Sustainable Development Solutions initiative for the United Nations to provide educational materials and resources on sustainable development and the Sustainable Development Goals (SDGs).

#### Boundless Roots Community:

“Roots of Transformation: Lessons and Leverage Points for Sustainable Living” - report on inquiries into how we can change the way we live in response to the climate crisis.





# 1.b. Facilitate spaces for connecting with nature

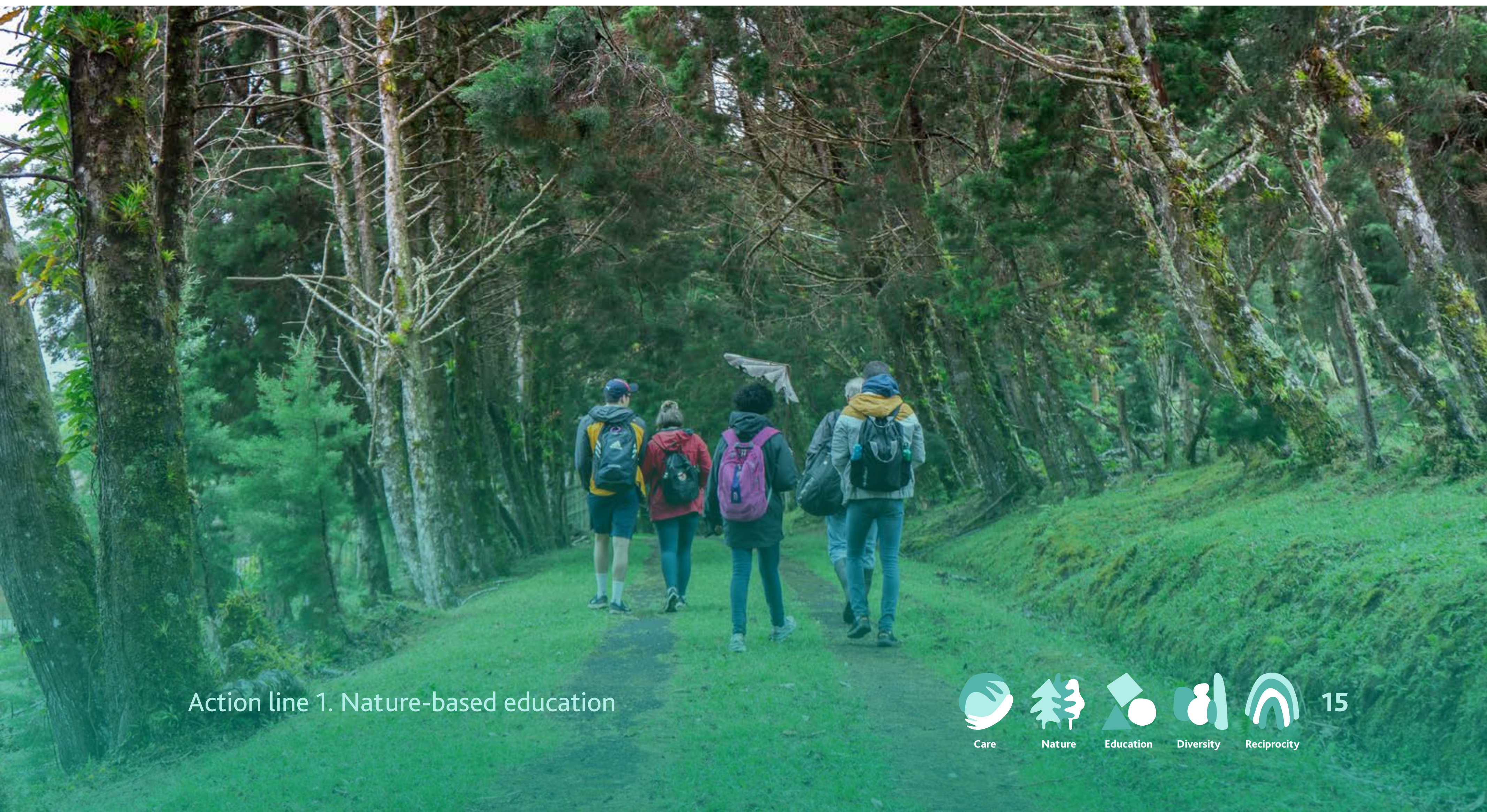
When individuals' perception of connectivity with nature increases, their sense of responsibility for their environment and capacity for achieving personal and collective wellbeing also increases. Boosting a profound ecological perception through experiences with nature leads to a more extended sense of being and strengthens transformative learning that integrates thinking, feelings, and actions.

In addition, an awareness of our dynamic connection with the environment **heightens our capacity to deal with uncertainty** and act on the quality of our individual lives and the lives of other beings, human or otherwise.

**1.b.i Activities and programs on the San Isidro campus for UWC Costa Rica students, teachers & staff**

**1.b.ii Outreach Programs and activities on the San Isidro Campus**

**1.b.iii Sustainable-educational tourism and service programs**







### 1.B.i Activities and programs on the San Isidro campus for UWC Costa Rica students, teachers & staff

#### 1. Design and develop lessons within nature.

Prototype lessons developed in Curricular Labs and collect data and experiences for their potential programmatic implementation.

#### 2. As practices for wellbeing, recreation, and health (physical, emotional, mental, spiritual, and environmental)

#### 3. To deal with mental or emotional health issues.

Example:

##### ***Forest Therapy***

Mindfulness practices

As spaces for team building and/or conflict transformation, restorative practices, etc.

### 1.B.ii Outreach programs and activities on the San Isidro campus

#### 1. Open up spaces for activities with:

##### **San Isidro Community groups of interest.**

Examples: Colectivo Agroecológico del Zurquí (CAZ), Recycling Center, artisans, etc.

##### **Educational communities (schools, students, educators, etc.)**

Joint sustainability projects  
One-day activities or camps  
Peer facilitation activities

##### **Partners, collaborators, or potential funders**

##### **Scientific researchers and conservationists**

Examples: Braulio Carrillo Park rangers, Biological Corridors, etc.

### 1.B.iii Sustainable-educational tourism and service programs

#### 1. With emphasis on field visits to strategic sites according to partnerships, studies, and projects "Sustainability Best Practices in Costa Rica" for UWC Costa Rica students and/or as outreach programs.

#### 2. Service and volunteering programs with emphasis on sustainability and environmental wellbeing

Linked to already existing Co-curricular programs and in new possibilities

Sustainability & Reciprocity Community Action Week, in a programmatic fashion

#### 3. School trips for recreational and contemplative activities in nature



# 1.c. Pave the way for education of the future: UWC Costa Rica Sustainable Pedagogies

Lessons learned from a review of the school's current academic structures and from the design of approaches to knowledge according to the culture of sustainability will pave the way for new educational imaginaries.

UWC Costa Rica thus has the potential to become a reference and model for pedagogies of sustainability, opening a space for experimentation, learning, and teaching from and in nature and facilitating alternative currents of thought.

**1.c.i "School of Educators"  
Extended Edition**

**1.c.ii Reciprocal and Continuous  
Learning Communities**

**1.c.iii Ad Astra - UWC Costa Rica  
Education Lab**

**1.c.iv Creation of Open Source  
Pedagogical Content focused  
on Sustainability and  
Reciprocity**







### 1.c.i “School of Educators” Extended Edition

The school can play the role of “facilitator of facilitators” in pedagogical matters and best practices of sustainability and reciprocity with the environment.

Teaching and training:

- New UWC Costa Rica teachers as they are hired;
- Teachers in the global UWC community;
- The country’s teachers and educational administrators (in line with the cooperation agreement with the Ministry of Education (MEP)); and
- Non-formal and informal educators (of community centers, foundations, and alternative learning spaces)

### 1.c.iii Ad Astra - UWC Costa Rica Education Lab

Make accessible the knowledge, scientific breakthroughs and technologies in renewable energies of Ad Astra Rocket to domestic and international educational communities and the general public (within the framework of the agreement with Ad Astra).

Be the hub of experimentation and prototyping of Ad Astra’s innovative technologies and research, involving the UWC Costa Rica educational community.

