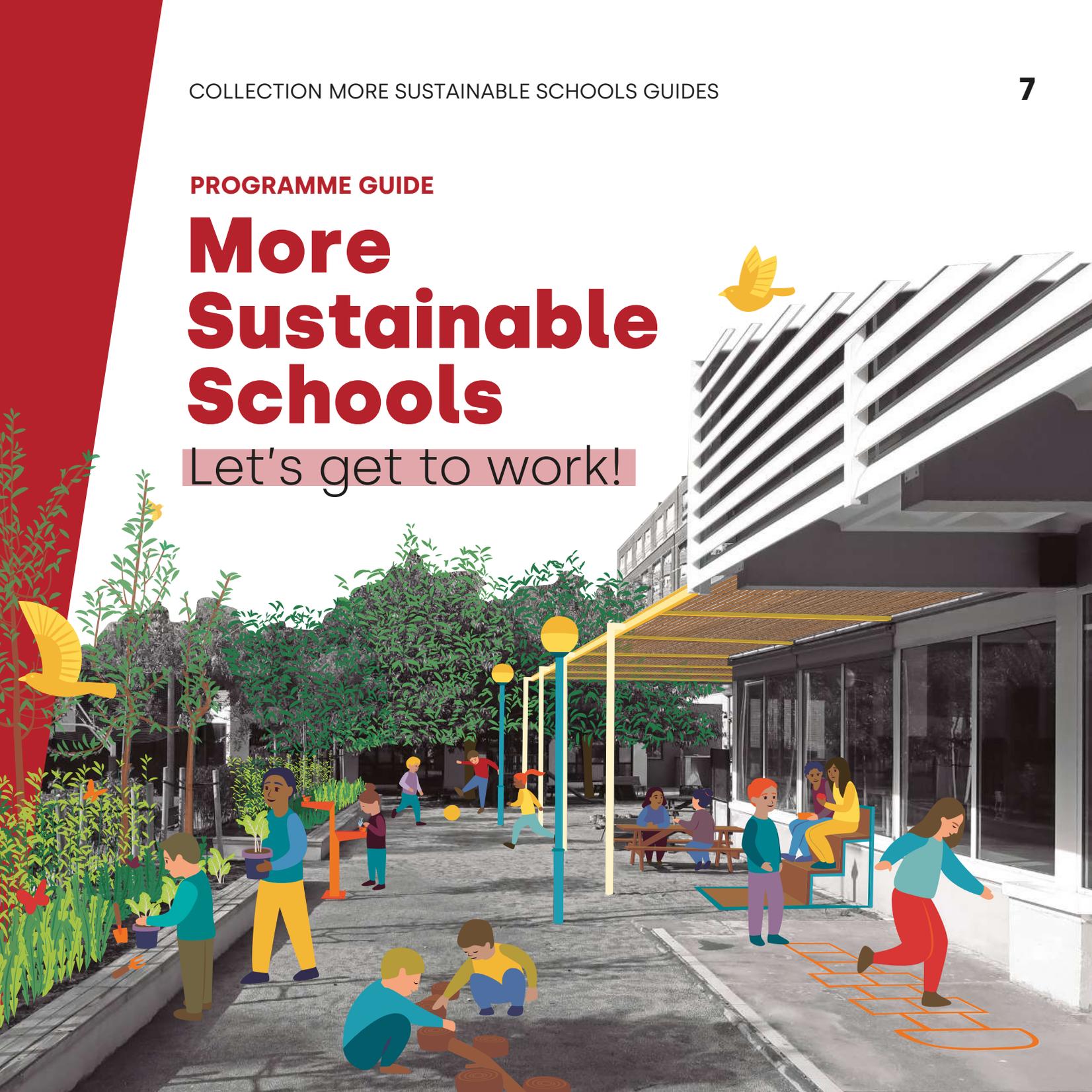


PROGRAMME GUIDE

More Sustainable Schools

Let's get to work!



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More Sustainable Schools

Let's get to work!

BARCELONA, 2020



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PART ONE

INTRODUCTION

**"The greatest sin
is to do nothing because
you can only do a little."**

Edmund Burke
(1729-1797, Irish writer)



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What and who this guide is for

01



The aim of this guide is to serve as a working instrument for teams at **educational centres that want to pursue an education for sustainability.**

It has been authored by members of the Barcelona More Sustainable Schools team with centres in the network in mind, in particular those participating for the first time.

The mission of the More Sustainable Schools programme is to offer assistance and support to educational centres that **want to make a change** that go beyond one-off actions and topical weeks, **with a view to adopting an approach at the centre to sustainability.**

Experience demonstrates that to embark upon this transformation, goodwill only goes so far. The work at educational centres to incorporate sustainability criteria and to perform actions to promote it are more likely to succeed when they receive stable support from a network and expert guidance.

To this end, **the More Sustainable Schools programme offers advice and resources as part of a shared work network** that shares the purpose and harnesses mutual learning, exchanging experiences and placing value on the

best practices of centres. **The network helps to create a shared culture of sustainability** and strengthens the commitment to making progress together, connecting overriding sustainability issues with practical, day-to-day issues that facilitate the transformation of school life.

When preparing this guide, the More Sustainable Schools programme had already accumulated 20 years of experience and remained committed to **transforming educational institutions to face the challenges posed by sustainability and the climate emergency**, accompanying all centres embarking on this journey.

The programme's resources are available to teaching staff, who tend to be at the forefront of the change, but also to those responsible for administration and maintenance, cooks and dining room staff, families and, as goes without saying, students. In fact, **becoming a More Sustainable School with an integrated centre approach involves the entire educational community.**

This is the third guide published by the programme. As was the case of its predecessors, this guide aims to enhance

the conceptual framework and address its contents in a more systematic and comprehensive manner, drawing on the experience of previous versions.

The guide is divided into two parts.

PART ONE explains what and why it is important that a school commits to an education for sustainability with an integrated centre approach.

After this introduction, **point 2** focuses on the **concept of sustainability** and the role that education plays, while **point 3** introduces **what exactly More Sustainable Schools are**.

PART TWO describes what becoming a More Sustainable School involves and sets out sustainability criteria for the different areas of schools.

Point 4 proposes **five interconnected areas of action** which essentially respond to the questions **why? what? how? where? and with whom?** the educational centre can become more sustainable. For each area, a suggestion is made of how to proceed, questions are posed to encourage reflection, and best practices at schools who have already embarked upon the transformation are presented.

Point 5 explains how to get to work in these areas and progressively make progress, developing successive projects, as part of a **cyclical process consisting**

of five phases: motivation, diagnosis, decision, action and assessment.

Point 6 draws on the moments and tasks that **the centres in the network share** over the course of a school year and lists the **resources at their disposal** to assist them with their progress over the years.

As there is no one way of making a centre more sustainable, the guidelines provided here are not the be all and end all. Their aim is to **inspire and encourage reflection and debate at each centre** to define its own pathway to sustainability, adapting the guidelines to the context of each situation and the vision of change of each educational community.

As well as a **guide**, this book also offers **explicit recognition** of the commitment, efforts and enthusiasm of the almost 500 educational centres across Barcelona, spanning all levels, over the past 20 years that have participated in the journey of the More Sustainable Schools network. This guide is dedicated to all centres, as well as those who join the network in the future, with the hope that it will serve them as part of their work to **educate children and young people to take informed, responsible decisions**, play their part as citizens of Barcelona and the world, and contribute to environmental integrity and an equal quality of life for everybody, both at the present and in the future.



Let's talk about sustainability

"The fundamental problem can be summed up as follows: the Earth is becoming too small for us, we are depleting its resources and it will be progressively more difficult for us to obtain them in sufficient amounts and we cannot continue with the expansion we had become accustomed to."

Ramon Margalef
1976



ONE EARTH

Just a few centuries ago, most people were born, lived and died without ever leaving their region. **The world seemed immense**; its horizons, infinite. This idea was supported following the European migrations to America: home to vast expanses of land, forests home to soaring trees, healthy herds of bison, countless resources... And if we turn our minds to the sea, the feeling of its sheer immensity combined with the unlimited abundance of fish was added.

Of course, the way we thought and lived, including our economic system, responded to this perception of the world. When Adam Smith wrote *The Wealth of Nations*, in which he suggested that growth could be infinite, in 1776, the Earth was inhabited by 800 million people and only Europe and South-East Asia were home to major population hubs: Australia and America remained quite empty, and in Africa, the slave trade had wreaked havoc.

Today, however, the **Earth has become too small for us**. We can travel from one place to another in just a few hours and can see the other side of the world from the comfort of our own homes. There are

no virgin lands or territories left to be discovered. We have cut down our huge forests. Bison are on the verge of extinction. Huge shoals of fish have been significantly depleted, and it is expected that soon there will be more plastic in our oceans than fish. Earth's population is on the verge of reaching 8 billion people. **From space, we have witnessed our blue planet as a speck on the black background of space.**

Now, **we are concerned about the Earth's resources** in particular non-renewable resources, as well as the quality of our air and water and the loss of our planet's wealth and beauty that

.....
Climate change is one of the most visible faces of this environmental crisis, but it is not the only one. We have altered more than 75% of the Earth's land, drastically decreased the surface area occupied by forests and one out of every eight known species is at risk of extinction. And in addition to this environmental collapse, poverty and social exclusion affect billions of people worldwide.
.....

disappear with the **landscapes** we destroy and the **species** that are being pushed into extinction. The **billions of people suffering from poverty** are a cause of great concern. The global pandemics that threaten our planet's populations are alarming. And **climate change** poses a threat that we ourselves have caused and that is proving to be so difficult to fight. We have realised that our way of conceiving and achieving the progress we desire **have seen us disregard their undesirable impacts.**

It is time for us to assume the major challenge of **making environmental conservation compatible with dignified living conditions for all of mankind.** That is what sustainability is really all about.

We must find the way of living **without destroying the bases or diversity of life**, guaranteeing climate conditions that make it possible for us to continue inhabiting the planet and managing resources in such a way that everybody's needs are satisfied, while leaving resources for the generations to come. We have to learn to **live without disregard for our future.**

.....
A change of path has become urgent. The roadmap to reach the end of the century with a tolerable climate involves making firm changes in a very short period of time (10-15 years).
.....

THE AVILITY OF BEING SUSTAINABLE

When it comes down to it, **sustainability** is all about: "The avility of being sustainable". In other words, sustaining the existence of mankind on Earth.

Sustainability is a way of looking at progress that **eradicates poverty** and achieves **a quality of life** for everybody **within** the planet's **ecological limits, safeguarding the bases of life.** These are two objectives that must be achieved **together and across all scales.**

If our aim is to work towards sustainability, then we have to understand the **two different faces**

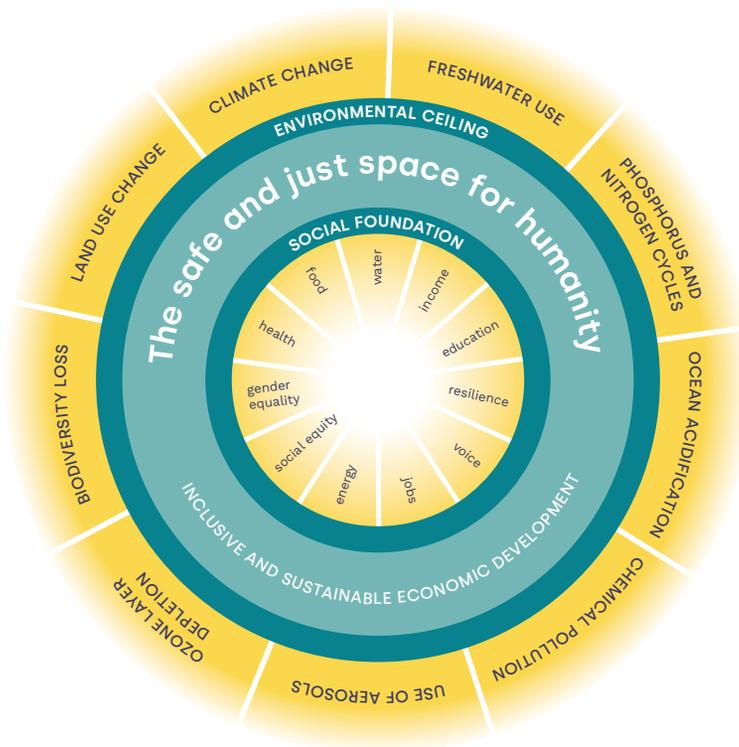


Pope Francis remarked in his encyclical *Laudato si'*: "There are not two separate crises, an environmental one and a social one; rather we are facing one single, complex socio-environmental crisis" (2015:139). Ban Ki- moon, the Secretary General of the United Nations (2006-2016), in his "Us, the people" speech at the 66th general assembly stated that we needed to "connect the dots between climate change, water scarcity, energy poverty, food security and female empowerment". "The solutions to a problem must be solutions for everybody", he said.



of the challenge and assume that we have to face both of them simultaneously. We must not seek economic and social progress disregarding the degradation of natural systems that are the essential support for life on Earth. Nor can we focus on resolving environmental problems without bearing in mind the needs of people for a dignified life. Mapping out the **problem properly in our minds is critical to ensure that our efforts do not lose focus.**

An image that can help us understand this is the image of a doughnut, which has a limit on both the outside and the inside, and represents the **fair, safe space in which humanity can prosper**, the foundations of which rest on the universal rights and the ceiling defined by the ecological limits of the planet. Below is the sustainability compass, which shows us the path that we have to follow.



The “doughnut” of sustainability

The “doughnut” proposed by British economist Kate Raworth (2012) sets out the ecological limits and requirements of human development. In 2009, the Stockholm Resilience Centre identified a number of “planetary boundaries”, which would place the stability of the planet at risk should they be surpassed. Three years later, Raworth suggested including “social boundaries” into the structure of the planetary boundaries, thus generating an environmentally safe space, compatible with universal rights and the eradication of poverty.

Talking about sustainability involves **accepting our limits**, which contradicts the economic theories on which our civilisation is based. We must take notice that we face a very important cultural obstacle here, as in our society, the idea of progress is connected to the idea of growth. As it is **impossible to indefinitely grow on a finite planet**, we need to radically reconsider the concepts of progress and prosperity. To keep thinking that we must grow forever to make the economy work is a major cultural barrier in the transition towards a sustainable society.

We face the collective task of **considering what is unsustainable** and constructing answers for the problems we face. The solution is not to project the 19th and 20th centuries into the future: that would be impossible. We have to learn to **live within the limits of our planet** and find a way of developing that does not compromise

the bases of life. **Living well without doing bad**, as the saying goes.

In 2015, the United Nations approved the 2030 Agenda consisting of 17 **sustainable development goals (SDGs)** with a view to eradicating poverty and providing food, water and energy to the ten billion people expected to be living on Earth by 2050. At the same time, **the Paris Agreement** established the goal of keeping the increase in the Earth's temperature to within 2°C, and to within 1.5°C, if possible. Both of these compromises are important, as they establish shared global objectives for most of the world's countries, although they are ambiguous in many areas, as tends to be the case when trying to reach a consensus between many different parties. We must employ a critical outlook and always give preference to the interpretations that are most consistent with the concepts of **ecological limits and social justice**.

.....

There is no magic formula when it comes to sustainable development: it is the commitment to trying to find ways to live better. Always keeping a fundamental difference in mind. According to the dictionary definition, to grow means "to increase the measure for assimilating or accumulating materials", while to develop means "to expand or achieve anybody's potential, to achieve a more complete, larger or better state". When something grows more quantitatively, it develops more qualitatively. Quantitative growth and qualitative improvement follow different laws. This is a very important distinction. It suggests that although there may be limits on growth, this does not have to be the case for development.

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BUILDING A CULTURE OF SUSTAINABILITY

The belief that there are no limits on growth is connected to other ideas, like the need to have new and better things every day to ensure our well-being, that technology and science are all powerful tools, or that Western lifestyle, based on the spiral of production and consumption, is the highest form of civilisation. And this is all rooted around the believe that mankind is a singular, privileged species, far removed from the environment we found ourselves in and destined to dominate the rest of nature.

Evolving towards forms of life that are sustainable requires questioning these principles and actively working on a new **culture of sustainability** in which we readdress the relationship of mankind with our surroundings, accepting the existence of limits and assuming that human development is not the same as growth. In our material plan, we **need to replace opulence with efficiency**, and in the mentality plan, we must **switch arrogance for prudence**.

The culture of sustainability must be a **culture inherent to a mature, responsible society**, which accepts limits and demonstrates solidarity between all its members.

To make progress with this cultural shift, unlearning is just as important as learning. We must critically readdress our established ideas, habits and lifestyles, looking for **new ways of approaching a common future**, getting involved in its creation, putting all our intelligence and creativity on the line.

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Progressively more people are aware of the change needed and accept that we all have a part to play. Young people, in particular, have raised their voice as part of the "Fridays for Future", initiative, led by Greta Thunberg.

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YOUNG PEOPLE AGAINST WASTE GENERATION

Are small changes really that powerful? They are, especially when we embark on them together. A total of 13 centres from the More Sustainable Schools programme met up in May 2019 as part of a demonstration at the Arc de Triomf in Barcelona, under the title “Avalanche”. More than 500 primary and secondary school children participated in this action, which aimed to raise awareness of the problem posed by waste generation and climate change. Older students gathered at the end of Passeig de Lluís Companys as part of a demonstration led by a pair of young people who made a giant ball of aluminium foil. This reflected the

sheer amount of waste that mankind generates. They rolled this ball down to Arc de Triomf, where primary school students were standing to create a human wall to stop it. To round off this action, the students came together as part of a flashmob to depict the dangers of climate change and the power of children and young people to stop it in its tracks. This symbolic act was particularly inspiring on account of the synergies created between the centres, the creative way in which the culture of sustainability was promoted and, most importantly, the leading role that young people played in its design and materialisation.



BARCELONA'S COMMITMENT TO SUSTAINABILITY AND CLIMATE ACTION

Like thousands of other cities around the world, at the turn of the century, Barcelona reflected in its **Local Agenda 21** the desire to make significant changes in the transition to a more sustainable city. The participatory process to create Barcelona's Agenda 21 culminated in the adoption of the **Citizen Commitment to Sustainability**. There have been two versions of this Commitment. The first (2002-2012) was revised and updated upon its expiry, when the current version was adopted (2012-2022).