### 1.c.ii Reciprocal and Continuous Learning Communities

Open spaces for sharing, reflection, and program design with different agents and communities (local and global) on sustainability values, practices, and lessons. Foster transdisciplinary insights and dialogues with:

- Local and Indigenous communities
- Scientific community
- Cultural agents
- Professionals in different fields (social sciences, arts, health, economy, etc.)
- Representatives of relative movements (feminism, integral ecology, degrowth, etc.)
- Members of sustainable settlements (EcoVillages, Buen Vivir, etc.)

### 1.c.iv Creation of Open Source pedagogical content focused on Sustainability and Reciprocity

The lessons and systematization arising from new pedagogy experimentation and implementation can be shared openly and free-of-charge online to broaden its scope and impact.





## 2. STRATEGY & GOVERNANCE

Another action line for the school is to guide its strategy, mission, and work areas towards sustainability. We cannot proclaim these principles unless we have teams responsible for their strategies. We need a team charged with providing continuity to the sustainability framework and trained to implement established milestones and measures on a timeline until UWC members (of all professions and levels) are dedicating part of their professional workdays to sustainability.

Sustainability has to be worked simultaneously on various levels: with the students, in continuing education with their teachers, and outside the classroom with the co-curricular team. Clear guidelines should be given to the teaching team regarding the scope of work. In addition, Residential Life needs to introduce tasks and teaching towards internalizing the sustainability framework and its continuity. As for “life” on campus, it is essential to train the staff: “Tías” & “Tíos”, the kitchen team (products, materials, work hours, dialogue spaces, the sustainability of their lives), etc. Governance should be partially reorganized, at least with regard to sustainability (going through care, transparency, horizontality, and knowledge sharing).

A decisive factor will be the transfer of breakthroughs and “discoveries” to the Board and the rest of the global UWC to replicate the knowledge.

### Actions:

- 2.a Form a Sustainability Team**
- 2.b Revise governance**
- 2.c Revise and streamline internal and external communication systems**
- 2.d Set attainable and realistic goals according to the school and external stakeholders' timelines**



## 2.a. Form a sustainability team

### 2.a.i Hiring of a Sustainability Team

Ideally, a team or person could be hired to lead and implement the process we have been working on from October 2020 to May 2021 (with SPL/ Ultrazul, Outreach, and the Management Team). This position should be full-time, in principle without its own budget (provided the rest of the school's areas and directors have a budget entry for sustainability), and capable of acting with autonomy.

### 2.a.ii Representation from different areas of the school

If a committee is formed, it should have representatives from the school's different areas (Academic, Residential Life, Co-curricular, Outreach, Operations, Kitchen, "Tías" y "Tíos", Development, students, etc.) and enroll different sustainability consultants according to interest and specific capacities for the challenges addressed in each case.

This committee or task team will ensure project monitoring and implementation, coordinate footprint measuring towards carbon neutrality, delegate team members as champions for specific projects, and update progress and reports on an enabled platform accessible to everyone involved in the management and direction of UWC Costa Rica.





## 2.b Revise governance

To improve the lives of those managing and inhabiting the school, one of the goals of UWC Costa Rica Sustainability will be to plan new forms of governance, decision structures that involve the best-trained agents, listening to different voices, balanced distribution of responsibilities, respect for rest hours, attention to urgencies, non-essential figures, etc. Various innovative organizational management and administration models exist from which UWC Costa Rica could adopt lessons learned, especially with regard to active listening to different voices, definition of specific roles (rather than job positions), and coordination in circular structures (whose mandate will be to carry out the mission of the work unit in diverse and varied teams, improving their production quality and ensuring their durability through ongoing education of their members).

Several organizational models will then be selected from which lessons applicable to UWC Costa Rica can be extracted, along with examples of best organizational practices based on innovative governance structures. This content is enriched by extensive research and several articles/documents, the reading of which is recommended.

### 2.b.i Governance and Organizational Models

### 2.b.ii Innovative Organizations in terms of Governance Structure





## 2.b.i

# Governance and organizational models

### 1. Sociocracy

An innovative model for organizational administration and management

This governance and decision-making model enables an organization to self-organize and self-correct, regardless of its size. The most important goal is to develop shared stakeholder participation and responsibility, granting power to the collective intelligence for the organization's success. Consent is the essential component of sociocratic decision-making. Sociocracy maintains an organization's existing operational structure. Added to each element of this structure is a parallel circle charged with making policy decisions; its mandate is to carry out the work unit's mission and ensure its durability through the continuing education of its members.

### 2. Holacracy

Horizontal, role-based management and decision-making system

Authority and decision-making in this organizational system are distributed horizontally instead of being established by a management hierarchy. The basic building blocks of the holacratic organizational structure are roles, instead of jobs, and holacracy distinguishes between roles and the people who fill them, since one individual can fill multiple roles at any given time.

It structures the various roles of an organization in a system of self-organizing (but not self-directing) circles, which are organized hierarchically. Each circle is assigned a clear purpose and accountabilities by its broader circle.

### 3. Agile

Agile involves project management techniques that use an incremental and iterative approach to manage projects. It follows an adaptive life cycle in the face of changes. Its particular feature is that the product evolves throughout the entire project, so it is neither designed nor planned in advance. Its goal is to have greater flexibility for responding to changes.

### 4. Teal Organizations

A Teal organization operates with a system based on peer relationships (lacking a pyramid structure). Decisions are made through consultation with those who are primarily affected, involving them directly in the process

It is defined around three principles:

- **Evolutionary purpose.** Compared to traditional strategic planning, "in Teal organizations, instead of attempting to predict and control the future, members of the organization are invited to listen in and understand what the organization wants to become, what purpose it wants to serve" (Laloux, 2014).
- **Wholeness.** Teal organizations invite us to reclaim our inner wholeness and bring all of who we are to work.
- **Self-management** is perhaps the most complex principle to understand from the stance of current governance structures. The self-management of Teal organizations combines innovative organizational structures and processes: autonomous teams, no bosses, no organizational charts, distributed decision-making, and open information flow.

### 5. U Theory

This process goes through seven stages until it reaches innovation through a personal transformation of each individual: download, observe, empathize, transform, crystalize, prototype, and deploy.

For any project, whether personal or professional, to be successful, it must be guided by an outcome-oriented roadmap. This theory paves that road in the business world, especially in team management.



## 2.b.ii

# Innovative organizations in terms of governance structure

## Impact Hub

Impact Hub is a global network of hubs whose goal is to foster entrepreneurial spirit, idea incubation, and business development and to provide collaborative workspaces. Its governance model is extremely interesting inasmuch as the local model of each Impact Hub (IH) is decided by the entrepreneurs leading each project. At the global level, however, an Impact Hub Association has been created in which all the IHs around the world are members with the same weight (each of them has a vote). The association is led by a board (Impact Hub Board) comprised by some 5-7 people who have been previously nominated and elected by each IH in public voting. In addition, Board membership is staggered so that there is never any entry or exit of blocks of management teams, thus ensuring knowledge transfer.

## TED

Platform for talks and spreading of knowledge and education. TED is a nonprofit organization dedicated to spreading ideas, usually in the form of short talks. It is also a global thought community. TEDx organizers are in constant communication with TED through an internal platform called TED HUB that serves as a mentoring center and repository of information and discussion. The activators are called “ambassadors” and support the local organizers on logistics as well as content. They hold thematic meetings annually (at least), sharing success cases especially with regard to bringing together their communities.

## Civicwise

This network has some 40 active members and more than 400 people networked in dozens of cities around the world. They are architects, designers, urban planners, economists, and graphic designers with a specific concern of innovating their territories with citizen engagement: the goal is to build collaboration. Connected through a global network, CivicWise develops innovative skills and tools to build better collaboration between citizens, academia, public and private decision makers within the building process of territories.

## More information

**Consult the study done by SPL (Ultrazul) for preparation of the preceding tabs**

Also, read the following articles and documents concerning governance and organization:

- [Definition of Impact Hub and its global governance](#)
- [TED. Basic participation and management guide](#)
- [Transfer of knowledge and structure](#)
- [New management models for new times](#)
- [Sociocracy Handbook](#)
- [Governance System of the Ecologists in Action NGO](#)



## 2.c.

# Revise and streamline internal and external communication systems

### 2.c.i

#### Platform evaluation

Evaluate the platforms already being used and introduce innovations. The effective use of technology will help improve the time management of teams and students. The advantages should be explored of new social media and communication alternatives such as Telegram or WhatsApp work groups.