The Commitment serves as a reference document for all citizens. In the framework of the Commitment, **anybody can pursue initiatives to contribute to achieving our shared goals**: each person, company, association and institution, everybody within their own remit can make the sustainability action plan their own. **This goes for educational centres too.**

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At present (2020), 1,500 citizen's organisations have signed up to the Commitment, voluntarily agreeing to work together to achieve the objectives through an action plan.

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Like any other citizen's organisation, obviously, but with added reasons on account of its educational mission.

In particular, Barcelona is staunchly committed to fighting climate change. The desire to make progress with this very important challenge was reflected in the **Barcelona Climate Commitment**, in 2015, as a result of a participatory process involving institutions from the More Sustainable Barcelona network. This commitment marked the start of three years of work to draw up the **Climate Plan**, an ambitious document prepared in a collaborative manner, which addresses the climate crisis from a comprehensive perspective across four strategic axes (mitigation, adaptation, climate justice and citizen's action) and involves all municipal spheres to achieve the objective of becoming carbon neutral in 2050. This strategic plan, approved in 2018, has been reinforced and gathered following the **Barcelona Climate Emergency Declaration**, adopted in January 2020 following a process of joint responsibility and reflection involving the City Council and local residents, as part of the Climate Emergency Board.

Over the course of this period, different **Climate Projects**, have been organised; these initiatives see different residents' organisations design and undertake specific joint actions. Several education centres have participated in some of these projects.

SOCIAL TRANSFORMATION VIA SERVICE LEARNING

Nursery schools are a privileged space for social transformation, where synergies can be created between families, children, professionals and other groups. In this case, the “We have a cure” project is a line of work pursued by the **Escola Bressol Llar d’Infants** that include different service learning projects (ApS) developed in cooperation with different

institutions. This ApS project has been developed in cooperation with AREP (Association for the Rehabilitation of People with a Mental Disorder), as part of which seven people visited the school on a weekly basis and performed a variety of tasks, including allotment workshops for children aged 2 to 3 at school and helping to prepare the fruit served to boys and girls during morning breaktime. Furthermore, an ApS project was undertaken in cooperation with the La Ginesta Special Education Centre, to manufacture toys and other utensils, handmade rugs as well as imparting practical cooking activities. Finally, ad-hoc collaborations and sewing workshops take place with senior citizens from the Uszheimer Foundation. These ApS aim to promote the values of solidarity, respect for diversity and fighting stigma that often accompany people with a mental disorder or intellectual disability.



THE ROLE OF EDUCATION. CHANGING TO SURVIVE

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We must build a new culture
of sustainability and education
could be the key.

.....

Accepting the challenge to move towards a new culture requires that we rethink educational responses to the socio-environmental crisis and assume, with conviction, the need to **educate people to be the engines for change** and provide them with the skills they need to take conscious action.

To contribute to a tangible and relevant cultural change, a traditional education can only go so far. Education for sustainability must replace education designed to perpetuate an unsustainable system. If the traditional education system has relayed knowledge that we have blindly accepted, education for sustainability must be accepted to encourage us to rethink, commit ourselves and innovate. We need **education that places us in front of challenges, that gives us the skills to contribute to overcoming them and that makes us responsible for being an active part of the solution.**

It is all too clear that responsibility for conceiving responses to the socio-environmental crisis cannot be assumed exclusively by the education system. However, education can be a lever for social change and the educational centre **a space for socialisation towards a better future.** Each centre is responsible for considering what their contribution will be, and the Administration, in addition to passing appropriate policies in the different areas, is responsible for encouraging educational teams and providing support for embarking on this transformation.

The experience of the centres in the **More Sustainable Schools network** demonstrates the possibilities that primary schools and secondary schools have to innovate and implement changes and best practices for a brighter future. Around the world, **millions of centres immersed in similar programmes are working towards the same objective.**

.....

Educational change is a strategic
objective. What type of education
can be offered to children and
young people for them to face the
uncertainties, risks and pace of
global change?

.....

The More Sustainable Schools programme



EDUCATION FOR SUSTAINABILITY: TRANSFORMATIVE AND SKILLS-BASED

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Education for sustainability must encourage changes that provides for a fairer, more sustainable society for everybody. This is a **transformational type of education**, that rather than promoting specific conduct and ways of thinking, focuses on strengthening critical thinking skills and exploring possible actions. It is not about offering more information; rather, it focuses on the skills that will help people to effectively participate in a progressively more complicated world and to contribute to its transformation.

Education for sustainability is aimed at providing the knowledge, skills, values and attitudes needed to allow people to make informed decisions and take responsible actions to ensure environmental integrity, economic feasibility and a fair society for the generations of today It promotes skills like critical thinking, an understanding of complex systems, imagining future scenarios and decision-making in a participatory and collaborative manner.

Unesco, 2014



THE INVOLVEMENT OF EDUCATIONAL CENTRES IN SUSTAINABILITY

To encourage sustainability, **educational centres perform a role like no other**, they are responsible for educating young people to become active members of the community in the pursuit of a more sustainable society. As part of their educational responsibilities, they can help students to become able to understand the impact of each person's actions on the planet and society, while their day-to-day actions can define and provide an example of what it means to live more sustainably and become a role model.

Progressively, more educational centres recognise their important role in creating and extending this new culture and **are committing to educating in sustainability and becoming a community of innovation** that explores more sustainable forms of life.

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This education has the revolutionary purpose of transforming the values that currently serve as the basis for our decision-making process (and foment human and environmental degradation) into new values that support a sustainable planet in which all people lead a dignified life. This clashes with the traditional purpose of schools to conserve the social order reproducing the rules and values that currently guide the decision-making process.

Robert B. Stevenson, 2007

.....

Helping a school adapt to a more sustainable world will require reviewing old practices, which were perhaps useful in the past, but that are no longer useful in the present and are unlikely to be in the future.

This is a form of transformational education, which looks at the content, methodology and outcomes of learning, and requires an **integrated centre approach** that involves the entire community.

Against this backdrop, the role of teachers and leadership teams is critical. In most cases, they are the ones who promote innovative educational processes that make centres more sustainable and who lead the mini revolution that this entails. However, putting the theory into practice is no mean feat. And really adopting an integrated, participatory approach is **impossible without making an effort**.

That's why assistance programmes are necessary, as part of which instruments aimed at providing encouragement and motivation are combined with the services and resources aimed at **providing teaching staff with a solid support**. This is the role that the More Sustainable Schools programme aims to play.

A SHORT HISTORY: FROM THE SCHOOL AGENDA 21 TO MORE SUSTAINABLE SCHOOLS

The “School Agenda 21” programme, a precursor to More Sustainable Schools, was conceived with a view to **education contributing to sustainability** recognising the role that schools play as agents of change in the city. The first edition was held in March 2001, the same month that the Citizen’s Sustainability Board launched the participatory process that would, one year later, lead to the adoption of the first Citizen’s Commitment to Sustainability.

It translated the idea of an educational proposal that acted in line with the process of preparing the city’s 21 Agenda. Through the programme, **educational communities became involved in a citizen’s movement** aimed at diagnosing, providing solutions and assuming commitments to make the city more

sustainable, starting with the surrounding area, i.e. the education centre itself.

Primary schools and secondary schools are considered a major element in the life of citizens, not only because of the education they impart to students, but also because the **multiplier and exemplary effect** this has on other groups in the education community: families, non-teaching staff, suppliers, neighbours, etc.

At the same time, it was understood that an **ambitious process of change and continuous improvement at schools**, like the one we were proposing, would be impossible without major efforts from teaching staff. Therefore, as part of the programme, the elements aimed at providing encouragement and motivation were combined with those aimed at **offering consistent support** to teaching staff.

As a result, as well as serving as an opportunity for civic involvement, the Schooling 21 Agenda became a tool for promoting the **innovative projects** in terms of environmental education that had been launched at different schools across the city over the years.

The programme **was highly regarded** and the number of centres that signed up quickly grew across the entire city.



What's more, it served as inspiration for implementing similar programmes in other Spanish cities, as well as in Italy, Portugal and Chile. In 2010, it was awarded the **Dubai International Award for Best Practices to improve the living environment**, as part of the UN Habitat programme.

Over the years, **the programme has grown** and evolved without losing sight of its initial purpose. Following the approval of the second Citizen Commitment to Sustainability, the programme took on the name **More Sustainable Schools**, to emphasise the transformation of centres in the network towards sustainability. In effect, each centre represents a “more sustainable” (or less unsustainable) context than the surrounding area, where best practices and a climate of shared values promote individual responsibility and decision-making amongst members of the educational community, including families. **Each centre in the network becomes an innovation community in which it is possible to trial processes and solutions on a small scale**, demonstrating and disseminating new, more sustainable ways of doing things.

Twenty years since its conception, **more than half the educational centres in the city** now actively participate in the More Sustainable Schools network.

The programme team has grown and the resources multiplied and diversified, with the climate emergency and actions for fighting it having become central issues.

More Sustainable Schools is a programme that offers **support with the educational transformation of centres from the perspective of** sustainability, generating improvements both in learning and in the educational community.

The programme aims to **comprehensively change each centre**, as part of the collective progress of the **network** of centres and the transformation of the **city** guided by the **Citizen Commitment to Sustainability**.

More Sustainable Schools is

- ✓ a participatory process,
- ✓ an opportunity for innovation,
- ✓ a commitment to action.

The **programme has consolidated its position and the results achieved are promising**. Recent research performed by the University of Barcelona ¹, which interviewed former students from centres participating in the network who are no longer at school, reflected a **general interest amongst former students for sustainability matters**, and a connection between the degree

¹ ELIAS, M. *et al* (2018)

of interest and the practices of young people in their daily lives. Furthermore, the best sustainable practices are associated with forms of **participation and activism**. One of the strongest conclusions of this research was the importance of having multiple socialisation agents at the same time and the **central role that the family and schools play together** as socialisation agents. To this end, it can be seen that in highly vulnerable environments, **educational centres play a significant role** in cultivating the values of sustainability and can make up for the absence of best environmental practices in the home and become key agents to reverse flawed starting points.



TECHNICAL TEAM OF THE MORE SUSTAINABLE SCHOOLS PROGRAMME



We strive to **accompany centres** who sign up voluntarily: we understand that, precisely because the change is so important, you cannot force it through.



Although there is a long way to go to transform centres, we have also come a long way. To this end, it is worth recognising that we should **always start with what is already working, which in many cases, is quite a lot.**



We are guided by the principles of **collaboration** and positive, constructive dialogue.



We are **always on hand to help.**

WHAT DOES THE MORE SUSTAINABLE SCHOOLS PROGRAMME PROPOSE?

More Sustainable Schools is a municipal programme that is committed to providing a **consistent and stimulating offer of support** to the city's schools in order to help them **sustainability at the heart** of their work.

The **VISION** of the programme is of a city where all educational centres **educate people to be aware of themselves, their surroundings and the limits of the planet**, people who feel responsible for finding the way to ecologically feasible, socially fair and economically effective development to distribute wealth. They **are active and creative people, good at clarifying values and interests, imagining alternatives, negotiating solutions and taking part in their implementation.**

The **MISSION** of the programme is to **help** schools to incorporate sustainability criteria into all areas of the curriculum, adopting a **comprehensive focus**. With this purpose in mind, it contributes to the following aspects:

- ✓ **Develop a critical approach** to what we do.
- ✓ **Broaden our horizons** as regards the possibilities of what we can do.

The More Sustainable Schools team helps teaching staff to reflect on what is not working and to take action to change this, **putting real transformation projects into practice**, like:

- A learning process, that **educates** (makes us capable, helps us to know how to proceed and sets out guidelines for action).
- A good experience that **empowers us** (makes us feel capable of taking action to change things).

Below, these concepts and the methodology are addressed in more detail.



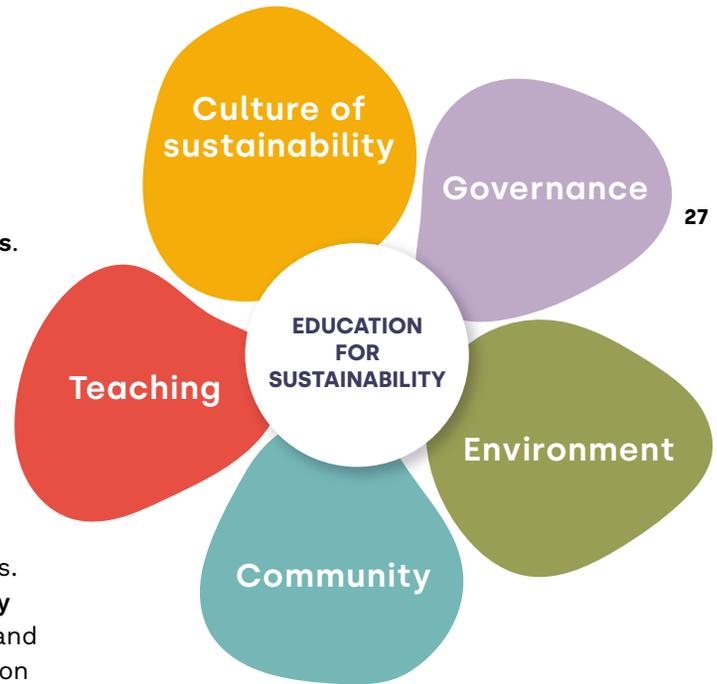
Being capable and feeling capable

AN INTEGRATED CENTRE APPROACH

Addressing an education for sustainability as part of the More Sustainable Schools framework entails a **systemic change**, which affects **all aspects of life at schools**.

It is obviously not just about looking at sustainability topics as part of the syllabus, rather we want to include learning in the classroom as part of daily life and practices, creating contexts and situations that encourage reflection, thinking of future scenarios and imagining alternatives. We will strive to ensure **consistency** between the idea of sustainability and its reflection in teaching, organisation and functioning at the centre, the management of resources, the physical environment and community relations.

We can only hope to make schools a model for sustainability. Everything that we do to make progress will not only benefit us, but set an example for others. It is a good idea to bear in mind that acquiring the capacity to act is not about taking one-off actions: we have to **immerse ourselves in the context in which we practise what we preach**, where problems are identified, proposals made, and decisions made and enforced. It is important to provide a stimulating environment in which people feel encouraged and gratified



when they contribute to the shared objectives, as the desire to act, to a certain extent, is linked to the social interaction that takes place when we share feelings and emotions.

Promoting an integrated centre approach is one of the five priority areas of action of UNESCO's Global Action Programme (GAP 2015-2019) on education for sustainability, with research having already demonstrated the benefits of adopting this way of working ².

² HENDERSON K. & TILBURY D. (2004)

◀ REAL TRANSFORMATION PROJECTS

The More Sustainable Schools programme has the conviction that the best learning method in terms of sustainability is participating in **real transformation projects in the surrounding area**, providing participants with criteria and representing a successful experience in itself. These projects encourage students to identify projects that are of interest and relevant in their lives, condensing them down to an achievable scale and taking action.

Thus, projects actively engage students in the process of identifying

actions, investigating them, searching for solutions, implementing them and assessing their impact. As a result, participants are encouraged to **develop critical thinking and explore possible alternatives**, while better understanding the complex, multidimensional nature of the socio-environmental crisis.

Children and young people are thinkers, capable of making their own decisions about what constitutes responsible action. Therefore, our educational aim is not to change their behaviour or impart specific behaviours; rather,



it is to **empower students**, improving their understanding of the surrounding area, developing their ability to act and reinforcing their determination to do so

As part of this **action-oriented education**, students commit to the project and reflect on their experience as part of an action and reflection cycle, that entails the acquisition of knowledge, development of skills and clarification of values, linking abstract concepts and personal experience. The role of the teacher is to create a learning environment that encourages experiences and student reflection.

Going beyond the specific results obtained as part of the projects undertaken, educational value is part of the process. **Reflecting on our practices** is an essential part of learning.

Each project has its own impact, whether large or small, on transforming the centre and a series of successive projects, year after year, represents a process of continuous improvement.



In relation to the **VALUES** that inspire us and the **PRINCIPLES** that guide us to take action, the More Sustainable Schools network often uses the following terms:

→ **SUSTAINABILITY**

Education for sustainability is a process structured around improving the understanding of the socio-environmental crisis, taking note of our responsibility for facing this crisis and strengthening people's ability to work by themselves and with others towards a more sustainable society.

→ **RESPONSIBILITY**

Each centre acknowledges its role as part of the solution and assumes its joint responsibility.

→ **INNOVATION**

Each educational community is aware that it is building a more sustainable context in terms of the centre, proposing innovative solutions and processes on a small scale that can be projected to the surrounding area.

→ **CITIZEN FOCUSED INITIATIVES**

It is a programme of education, participation and civil involvement that recognises, encourages and supports the introduction of sustainability criteria in the way centres are run. It also represents an opportunity to reinforce the bonds between the school and the city.

→ **TRANSFORMATION**

We are committed to a transformational approach to education, leaving schools that merely relay the same old message behind. It is not about understanding and accepting, rather it is about understanding and acting. The programme encourages educational communities to get involved in a participatory process to review educational proposals and practices to bring about real change at schools and in the surrounding area.

→ **PARTICIPATION**

The participatory nature of the process is essential, as everybody's contribution and creativity is necessary to generate new, unforeseen alternatives to our way of doing things. And the change is only possible when the desire to achieve it is shared.

→ **LEADING ROLE**

Students play a leading role. Children and young people form part of the real change experience, designed and implemented by them with the collaboration and guidance of teaching staff and the complicity of the rest of the educational community. The place of students and teaching staff is considered.

→ **LEARNING**

The very processes that make it possible to improve the school are excellent learning opportunities, as they provide the opportunity for us to analyse our surroundings, to understand problems from different angles and perspectives, to develop our own ideas and values and express points of view, to listen to and face disagreements and uncertainty, to distinguish between facts and opinions, to combine theoretical knowledge with practical proposals and to make decisions democratically. Through action, we learn to learn. The process is the main lesson.

→ **EMPOWERMENT**

The lessons learned and positive experiences of having improved our surroundings educate us and help us to feel motivated and that we have a stake in committing to conscious action once again.

→ **COOPERATION**

Work on the project facilitates cooperative learning, where children and young people have the opportunity to work with their classmates to respond to the challenges they are faced with. We encourage placing a value on diversity, educating them on how to interact with others and empathy for the social environment. We are not alone; we must look for synergies.

→ **NETWORKING**

Networks require that we work together and communicate, shine a light on best practices and undertake shared projects. This allows us to learn from one another and make progress together.

→ **LONG-TERM**

The programme is not about taking one-off action; rather, it invites centres to get involved in a medium and long-term undertaking. It encourages them to embark on successive projects over the years to make continuous improvements.

→ **FLEXIBILITY**

The process is shaped by the centre itself, which designs its own projects and structures it based on the decisions it takes.

WHAT DOES THE MORE SUSTAINABLE SCHOOLS PROGRAMME OFFER?



A common **work framework**



Assistance and information service in person, over the phone and online



Periodic communication in the form of an e-newsletter and news on the website



Training



Technical and educational **advice**



Boosting working groups, courses, seminars and experience-exchange spaces



Specialist **technical support** with certain topics



Material and economic support **resources**



Environmental Education **Documentation Service (SDEA)**

THE NETWORK OF MORE SUSTAINABLE SCHOOLS

The network of More Sustainable Schools **brings together centres committed to including a comprehensive approach to education for sustainability** and are at different stages of development. The network provides a space for sharing practices, learning from one another and accessing resources, training, advice and support.



More Sustainable Schools **forms part of a larger network, More Sustainable Barcelona**, made up of 1,500 associations, businesses, shops, educational centres and universities, in addition to other organisations, all of which have signed up to the Citizen's Commitment to Sustainability, cooperating with one another, exchanging information, sharing results and participating in a collective learning and adaptation process.

At present, more than 50% of educational centres in Barcelona form part of the More Sustainable Schools network and are employing an integrated centre approach as regards education for sustainability.

Each school year, there is a new call for schools that would like to continue and develop their project, as well as others that want to start one and sign up to this engaging collective project.

All Barcelona's infant (for children aged 0 to 6), primary and secondary schools, post-compulsory, vocational and adult education centres, and specialist and/or adapted schools can join the More Sustainable Schools network.

HOW CAN A CENTRE FROM THE MORE SUSTAINABLE SCHOOLS NETWORK BE RECOGNISED?

THE TWELVE KEYS

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- 01** Want to make progressive changes in becoming a more sustainable centre: signing up to the E+S network.
 - 02** Commit to the city: signing up to the Citizen's Commitment to Sustainability.
 - 03** Activate the commitment to transformation as part of annual or three-yearly projects: have an active project and dedicate space and time to working on it.
 - 04** Manage and coordinate projects applying joint leadership approaches: have an E+S committee on which students and teaching staff, as a minimum, participate.
 - 05** Expand the commitment within the educational community: have a communication strategy to ignite enthusiasm amongst families and collaborators, inviting everybody to participate actively.
 - 06** Reflect the commitment to transformation in the centre's ethos: its educational project and other documents explain the aim of providing an education for sustainability.
 - 07** Reflect the desire to provide an education for sustainability in content and methods: rethinking and adjusting the syllabus and educational practices.
 - 08** Apply democratic principles: creating an atmosphere that acknowledges all voices, that encourages communication and participation.
 - 09** Empower students to take action: projects are structured around real situations, in which young people identify problems and search for solutions.
 - 10** Link the good management of the environment to learning: students participate in decision-making in relation to the spaces and management of resources to minimise the ecological impact and optimise social benefits.
 - 11** Be committed to continuous improvement: review and assess what is being done and encourage the permanent education of teaching staff.
 - 12** Be an active centre in the network: be prepared to exchange and cooperate with other centres and be open to participating in shared projects with organisations across the city.
-



PART TWO



PART TWO

ON THE PATH TO MORE SUSTAINABLE SCHOOLS

**"A lot of small people, in lots
of small places, doing small
things, can change the world".**

African proverb



In what areas can we act to make our centre more sustainable?



Becoming a More Sustainable School involves including sustainability criteria across all areas of our schools. For practical purposes, they are divided into **five** interconnected **areas**, which mainly respond to the questions **why? what? how? where? and with whom?** We can make our centre more sustainable.

The changes in these areas tend to be achieved gradually as we go about our successive projects.

Each centre has its own transformation pathway, focussing each year on certain aspects, such as, playground spaces, energy consumption or school dinners. The idea, over time, is to include sustainability criteria in all areas.



**The sustainability project:
five areas of action**



FOR WHAT PURPOSE? CULTURE OF SUSTAINABILITY

The culture at our centre establishes and reinforces values, beliefs and expectations about how things must be done and encourages people that form part of the educational community to act in a certain way. To this end, they should develop and enhance a **culture of sustainability**.

A culture of sustainability is a culture in which teaching staff, students, families, non-teaching staff and leadership share the conviction that we should take action to transform our society and make it more sustainable, learning ways of living that ensure the fundamental rights of everybody within the planet's ecological limits.

The centre's **culture of sustainability** is reflected in a sustainability **ethos**, which will be present in written documentation and also reflected in educational practices, governance and the physical space at the centre and as part of its relationship with the community.

➤ **BUILDING A VISION: WHAT WILL OUR MORE SUSTAINABLE CENTRE BE LIKE?**

Defining **what sustainability means to our centre** is a good first step. When constructing this **vision**, ideally we should obtain feedback from all sectors of the educational community: teachers, leadership, students, families, kitchen staff, etc.

Get everybody involved: the more, the merrier. We must draw on the opinions that everybody has about what a **sustainable centre** is to construct a shared vision. The exercise will be worthwhile and inspirational. Bear in mind that **we will only be able to start working towards achieving our desired future when we are capable of constructing it mentally.**

When it comes to designing this vision, take the **different facets of sustainability**, into consideration; be careful not to oversimplify by just looking at environmental factors. Think about the **type of small society we want to promote** at our more sustainable centre and the values we want relationships to foster.

Our vision **will also derive from the characteristics and needs** of our centre and the surrounding area, as well as our history and development as a centre.

FOR REFLECTION

- ➔ What does the sustainable centre mean to us? What vision do we have of our centre as a sustainable community?
- ➔ At our centre, have we reached an agreement about what it means to live sustainably?



COMMITMENT TO SUSTAINABILITY AT FEP SCHOOLS



During the 2015-2016 academic year, eighteen schools from the **Fundació d'Escoles Parroquials** (FEP - Parish Schools Foundation) agreed to pursue an education for sustainability. Thus, the following year they created ECOFEP, a committee made up of teaching staff, students and other members of the education community from all schools, with a view to making sustainability an identity trait. Over the course of the 2017 - 2018 academic year, a document was drawn up with 7 areas of action and 30 commitments, a statement of intent by FEP schools about education for sustainability. This was the result of the joint efforts of several task forces, structured around the Citizen's Commitment to Sustainability and the other guidelines of educational centres and institutions, with additional commitments also added. The document formed part of the ethos of the Foundation and each of the schools and has become a tool with which the educational community at each centre has been able to evaluate their situation when it comes to sustainability as well as designing the objectives of joint and individual actions.

◁ INCORPORATING SUSTAINABILITY IN THE EDUCATIONAL PROJECT OF THE CENTRE AND OTHER DOCUMENTS

The ethos of the centre is explicitly reflected, translated into objectives, action lines and proposed initiatives as part of the **Centre's Educational Plan**, the Master Plan, the teaching plan, etc., or in the **rules**, protocols and recommendations of use that are employed when preparing a **sustainability policy** (rules of organisation and functioning of the centre or letter of intent, for example. This policy is reflected in the development of the **strategic lines that the centre prioritises and accompany values** (such as responsibility, justice, respect for all forms of life, non-violence, solidarity, cooperation, etc.).

Looking beyond the Administration's general guidelines or regulations, **each group of educators has its own characteristics**, consisting of a way of thinking and interpreting their surroundings and a vision of how to interact with these. An ethos might be considered solid, shared by the entire community, both in theory and in practice or, in contrast, it might consist of different approaches, incompatible and even contradictory perspectives. These perspectives may be championed by different groups in

the community, leading to conflicts that would need to be resolved.

Diagnosing the centre's sustainability ethos is a **wonderful opportunity to rethink the type of school we want** and to respond to fundamental questions about the type of education we want our children and young people to receive. We can do this by reviewing the content of the documentation establishing the ethos and where we raise awareness of the centre (website or blog, posters, brochures, letters to families) and make the necessary adjustments.

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FOR REFLECTION

- Is our commitment to sustainability reflected in the centre's educational plan?
- Will we review the centre's educational plan and other documents to update them and make the necessary adjustments?
- Are the rules that govern people's conduct at our centre clear as regards what is expected from everybody in terms of sustainability?

SUSTAINABILITY IN DOCUMENTS

Efforts to offer students an integrated education must be reflected in all the centre's documents. At **Escola Virolai**, sustainability is reflected in a specific plan. The sustainability plan features the critical aspects of how we define care for the environment and people in education and helps to relay respectful values and attitudes to students. The plan sets out the centre's educational objectives when it comes to sustainability, the core pillars that the plan rests on and

a declaration of the educational potential offered by socio-environmental challenges. Gradually, priority lines for successive courses are defined, for example, syllabus and centre greening, student participation, networking with external agents and assessment. Finally, a part is dedicated to educational environments in relation to education for sustainability; in other words, forming an opinion, solidarity, responsibility, hope or sensitivity to name just a few.



◁ **STRENGTHENING COHERENCE**

The vision and are values **are translated into actions** that tackle all the other areas that we will look at below: teaching, governance, the physical environment and community relations. Written documents express the desire about what the educational centre wants to do, how it will achieve it and where it is headed, while **day-to-day activities** reflect what this means **in practice**. These two expressions may be more or less consistent with one another, even though sometimes they may seem contradictory. This happens when there is a significant difference between what is reflected in written format and what we actually do.

The centre's organisation, participatory spaces, the budget, procurement criteria (products and suppliers), the shared use of resources (books, classroom material, etc.), the distribution of time and space, ceremonies and celebrations or neighbourhood relations, to name just a few, are all **specific areas where the centre's commitment to sustainability can be seen**. Furthermore, the ethos is

reflected on a daily basis through the conduct of people who make up the educational community.

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We must ensure that the **daily practice** of the different groups across all school environments **is consistent with the proposed, approved purposes**.

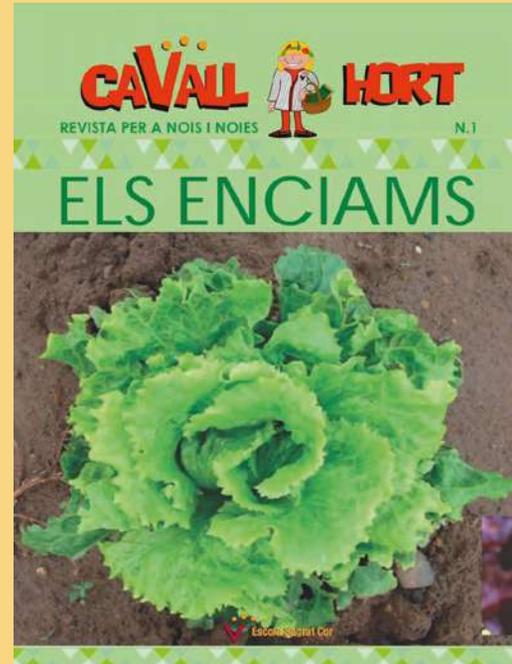
In the **centre's educational plan** and other documents that explain the centre's ethos.

FOR REFLECTION

- How does sustainability form part of the centre's daily activities?
- Do we keep an eye on the degree of consistency between what we say and what we do?
- Do we share the vision and values with our teachers and families at the centre?
- Do we make sure that the staff has free time and the opportunity to reflect on sustainability issues and how education for sustainability is delivered?
- Do we include families in the educational actions and practices at the centre in relation to sustainability?

CONNECTING PROJECTS TO THE SPACE

At **Escola Sagrat Cor Aldana**, they connect shared learning spaces to strengthen a discourse that is consistent with the course contents that they impart. As part of a project to transform a space at the centre, they built a very special library. Should you ever get the opportunity to visit their allotment and compost heap, with its space for exchange, the adjacent library-allotment and read a few copies of the magazine, *Cavall Hort*, you'll understand perfectly what we mean. These are dedicated spaces that provide a welcoming, stimulating area where students can read and care for the allotment. Worth particular note in this space is the magazine, which was created exclusively by students and serves to work on literary, artistic, mathematical, musical and technological skills all at the same time. This magazine connects a project to promote reading together to the sustainability plan.



WHAT? TEACHING

This is the area of the syllabus and teaching practice that must be consistent with the purposes formulated under the centre's educational plan. We must define the **necessary learnings to make progress with sustainability** and how they will be imparted. Furthermore, we must assess the level of consistency between what we want to teach and what is actually being taught and learned.

The **syllabus** establishes the series of basic skills, objectives, contents, teaching methods and assessment criteria. This refers to any concepts, procedures, values, data or any idea or conduct considered teachable. It may also include recommendations about teaching or grading contents.

It is important to bear in mind that **we are talking about skills training**, in other words, acquiring baggage for change. This includes the conceptual learnings that are justified, as well as instrumental learnings to **"be capable" of taking action** and enhancing the necessary motivation and courage to **"feel capable" of doing it**.

WHAT? Teaching

- Cross-cutting approach, complex thinking
- Critical and creative people
- Empowering students to embark on real initiatives

EDUCATION FOR SUSTAINABILITY

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◊ **CROSS-CUTTING APPROACH, COMPLEX THINKING**

We must **look at the syllabus from the perspective of sustainability**. We must reflect on adapting the **centre's annual programme** and how to adjust sustainability contents as part of teaching processes employed in the classroom, over the course of the year, in different areas, subject matters, departments, stages, etc. This also goes for research projects, excursions and summer camps, practical work in the laboratory, etc. to infiltrate the entire programme at the centre in the medium term.

We adapt the objectives and contents of the annual programme linked to sustainability bearing in mind its cross-cutting, holistic nature when it comes to promoting **a fairer, more supportive society that is aware of ecological limits**. It is not about adding new content, but about including a **cross-cutting vision** of all subjects. However, we must also take care to including, enhancing or updating contents, to **bear in mind concepts that have traditionally been disregarded** (for example, the role of women or minority groups) and emerging topics to be addressed (for example, climate change, the planet's health or globalisation).

Sustainability and **complexity** go hand in hand. We address matters involving environmental, social, political, economic, cultural, ethical, scientific and technological aspects: which is why all subjects on the syllabus are affected. It is important to understand and accept complexity and **encourage complex thinking**.

We must counteract the simplification of narrow-mindedness, forget about things being black and white, and learn to accept the greys. We have to train ourselves to have

a systemic view of reality, paying attention to relationships in space and time, valuing the wealth of diversity, bearing in mind the limits (as regards the Earth's replenishment capacity, resources, time needed for processes, the human mind, etc.) and the unforeseeable nature of complex natural and social systems.

FOR REFLECTION

- Are programmes flexible and open to change, in such a way that they can be adapted to any given moment?
- How do we listen to and take into consideration the concerns, experiences, ideas and expectations of students and build them into programmes?
- Does educating in sustainability provide new ideas and perspectives for innovating in the teaching of traditional materials?
- In all subjects, do we base teaching on delving deeper into relations and interactions?
- How do we encourage the inclusion of concepts that are central to sustainability into the syllabus, such as ecological limits or human rights?
- Are assessment models consistent with the criteria of a sustainable centre?

LEARNING FOR EVERYBODY

A good example of transversal learning is the project dubbed “Mallerenga” at **Escola Betània - Patmos**. It was by chance, when setting up a nest box, that the centre was able to take a variety of learnings performing an actual field study, with video monitoring, converting this into an activity that motivated the entire educational community. Students made systematic observations, searched for nesting information, prepared theories,

learned to understand and estimate the reality of living beings and with teachers, formed shared knowledge. A field journal was used to note down behaviour details, skills, appearances of neighbouring fauna, phenological aspects and breeding calendars. In short, this opportunity was harnessed to strengthen linguistic, mathematical, scientific, technological, artistic and cultural skills, in addition to others.



HOW CAN WE LINK SYLLABUS SUBJECTS AND CONCEPTS TO EDUCATION FOR SUSTAINABILITY?

EXAMPLES

SUBJECT	CONCEPT OF EDUCATION FOR SUSTAINABILITY	SOCIO-ENVIRONMENTAL PROBLEM	POSSIBLE ACTIONS
BIODIVERSITY 	Interdependence Learning how living beings depend on one another to satisfy their needs.	Extinction of species and loss of biodiversity.	Design and deployment of butterfly gardens. Construction of insect hotels. Installation of bird feeders and nest boxes. Planting of native species.
WASTE, RECYCLING, CONSUMPTION 	Equity Learning about finite resources and unequal distribution.	Squandering of resources. Increase in waste that the planet is unable to absorb. Poverty.	Preparation of an co-audit of the waste generated at the centre. Design and implementation of a waste prevention plan. Composting.
MOBILITY 	Responsibility Learning how to make informed decisions and acting consequently.	Climate change. Atmospheric pollution. System based on non-renewable resources with growing energy consumption.	Design and implementation of school routes. Installation of bicycle and scooter parks at the centre. Use of public transport.
FAIR TRADE 	Solidarity Learning to feel part of humanity and get involved in mutual support.	Production of goods unfairly, unsustainable and unsafely for the Earth and its inhabitants.	Collaboration at a community allotment. Prioritising and promoting social and solidarity economy products.

◁ CRITICAL AND CREATIVE PEOPLE

Sustainability represents a commitment to changing our daily life and the daily life of our societies in ways that benefit most people, now and in the future, and that at the same time, reduce our environmental impact. This requires **active, critical and creative citizenship, able to resolve problems** through cooperation and combining technical knowledge with innovative practical ideas.