### 2.c.ii

#### Communication and Care

Avoid the use of mass emails and emails that do not respect rest hours. A good system needs to be designed so that everything is not copied to everyone and emails are not sent outside work hours (except in emergencies). We should consider evolving from email to project management platforms such as ASANA, for example, and especially for communication through channels such as Slack (organizations that use it have reduced emails by more than 50% and increased the effectiveness of their communications).

### 2.c.iii

#### Communication Strategy

Communication strategy of the new campus: In terms of communication, UWC Costa Rica's arrival to San Isidro de Heredia will be a huge event, not only for the projects of sustainability, environment and business but also urban-wise, with UWC Costa Rica serving as a dynamizing agent with national and international repercussions. A "glocal" (global + local) 360-degree, on/off, experiential, proximity communication strategy is proposed, maintaining the school's international essence while triggering a direct change in the site's area of influence: citizens, institutions, and companies.

### 2.c.iv

#### Communication Lines

##### 1. Egalitarian and diverse communication:

Inclusive language will be used and care will be given for diverse and egalitarian participation in activities, events, etc. In addition, protocols will be established for preventing potential sexual or any other kind of discrimination.

##### 2. Accessible communication:

for persons with diversity credentials, such as members of the hard-of-hearing community.

##### 3. Co-produced communication:

Working with communities generates ownership and greater success when starting transformations.

##### 4. Sustainable communication:

Ensuring environmental sustainability is a shared responsibility. Pollution-free communication: Recycled or second-hand materials, reduced or no use of plastics, reuse of our own materials, etc.

##### 5. Transparent and auditable communication:

A portal where data, reports, activities, agreements, etc., can be consulted.

##### 6. Glocal communication:

A local perspective anchored in the territory but always attentive to similar international projects; sharing of tools and lessons learned and participation with other institutions for sharing knowledge.



## 2.d. Set attainable and realistic goals according to the school and external stakeholders' timelines

### 2.d.i Planning

Medium- and long-term processes should be planned with respect to governance and management strategies, avoiding the short term.

### 2.d.ii Priority Code

Establish a priority code to prevent urgencies or unforeseen exceptions as much as possible. Careful, quality time is needed for taking precautions.

### 2.d.iii Impact Measurement

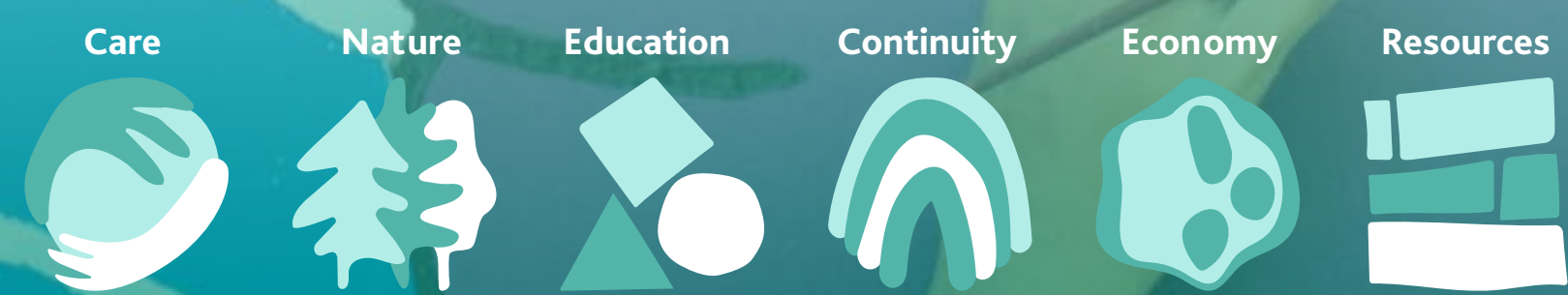
If we want to measure the project's impact (on many layers: from its impact as a physical, environmental, energy, etc. space to the relations it generates and how these contribute to social change), we need to design a theory of change (ToC) or other customized mechanism.

### 2.d.iv Corp Certification

We should consider the possibility of certifying as a B Corp, a movement that groups social enterprises with innovative triple-bottom-line (economic, social, and environmental) business models. Its goal is to put the power of enterprises at the service of society to solve twenty-first century social and environmental problems. The independent foundation behind the movement is B Lab, which manages and regulates the certification and application process. B Corp enterprises have a commitment to transparency and a clear intention to make a social and environmental impact.

The movement provides enterprises with an exhaustive method for measuring the impact of the different business areas by measuring five aspects: governance, employees, environment, community, and business models. B Corp companies seeking to meet these criteria should include in their bylaws the mission to have a positive impact on society. An entity can access the tool for free online.





# 3. WE ARE HOW WE CONSUME

The capitalist systems of production, operation, and consumption and the traditional view of economic growth and development have led us to the depletion of planetary boundaries and the climate crisis we are now experiencing. The necessary paradigm shifts for sustainability start with shifts in perception.

This action line focuses on raising awareness of our habits of consumption, use, and waste to drive a circular view of these processes and reframe the values guiding these patterns. In nature, nothing lacks and nothing is in excess; We humans are not above natural cycles, we are part of them, and by taking these cycles and spirals as a model we can design better systems for a life in balance with the environment.

*"We must realize that when basic needs have been met, human development is primarily about being more, not having more"*

*(Preamble, The Earth Charter).*

The following recommended actions, projects, and examples focus on questioning our habits of production, consumption, use, and waste and to reframe them from a social-ecological perspective.

## Actions:

### 3.a Building awareness & visibilization

### 3.b Revaluation of the consumer culture

### 3.c Change of habits for a change of culture



# 3.a. Building awareness & visibilization

## 3.a.i Study and analyze patterns of consumption and waste within the school

Ask ourselves: How and what do we consume?

Identify consumption habits and patterns:

- Purchases and uses in the school (food, materials, etc.)
- Look at suppliers and their practices and impacts.
- Have the participation of the Purchasing, Kitchen, General Services, etc., teams.
- Consider the production, manufacturing, provenance, transportation, and packaging of the purchased products and their impacts (traceability).
- Energy and resources (water, electricity, gas)

How do we waste?

- Inspect waste management in the school (solid waste, composting, recycling).
- Identify the predominant types of waste and the consumption and waste cultures they denote.

What habit shifts are needed to reduce the impact and adopt more responsible models in balance with the environment?

- How can we visibilize and communicate these processes?

## 3.a.ii Consider lifestyle factors (individual and institutional)

- Why do we consume what we consume?
- What are the reasons, drivers, and decisive factors in the decision-making?

## 3.a.iii Empower students to lead these studies of consumption and waste patterns in the school

- Encourage students to engage in or lead these lifestyle studies and propose creative, viable solutions.
- Link to curriculum topics or frame as self-directed research and communication projects in exchange for academic credits or co-curricular hours.

## 3.a.iv Understand the environmental impact of habits and actions using lifestyle calculators

- Experiment with tools for measuring the carbon and ecological footprint of materials in order to record, communicate, and learn about the social-ecological impacts of individuals and the school.
- Students could likewise lead these efforts in order to motivate them towards sustainable behavioral shifts.

## 3.a.v Visibilize studies on consumption and waste within the school

Think of ways to communicate and visibilize these patterns (with a systemic approach) to help raise awareness and inspire habit change.

- Conduct student-proposed and managed communication campaigns (social media, websites, infographics, videos, etc.) or other student-proposed projects.



## 3.b. Revaluation of the consumer culture

### Align values with lifestyles and decision-making.

#### *Be more, use less*

Assume responsibility for a real lifestyle change. Learn to live more with less.

#### *Think circular, not linear*

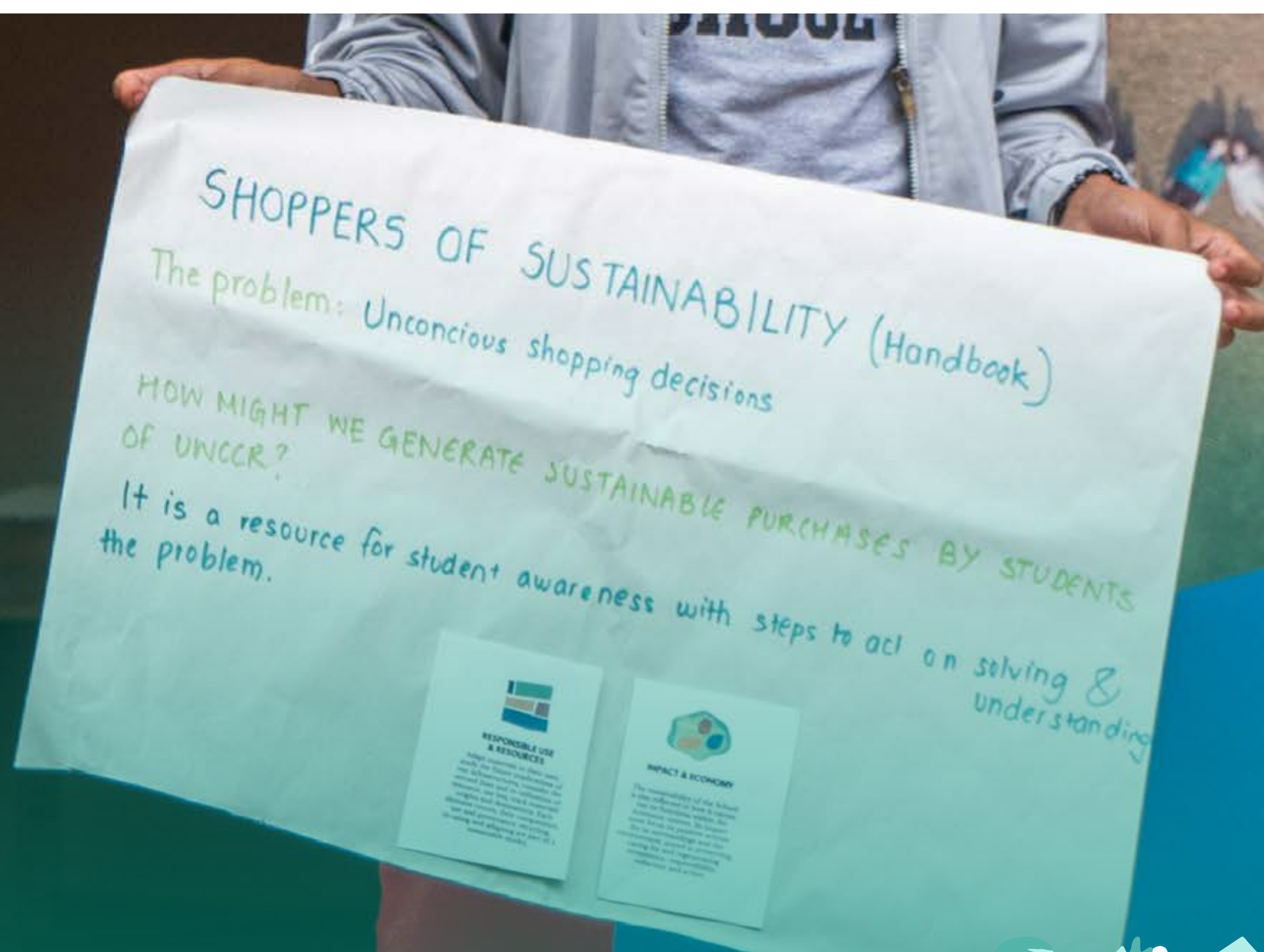
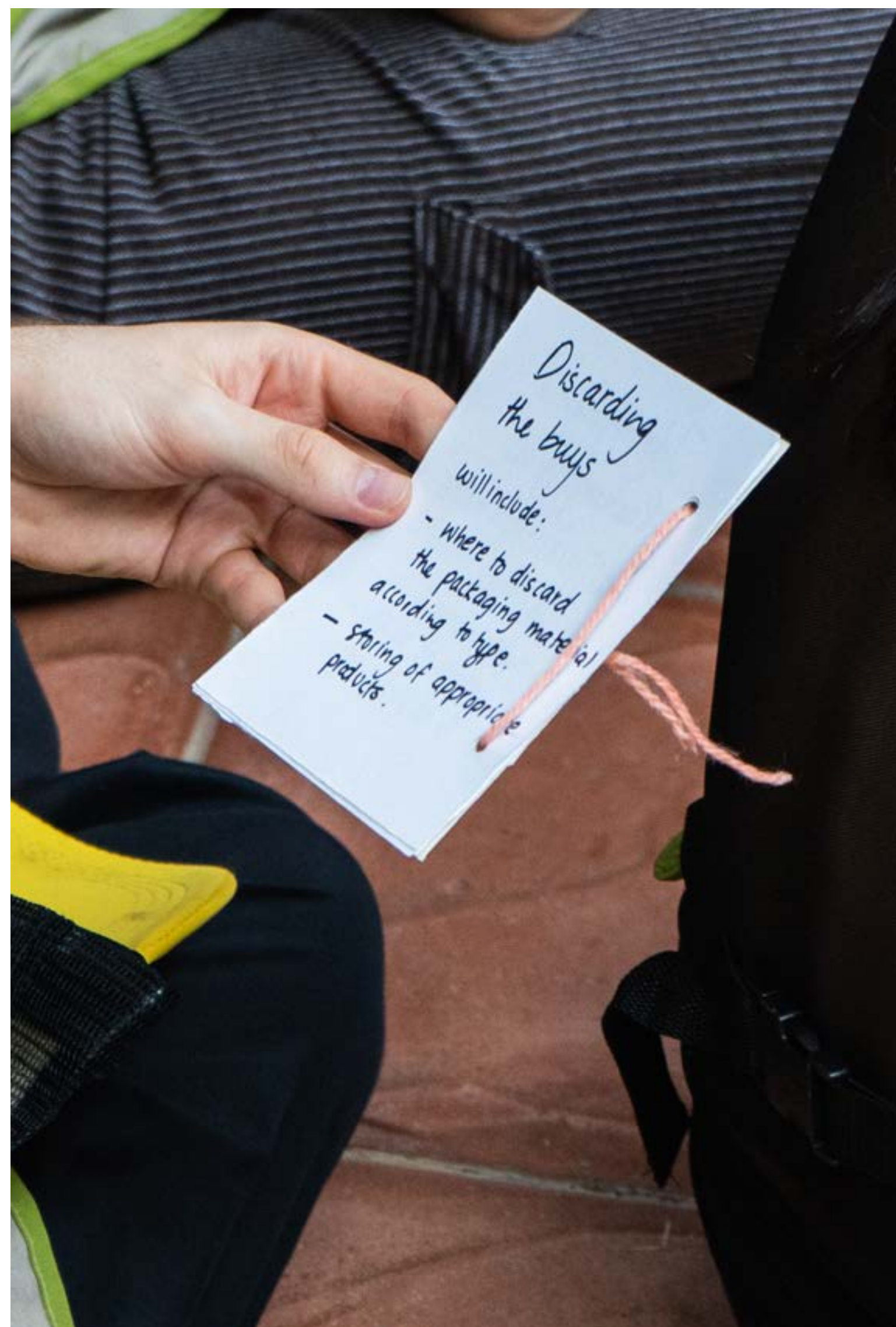
Change the culture of throw away and replace to a culture of return and renew

#### *Rethink waste: second lives*

Consider: What of what we waste could have a second life?

#### *Look to the local*

Prioritize local businesses, suppliers and cooperative relationships.





## 3.c. Change of habits for a change of culture

Lifestyles do not change from one day to the next and are determined by the context in which they are immersed. What is sustainable in one place might not be sustainable in another. Thus it is important to understand the factors influencing our lifestyle choices in order to set viable, staggered goals and actions for our situation.

### 3.c.i Be conscious and responsible consumers

Towards a *Zero Waste* school:  
Encourage practice of the principles of the Zero Waste movement at the individual level.

#### USE:

**Refuse:** Say no to buying products with excessive or harmful packaging.

**Reduce:** Don't buy things you don't need.

**Reuse:** Give new purpose to products, think of second lives, buy second-hand, buy reusable products, etc.

#### WASTE:

Compost / Recycle

Visibilize these principles and create incentives for putting them into practice (gamification, challenges, prizes, etc.).

### 3.c.ii Sustainable sourcing

Shift from a product-buying model to a service-buying model:

Identify the essential needs filled by a product. What other ways can the needs be met beyond being the owner of the

product? Could the product be exchanged for the service it provides? Do this exercise with tools such as Service Flip to determine user needs.