Beyond teaching specific solutions defined by experts and agents, promoting specific conduct and ways of thinking (instrumental approach), a more sustainable school aims to **teach** children and young people **skills** so that they can **interpret the world they**

live in and take action to improve it (emancipating concept of education for sustainability).

An example of this can be seen in the way we address waste. Educational centres tend to dedicate a lot of time to teaching how to separate waste between different containers, and this is all well and good. However, we must be aware that we are adopting a management solution, which we provisionally accept but that will change when we find a better one. **The issue is to understand the problem** of domestic waste **and explore** what we can do to address this; as a result, we will most likely look at prevention and reflecting on our consumption model.

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ES1



INSTRUMENTAL

Encouragement of informal, qualified conduct and ways of thinking that are useful in the short term.

ES2



EMANCIPATING

Critical thinking skills in relation to solutions accepted and testing ideas, exploring dilemmas and contradictions.

Two approaches to education for sustainability. Focus ES 1 is more predominant; however, if we limit people's abilities, when it comes to handling change, they will be less capable and, therefore, less sustainable. ES 2 is an essential add-on to ES 1.

Based on Vare and Scott (2007)

To this end, contexts and **learning situations must be created** that encourage thought, foreseeing futures and imagining alternatives, communicating and interacting with others and cooperating.

One good way of helping students to develop these skills is proposing **cooperative learning** to children and young people, offering them the opportunity to work with their class mates, with the values and perspectives that each of them have, in response to the questions they are faced with. A learning environment like this one educates children and young people to interact with empathy, considering different ways of perceiving problems, solutions and strategies before adopting a stance.

FOR REFLECTION

- Students are taught to:
 - Identify the information and points of view that are necessary to examine a situation.
 - Ask and ask themselves questions.
 - Express and defend their own ideas and learn how to listen to others.
 - Gather, analyse, interpret and assess information from different sources.
 - Gather data on the surrounding area, classifying, analysing and interpreting it.
 - Weigh up evidence that supports a given position.
 - Question their own assumptions and those of others.
 - Form reasoned opinions and judgements and understand how to defend them.
- Students are taught to:
 - Explore possibilities.
 - Learn from other people and other contexts.
 - Imagine and design solutions.
 - Anticipate probable, possible and desirable future situations.
 - Apply the principle of caution.
- Students are taught to:
 - Use empathy and active listening.
 - Take part.
 - Collaborate with others.
 - Work together.
 - Resolve conflicts.



DOING AWAY WITH INERTIA

As part of the projects implemented at **Institut Jaume Balmes**, reflecting based on day-to-day situations as regards consumption habits is a common exercise. As part of a theatre workshop entitled “Em vesteixo o em vesteixen?” (“Do I dress myself or do others dress me?”), students participated in theatrical situations employing their sense of humour about the consumption of clothing and “doing away with the inertia of daily life”. A forum was also held on the impacts of the current model of consumption, both in our lives and the lives of others. Without looking to apportion blame, addressing the topic from different perspectives and applying a constructive approach, students were divided into groups to learn more about the flows involved when we decide to purchase an item of clothing. Questions like these served as a guide during the process: how much clothing is there

in shops? Do we buy it all? Are we what we wear? Do we dress to reflect our personality? Where do the clothes we buy come from? What is fashion? What happens when something goes out of fashion? What do clothes have to do with the health of and caring for the environment?



➤ **EMPOWERING STUDENTS TO EMBARK ON REAL INITIATIVES**

Education for sustainability is **structured around** taking action. If it is worth understanding a problem, that is because it is worth taking action to contribute to correcting it.

At More Sustainable Schools, projects are structured around real circumstances, in which we identify problems and search for the appropriate solutions from the perspective of sustainability. The aim is to **empower students to take action in relation to real questions**, placing value on resolving conflicts and learning lessons. Going beyond the outcome, educational value is found in the process we follow as part of these actions.

At schools, where sometimes it is conceived that the answers to all our questions can be found in text books, focussing on an actual problem with a view to finding a solution is an exhilarating proposal. Initially, this may pose a challenge to students and teachers; however, it is quickly established that this offers a wide range of advantages through fictitious, decontextualised situations. **Triggering a process resulting from a problem in their surrounding area takes on a special meaning** for children and young people.

It is not just about finding a response. **Environmental conditions are a never-ending source for asking questions.** Questions that lead to a need to research, create, organise knowledge, look for new information, debate, discuss, agree on ideas and values, negotiate proposals, develop alternatives and pose new questions. Real questions, that encourage debate and stoke up an interest in understanding. Questions that don't have one single answer.

By planning and organising actual actions, students are empowered to **apply their learning to making positive changes** in their lives, at the centre, in the surrounding area and in the city. And, after this action, children and young people reflect on what has been done, how it has been done and what has been achieved to determine what they have learned and what they would do differently.

Understanding the situation and providing a response with others, responsibly assuming the part that each of us plays, are necessary for us to become people that are capable of organising ourselves and actively getting involved in a changing, plural and complex society. All this and more **is learned through action, experience and reflection.**

FOR REFLECTION

- What opportunities and stimuli encourage students to participate directly in the surrounding area and take action to improve it?
- How do we encourage active research and exploration to help students identify and size up the problem of sustainability in the surrounding area?
- What opportunities and facilities do we give to students for them to get involved in planning and implementing their own projects?
- How do we help students to organise themselves?
- How do we encourage students to investigate and analyse reality from different perspectives before deciding what needs to be done?
- How do we help students to establish criteria for making choices and decisions?
- Do we teach students to plan actions around reducing risk and accepting uncertainty?
- Is the student's involvement in an activity accompanied by a reflection on the experience and do the results allow lessons to be learned?



A PLAYGROUND FOR EVERYONE

Escola Drassanes detected that the use of the playground between boys and girls was uneven and the games played by boys occupied more space. Teaching staff addressed the situation and proposed the “Fem patis coeducatius” (Making co-educational playgrounds) project. This saw children, assisted by two expert institutions, observe and question the situation in the playground was, detecting dynamics, uses and occupations of the space that were worthy of debate. The proposal was made to redesign the playground and the activities it played host to. Conflicts arose in

relation to weaknesses and potential solutions were discussed; however, the joint work encouraged everybody and emphasised the possibilities to make a change. Proposals were made and an agreement was reached that different spaces were required for calm, movement, experimentation and nature to improve relations and redistribute the space. Students, families and teachers got down to action and submitted proposals. The proximity to the problem in question and the opportunity to take action to change it made this a successful project that remains valid to this day.



HOW? GOVERNANCE

The culture of sustainability at the centre is also reflected in a specific model or **organisation**, which could be referred to as “**the climate**” at the centre.

Each centre has its own climate. In other words, a specific **atmosphere for relationships in which ideas can be shared and students develop their values**, attitudes and behaviours.

Although it is a difficult concept to define, everybody experiences it and everybody contributes to creating it. It is important for all members of the educational community to be aware of their contribution, from clerical staff to kitchen staff and from teachers to families. **The entire education community plays an important role**

when it comes to generating a stimulating learning environment and harmony, based on respect for different opinions and beliefs, democratic practices and high-quality communication.

Analysing this area is a process that requires time; however, it can serve as a **worthwhile experience in terms of consolidating and securing the success of any change we propose.**

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◉ THE INTERNAL FUNCTIONING OF THE CENTRE

We aim to create a welcoming, tolerant and nourishing atmosphere, where it is easy to grow personally and learn to coexist with everything that entails listening, understanding, accepting differences and cultivating a consensus, where everybody's participation is encouraged and mistakes that make it possible to learn and improve are valued. If this **positive educational climate is the result we are expecting**, how do we go about achieving it?

One key factor is the **way in which the educational centre is governed**, in other words, how its internal functioning is organised, how decisions are made, how they are coordinated, how leadership and responsibilities are distributed and how information is circulated.

EDUCATION
FOR
SUSTAINABILITY

HOW? Governance

- The centre's internal operation
- Experiencing values, appreciating diversity
- Participation
- Communication

Generally speaking, educational centres have a pre-defined organisational structure and communication channels. This involves the School Board, the teaching staff, the centre's leadership team, the departments, committees, delegates and parents' associations, as well as all coordination structures and channels of communications established between them. It is worth looking at **how we make the most of these instruments or whether it might be a good idea to rethink** them or disband them and create them again from scratch.

The governance model has a practical impact on all life at the school, including the organisation of time and spaces. Reviewing these aspects and improving them wherever possible to enhance **consistency between theory and practice** is an important challenge, which requires being open to changing the ways of doing things, which are often dragged along by inertia. This change will be possible if the educational centre, as an organisation, is capable of learning.

We often complain about time restraints. Time is a limitation, but it might also be the case that **the main difficulty** is establishing priorities.

Arrival and leaving times are set, but as a centre, we must decide whether we want to expand these timetables with additional activities as part of a clear commitment to quantity, or rather to carefully select activities and prioritise quality and depth. **More is not always better.** And remember that changes of attitudes and values are not just slow: they have to be slow.

FOR REFLECTION

- Do we recognise all the groups involved in life at the centre?
- Do we promote debate, constructive dialogue about the organisational model and the relationship between people and their surroundings?
- How do we build trust between people?
- Is autonomy respected and is an emphasis placed on each person's responsibility?
- Do we foster cooperation and solidarity between members of the community?
- Is there a democratic climate?
- Are the coordination structures in place sufficient and adequate?
- Is diversity taken into consideration and does everybody feel represented in the school and by the school?

BEING A COMMUNITY, ONE OF THE PILLARS OF THE CENTRE



At **Institut Maria Espinalt**, well-being, emotions and community are the pillars around which the centre has been built. They consider socialisation to be “a basic need that cannot be forgotten or separated from academia. It is impossible for there to be an educational project without an educational community. Education is a social reality”. The centre is home to experience-based spaces and it is given a leading role in communication. “Developing and growing attachment and trust represent major challenges involved in this process”. That is why

open days are held and meeting spaces and a well-being observatory have been created, as well as multiple classroom activities organised based on dialogue, critical thinking, creativity, debate and cooperation. The roles are also well defined: “Students play a leading role, they are the stars who are responsible for making critical decisions, taking action, experimenting... The role of teaching staff is to manage groups and accompany each person as part of the process, in close cooperation with the families, who we must not leave on the sidelines.”

◀ EXPERIENCING VALUES, APPRECIATING DIVERSITY

Values are not conveyed simply nor can they be changed easily. To instil new values, the first step is to **be aware of which are the values** that we build our day-to-day lives around, bearing in mind that often the values we announce are different from the values implicit in our actions, as these are mixed with our interests.

A major concern rooted in educational centres is the feeling that family values are not always in line with those promoted in schools. This can be reflected in a conflict between teaching staff and families, or as a challenge when managing diversity. If we share the value of respect for diversity, we must put into practice **the acceptance of the existence of other values.**

When we observe children's conduct, it can be seen that they know how to coexist with very different contexts and individuals, without any sign that they experience this as a conflict. They use very difficult language with their friends that they do with adults or at school and they must also be capable of learning and accepting that they are certain attitudes that are expected of them at school.

These are not necessarily the same that are expected of them at home. It is not about having value systems face off; rather it is about creating a sense of cultural diversity.

FOR REFLECTION

- Do we teach students to value diversity as a form of wealth?
- Do students learn to distinguish between objective knowledge and opinions based on values and to investigate unexplained values and interests?
- How can we promote reflection, mutual respect and understanding values different from our own?
- How are dissenting opinions or different beliefs received?
- Are we willing to manage heterogeneity or do we tend to force homogeneity?
- How do we handle disagreements?
- Are we capable of leaving differences to one side to concentrate on common objectives?

THE BEAUTY OF MULTICULTURALITY

Located in La Verneda, **Escola La Pau** is a melting pot of residents from different backgrounds. The school's educational aims include encouraging a respect amongst students for diversity and regarding differences as a source of wealth and relationships. Multiculturalism is so deeply rooted that different approaches are adopted: from warmly welcoming students from abroad, emphasising the bravery and difficulty of leaving their place of origin, to a specific subject in which students study the cultural and geographical traits of the places from which their classmates come, involving a range of activities like social theatre or workshops on religions, the culture and peace and cooperation. The school also organises sessions with NGOs to learn about conflicts and the obstacles faced by refugees or those who suffer from situations of injustice or inequality as they form part of a minority.



◀ PARTICIPATION

The sustainability project must be a participatory space in which students, hand in hand with the rest of the educational community, have the opportunity to understand what is meant **by a democratic form of life** and how to pursue it. Thus, actively taking part in the project and involving ourselves in imagining how we can improve our surroundings and making specific transformations a reality, we develop the necessary skills to create a more sustainable society, starting with education and participating in the project. And we learn to participate by participating and, in relation to an education for sustainability, **participation is both a means and an end.**

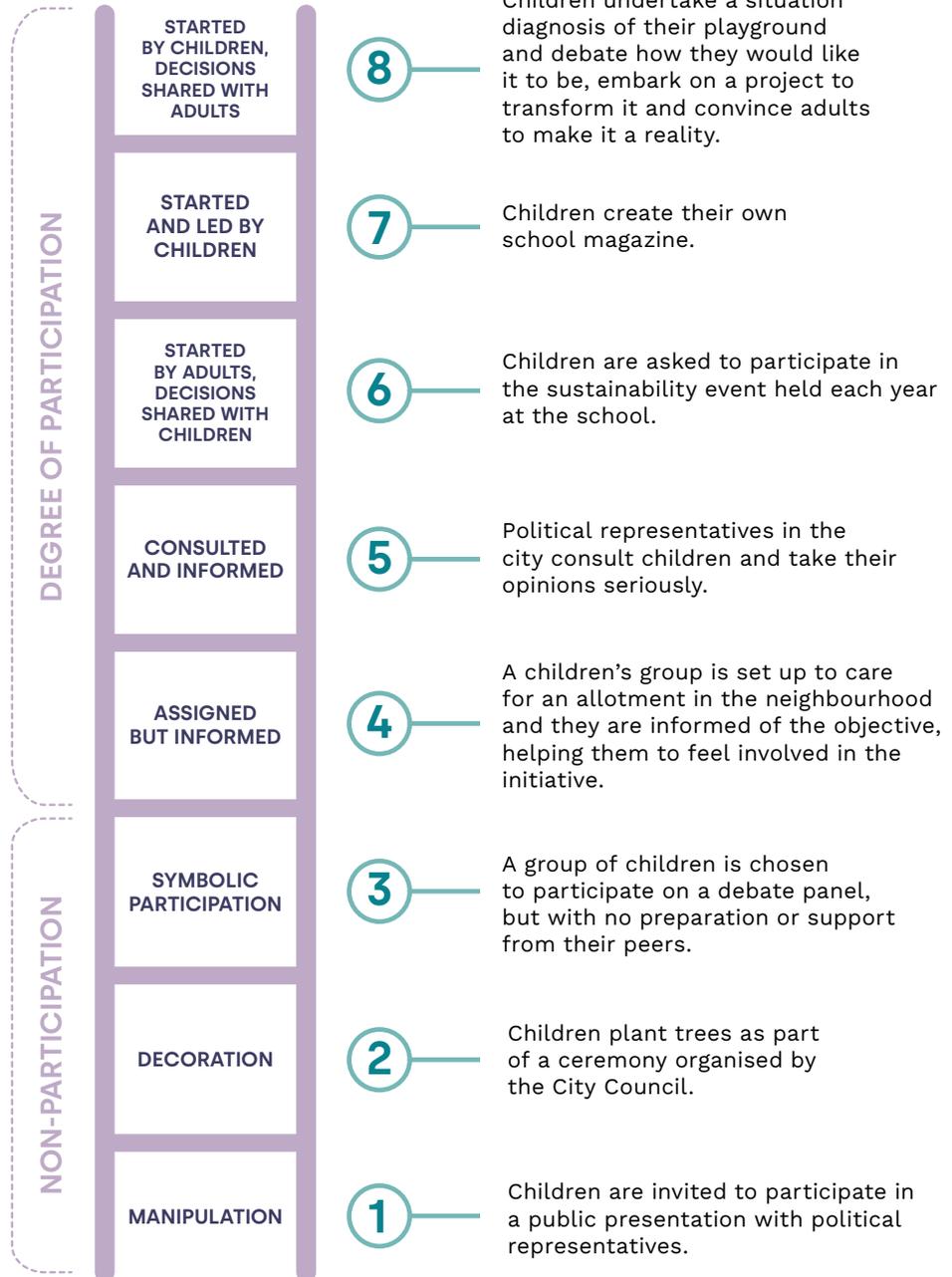
That is why we encourage the sustainability project to be **shared by everybody** and that both students and teachers, leadership, management, support and maintenance staff, families and partners feel engaged. **All members of the education community have an important role to play** when it comes to defining and working on the centre's sustainability objectives. This is a feature of the **school's global commitment.**

Incorporating the diversity of the educational community means recognising everybody as active agents, with rights, responsibilities and being capable of compromise. Therefore, we have to **ensure that all voices, ideas and contributions are taken on board**, allowing people to express and opinion and form part of the decision-making process, implementation and assessment of actions taken. However, the role of each person might be different and at each stage of the process, an analysis can be performed as to who should occupy a more or less important role. Evidently, forming part of the coordinating committee for a sustainability committee, or **E+S Committee**, is a **particularly intense and privileged opportunity to participate and learn about participation.**



Participation of children and young people. Hart scale.

This scale is divided into eight levels, with the first three not construed as actual participation, as it is considered that the adult guides and manages the children and young people. From the fourth to the eighth levels, the degree of participation increases until the level desired by a More Sustainable School is achieved.



Consideration must be given to the conditions required. The first is motivation: the process must encourage enthusiasm and commitment and promote a positive attitude in relation to the transformation. The necessary **knowledge and skills must be borne in mind**, understanding how they transform. Finally, consideration must be given to the **capacity and resources available** to transform into what we want to become, as, otherwise, we might come up against dead ends as part of the process, generated by frustration, lack of motivation or limited influential capacity.

We often think that encouraging participation means slowing processes down. Now, it does require patience, efforts to achieve understanding and caring for organisation, amongst other aspects. However, **the outcome is an enriching project**, which bears fruit in terms of a **more cohesive and active education community** and an increase in awareness about the right and shared responsibility we have as citizens to participate in the policies and actions in the surrounding area. Sometimes, reaching a consensus is

not easy; however, if we share the idea that it is a necessary condition for the approved proposals to be “appropriate” for everybody, we are aware that **even though it may take us longer, we will get further**.