Determine suppliers who are working around this service model.

Consider product quality and components to eliminate or replace harmful materials with viable ecological alternatives (packaging and presentation are important)

Prioritize materials with biodegradable, compostable, recycled, renewable, chemically-safe, etc. components.

Implement traceability systems and ways of communicating these processes to the educational community.

Collaborative work with General Services + Kitchen + teachers and students

Prioritize local, sustainable and fair suppliers.

Pay attention to certifications of sustainability and best practices in material use, resources used in production (water, energy), fair treatment, and transportation.

Provide professional development for staff on green economies, circular economy, and sustainable practices.

Ellen MacArthur Foundation Courses

Cambridge University, Executive Education: "Circular Economy and Sustainability Strategies"

Fundecoop training: "Why buy locally?"



# 3.d. Implement projects with students linked to life cycles of food and “things”

## 3.d.i Food

Potencial Topics:

### *Food and Culture*

- Food projects linked to culture, traditions, history, identity, health, etc.
- Foster the sharing of culture and local wisdom (Santa Ana, San Isidro, etc.) through gastronomy. Recipe books, for example

### *Production, Power and Economy*

- Food sovereignty
- Ecofeminism

### *Traceability*

- Food traceability programs
- Investigation into current and local suppliers (in Santa Ana, San Isidro, and surroundings)
- Work with kitchen staff, aunts & uncles

## 3.d.ii Gardening & Composting

Activate student-led organic production and composting projects at UWC Costa Rica.

a. Santa Ana: “Ongoing greenhouse and composting activity”

San Isidro: Set up a program from scratch.

### **Consider:**

- rotation of students by group or similarity
- student leaders and apprentices
- teacher advisors
- work with aunts or uncles

b. Activate work with communities and local expert knowledge.

- School community
- Santa Ana and San Isidro communities

c. Link to workshops and projects on:

- Permaculture
- Regenerative agriculture
- Healthy lifestyles
- Food
- Seed bank
- Planting of flowers and plants for butterflies and bees

d. Link curricula (natural sciences, social sciences, arts and letters).

e. Consumption of garden produce for the educational community

f. Sell produce at fairs to bring in income for their maintenance or specific projects.







### 3.d.iii Recycling Lab

1. Create a space at the school (Santa Ana and San Isidro) for:

- a. Ordering of recycling and collection center
- b. Artistic creation and curriculum design
- c. Elaboration of ecobricks and design of projects for using them
- d. Spaces for talks with:
  - Experts on waste management, circular design and economy, and relevant topics
  - Representatives from recycling and collection centers (Santa Ana and San Isidro)

### 3.d.iv The Life of “things”

1. Projects on product life mapping: clothing, packaging, beauty, health and cleaning products, etc.

2. Projects on best consumer practices: Smart Material Choices

3. Workshops for making natural products and fostering networking with local sustainable suppliers

4. Enable “Duka” as a sustainability and thrift store: natural products, second lives of things (clothing, etc.), bartering, as a prototype for doing the same on a larger scale in San Isidro.

5. Projects with Santa Ana school waste deposits:

- Furniture-making with the materials
- Art projects
- Building of composters with old barrels





## 3.e. Consult best practices and related resources

### 1. Traceability

Processes and measures for recording the supply chain data of a product or material from its origin until it reaches the consumer.

### 2. Localization

Movement that proposes to make an economic shift from global to local, favoring autonomy and diversity by creating local food systems based on the ecology and food sovereignty.

- [Local Futures: Economics of Happiness Toolkit](#)

### 3. Responsible consumption

Educational resources concerning sustainable lifestyles and practical implementation of the SDGs, particularly #12, "Responsible Consumption and Production".

- [One Planet - Hub for UN SDG 12](#)
- [Sustainable Lifestyles and Education](#)
- [Lifestyle Calculators](#)

### 4. Social-ecological impact

User-friendly tools for evaluating the social-ecological impact of projects and initiatives graphically, linking Doughnut Economics and Theory of Change methodologies and implementing the Sustainable Development Goals.

- [Social-Ecological Impact Assessment Tool](#)

### 5. Sustainable economy

[Doughnut Economics / Doughnut Economics Action Lab](#)

Moving away from growth-centered economics, this approach proposes economic thinking that reformulates and prioritizes prosperity and social and environmental wellbeing within the planetary boundaries. The approach was formulated by

economist [Kate Raworth](#) to reframe the twenty-first century economy. The Action Lab provides a variety of pedagogical tools for putting it into practice in different areas.

- [7 Ways to Think Like a Twenty-first Century Economist: educational resources for reconceptualizing the economy](#)

### 6. Bioeconomy

"The bioeconomy is the production, use, conservation, and regeneration of biological resources, including the knowledge, science, technology, and innovation related to those resources, for providing information, products, processes and services to all economic sectors for the purpose of advancing towards a sustainable economy"

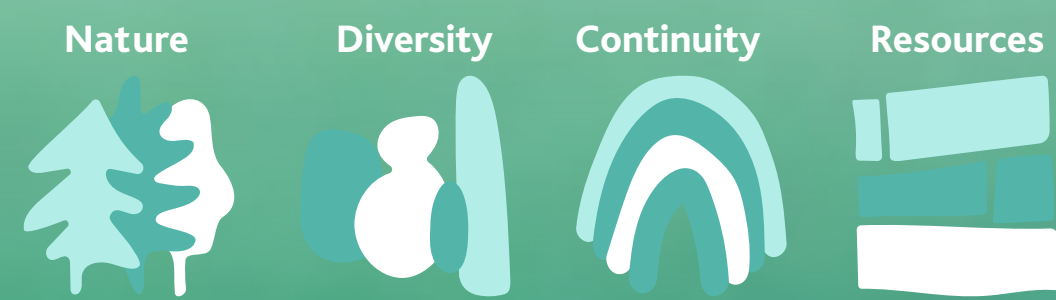
- [Estrategia Nacional de Bioeconomía 2020-2030](#)

### 7. Circular Economy

Using nature's cyclical model, this seeks to shift an economic system based on producing, using, and throwing away (make, take, waste) to one of reducing, reusing, and recycling (cradle to cradle) through the redesign of products, consumption, and manufacturing processes.

- [Ellen MacArthur Foundation](#): Provides many resources, educational materials, professional development courses, and research on the economy and circular design.
- [Circular Economy Practitioner Guide](#): Strategies and examples for the transition towards a circular economy, including circular design, buying, selling, and finance practices, among others.





# 4. ARCHITECTURE, INFRASTRUCTURE AND LANDSCAPE

*Design for regeneration, ecosystems, and learning.*

Commercial and residential construction accounts for half the CO<sub>2</sub> expelled into the atmosphere along all its phases: construction, use, and later demolition. The materials and way we use them to build our infrastructures thus have much more impact on the ecological footprint than the entire useful life of the building. UWC should ensure that the impact of what we build with regard to its ecological footprint (carbon, residues, etc.) is reduced to zero or even to the point of being positive, regenerative, and capacitative.

We want our facilities to be in balance and reciprocal with nature and our surrounding ecosystems. These ecosystems are comprised by all the inhabitants in a landscape prior to our appearance, and we need to fully understand and include them in the dialogue over what we want to design, use, and perhaps build. To this respect, what we design and implement as supporting infrastructure for the new UWC Costa Rica campus should be extremely sensitive to those ecosystems, from the larger environment to the area's inhabitants (species, climate, community) and even to the non-organic components.

Moving the campus should be a learning opportunity. A new place should bring reflection on how this place is a learning object. This resource investment will only be sustainable if it enables many UWC generations to learn new models on this campus, and this will only be possible if the campus teaches them, provides a context for learning emergingly and promoting the culture and locally specific ways of doing, driving and fostering nearby local industries and crafts.

## **Actions:**

- 4.a Build less, minimize the impact of what we build**
- 4.b Make nature a part of the infrastructure**
- 4.c Reduce and visibilize infrastructure consumption and maintenance**
- 4.d Implement infrastructure that learns and teaches**



# 4.a. Build less, minimize the impact of what we build

One of the most sustainable strategies for the future is that of minimum consumption. To this respect, we need to be very aware of the quantity of resources used to put our infrastructure into use and design measures to ensure minimum resource use with maximum use capacity. Can we build a fully biodegradable building? Can our building be used somewhere else without needing to use more elements than the ones it has? Can a campus with various construction phases be conceived? Can the number of constructed infrastructure facilities be minimized and can they be multi-use?