FOR REFLECTION

- Have we created a space for reflection, dialogue and respectful and safe debate to express an opinion, share ideas or offer critiques?
- How do we ensure that decisions are based on the interaction and consensus of everybody involved?
- Do students take part in decisions and do they have time and space to suggest, plan, enforce, manage and assess their initiatives?
- How do we guarantee the possibility for proactive participation amongst different members of the educational community?
- Can everybody understand the problems we face in terms of sustainability?
- Does everybody have the resources they need to take decisions and action?
- Can everybody see the impact of the final result of sustainability projects?

DEMOCRATIC COMMITTEES

During the 2017-2018 school year, **Escola Sant Josep Oriol** performed a variety of participatory processes to create committees to lead the More Sustainable Schools project: the Green Committee, made up of two delegates, teachers and families; the Escarola Committee, formed by students and teachers, and the Eskamot Verd, consisting of upper secondary school students. The Green and Escarola Committees defined sustainable action proposals for the school and decided which would be the best for the Eskamot Verd to put into practice. In the case of the Escarola Committee, a number of members were nominated and elected by their class mates, others presented themselves voluntarily and others used games to select the characteristics of the person to represent them, after deciding who best fit the corresponding profile. In relation to Eskamot Verd, potential

members had to make a short, inspiring speech to their class. Such was the success of the initiative that all students who presented themselves were elected. They then went on to design a unique uniform to identify themselves.



◁ COMMUNICATION

Gabriel García Márquez said “If something is not communicated, it does not exist”, and we all know of good initiatives that never came to fruition because there were no strong communication strategies in place. With this in mind, from the moment that the project is proposed, we must **bear in mind the communication actions and strategies** to be developed, as they will define, for the large part, the project’s potential impact.

From the outset, when a centre decides to form part of the More Sustainable Schools network, everybody involved at the centre should be aware of the desire to implement sustainability in day

to day actions. This commitment will be reflected in specific changes, which will serve as the best way for viewing the process. However, beyond evidence of the facts, we must **establish good communication strategies** between different agents in the community.

It is about ensuring that **everybody has access to information** that is extensive, up to date, proven, understandable and transparent in relation to all aspects of the project in question. Thought should be given to how to **explain and share objectives**, actions and results, as well as how to encourage different groups to **discuss** efforts, progress and each one’s degree of satisfaction.



Therefore, communication is not only a process of relaying and disseminating information: **it must generate contexts, spaces and tools that facilitate participation and reflection.** We must ask ourselves how we can better choose and promote the response from different participants and how we can encourage the necessary dialogue for reaching a consensus and a basic commitment to achieve the changes we seek. **Participation and communication are closely connected to one another;** one cannot survive without the other.

It is of the utmost importance to pursue the involvement of children and young people **from the outset,** when designing the project's

communication plan, when defining the content and when looking for the most suitable channels.

The E+S Committee, as well as overseeing the coordination and implementation of the sustainability project, **plays a key role in terms of communication,** as it can serve as a backbone and gathers together the opinions and reflections of each group.

At some educational centres there are **groups that serve as catalysts formed by students** that in a stimulating and fun way encourage their class mates to deliver on the actions led by the Committee.



These strategies are not limited by rigour and publishing specific data that demonstrate the problem and make it possible to set the objectives we want to achieve as part of the project. **Drawing on emotions, generating a sense of belonging and making people feel part of the solution will generate more interest** than limiting ourselves to relaying data.

It will also help us to speak in a **familiar and motivational language** with messages structured around optimism and the opportunity for change and improvement. If we want everybody to feel part of the change, we must do so **secure in the knowledge that the transformation is possible** and, taking on board the African proverb, “a lot of small people, in lots of small places, doing small things, can change the world”.

EXAMPLES OF COMMUNICATION CHANNELS



PHYSICAL FORMAT

- Signage, information boards, posters, photographs
- Leaflets
- Exhibitions



DIGITAL FORMAT

- **Website:** a dedicated space can be created on the centre’s website that explains the project and where news can be posted explaining specific actions.

- **Social media:** a wide variety of content (videos, photos, online articles, brief ideas, etc.) could be uploaded to the centre’s user accounts as well as parents’ association accounts, interacting with agents in the area surrounding the centre. It is also important to harness ephemeral content on social media: “stories”, as they are fast and immediate and have a wide reach.
- **Newsletter:** to disseminate website or blog articles. These articles can also be shared via More Sustainable Schools news.

FOR REFLECTION

- To what extent is communication at the centre complete, cared for and transparent?
- How do we listen to the concerns of the different members of the educational community?
- Are mechanisms in place to promote knowledge of projects, objectives, the process itself and the results both inside and outside the education community?
- Do we explain the changes we want to achieve and the reasons properly?
- How do we encourage students to get involved and play a leading role in communicating the project?
- How do we share and celebrate the results of our project?
- Do we have a communication plan for the sustainability project?

- **Email:** informative emails to relay organisational information and spread communication campaigns.
- **Discussion forums:** online debate spaces with other educational centres and agents from the educational community to enhance synergies between people working towards the same goal. For example, on the 26th of each month, there is a debate with the hashtag #EA26.



IN-PERSON FORMAT

- **Meetings:** between teachers, with parents' associations, students, etc.: these are very important spaces in which to explain the process and take collective decisions.
- **Word of mouth:** often, what works best is to talk about our own experiences to encourage others to participate in the proposed actions.



EVENTS, ACTIVITIES OR WORKSHOPS

SHARING A DESIRE TO CHANGE THE WORLD

Col·legi Sant Ramon Nonat is one of the centres participating in the programme that has led most campaigns enthusiastically and creatively. The recipe? A dedicated teaching staff and committed young people. The Team from Assemblea Verda, the E+S Committee formed by delegates, coordinates and designs all sustainability projects at the school. The Eskamot Verd youth group is responsible for invigorating actions in the form of challenges, competitions, debates and workshops to raise

awareness of social media and to captivate everybody. The messages, with a relaxed yet vindictory tone, are a call to participate in the change we want for the school and for the world. All campaigns have their own logo, slogan and other communication elements, with a standardised graphical line that together make for a visually attractive product. All these actions form part of the so-called “green revolution”, in the framework of which transformative changes are encouraged in collaboration with the entire educational community, serving as an inspiration to other educational centres.



EDUCATION FOR SUSTAINABILITY

WHERE? Environment

- The classroom
- The kitchen and dining room
- Common spaces
- The building and the facilities
- The grounds and the external spaces
- The immediate environment

WHERE? ENVIRONMENT

The development of attitudes and criteria is related to what and how we educate, but also where we educate.

The conditions of the building itself and the surrounding area represent an educational tool.

Therefore, the aim here is to **set an example by practising what we preach.** The building, classrooms, dining room, common spaces, playground and the surrounding area reflect the values of our centre. Furthermore, the way in which we buy the water and power that we consume, the food we make, the waste we generate and how we manage them or the way in which we move speaks to the degree in which we have assumed and integrated the principles of sustainability.

More Sustainable Schools give students a **leading role and responsibility for making decisions in relation to the management of the physical environment and resources**, harnessing them as learning actions. The building and the surrounding area are the **perfect space for direct learning** about sustainability and climate action. This miniature world allows students to detect areas for improvement, explore alternative solutions as well as proposing them. Designing and making changes in the school environment, students and the entire education community have **the opportunity to create and view systems that make the centre more sustainable** and enjoy it.

Over time, More Sustainable Schools **introduce improvements in their surrounding area**, in the way that they manage resources and their approach to consumption, **demonstrating their commitment to sustainability:** photovoltaic solar power, the more efficient use of energy, more plantlife, ponds and other habitats for biodiversity, allotments, adapting to functional diversity, different spaces

where children with different needs can feel at ease, games that both boys and girls enjoy, water and paper saving, fair trade products, healthy food from local sources, reusable packaging, waste composting, etc. are just a few examples.

A fundamental aspect that is sometimes overlooked is **maintenance** and correctly using the improvements implemented over time.

In the case of energy, for example, it is a great idea to replace incandescent and halogen lightbulbs with low-consumption systems and install blinds or curtains to prevent overheating from the outside in summer and cold in winter. However, we must make sure to make the most of natural light, refrain from leaving lights on when they are not needed and closing and opening blinds as appropriate; furthermore, we must **monitor** energy consumption over the course of the year to check that our efforts are bearing fruit.

FOR REFLECTION

- Are we aware that we should lead by example in the management of our building and school?
- How are students involved in decision-making regarding the design of spaces and the management of resources?
- How do we share responsibility for quality and correctly maintaining spaces and facilities at the centre and in the surrounding area?
- What sustainability criteria have been included in the management of our centre's resources?
- To what extent is the way in which we purchase consistent with our sustainability choices?
- Is a waste prevention plan in place? How do we ensure the waste we generate is handled correctly?
- Do we have a continuous improvement plan?
- How do we track progress over time?
- How do we share the changes and improvements we make with the educational community?

ALL SPACES ARE OPPORTUNITIES

At **Escola Octavio Paz** all common spaces at the centre are also learning spaces where students actively, creatively and freely interact. For them, “space is like a third teacher”, as L. Malaguzzi used to say, and it must be organised in such a way that encourages communication processes amongst children. They understand that education “is made up of complex interactions, many of which happen if the space is participatory”. This is reflected, at primary school, in the so-called “environments”, where “children interact with one another and communicate with peers of different ages based on the proposals made by teaching staff and reconstructed by them. Each environment offers a range of learning opportunities with different materials and facilitates different responses and actions by children.” Furthermore, at primary school, worth particular mention are spaces of competence, “a time for learning where children are given the opportunity to develop defined research proposals and where they can work individually or in small groups, depending on their difficulty”.



➤ THE CLASSROOM

We spend many hours in the classroom together, sharing and working as a class, and learning habits without even realising. It is important to pay special attention to how we use and manage the resources we use in our daily undertakings in the classroom and throughout the centre to help us to become as sustainable as possible.

FOR REFLECTION

- Are there spaces for encouraging group work, the autonomy of children, communication?
- Do we make sure the classroom environment is healthy, noise-free and with good quality air, plants and other natural elements, that is welcoming to everybody?
- What measures are in place for the efficient use and reuse of materials we use in the classroom?
- What guidelines do we give to families about books, materials, lunch, etc.?
- How do we manage efficient lighting and climate control in the classroom?
- Are there dedicated recycling spaces?

- 1 REUSABLE PACKAGING
- 2 SELECTIVE WASTE COLLECTION
- 3 SUSTAINABLE PROCUREMENT
- 4 REUSE OF TEXT BOOKS
- 5 EFFICIENT, SECTORISED LIGHTING
- 6 SIGNAGE
- 7 MULTI-PURPOSE SPACES
- 8 INDOOR PLANTS



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IN WHICH FIELDS CAN WE TAKE ACTION TO MAKE OUR CENTRE MORE SUSTAINABLE?

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- 1 MEALS LOW IN RED MEAT AND LOW IN PROCESSED INGREDIENTS
- 2 LOCAL, SEASONAL FOOD FROM DIFFERENT CULINARY TRADITIONS
- 3 FOOD WASTE PREVENTION
- 4 REUSABLE, LONG-LASTING CUTLERY
- 5 FABRIC NAPKINS
- 6 WASTE SEPARATION
- 7 EFFICIENT DOMESTIC APPLIANCES
- 8 COMPOSTING

➤ THE KITCHEN AND DINING ROOM

77

What we eat and how we eat it are central factors in our lives, as they have a direct relationship with our health and the planet's health, as well as affecting the way we interact and respect one another.

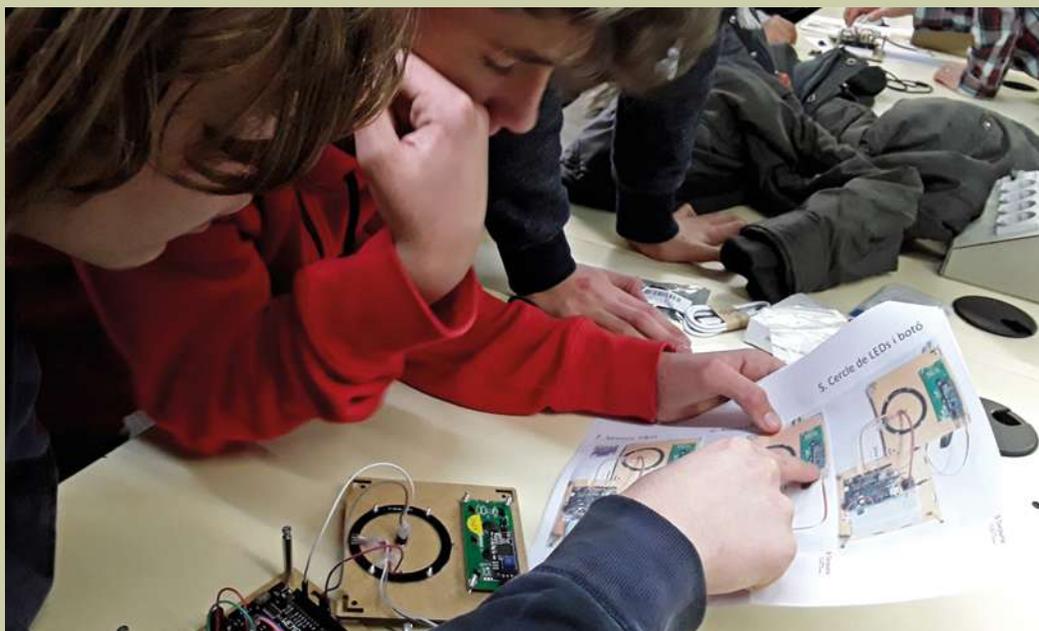
FOR REFLECTION

- Do we ensure that meals are healthy, with local products, drawing on different culinary traditions, with a moderate consumption of red meat?
- Do we use reusable, hard-wearing cutlery and fabric napkins? And for picnics?
- What measures are used to minimise the waste generated and prevent food waste?
- Do we encourage autonomy, respect and individual and collective responsibility?

REDISTRIBUTING THE CLASSROOM TO MAKE IT MORE EFFICIENT

Students from years 9 and 10 and science and technology A-level students from **Institut Barri Besòs** participated in the project “E3: energy efficiency at educational centres”, to improve the efficiency of energy use at school, at home and in the neighbourhood. One of the most important actions undertaken involved remodelling the technology classroom. This saw students study the energy characteristics of the classroom, for example, artificial and natural lighting or the position of radiators. The outcome of this research detected

the opportunity to improve energy efficiency merely by redistributing the classroom. And so, the layout of desks and the blackboard was changed to make the most of the natural light, the switches that had to be turned on during the day to ensure there was enough light were identified, fabric curtains were installed to avoid glare on the blackboard and heat getting into the classroom, and a classroom ventilation protocol was set up to keep the temperature comfortable over the course of the entire day.



HEALTHY FOOD FOR STUDENTS AND THE PLANET

The food that students eat is high on the list of priorities at **Escola Orlandai**, which takes care of even the finest details. Working on school dinners that include a variety of high-quality, local foodstuffs, some of which are ecologically certified (staples like rice, vegetables and pasta), which promotes local agriculture and reduces the ecological footprint of imported produce. With a view to reducing the emissions generated by intensive livestock farming, some meals are vegetarian and, once a month, there is an “animal-free” day, in which the food served is 100% plant-based. The food served also includes allergy free options for those with nut, gluten and lactose intolerances. Once a week, the bread served is wholegrain and the fruit is always seasonal, helping students to learn about growing seasons. In terms of the waste generated at lunch, students are encouraged to take whatever they have not eaten with them home in their lunch box or reusable container. They are also encouraged to eat a healthy breakfast, without processed food and refined sugars.



➤ COMMUNAL SPACES

Common spaces are informal spaces of coexistence. They play host to many things that are not explained, but that can (or cannot) encourage relations, where uses and initiatives can be pursued by the educational community, bearing in mind different ages, genders and interests. To this end, it is important to set aside time and resources to adapt classrooms, making these shared spaces multifunctional, flexible and offering learning possibilities.

FOR REFLECTION

- Do we have multifunctional spaces to hold meetings and conversations? Who participated in their design?
- Which elements of common spaces encourage use by the educational community?
- What consideration is given to sustainability criteria as part of ceremonies, parties and excursions?
- What activities are performed in communal spaces? Do all groups have access to them in equal conditions?

- 1 SUSTAINABLE PARTIES
- 2 WASTE PREVENTION
- 3 EXCHANGE MARKET
- 4 CONSUMPTION COOPERATIVE
- 5 BOOK CROSSING
- 6 MULTI-PURPOSE SPACES
- 7 INDOOR PLANTS



ESCOLES + SOSTENIBLES

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COMISSIO SOSTENIBILITAT

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PARTICIPA

Suma't a la cooperativa

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Sortida al bosc apunta't!



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IN WHICH FIELDS CAN WE TAKE ACTION TO MAKE OUR CENTRE MORE SUSTAINABLE?



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- 1 SUSTAINABLE BUILDING
- 2 ADAPTED TO REDUCED MOBILITY
- 3 EFFICIENT BUILDING (insulation, etc.)
- 4 EFFICIENT, SECTORISED LIGHTING
- 5 SOLAR PROTECTION SYSTEMS
- 6 PHOTOVOLTAIC INSTALLATION
- 7 THERMAL SOLAR INSTALLATION
- 8 WIND INSTALLATION
- 9 RAINWATER RETENTION CISTERNS
- 10 WATER SAVING MECHANISMS ON TAPS (aerators, etc.)
- 11 WATER SAVING MECHANISMS ON CISTERNS
- 12 GREEN ROOFTOPS
- 13 WEATHER STATION

➤ THE BUILDING AND THE FACILITY

83

Our building must set an example each and every day. It must serve as an example of best sustainable practices and key elements in relation to learning for the entire educational community: generating clean and renewable energy, maximum energy efficiency, collecting and saving water, green spaces, etc. as well as adapting to functional diversity (reduced mobility, hearing disabilities and visual impairments).

FOR REFLECTION

- How do we encourage water and energy savings? Do we monitor consumption?
- What interventions could make the building more sustainable? Are they within our reach? Who could help us?
- Do we have spaces adapted to those with reduced mobility, hearing or visual impairments? What do we need to make them a reality?

WE MAKE A SCHOOL, WE MAKE A NEIGHBORHOOD

84

The “Habitem l’escola” and “Fem escola, fem barri” projects consisted of a series of actions that were performed by students and families at **Escola Fort Pienc** to improve common spaces both inside and outside the centre. These strategic interventions aimed to improve the spaces in which school activities were performed on a daily basis, structured around the school’s layout, which was done in a short space of time on a limited budget. These actions involved creating gardens and green courtyards, improving the distribution of furniture in common spaces and classrooms, proposals in relation to internal mobility, such as spaces for parking scooters and educational projects in relation to allotments and vertical gardens. In terms of the outdoor spaces at the school, a series of activities were performed at Plaça del Fort Pienc and in Carrer de Ribes, in cooperation with the APIP-ACAM Foundation, which promoted spaces for reflection about sustainability and public spaces, as well as bringing the different groups in the neighbourhood together. These changes, in addition to ensuring the continuity of the sustainability project at the school, served to consolidate the relationship between families, teaching staff and different agents in the surrounding area.



TOWARDS MORE RESPONSIBLE CONSUMPTION

In Poble Sec, two centres analysed the consumption patterns of their buildings and users in terms of power, water, materials and food. **Tres Pins and Mossèn Jacint Verdaguer schools**, accompanied by a neighbourhood institution, performed an audit to identify weak spots in consumption. This quickly emphasised everything that was easily changed and, thus, facilitate more responsible consumption. For example, students decided that from then on, only reusable packaging would be used for breakfast and afternoon snacks, posters would be hung in toilets to encourage a more rational use of water,

making sure to turn lights off when not using a space and improving the use of heating, turning radiators on when the threshold temperature was indicated on the corresponding thermometer. Furthermore, they looked at the responsibility of other members of the community, asking for changes to be made in the building: installing rainwater collection tanks and solar panels, improving insulation by installing double-glazed windows or rolling out composting at the school. Families also declared what they could change at home when it came to taking action and before going grocery shopping.



➤ THE GROUNDS AND THE EXTERNAL SPACES

The distribution of uses and changes to elements can help to make outdoor spaces more versatile and convert them into an excellent context for learning.

FOR REFLECTION

- What are these spaces used for as part of the school's day-to-day activities? Could they be put to any other uses?
- What relationships and uses can be seen in this space? What can we change to promote new spaces?
- Do we encourage the use of spaces for rest, building relations and games, bearing diversity in mind?
- Do we encourage the entire educational community to participate in the design?
- Do we create habitats and care for plants and wildlife?
- Do we encourage ecological cultivation?

- 1 NATURAL PAVING
IN PLAYGROUNDS
- 2 SPACES FOR THE DIVERSITY
OF GAMES
- 3 SPACES FOR REST
- 4 SPACES FOR PLAY WITH
NATURAL ELEMENTS
(sand pit, logs, rocks, etc.)
- 5 SPACES WITH SHADE
(trees, awnings, pergolas)
- 6 NATIVE PLANTLIFE
- 7 PLANTERS
- 8 ALLOTMENT
- 9 ANIMALS - WILDLIFE
- 10 INSECT HOTEL
- 11 BUTTERFLY GARDEN
- 12 NEST BOXES AND FEEDERS
- 13 BICYCLE AND SCOOTER
PARKING SPACES



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IN WHICH FIELDS CAN WE TAKE ACTION TO MAKE
OUR CENTRE MORE SUSTAINABLE?



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- 1 ECO-CHAMFERS
- 2 SCHOOL ROUTE
- 3 PEDESTRIAN AREAS
- 4 TREES, CORK OAKS AND PLANTERS
- 5 GREEN SPACES
- 6 MOBILE SCHOOL GREEN POINT
- 7 SUSTAINABLE SCHOOL TRANSPORT

➤ THE IMMEDIATE ENVIRONMENT

89

Although outside the school premises, this is the border between the neighbourhood and the city and defines the centre's relationship with the surrounding area. Providing the educational community with rest spaces, with more plants, a better environmental quality, posters encouraging visits, etc. enhances the relationship between families and the centre.

FOR REFLECTION

- Do we have spaces with planters, benches, etc. that are the perfect spaces for conversations and sharing moments?
- Do we participate in community projects in the neighbourhood?
- Do we encourage students and their families to use sustainable transport to travel to school?

TAKING CARE WITH THE DESIGN OF OUTDOOR SPACES

90



Escola Fluvià uses a plot of land next to the school, signed over by the local authorities, as a playground that is bursting with opportunities. Over the years, this huge space has been transformed into an extension of the school's main playground, where children interact with a variety of elements that encourage learning through play. It is home to gardens with aromatic plants, a ground-level allotment, vegetable gardens in growing tables, a pond with aquatic plants, peaceful spots for reflection, climbing structures, constructions made by families to facilitate symbolic play, countless nooks and crannies where children can be creative, areas of natural shade and a wide variety of plants, bursting with opportunities. Visiting this outdoor space, in addition to work in the classroom, improves all the projects embarked upon at the centre.

CONQUERING THE STREETS AROUND THE SCHOOL

As part of the process to transform Plaça de les Glòries and create a huge green island, the team of architects encouraged educational centres and local residents to propose artistic, leisure experiences, with low-cost interventions that would substantially change the vision of the street. Thus, students from **Escola dels Encants** were tasked with proposing the transformation of Carrer de Cartagena, between Avinguda Diagonal and Carrer del Consell de Cent. Prior to the start of the definitive work, the educational community at the school

played an active role in its provisional layout. The experience kicked off with a week in which the street was cut off to traffic and the school children got to work, taking measurements, discovering what was there and what was missing and making up games that demonstrated the street could be a perfect place for playing and running around. One of the students reflected: “We’re thinking what we can do in this street, maybe a slide, maybe a tree house, a big allotment, swings or a zip line. We want it to serve as a park for the school”



NATURE, THE PERFECT SPACE FOR LEARNING

One of the most well-known tools used to increase personal well-being and decrease stress is to go for a walk in nature. In **Escola Sant Gregori**, located in the Serra de Collserola, for years infant and primary school students have regularly gone to Collserola on excursions. These trips, in addition to aspects of the syllabus, encourage creativity, self-esteem, resilience and, at the same time, observing the environment, other people and ourselves. The aim of this project is to respond, in a genuine and specific way, to the scientific evidence that studies have generated about the need for green spaces to improve physical and mental health as well as cognitive development, as well as about students and families in the nearby natural environment to promote, based on knowledge, respect for nature and for future generations.



**EDUCATION
FOR
SUSTAINABILITY**

**WITH WHOM?
Community**

- Open school
- Networking
- Contribution to the More Sustainable Barcelona network
- Networks of networks

**WITH WHOM?
COMMUNITY**

A More Sustainable School is not an institution that is isolated from the real world that addresses general and abstract concepts that are only valid within the four walls of the centre; rather, it is a school that is **open, attentive and receptive** to what is going on outside and becomes a key player and catalyst for change in its social environment. It is a school that not only allows what is happening on the outside to infiltrate its classrooms, but it also actively pursues this, with an attitude of **solidarity and commitment**.

Sustainability requires collaboration: that is why creating links and **cooperating with others is a critical learning experience**. However, contact and interaction with other centres or

institutions, the exchange of experiences and knowledge and **networking** will progressively become a very powerful stimulus for the work of our school community.

We are open to the world to try to understand the path that the things in our surrounding area take, and to paying attention to the actions being taken and adopting what might be useful, as well as sharing our progress and the lessons learned.

◀ OPEN SCHOOL

Families and other members of the community are our main **allies when it comes to sustainability projects** at the centre; however, we can also build and nourish partnerships with neighbourhood institutions and other organisations that have expertise, time and resources to offer. A centre that encourages horizontal relationships with the local community and encourages everybody to participate in shared projects will help create a wonderful network of complicity and a desire to make a change. It has the potential to become the backbone

of the neighbourhood, which also responds to its needs.

Supplying **carefully crafted information about our education for sustainability project to the local community** is important. Value must be placed on this information as a way of encouraging reflection about sustainability amongst people in the surrounding area who perhaps have not come into contact with the concept until now. Likewise, we can also attract the attention of people and institutions who see our centre as a new agent with which to collaborate.

Obviously, our projects are more likely to be correctly understood and accepted if members of the local community believe they are relevant. It is worth considering how we can **involve people and institutions in the definition of priorities**. Asking families about local sustainability problems, offering guided tours to local residents to introduce them to the sustainability features of the centre, participating in events and projects outside the school, coordinating with social institutions, asking for opinions and help from expert associations, etc. are all ways in which we can **get closer to the local reality and create bonds with people**.

By progressively becoming involved in matters affecting the local community, the centre can become a **catalyst for change in its area**, transforming spaces, implementing collaboration initiatives

with neighbours and looking at the realities both inside and outside the school premises.

Service and learning projects are a good opportunity for cooperating with institutions who are active in the surrounding area and strengthening links with the community.

Another important aspect is to establish **collaborations with universities**, whether to embark upon joint research projects, to receive expert knowledge and advice or to offer practical training opportunities to university students.

FOR REFLECTION

- Do we invite families and people from the neighbourhood to find out about the school and the projects we undertake?
- Do we draw on the realities and problems faced by the community as a field for real action and learning?
- Do we involve the centre in neighbourhood affairs (problems, projects, parties, etc.)?
- Does the neighbourhood regard the school as a community centre where they can participate and learn?
- Do we network with local agents and institutions as regards matters affecting the centre, local area and community?
- Do local experts (institutions, universities, etc.) offer advice or collaboration as part of our projects?

THE CENTRE AS A NEIGHBOURHOOD FACILITY



Institut Escola Trinitat Nova is a school that is open to the neighbourhood. When work started on the project to create this centre, consideration was given to “how to create a comprehensive educational proposal with high educational value that would ensure that children and young people (as well as all local residents) connect their interests and motivations with local resources and thus strengthen social cohesion and learning in the community”. The proposal involved the Trinitat Nova educational space, which enriched the centre; however, it is also open to all families in the

neighbourhood who are looking to create educational spaces experiences beyond the realm of teaching activities and thus make it possible to share and construct objectives with the community. The management team sand socio-educational facilities have been constructed, like a library, multifunctional space, audiovisual culture and communication space, and meeting spaces are also offered to families, institutions, as well as permanent training, leisure, sporting projects, etc.

◁ NETWORKING

Networking is the practice of reflection, communication and joint action with stakeholders from the local area. The Barcelona **More Sustainable Schools network** rings together all these centres in the city that are committed to the sustainability that they form part of. In the network, **we share a purpose, fieldwork and motivation and offer support to one another.** Each institution using their own identity and autonomy, while establishing links to join forces.

Teachers participate in seminars with their peers, listening to new ideas based on the experiences of others and receiving recognition for their own initiatives, as well as discovering different perspectives about sustainability. **Sharing concerns and teamwork**, not only pooling experiences, knowledge and capacities, but also generating new learnings, that are more suited to the transformation we are pursuing. **Reciprocity, the exchange of ideas and dialogue are essential** as part of this collective construction and management of knowledge.

Students also share a purpose, symbols and rituals. The ceremonies to sign the citizen commitment to sustainability at the Saló de Cent, end of year meetings, fortnightly newsletters, songs written together, committee afternoons, etc. **promote a sense of belonging, complicity and cooperation.**

The network offers **opportunities to forge synergies:** to establish partnerships with other centres to share a specific project, create a thematic work group, organise joint actions with other centres to face a common problem or explore an opportunity. The educational centres harness resources, combine efforts and make the most out of each person's assets. It is not only about undertaking actions in lockstep that are more or less similar, but about connecting these actions, enhancing their transcendence, visibility and social impact.

DISCOVERING THE NEIGHBOURHOOD THROUGH A CHILD'S EYES

The **Les Acàcies, Vila Olímpica, Pere IV i L'Arenal de Llevant schools and their parents' associations** participated in "Camí9" with a view to discovering and obtaining a better understanding of El Poblenou as a neighbourhood, offering children the opportunity to get around the neighbourhood by themselves and encouraging sustainable mobility. Groups of children from years 3, 4 and 6 participated, working together to prepare a map marking the most emblematic points in the neighbourhood and the distance and time it takes to walk from one to another. The beach, Plaça de Prim, the Art Workshop and the skatepark

were a few locations highlighted on the map, many of which differed from those that would have been chosen by adults, and helped to get a child's perspective of the neighbourhood. "Camí9" was developed separately at all schools, before celebrating a joint ceremony to share the outcomes and depict the map on the ground of Plaça de Can Felipa. This activity saw students study aspects of the neighbourhood's past and mathematics, calculating distances, as well as generating a joint space for parents' associations to make proposals about how to move around the neighbourhood on foot.



Micronetworks of schools interested in a single topic make it possible to exchange and share ideas and compare data between all participating centres. Teaching staff are provided with resources designed specifically to work on the topic and they receive specialist technical advice. They have access to resources adapted to their circumstances to enhance the methodological process in the preparation of education for sustainability projects, without having to develop them by themselves.

FOR REFLECTION

- Do we get involved in the life of the E+S network?
- Do we harness the training, exchange and joint work resources and opportunities that the network offer?
- Do we cooperate with other centres to develop, exchange and share ideas and information about education for sustainability.
- Do we encourage students to participate in network initiatives or cooperate in those led by students from other centres?



NOU COMBUSTIBLE (THE NEW FUEL)

During the 2016–2017 school year, all centres involved in the programme were invited to participate in the preparation of the lyrics for the anthem of the More Sustainable Schools programme, *El nou combustible*. Piecing together all the stanzas written by the participating school, the music group Xiula embarked upon a creative process that culminated in the anthem presented during the closing ceremony that year.

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El nou combustible (The new fuel)

The sun has been hidden and it is sweltering.
The streets are filled with noxious fumes.
Bins in the street are overflowing.
Our rivers have run dry and are polluted.

But there are people who want to change our path,
thousands of agents who want to do it step by step;
schools are the start of all these paths, and the
mission will change our destiny.

*It has now begun, what seemed impossible,
revolution, is the new fuel!*

*When we fight together, we are invincible,
together we will build sustainable schools!*

In the darkness, you wake up as you discover
that it's time for you to be water in the dese,
(*be water, my friend*).

Small details that make a big difference,
nobody can cut back your freedoms.

An allotment, a gesture, a voice that wants to be heard.
A dream come to life, taking over the streets for play.
One car less, making consumption more sustainable,
eating fresher, hunger when you want to decide.

*It has now begun, what seemed impossible,
revolution, is the new fuel!*

*When we fight together, we are invincible,
together we will build sustainable schools!*

RAP

I want to see a specially coloured sea,
cleaner than ever, full of fish and corals.

I want to see the sky, full of stars,
without the lights of the big city.

Nature is full of fragile things and if you want
to care for your surroundings, the solution is
really simple: you have to make a move,
now is your time!

We want a world full of life, save!

Don't waste energy and much less your power.

We use rubbish to make poems of love and
songs from fuel.

Let's start a revolution, billions of people around
the world.

Coming together, the world can't change by itself.

Discussing, deciding and reaching a consensus,
it's not always easy, but I'm convinced.

Squares, streets and parks across the city
will be new places where we can grow freely.

*It has now begun, what seemed impossible,
revolution, is the new fuel!*

*When we fight together, we are invincible,
together we will build sustainable schools!*

*It has now begun, you won't want to miss it.
Inside the darkness, we will be the light that shines.*

I don't want the world to go to hell!

You and I will be the green revolution!

➤ CONTRIBUTION TO THE MORE SUSTAINABLE BARCELONA (B+S) NETWORK

When a centre joins the More Sustainable Schools programme **it signs Barcelona citizen commitment to sustainability** and is declared as being jointly responsible for achieving the objectives shared by all signatories. Thus, the educational centres in the network have a clear conscious that they also **belong to the larger More Sustainable Barcelona network** and the small or large transformation actions to

consolidate and extend the culture of sustainability **contribute to making Barcelona a more sustainable city.**

Beyond the formal civic commitment to forming part of the network's governing bodies (citizen's council for sustainability) and its work groups, or participating in joint events and assuming joint stances (for example, the network member conventions, World Environment Day celebrations, *Fem Xarxing* workshops, recognition



of best practices, etc.), belonging to the B+S network opens educational centres to the possibility of establishing **genuine cooperation with associations, summer camps, retailers, companies or experts**, with which, as well as sharing a purpose, they can share specific projects and actions.

Good examples of collaboration and links between organisations in the network can be seen in neighbourhood projects (such as the Participatory Energy Plan in Sant Martí), *Pla Buits* projects (such as *Illa dels 3 Horts*) or the Clima projects, where educational centres become actively involved with other stakeholders.

Insofar as **educational centres are not isolated from the real world**, the lessons learned are not only relevant here, but also to partners involved in projects, meaning that the exchange really is in both directions. There is an exchange of both knowledge and recognition. **Teachers and students are more visible on social media** and children and young people start to exercise their role as city residents.

FOR REFLECTION

- Do we share the importance of working at the educational centre towards a more sustainable Barcelona with students and parents in cooperation with the citizens' organisations that form part of the larger More Sustainable Barcelona network?
- Do we harness the resources and opportunities offered by the B+S network?
- Do we propose embarking on (or cooperating on) a network project with citizens' organisations?

SHARING THE TRANSFORMATION PROCESS

Institut Menéndez y Pelayo, in cooperation with two other institutions from the B+S network, submitted a successful bid as part of a call for subsidies offered to Clima projects. Thus, it was possible to implement a project that encouraged cooperative work and set out mechanisms for shared decision-making. This saw the creation of a vertical garden following the concept of “do it yourself”. In cooperation with the Galanthus Natura Association and the World Nature Foundation, a proposal was made to transform the school playground as part of a participatory process involving the entire community. The result immediately had a positive impact on the city and surrounding area.