## 4.a.i How much does its infrastructure weigh? Seek strategies to reduce the amount of constructed material

### 1. A campus by phases and with inhabitants.

*Learning from Service Week (SW).* Think of implementing the campus in several phases with infrastructure that can be adapted to needs as they are detected according to how it is being used.

### 2. Less is necessary-architectural sincerity.

Avoid superfluous and decorative materials and optimize their use. An absence of useless elements means no materials are used that generate an ecological footprint.

### 3. Reduce the number of m3 constructed.

Design with minimum sizes and plans and foster versatile spaces that can be used in several ways instead of having several spaces for non-recurring uses.

## 4.a.ii Keep in mind all the infrastructure phases (planning and construction, useful life and demolition)

### 1. Avoid construction pollution.

Be very conscious of the materials used for building and their ecological footprint with regard to the energy they consume for their production and transportation.

### 2. Extend the useful life of the building.

Choose decent quality materials and maintain a high standard in all processes. Seek constructions that need less maintenance and whose elements can be reused or recycled when they change functions or are demolished.

### 3. Second and later lives.

Exhaustively plan for a building that can be cleanly disassembled, choose materials and design for its infrastructure to be integrated later into the environment through decomposition or reuse.





## 4.b. Make nature a part of the infrastructure

The main learning infrastructure at UWC Costa Rica should be nature. The wild forest, almost free of intervention, should therefore be designed as an opportunity for learning and activities to occur. Nature and the environment should be present in all parts of the campus and its infrastructure. Can a forest be a classroom? Can a building be compostable / biodegradable? Can we coexist in the infrastructure with other forms of life? Can buildings be built that generate nature or that are alive?

### 4.b.i Natural materials & techniques

Promote infrastructure construction with natural materials and techniques and/or low environmental impact, using eco-efficient raw materials and renewable materials. Promote local, nearby construction techniques and materials produced and extracted locally with certified sustainable production. Study and know the origin and destination of materials, where they come from and where they are going.

#### Potential strategies to be implemented:

- Wood or bamboo (La Cotinga, etc.) in structures. These two materials can be produced locally and have a positive carbon footprint when their extraction is certified.
- Use nearby materials and foster naturally produced materials such as mud, stone, or bricks and avoid as much as possible any materials with a strong ecological impact such as fossil fuel derivatives (plastics, asphalts, etc.).
- UWC sawmill and workshop. Use non-native forest instead of native forest as an opportunity to extract wood for potential medium-term campus infrastructure and as a parallel business model.

### 4.b.ii Include nature as an element in infrastructure

To have a nature- and environment-based campus, all parts of it must be related to nature.

#### Potential strategies to be implemented:

- Create infrastructure that is well-adapted and visually and physically related to the landscape and natural surroundings.
- Promote and integrate live and/or regenerative architecture that permits integration of natural systems into the proposal.
  - Materials based on fungus and living beings are currently being used in construction. These technologies are becoming increasingly advanced and may be of interest for some elements on campus.
- Plan the landscape to have many places in nature such as sites for meetings, learning, and experimentation.





# 4.c. Reduce and visibilize infrastructure consumption and maintenance

According to the infrastructure life cycle analysis, the ecological footprint of energy consumption during the infrastructure's useful life tends to be less than the footprint embedded in its production or demolition. However, good management of infrastructure use is strategic for the school because of its pedagogical importance and the importance of transparency, and for serving as an inspirational model for future generations.

## 4.c.i Bioclimatic strategies and passive acclimation

Design infrastructure according to criteria that minimize its energy consumption needs as much as possible through the structures' spatial configuration (shape, function, and orientation), keeping in mind their solar exposure, natural ventilation, natural insulation, etc.

## 4.c.ii Water management

Water is one of our planet's scarcest resources and the school has to be exemplary in the way it consumes, treats, and manages it. It should implement systems for rainwater catchment, storage, and use and consider and design a system for separating and treating grey and sewage water for irrigation as well as potential equipment and proposals for capturing environmental humidity.

Potential Partnerships: WaterGen, Hidrogeotecnia, Global Water Partnership, Agua Tica

## 4.c.iii Energy

Promote renewable energy sources (solar, wind, water) with both external providers and self-generation. Proper, exhaustive measurement and visibilization of energy use will be essential for learning from the proper use of the infrastructure and its consumption.

Example: Humboldt School energy use  
Partnerships: Ad Astra

## 4.c.iv Mobility

It is already a reality that we must design our mobility systems to be clean and consume as little as possible. For this, we need to focus on various strategies: mobility to and from campus and mobility on campus.

### a. On campus

Promote mobility with vehicles that use human traction (bicycles, skateboards, etc.) or batteries.

### b. Off campus

Electric vehicles are becoming increasingly common. To have modern infrastructure, install charging points for electric vehicles and leave the installation prepared for future expansion.

## 4.c.v Waste management and organic production

Think of the campus as a potential vegetable producer, including all phases from production to waste management. We might be interested in having lightweight infrastructure for these uses (recycling and waste management labs/centers, greenhouses, gardens, etc.) that can be activated and used by campus users.



# 4.d. Implement infrastructure that learns and teaches

Our infrastructure should be one more agent in the learning community and this diverse ecosystem. It should include measures and actions that permit, on the one hand, evolving and adapting to new realities as they appear, in collaboration with their inhabitants, and, on the other hand, establishing relationships with other organizations and learning from the local context and its knowledge and ways of doing.

## 4.d.i

### Situated knowledge

Encourage the inclusion of adapted local ancestral techniques and promote local artisanry and industry. Establish relationships with these nearby guilds and include them in the infrastructure creation tasks and pedagogical programs.

## 4.d.ii

### Learn from ourselves. Critical infrastructure

Think of the campus in terms of pedagogy: what can be learned from it and what can it learn?

#### 1. Campus in Beta.

Think of and design the campus in several implementation phases, as a campus half done. Move there with only a few completed buildings and live on it while building, inhabiting the landscape in Beta. Promote programs with similar systems.

Examples: Construction of furniture, platforms, pavilions, etc

#### 2. Traceability & labeling

Implement a system and method for traceability, monitoring, and labeling of the construction materials and elements.

Examples: Plans available to everyone, student participation in construction.

#### 3. Visibilization of consumption and related programs.

Plan the energy systems with elements that show the resource consumption of the building, etc. Foster educational programs about this. Learn together to build the future.

## 4.d.iii

### Learn from others.

### Environmental management and certifications

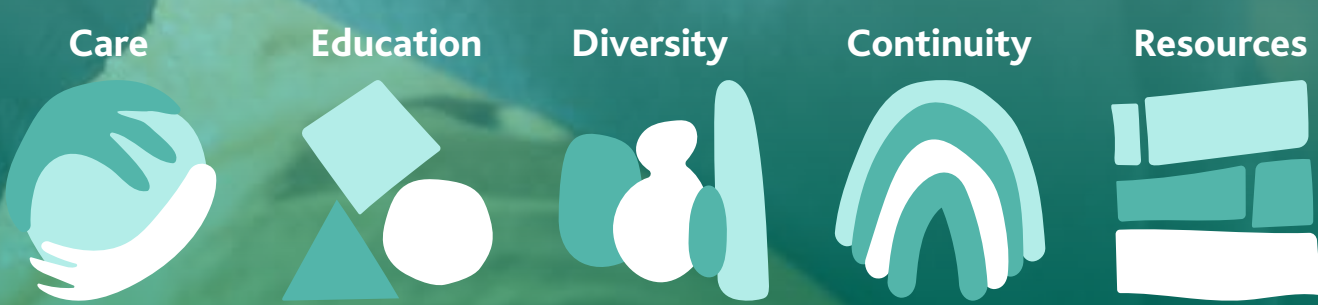
Seek certifications to learn how to be more ecological and cleaner. Observe what is being done in other places. Use tools and services that show and visibilize the ecological footprint of our infrastructure from its construction.