➤ NETWORKS OF NETWORKS

More Sustainable Schools also join forces to **work together with other groups who share objectives.**

To this end, in 2009 the **Network of Schools for Sustainability in Catalonia (XESC)**, was set up, a network of networks in Catalonia, so to speak. The result of informal exchanges in response to the need to share experiences between centres and municipalities developing programmes in relation to an education in stability, XESC is currently made up of 16 Catalan towns and cities (including Barcelona), the Barcelona Education Consortium, the Network of Towns and Cities for Sustainability (XCPS) and the Generalitat de Catalunya (as part of the Green schools programme). In total, **more than one thousand educational centres are committed to an education for sustainability**; exchanging experienced, training and resources and promoting research and assessment, as well as establishing national and international links.

At a national level **ESenRED (Escuelas hacia la Sostenibilidad en Red)** brings together networks of sustainable non-university educational centres promoted by public administrations (autonomous communities, town halls, provincial councils, etc.). ESenRED receives collaboration and support from the National Centre for Educational Research and Innovation (CNIIE) and the National Centre for Environmental Education (CENEAM).

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In terms of the work of these two supramunicipal networks, worth particular mention is the **International Youth Conference** “Let’s take care of the planet”, which mobilises and encourages young people to analyse and debate the main socio-environmental challenges we face. This is a process that sees young people come together, discuss the topics proposed and choose representatives to communicate the ideas generated by the different spaces of exchange. This process includes holding national and international school conferences.

At an international scale, the E+S programme is contributing more and more best practices and sharing knowledge at different forums. The most significant is the **Global Action Programme, (GAP)** or Education in Sustainable Development by UNESCO, with the E+S programme being a partner of task force 5 Speeding up solutions in the local environment.

FOR REFLECTION

- Do we get involved in Catalan, Spanish or international proposals? What can we contribute?
- Do we harness training, exchange and networking opportunities at a regional and international level?
- Do we encourage students to get involved in actions with young people from different countries?



LET'S TAKE CARE OF THE PLANET

Centres participating in **“Let’s take care of the planet”** attended the Catalan conferences, presenting their projects and reflecting on and debating the socio-environmental challenges they face in their area. Here, representatives are chosen to attend the national conference, at which experience, concerns and solutions are shared with other young people. It is a learning process amongst peers, promoting empowerment to take action and create as part of a network. “Let’s take care of the planet” was part of an experience I’ll never forget. It opened my eyes to the real world: a world that doesn’t care

for the environment and that, therefore, has a really negative impact on the planet. Thanks to this event, I’m really motivated to try make a change”. (Enzo, Vilanova i la Geltrú). “[...] it has served as a way of demonstrating the power that young people have and that when we come together, we can achieve a lot of things”. (Mariona, Barcelona). “[...] has been filled with knowledge, work and new friends, but most importantly, lots of enthusiasm”. (Nieves, Barcelona). “[...] this has been a unique and unforgettable experience. We’ve forged strong friendships between us”. (Sergi, Barcelona)



Let's get down to it!





If you have got to this part of the guide, then you'll have a pretty good idea of what it means to be a more sustainable school.

The following pages provide an explanation of how to make progress converting your centre into a more sustainable centre. Step by step.

THE FIRST PROJECT

You will probably be already doing things at your centre that respond to the interest amongst teachers and students to care for the environment and defend a decent life for one and all. You are likely to have made efforts to separate waste or save water and energy, perhaps collaborating with a social institution in your local area. However, the time has come **to go one step further and adopt a global commitment at the centre to making progress with education for sustainability** as part of a structured process of action and reflection that will make you a more sustainable school.

Understanding the global nature of the socio-environmental crisis: We are all aware of the major problems (poverty, destructive consumption, inequalities, environmental damage, climate change and human conflicts) are inextricably linked to one another.

With sustainability on the horizon:

Aware of the limits of our planet and the requirements of human development, we propose rethinking how we live and innovative to find solutions that improve everybody's quality of life without harming the environment and resources or accumulating problems for the future or for other regions of the world.

Integrated centre approach: Working to make the school or institute more sustainable involves a holistic approach to the educational centre, which means, amongst other aspects, establishing a close relationship between all aspects of the centre's life.

We are not starting from scratch: This approach by no means involves having to start from scratch, rather making progress with what is already being achieved, consolidating what works and reviewing whatever needs to be strengthened. Consistency between theory and practice.



There is no checklist: The programme suggests a simple, flexible methodology that aims to be useful for each centre to follow their own path, progressing at their own pace, depending on the characteristics, possibilities and level of commitment. The only requirement to engage in a process like this is the desire to change.

Autonomy of the centre: The pathway to becoming a more sustainable centre involves conceiving, designing and planning successive projects. Each centre decides on its own starting point and sets its own objectives and actions,

bearing in mind its own circumstances. The outcome will be a middle point of what is desired and what is possible.

More Sustainable Schools projects reflect the desire to make significant changes in relation to sustainability. These transformations may be large or small, addressing the centre in its entirety or focussing on a specific element.

Bear in mind that you are embarking on a long journey and this is only the first step.

GETTING STARTED WITH THE FIVE Cs



1. CONSCIOUSNESS.

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YOU MIGHT HAVE HEARD...

You might have heard about a programme that helps schools to be more sustainable, or heard about the experience of a nearby centre or seen photos of the Saló de Cent full of children and young people. You often think about the unsustainable way of life we lead, in the belief that education is key to contributing to a better world and have started to make changes at your centre. You are considering whether to take the leap and join the More Sustainable Schools programme.

What are you waiting for? Find out for yourself! Get in touch with the programme and book an informative session, where we will respond to your questions and explain the steps you need to take and how we can help you.

Welcome to the More Sustainable Schools network!

2. COMMUNICATION. SHARING THE IDEA

The first step is to make a decision as a centre. To this end, you'll need to **xplain the purpose to the teaching staff or, even better, the entire educational community**, and share the Citizen's Commitment to Sustainability. The programme will provide you with the communication materials you need to do this.

If you decide that you want your centre to form part of the network, that means you want to embark on the journey towards sustainability with other educational centres and 1,500 organisations from across the city. Congratulations!

3. COMMITMENT. WHAT ARE WE WAITING FOR?!

The **management team approves** the implementation of the process as part of an initial project. Now it's time to confirm the centre's interest in participating in the programme.

It must also sign the **Barcelona Citizen Commitment to Sustainability**, which will take place a little further down the line, at the start of the school year as part of a ceremony held at Saló de Cent.



4. **COMPETENCE.** GETTING TRAINING

When you confirm that you want to become part of a network, we will invite you to the first **training session**.

Furthermore, you will receive the tools and instructions to help you familiarise yourself with the structure and contents of a sustainability project and consult several examples. Now, it's time for you to start thinking about your own.

5. **COMMITTEE E+S.** GETTING ORGANISED

An essential step is organising the **sustainability project coordinating committee** at the centre, which will lead and coordinate the projects as they are developed. To simplify matters, in this guide it is referred to as the E+S Committee; however, this **driving force** can be referred to in many different ways and each centre can name it however they want: sustainability committee, green group, eco team, etc.

Ideally, the E+S Committee should be made up of **representatives of all agents in the educational community**, in such a way that it serves as a

meeting and dialogue space for all parties, where discussions are held and decisions made about the project.

The purpose of the E+S Committee is to **promote and coordinate the sustainability project** at the centre and monitor the roll out of the action plan. As such:

- ✓ It coordinates the **planning and performance of the different phases** of the sustainability project.
- ✓ It coordinates the **continuous assessment and monitoring of the process** and the project's outcomes.
- ✓ It guarantees **consistency** between the goals and actions being taken.
- ✓ It detects the **needs** to improve the progress made with the project, requesting advice when necessary and acts as a point of contact between the client and + Sustainable Schools programme team.
- ✓ It ensures the extensive and transparent **communication** of the process, actions and results, encouraging the educational community to maintain a positive, constructive attitude.
- ✓ It facilitates the **participation** of the different members of the educational community in discussions and reflections,

encouraging people to share ideas and initiatives and promoting responsibility, cooperation and autonomy amongst the different stakeholders.

The range of tasks requires all **commitment from enthusiastic, enterprising individuals**, who want and can dedicate part of their time to them. These tasks involve a variety of meetings both at the start of the school year to plan and launch the sustainability project and throughout the year to assess progress and adjust the action plan as necessary.

The starting point for each centre might be very different as may the structure and functioning of the E+S Committee. Before getting organised, consideration should be given to the following:

- ✓ **The composition:** it should be as diverse as possible (students, teachers, families and non-teaching staff) and the different educational levels at the centre should be represented, as should members of leadership. Individuals and organisations who provide technical expertise or may be affected by the project being undertaken could also be invited.

- ✓ **The frequency,** the time and the meeting place: there should be a physical space and time set aside for coming together, included in the centre's organisational documents and teachers should be allowed to dedicate time to this initiative.
- ✓ **The process for electing** members: voluntary, by vote or confidence.
- ✓ How it **fits into the organisational structure** at the centre. The role within the general organisation and the weight of its decisions.

Once these decisions have been taken and the E+S Committee has been constituted, the following agreements must be reached:

- ✓ **How** tasks will be distributed.
- ✓ **Who** will be responsible and the contact person (adult) for the More Sustainable Schools programme team.

Remember that the sustainability project is the **responsibility of the entire educational community**. The E+S Committee will assume responsibility for certain tasks, but only act as a support in the development of the shared project.

LISTENING TO AND RESPECTING WHAT STUDENTS WANT

For some time now, students at **Escola Ramon Llull**, ranging from the youngest children at the school to the oldest, have expressed their opinion about the goings on at the school. Their committee is made up of representatives of all classes at the school, sharing debates with a number of teachers, who understand how to motivate and give them space to express their opinions and decide what needs to be done to reduce noise, improve selective waste collection or improve the way in which the community is informed about successes, for example. Afterwards, another committee on which only teaching staff sit is responsible for prioritising and assessing all contributions before sharing them with the school's leaders. Contributions from everybody are encouraged and debates organised to reflect, stoke an interest and promote involvement. In addition to the different communication actions, the results are always included in the centre's annual plan to ensure they are officially distributed to the entire teaching staff.



PROJECT DEVELOPMENT: A CYCLE WITH FIVE PHASES

The work scheme for developing the centre's sustainability project is structured around five phases that make up the analysis and intervention model.

Far from being a linear path, these five phases take on the form of a spiral. We like to imagine ourselves walking along a snail's shell, and each turn is slightly higher up. Over the course of the year, we will develop educational actions and improvements at the centre and in the surrounding area that are progressively more ambitious, always adapted to the possibilities and characteristics of each centre.



The sustainability project:
the five phases

MOTIVATING, ANALYSING, DECIDING, ACTING... AND CONSTANTLY EVALUATING

As part of the actions performed by the **Centre de Joves i Adults ACIS** there are different phases that guarantee the success of the proposed actions. The preparation of the basis, for example, involved preliminary work to obtain an understanding of the environment and these types of spaces. Subsequently, the changes needed in the surrounding area are diagnosed, prioritising tasks and deciding on the task forces. Next, following a schedule, each task force participated in the corresponding actions, based on a number of specific objectives: being well organised is critical in promoting the action-based strategy. These actions went hand in hand with gardening, natural sciences, health, mathematics, visual arts and Catalan language tasks. Finally, corrections and improvements were made based on the assessment of objectives.



◊ MOTIVATION

Getting the educational community on board

WHAT?

The purpose of this phase is to **spark an interest and commitment across the educational community** with the idea of **encouraging people and groups** as much as possible with the project to make their school more sustainable.

The motivation is the drive that triggers, guides and maintains a specific conduct with a view to achieving the desired objective: **the enthusiasm that fuels us** to take action.

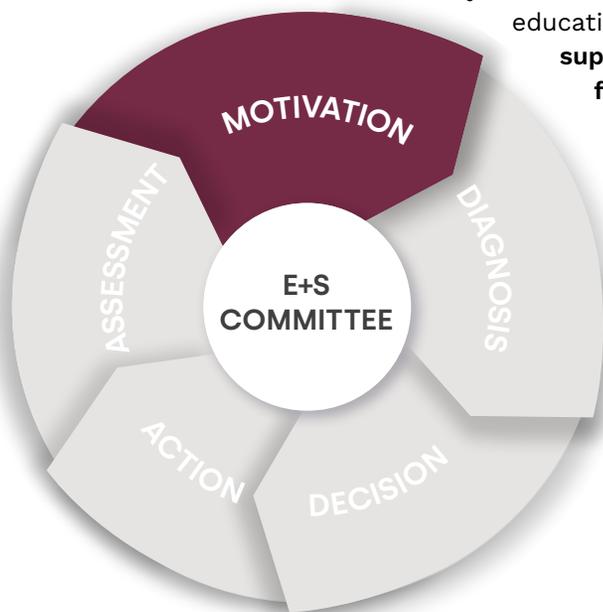
A key element in the success of any initiative that engages the educational centre is to **secure support and complicity from as many members of the educational community as possible**: the more, the better! Support and complicity in the framework of More Sustainable Schools are a reflection of the interest to get involved in a process of change.

WHO?

Educational centres play host to people from a variety of backgrounds and it is normal for us to find a wide range of attitudes and motivations as regards harmony or getting involved in a project amongst teaching staff and other members of non-teaching staff. It is possible that initially, the interest in making changes is the initiative of certain members of the school or a specific group, whether the leadership team, a group of teachers, a group of students or families. In other cases, motivation to embark upon the project might come from the majority of the teaching staff, which will make things much easier when starting and developing the project.

The commitment of key players is always essential, as it would be impossible to make progress if major stakeholders, like the leadership team, were to disregard the process.

The E+S Committee is made up of the most conscientious members and initially, it will need an enthusiastic leader to encourage and make everybody feel included. **Students have a very important role to play** motivating peers and relatives. Some particularly



dynamic student committees not only act within the centre, but they also make a name for themselves and influence the entire E+S network.

HOW?

To decide what needs to be done, **it is important to identify the starting point.** It is all about recognising strengths, for example, who could be potential accomplices, as well as weaknesses and, as the case may be, analysing the reasons that lead to a lack of motivation. By analysing the scenario for our actions, it will be possible to select the most appropriate actions and enhance their chances of success.

Providing information (transparent, updated, proven and in particular, undogmatic) and **creating opportunities for dialogue** used on the perception of each person and making it possible for people to see things from another perspective are the main ingredients that cannot be missing from the motivation process. We will share the conceptual framework, ensuring consistency when we talk to others about it, without exerting pressure or preaching, reaching a consensus employing our free will and by convincing participants, as part of **a climate of acceptance amongst members**, helping everybody to feel comfortable about sharing their ideas.



It will be necessary to find spaces, occasions and ways of reflecting on our surroundings (our centre, our city, our planet), that we like and dislike; our responsibility for them; why it is worth getting involved; what we would like them to be like; how we can improve them, etc. Consideration could also be given to connections between schools and the outside world, the bonds between environmental, economic and social aspects, the relationship between the options we choose and their consequences, etc. All of this while **making sure people can express themselves and expand their perceptions.**

It is about organising motivating actions, which provide opportunities to talk about what has been done and what is left to do, express opinions, make suggestions, compare points of view and share objectives and common beliefs. These actions help to bring our concerns to the surface in relation to certain events in the immediate environment, encouraging people to raise questions and research answers, leading to active involvement, suggesting the inclusion of new matters on the agenda, etc. In short, **actions to raise awareness of existing problems and their consequences, in addition to our responsibility and the value of our actions.**

Actions might address the centre as a whole or a specific group: students, families, teachers, non-teaching staff or neighbourhood associations. Consideration must be given to the needs and priorities of each group and it must be established, in each case, **which is the driver that will encourage these people to get involved in the transformation project.**

FOR REFLECTION

- Motivation is a necessary condition, but it is not enough by itself to promote the perception and desire to make a positive change in people; it is the engine that, given the right circumstances, can see a transformation process put into place.
- We must encourage establishing an ideal, respectful climate with the conceptions and personal times, waiting for people to gradually become interested and feel that they have something to say and contribute and that their attitudes are worthwhile or, at least, understood.
- We must nourish this motivation constantly as well as analysing the difficulties we come up against. We must bear in mind that each year, a new group of students replaces a group of leavers and their families and that new teachers often join. This is why we must place an emphasis on promoting actions to provide continuous motivation, throughout the process, and not just at the start of a project. As a result, we can educate a group willing to participate in questions that are relevant to the school environment and everything that we set our minds to with a view to improving it.

PLASTIC FOR BREAKFAST

Students from **Escola d'Educació Especial La Sagrera** were invited to a very special breakfast: polystyrene sandwiches, plastic tapas and aluminium-foil cereal! The following week, through a mix of research and classroom games, students looked at the pollution caused by plastic-based waste, to try to understand why the breakfast they had been offered was so strange (and it really was!). As part of these games, students earned points, which were later converted into coins (*gretis*). This served as a way of getting students in the mood for one final activity. At the end of the week, these *gretis* could be converted into tools and material to clean waste on the beach. The decision was made to visit Bogatell, a beach not far from the school, to see which group could clean up the maximum number of rubbish, plastics and microplastics.



◁ DIAGNOSIS

Discover the problem to be addressed

WHAT?

The aim of this phase is to **identify and analyse the situations and problems** at the centre and the surrounding area that we want to address and understand the causes. There are a wide variety of aspects up for diagnosis and can be related to one, some or all of the five areas of action that we have defined. These might be relevant issues that we have seen at our centre, in the surrounding areas, or even the city and beyond.

the causes. We will need to observe, measure, calculate, survey, investigate and compare to establish strengths and weaknesses. Having a real understanding of the starting point is key in adapting our actions and being able to properly evaluate the impact of our efforts. However, **the activities performed to perform the diagnosis will gradually provide students with opportunities to learn** as well as other members of the educational community.

There are a wide variety of aspects that we can include in the diagnosis and it is down to us to decide on the scope. We can focus on just a couple of specific aspects that are of particular interest to us or consider an overall diagnosis, reviewing five scopes of action. However, a sustainability project often prioritises the diagnosis of a specific field, but ends up looking at others; for example, if the project is looking at food waste at meal times, in essence, we need to perform a scope 4 diagnosis (environment),



Being motivated and being capable of thinking about socio-environmental problems at our centre or school is the first step in getting our project off the ground. The next step would be to describe these problems in detail to obtain an **in-depth understanding of them** and try to define

although the process should also result in us asking ourselves whether the syllabus addresses this topic appropriately (scope 2, teaching). Generally speaking, the centres adopt progressively more ambitious approaches the more years they have been part of the E+S programme.