1. Create a sustainability committee/team to monitor the process.

2. Use environmental management tools (Susty, ISO, Building Transparency).

3. Obtain certifications (PBAE, Carbon-neutral, RESET, LEED, BREAM, etc.).





# 5. PARTNERSHIPS AND COMMUNITY ENGAGEMENT

A sustainable future intrinsically implies working in collaboration with others. The quality of our partnerships, collaborative work methodologies, and relationships with different communities will determine the type of impact we will have. UWC Costa Rica enjoys being an educational institution that in turn comprises a global movement, so its networks are extensive, diverse, and rich in knowledge. This maximizes its scope and potential for bringing about regenerative change locally, regionally, and ecosystemically.

In addition, the school should work toward creating new academic and educational imaginaries capable of overcoming the sectoral and compartmentalized approaches that have predominated up to now. We need perception shifts and methodologies centered on dialogue of knowledge and transdisciplinary cooperation. These manifest in the rise of alternative epistemological currents that encompass all the complexities of nature-society relationships.

Also important in reaching greater balance and wellbeing will be to look to ecological, ancestral, Indigenous, feminist and local wisdom as sources for learning.

This action line underlines the need to work in partnership, cooperation, and knowledge- and resource-sharing with communities, movements, organizations, institutions, and governments.

Mention is made below, and in connection with the Matrix of Contacts document (Annex I), of the school's internal and external stakeholders whose existing or potential roles might be considered for determining their involvement in different projects, action areas, or sharing.

Although some examples are given to illustrate the partnerships, the Annexes must be consulted while reading this summary.

## Actions:

### 5.a Establish, transparent and sync-up alliances



# 5.a. Establish, transparent and sync-up alliances

## 5.a.i Define criteria and categories (or types of collaboration) consensually

1. Revise the ones that have already been made or are being used.
2. Work with different school groups (Development, Project Coordination, General Services, DEM, etc.).
3. Conduct an institutional Stakeholder Analysis.

Define and order according to levels of participation, interest, and influence in a given project.

## 5.a.ii Facilitate accessible and open databases

Have open platforms with defined and shared criteria for entering new contact and partnership data, etc.

### Best practices:

#### 2030 Agenda Partnership Accelerator:

A collaborative initiative of the United Nations Department of Economic and Social Affairs and the Partnering Initiative, primarily, whose goal is to accelerate effective partnerships for advancing and supporting the Sustainable Development Goals.

#### SDG Partnership Guidebook:

A practical guide to building high impact multi-stakeholder partnerships for the Sustainable Development Goals.





# Establish, transparent and sync-up alliances

## 5.a.iii

### Partnerships and exchange

#### 1. UWC community:

- Students, teachers, staff and families
- Alumni and global UWC community

#### 2. Neighboring communities (San Isidro and Santa Ana)

- Companies, organizations, and interest groups (ecological, social, labor, cultural, etc.)
- Braulio Carrillo National Park

#### 3. Global movements (Zero Waste Movement, Global Circular Design Movement, Ecofeminismo, etc.)

#### 4. Local and international Indigenous communities and organizations

#### 5. Government organizations

- Ministries and secretariats (MEP, MINAE, SINAC)
- Climate Change Directorate
- Join country efforts on this topic.
- Municipal governments and mayors' offices
- Integral development associations

#### 6. International organizations

Global agencies and programs (UNEP, etc.)

#### 7. Formal and informal educational institutions

International and San Isidro primary and secondary schools

Informal learning centers

#### 8. Scientific research institutions in the region and the world:

Local universities (EARTH, UCR, UPAZ, TEC, UNA)

Biological stations of interest (OET, Cotinga)

#### 9. Non-governmental organizations

#### 10. Specialists (relevant according to the projects)

#### 11. Research and fieldwork with/in institutions or similar projects

#### 12. Private sector

With interest in participating in and/or sponsoring sustainability-related educational projects

#### 13. Local and social entrepreneurialism

#### 14. Suppliers (local and non-local)

#### 15. Open source communities

for promoting transparency, free access to data, products and technologies

#### 16. Sustainability and learning communities

Global Eco Village Network - (Greening Schools)

Ecoschools

## 5.a.iv

### Imagine new partnerships

As studies, projects, and prototypes are developed, think of new opportunities to expand on networks and new and unexpected organizations.



# Next Steps

It is critically important for UWC Costa Rica to review and carefully analyze these proposals to identify: the **teams needed** for working on them, **time enough** for implementing them according to the school's timelines, the **actions that are already being implemented**, a matrix of **priorities** (within the school and with regard to the institutions, the international network, the Board, etc.), and **available budgets**.

## May 2021 - September 2021

1. Presentation, feedback and clarifications of the document.
2. Disseminate and communicate the Sustainability Framework in the school.
3. Follow up on the architecture action line (fast track).

## September 2021 - November 2022

1. Search and recruitment of Sustainability Team/Coordinator
2. Revise plan, set priorities and timelines for teams
3. Detailed planning of each of the action lines
4. Parallel implementation of sustainability experiences

## November 2021 - July 2022

1. Sustainability Team/Coordinator to be assigned and begin working
2. Assign work teams or "champions" for different action lines
3. Revise plan, establish priorities and times dedicated per team.
4. Exhaustive planning of each action line.
5. Parallel implementation of sustainability experiences

## August 2022 - July 2023

1. Implement and revise plans, learning from past experiences
2. Parallel implementation of sustainability experiences
3. Programmatic repetition



# Background

In September 2020 Lorena Silvestri contacted the consultants, who were sent the project request form prepared by UWC Costa Rica for proposing a work project in accordance with UWC Costa Rica guidelines.

Working on her own, Sofía Quirós prepared [this proposal](#) and for their part the Zuloark team (comprised by Juan Chacón and Julia López Varela - see their bios) [proposed this plan](#).

Both Sofía and Zuloark, though without knowing each other, proposed the need to create an expanded consulting team to bring together the expertise needed for addressing the challenge specified in the abovementioned project request form: local knowledge; experience in educational projects, architecture and infrastructure; experience in design methodologies and sustainability work; and knowledge of UWC's goings on. The team needed to be multidisciplinary and diverse (in nationality, a Costa Rican member being a *sine qua non*, and in gender). Sofía and Zuloark made an immediate connection and formed Ultrazul as the SPL (Sustainability Project Lead).

Together they reelaborated their proposal, proposing a work structure and the methodology specified below.



# Process Methodology

A six-month (November 1, 2020 - April 30, 2021) process was proposed with different actions:

## Design of a work process

Preparation of a plan for tackling the assignment according to the school's needs. Creation of a timeline, work scheme, schedule of meetings and reports, data recording system, index, minutes, weekly summaries, etc.

## Coordination and work with other teams of experts

(expanded teams) and moderation of design and discussion meetings according to challenges and goals by area.

## Pilot program

Co-designing of a prototype for implementing at different scales the lessons learned in the first months of work until their testing in February. This point was subdivided into the following:

**A prototype** (including all the aspects analyzed and co-created with the school's agents, neighborhood, neighbors and strategic partners such as the architects of Estudio Zurcher Arch). This was to be done during Service Week to work with students on putting into practice decisive aspects for UWC Costa Rica's future Sustainability Framework.

**Guidelines** for the campus's spatial and architectural Master Plan, including design and discussion meetings with Zurcher to include natural, efficient, and sustainable systems in their project as well as work meetings with the teachers and other onsite fieldwork (in Santa Ana and San Isidro).

## Deliverables

A framework of guidelines for activating the culture of sustainability in UWC Costa Rica and serving as an example for the rest of the UWC network: project replicability.





# Timeline

The timeline proposed and consensually agreed with UWC Costa Rica included the following phases and actions:

## Proposal design

(October 2020)

- Project scope and objectives
- Content ideation
- Adaptation of the proposal to the project request form prepared by UWC Costa Rica
- Coordination meetings
- Budget and content adjustments

## Organization and coordination

(October 2020 to April 2021: throughout the project)

- Agenda and timeline, documentation, design of work meetings
- Internal coordination meetings with different counterparts

## Work scheme design

(November 2020 to February 2021)

- Work framework focusing on the environmental, technical, and energy sustainability of the architecture and the surroundings; participation, community, and design; management and governance.
- Meetings, interviews and work meetings with internal and external stakeholders, including the educational team, key teachers and students, CVG, Zurcher, Ad Astra, and key representatives of the San Isidro community.
- Mapping of similar experiences.
- Research and compilation of information in all the areas, topics, teams, and inspiring references.
- Schematic reports and design of a conceptual diagram of the project.

## Activity documentation and design. Preparations for the trip to Costa Rica (Zuloark) and fieldwork

(January 2021)

- Development of proposals and activities with a focus on the environmental, technical, and energy sustainability of the architecture and the surroundings.
- Participation, community, and design.
- Management and governance: research.
- Design of Service Week and the February trip activities.

## Prototype

(February 15-19, 2021)

- Development of the pilot program based on the designed activities.

## Final design and production of the plan and deliverables

(March and April 2021)

- Review and adaptation to the technical specifications, Project Request Form, depending on the evolution of the process to date and the real implication of third-party agents.
- Baseline of local and global sustainability practices.
- Compilation of sustainability recommendations for all dimensions of UWC Costa Rica's life based on the identified opportunities.
- Design and development of deliverables and reports.



# Service Week & Outputs

One of the process's essential tasks was prototyping with students, conducting an onsite experiment to put to the test the sustainability diagnostic, studies, desires, and challenges and testing an experience in the new San Isidro campus with students.

We worked for several months in steady coordination with Co-curricular Director Nancy Solís to unify views and give students both an enriching experience and interesting material for the Sustainability Project Lead / Ultrazul team. The Outreach team was also essential for this prototyping. We worked with Lorena Silvestri and Michelle Tenorio (Outreach and Innovation) on designing the week's logistics (transportation, food, materials and waste management, internal regulations, security measures, etc.).

The week was seen as being one of prototyping and collective design: students were part of a "UWC Costa Rica sustainability framework design collective." It was a kind of educational camp of thinking, discussing, producing, and concluding. The learning process went through several phases and necessarily ended with some ground rules, guidelines for establishing the framework for guiding the school's sustainability.

The main goals were for students to:

- Reflect on the site, think about the new campus and act on it. And do the same on the current campus.
- As much as possible, mix with the San Isidro community.
- Develop a skill.
- Break down what sustainability was for them, for their lives, the future, their studies, the ecosystem, etc.
- Address the topics of waste management, diet, ecology, biodiversity, materials, circular economies, recycling, second lives, pedagogy, ecosystems, climate emergency, care and wellbeing.

Service Week consisted of working and living with the students on the two campuses (Santa Ana and San Isidro), developing activities for applying a sustainability perspective to their lives.

The first day kicked off with a group meeting with talks on the topic given by Professor Alonso Muñoz from the University for Peace (click here to read about his master class) and sustainability project expert and architect Juan Chacón from the Zuloark collective (click here to read about his master class), as well as a series of group discussion and challenge-identification activities.





To ensure a full experience for the students, teams (of 10-20 people) were rotated so that they were in San Isidro as well as in Santa Ana at some point during the week (ensuring that everyone spent one night in San Isidro). The following teachers participated: Jeff Norris (key collaborator and co-designer of content and without which the week would not have been a success), Mateuz Jurecki, Jessica Dubie, Justin Voorhess, and Rolando Cubero. The rest of the week revolved around three work tracks:

## Makers

These were builders who worked with their hands and applied new knowledge through creative design and construction.

There were two groups, each of which worked on two different projects: a recycling center on the Santa Ana campus and different interventions in learning spaces and trails in the forested area of the San Isidro campus.

## Detectors

These were explorers. There were three separate groups that rotated focus areas and different activities (all in San Isidro). These activities were:

- Preparing a **biodiversity inventory**: learning the surrounding ecosystems and recording the biodiversity in the explored area, providing and adding different species to a common database, monitoring camera traps and recording sounds in nature.
- **Mapping the San Isidro town**: investigating and walking around it, detecting key points, businesses, reference sites, organizations, and projects; mapping findings and investigating those that were especially interesting or that could serve as potential future activities or projects with UWC Costa Rica.

- Mapping of **emotional routes**: being in nature and connecting with it on the San Isidro campus; recording the emotional experience (drawing, writing, and/or voice recording) and locating it to determine specific key points for including on a collective trail map.

## Harvesters

These were the narrators or journalists. They recorded the week's experience, compiling information through observation, interviews, and the writings, drawings, and audio recordings, photos, videos, etc. They prepared a chronicle of the activities and people's perspectives, interweaving them with topics and ideas on sustainability, reciprocity, community, and wellbeing.

It is important to point out that the 360 Sustainability Experience framework was created from this pilot experience, and that the Immersive Residency Day Experience curriculum was designed within this framework.





# Lessons & Data

## Service Week Lessons

- A pedagogical success: the week's diverse topics and activities were synchronized and connected, very localized and in line with the general framework.
- The emerging activity development capacity, empowerment, independence, and maturity of the students: their involvement and enlistment were gradually encouraged.
- The creation of common moments (among roles) is essential for aligning activities within these types of schools and experiences.
- Logistics are a pending matter: the teams, suppliers, and coordination need to be reinforced.
- Care activities by student teams (production and reproduction) would have to be included. Service Week should be a service to the community.
- UWC as a care bubble: empower more and have students participate in that care.
- It was confirmed that students wanted to "make with their hands." The Maker track needs to be strengthened more: ideate the spaces, think about them, and build them.
- It is easier to learn and apprehend what is tangible.
- Students' attitudinal change: go from depending on instructions to solving problems autonomously.

## Tools used during the process

- The co-design and brainstorming meetings with various agents (CVG, Zurcher, internal SPL/ Ultrazul, with the school, etc.) used creative aids that facilitated people's participation, even working remotely.
- A video was produced for working with UWC Costa Rica teachers and a dynamic was used, accompanied by a survey, for thinking together on sustainability.

- Every week the SPL/Ultrazul team sent UWC Costa Rica (Mauricio Viales and the Outreach and Innovation team) a report on the progress to date. These documents were called "Fridays for Future".
- SPL/Ultrazul organized a prospecting and study trip to the La Cotinga Biological Station (on the Osa Peninsula) to collect information on pedagogical experiences in nature and sustainable construction materials.

## Some additional data

During those six months, SPL/Ultrazul held the following number of meetings or work and design days with several departments, areas, or agents:

Management (M. Viales) and Outreach and Innovation (Lorena Silvestri and Michelle Tenorio):	<b>38 meetings</b>
Co-curricular director:	<b>12 meeting</b>
Ed. team:	<b>7 meetings</b>
Development and Project Coordination:	<b>7 meetings</b>
Management team:	<b>2 meetings</b>
Oversight Committee:	<b>2 meetings</b>
CAS and students:	<b>9 meetings</b>
DEM:	<b>2 meetings</b>
Teachers and Jeff Norris:	<b>13 meetings</b>
CVG:	<b>6 meetings</b>
Zurcher Architects:	<b>7 meetings</b>
Ad Astra:	<b>3 meetings</b>
UWC kitchen team:	<b>4 meetings</b>
Third/various parties:	<b>20 meetings</b>
Visits to places:	<b>8 sessions</b>
Different presentations (staff, Board, etc):	<b>4 presentations</b>





# Annexes

This chapter consists of four summaries of the annexes: documents, readings, and research that have nurtured and accompanied the project. Their reading is recommended (and even mandatory) to fully understand the Sustainability Framework and implementation of its action lines.

## 1. Matrix of Contacts

This document includes relevant information on people or organizations that we've worked with or that we recommend working with to implement the Sustainability Framework and action lines, along with a brief mention of why they are partnerships of interest for the project.

## 2. Miscellany

Database with varied information on agents, projects, and references that have been consulted during the process. Inspiring readings, studies on topics concerning sustainability (ecology, resources, materials, traceability, energy, waste, management of garbage and food waste, etc.), books, articles, podcasts, videos, and a long etcetera of related links.

## 3. Organization of Google Drive folders

These folders contain the record of SPL/Ultrazul's process from the start of work. They are structured as follows:

### **Folder 01. Documentación UWC Costa Rica**

contains the information the school provided to the SPL/Ultrazul team on Ad Astra, Zurcher, Co-curricular, DEM, and Outreach.

### **Folder 02. Coordinación del proyecto**

Contains the minutes of all the meetings, presentations produced by SPL/Ultrazul, and Fridays for Future.

### **Folder 03. Trabajo**

It has the bulk of the project, organized into different folders according to the different agents with which we worked. It also contains the folder with the final document (00. Trabajo entregables), structured by chapters (some editable and others protected).