→ **Scope 1. Diagnosis of the culture of sustainability**

The aim is to analyse the values, attitudes, rules and behaviours that form part of the educational product in relation to sustainability. Diagnosing the centre's sustainability ethos is a wonderful opportunity to rethink the type of school we want and to respond to fundamental questions about the type of education we want our children and young people to receive.

→ **Scope 2. Diagnosis of teaching**

When diagnosing the penetration of the sustainability culture as part of teaching activities, we will need to focus on programming, teaching methods, teaching materials or supplementary relationships between syllabus contents. These are

analyse how to roll out the More Sustainable School vision in our teaching practices, the way in which themes are addressed and skills employed, and what ends up actually being implemented.

→ **Scope 3. Diagnosis of governance**

Diagnosing this scope involves analysing aspects of the organisation and climate in which both teaching staff and students develop their values, attitudes and behaviours. It could be an invitation to discuss what "participation" means to us as an educational institution; what comes to mind when we think about students, teaching staff, families or members of non-teaching staff; how democracy is at our centre, and how to encourage civic values and hone our citizenship skills. We can also analyse the contents of communication and the degree of consistency between the messages relayed and what we do, the existing communication channels, the people who transfer information and to what extent we encourage dialogue, debate and reflection.

LET'S GET DOWN TO IT!



→ Scope 4. Diagnosis of the surrounding area

Performing a diagnosis of the surrounding area entails determining the physical and functional aspects of the centre, understanding that the example of their own reality is key to the education of children and young people. From this perspective, we can analyse the characteristics of the building or the school premises, such as the design of spaces, the passive use of solar powers, the existence of architectural barriers, acoustic comfort or playground installations, for example. Taking one step further, we can place the focus on green spaces in the neighbourhood, air quality, the condition of streets and urban furniture, waste collection

operations, services and shops or the socio-environmental commitment of neighbourhood institutions, to name just a few. We can also look at the family context and analyse how we eat, consume or live together. Finally, we can diagnose city, national or international problems, if that responds to the student's interests and willingness to take action.

→ Scope 5. Diagnosis of external relations

Here, the aim is to understand the quality of links between the centre and its surroundings and detecting exchanges, stakeholders, initiatives developed and the positive impact that the centre is capable of generating.

WHO?

Under the leadership and coordination of the E+S Committee, **the entire education community can get involved in this phase.** Having as many people participate as possible is recommended, contributing their opinions, although teachers and students will normally take on the main burden of responsibility. Depending on their age, **students must play a leading role** in the collection of data, analysing it, taking

decisions, participating and extracting conclusions, with adults providing the necessary space.

As in the other phases, the greater the involvement of members of the management team, the more likely the change process is to succeed.

Depending on the scope being diagnosed, groups taking on responsibility will differ.

	PROMOTES	COLLABORATES
 <p>Scope 1. Culture of sustainability.</p>	Teachers	Families and older students
 <p>Scope 2. Teaching</p>	Teachers	
 <p>Scope 3. Governance</p>	Teachers	Students, families and non-teaching staff: in particular, aspects of participation and communication
 <p>Scope 4. Environment</p>	Students	Assistance and guidance: teaching staff Collaboration: other members of the educational community
 <p>Scope 5. External relations</p>	All sectors of the educational community	

Teaching staff and students on the E+S Committee, responsible for coordination, must be capable of interpreting the concerns, expectations, misgivings and complicities of the entire community. **Students are in particular responsible for serving as a loudspeaker for the opinions of their classmates.**

By performing the diagnosis, the aim is to find out what the community thinks about the current situation, to define the priority actions in the following phase. It is often beneficial to find out the point of view of different groups: cleaning staff, kitchen staff, dining room staff, concierges, clerical staff and maintenance services. The opinion of families, on the other hand, emphasises the transparency of the process. **The more groups that are involved, the better the information we will gather.** Depending on the scope proposed, we could even invite institutions or associations connected to the centre and that are experts in the chosen or similar field.

HOW?

Depending on the number and age of students and teaching staff available, **we can organise ourselves in different ways.** Under the coordination of the E+S Committee, we can think of ways to involve the entire centre, with each class choosing the tools to be used in the data collection process, sharing information between groups and a representative from each class coming together to extract conclusions. One alternative is to entrust the diagnosis to a single class or group, which regularly communicates its discoveries to peers and disseminates the results once the process comes to an end. Another option could be for a group of teachers from different subject areas to organise a data collection exercise, aiming to be as wide reaching as possible, each within their own remit. At nursery schools, infant schools and special education centres, the diagnosis is often performed getting families and non-teaching staff at the centre involved. In other cases, it could be organised as a specific work for extra credit or as research work. **There are as many options as centres and there is no one formula that is right.**



At the start of the diagnosis with students, activities should be proposed **to help detect preconceptions**, knowledge, thoughts and beliefs that define the participants' vision of reality, as well as encouraging them to question these visions to make it possible to build more flexible models of communication, capable of building in new ideas. Useful activities might include analysing images, texts and audiovisuals; interpreting graphic material; participation in simulations to reproduce certain contexts and where students perform the corresponding roles; exploring scenarios from different perspectives and, in any case, formulating questions and preparing hypotheses.

During the **collection of information** we can direct observations towards new approaches, logging them using different supports (photographs, texts, charts), making calculations, consulting sources (books, Internet, management documents), performing surveys or holding interviews.

Using all the information obtained, combined with what we already knew or thought, now is the time to **process it** making comparisons (charts, graphics, drawings), visual representations (scale models, murals) and, in short, anything that helps to reinterpret and summarise the results and make them visible to the community.

FOR REFLECTION

- It is important to recognise that behind the decision to perform a diagnosis, not only will we find the need to identify and analyse the problem and pinpoint the causes. A teaching staff that decides to embark upon a diagnosis of more structural aspects of the educational centre is a group that will have to courageously face the challenge of being willing to change. And change is always difficult. It is not just about measuring the amount of water or energy that goes to waste, it is also necessary to reshape attitudes that are sometimes deeply rooted in people or groups. A diagnosis must be useful in order to identify characteristics of the culture at the centre that are not consistent with the desire to provide an education in sustainability, democracy, reason and based on cooperation, encouraging the emotional, moral and intellectual autonomy of everybody in the educational community and, in particular, students.
- We must reflect on which aspects are problematic and which aren't, the explanations for these problems and the range of solutions we can propose. It is not just about expressing an opinion, but providing a reasoning for what we are analysing, delving deeper into the causes and making progress with solutions.
- Each school and centre must find their own time. We must face the challenge of adding new practices to what we are accustomed to or make the decision to change those that allow us to orient the school in the direction we want to head in.

WHAT PROBLEMS DOES THE CENTRE FACE?

During the 2016–2017 school year, **Institut Quatre Cantons**, organised work following an external proposal, including it in the syllabus, as part of which 25 students wrote an awareness raising campaign. First of all, however, a preliminary step is needed: we must perform a diagnosis for the centre. Students from the school played a leading role in the diagnosis process, leading and driving the task. Depending on their interests, they can be divided up by topics to undertake an ecological audit: water, noise pollution, waste, biodiversity, energy and school materials. After dumping the results into computer graphics, proposals were made about how the school could be changed. “Most proposals looked at converting certain spaces at the school into greener, friendlier spaces. This reflected the desires of students and was totally different to what some teachers would have suggested had they been involved.” Students also expressed the need to introduce sustainability on the syllabus and made specific proposals for the following school year.



◁ EXPLORING ALTERNATIVES AND DECISION-MAKING

Searching for solutions, establishing priorities and drawing up an action plan

WHAT?

The aim of this phase is to **reach a consensus about the things we want to change** and establish priorities based both on what is most important and what is most feasible. This is the basis for **devising a plan that specifies landmarks, a schedule and who is in charge.**

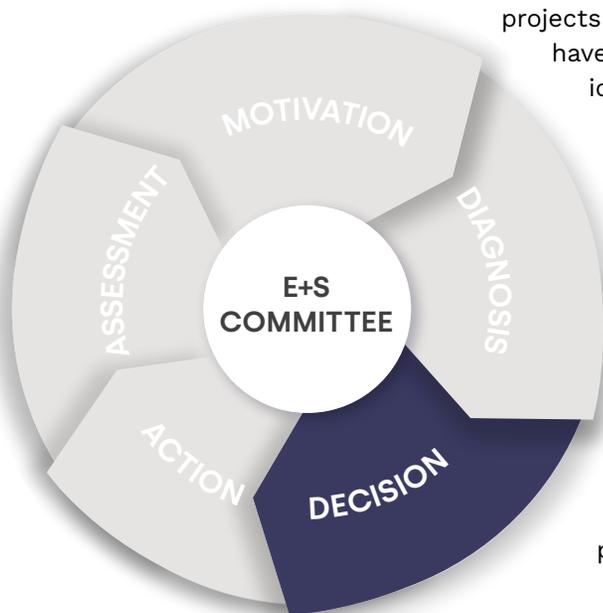
This phase sits in between the diagnosis and the implementation of an action plan. In other words, once we have gathered the necessary information to understand the dimension of the projects being examined, we have analysed them and identified the causes of the problems, it is time to look for possible solutions, decide which are most feasible and, ultimately, make decisions that are reflected in an action plan.

Identifying solutions to problems is a very important part of the process, as it **allows**

criteria to be adopted and democratic rules of play to be employed.

Solutions can entail different types of changes:

- ✓ Changes to *infrastructure*: civil engineering, repairs, replacement of facilities, transformation of a space at the centre or the surrounding area, etc.
- ✓ Changes to the *organisation* associated both with the management of the surrounding area and resources (control of energy spending, procurement criteria, changes with cleaning, irrigation, the use or reuse of materials, etc.) and governance aspects (time management, distribution and use of space, creation of committees or spaces for debate, etc.).
- ✓ Changes in the *conduct* of people and groups: to improve aspects that depend on the actions taken by each and every person and that highlight the importance of being competent in social, interpersonal and personal spheres.



WHO?

Given the problems detected in the diagnosis can vary in nature, complexity and severity, responsibility for extracting solutions will fall unevenly on each of the groups in the educational community.

Although **ways can always be found for everybody to participate to some extent**. As part of the process for exploring solutions and taking decisions about priorities, a group debate in which everybody can express their priorities is critical, whether in the form of discussion groups, assemblies, workshops, the guided reading of documents or sessions under the title “how can we improve our centre”.

HOW?

By starting with the results of the diagnosis; **having a good summary** will come in handy. The first step would be to group problems together based on type or depending on the group assuming responsibility for the solution.

Next, it would be necessary to **establish an order of priorities**, which might depend on:

- ✓ El cost econòmic.
- ✓ The severity or urgency of the problem.
- ✓ The interests of the different groups.
- ✓ The ease with which people get involved in a given change process.
- ✓ The economic cost.
- ✓ The efforts required based on the complexity of the solution, time, etc.

We suggest organising a meeting at which you can debate the action priorities. Participants might suggest for example that despite a given problem being particularly serious, the solutions appear infeasible at present given their complexity or economic cost and that they should be left for a later date. Priority must be given to **setting realistic objectives, rather than creating false expectations that lead to frustration**.



Once the order of priorities is established for the problems, it must be reflected in writing and **shared with everybody**. It is likely that at the debate session, **proposed improvements** will be made. It would be a good idea to condense these into an **initial list of ideas**. Later, we can work in groups or workshops to identify opportunities, explore other alternative solutions and analyse their feasibility.

The decisions taken as a group are organised into an **action plan**, which will serve as a roadmap for making progress with the established objectives. To this end, we suggest including:

1. The **objectives** to be achieved, i.e. the changes we want to and can introduce in the short, medium and long term and that have been decided upon in advance.
2. The most appropriate **actions** to achieve these objectives.
3. The **time line**.
4. The people **responsible**.
5. The necessary **resources**.
6. The **criteria and indicators** for assessing the success of the action (see "Evaluation" section).

For organisational purposes, a general action plan may be drawn up, before each team entrusted with implementing and monitoring prepares their own detailed programming, including the milestones, details of the actions, resources and evaluation tools.

FOR REFLECTION

- Emphasis must be placed on the educational value of exploring the alternatives and decision making, regardless of the age of the children or young people. The working strategies employed with the different participants might change, but the value will not.
- Remember that changes require the consensus and commitment of the different groups at the centre, as well as the groups from outside the centre. To build this consensus, the entire educational community should be kept well informed, ensuring there are high-quality spaces for communication.
- An action plan is not merely a list of separate actions that offer half-baked solutions to problems; rather, they serve as the backbone of group work that responds to an agreed objective that seeks to resolve a problem detected during the diagnosis.

CONSCIOUS PROCUREMENT OF SCHOOL MATERIALS

Students from **Escola La Muntanyeta** started the year with a specific challenge: when they arrived at school, no classroom material was available for them. The challenge involved them handling the decision-making process and deciding what needed to be purchased. For starters, students worked in small groups and started to research school materials and how they are used, how much money they cost, the environmental impact they have and the way in which they could be procured responsibly. Students had a pre-defined spending limit and each team drew up a list with what they considered was necessary. After reaching a consensus, they planned, with support from two material brochures, what was needed on as tight a budget as possible. Once this second consensus had been reached, they decided what material to buy, the amount and where from. This project, focussing on the management

of school materials, made it possible to work on factors like environmental awareness, responsible consumption and self-sufficiency as well as language, resources and mathematics.



EXAMPLES OF CHANGES IN DIFFERENT AREAS



TOPIC 1. CULTURE OF SUSTAINABILITY

- **They extend the concept of sustainability and promote reflection throughout the educational community** to make sure we are all on the same page. This leads to changes in the centre's educational plan and other documents that demonstrate the centre's ethos to clearly demonstrate its commitment to sustainability.
- **They promote changes in the Centre's rules of organisation and functioning** to facilitate the development of the sustainability project, setting aside time and space for the organisation of the necessary committees and work groups.



TOPIC 2. TEACHING

- **They promote innovative ways of working** to develop sustainability projects and acquire the corresponding skills



TOPIC 3. GOVERNANCE

- **They promote communication and overall knowledge of the project:** installing informative posters, holding community surveys, hosting thematic parties or publishing on social media, blogs and websites, etc.
- **They encourage participation and democratic practices:** or example, the creation of spaces and time for debate, talks or participatory processes.



TOPIC 4. ENVIRONMENT

- **They promote changes in the management of resources:** these include changes in the procurement of material, the reuse of paper, changes with lighting, water saving, the introduction of organic food in dining rooms, the reuse of material or greening of parties.
- **They promote the transformation of spaces at the centre:** for example, improving acoustic comfort, the naturalisation of playgrounds, remodelling spaces to adapt them to new methodologies or reorganisation of classrooms to better harness natural light and other resources.
- **They promote improving the environment:** in this case, this is about transforming spaces outside the centre, participation in community allotments, planting cork oaks, cleaning beaches or other natural spaces, interventions on public streets.



TOPIC 5. COMUNITY

- **They promote relationships or connections with institutions, shops or neighbourhood associations:** this is the case of projects led by other institutions, universities or the city council, the preparation of activities for neighbourhood festivities, the participation in school routes or organising bric-à-brac markets, for example.
 - **They promote the exchange of experiences with other educational centres:** as part of projects shared with other centres, for example, through networks for change or with international projects, such as Erasmus, involvement in the closing ceremony of the More Sustainable Schools programme or educational events like "Let's take care of the planet".
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◉ ACTION

Taking action and promoting change

WHAT?

During this phase, we encourage **taking action**. Responding to the decisions we have taken and implementing them as part of a process that is not merely a drill, rather a **real experience featuring the alternatives that we have come up with together**. Now it is time to put what we have learned into practice and **obtain the skills we need to take action**.

When we talk about action, we mean interventions that students decide to take to tackle problems and improve the situations analysed; actions that, therefore, involve **reflecting on their own actions**. The process is, in itself, the main lesson. Bearing in mind that, as we have said, when students investigate and try to resolve a problem, relevant milestones are those that refer to the educational process and not specific results, which may have varying degrees of success. Our aim is to educate children and young people in the skills they need to understand the world and become people capable of organising themselves and getting actively and critically involved in a changing, plural and complex society.



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WHO?

The action plan will be implemented, as applicable, with the participation of the different groups from the educational community. Given the problems detected can vary in nature, complexity and severity, responsibility for extracting solutions will fall unevenly on each of the groups. Each action will be entrusted to responsible parties or primary stakeholders.

The E+S Committee, as the team responsible for leading the sustainability project, must anticipate how to handle communications with

other students, teachers and families, and the time at which everybody will be invited to participate, at least as part of one-off actions, with a view to avoiding the group responsible for the action simply ploughing ahead with the action without including the rest of the centre in the project. Getting everybody involved is critical to the success of the actions and helps to transform the educational centre and community it is part of.

HOW?

Under the coordination of the E+S Committee, actions can be organised in a variety of ways, always **depending on the scope of action and consistent with the way in which the diagnosis has been performed.**

Here are a few examples, depending on who is tasked with leading the action:

- ✓ As regards actions that aim to adapt the educational project, improve the syllabus or introduce changes in the way in which the centre is internally organised, responsibility for the action lies with the teaching staff. Year, department or staff meetings may be necessary, or work groups may need to be organised
- ✓ In relation to actions affecting kitchen staff, individuals responsible for extracurricular activities, cleaning or concierge staff, their involvement in actions will also depend on their degree of commitment and available time. However, in part, it will also depend on the strategies employed to involve them in the diagnosis and decision-making process.



- ✓ Concerning joint actions with families, with the parents' association, with the school board or neighbourhood or city institutions, sometimes only adults are involved, however, other times, students might be actively involved: emphasising the importance of children and young people participating in actions and projects organised by the city is definitely worthwhile.
- ✓ In the case of most actions, all students can take part as the main stakeholders, with the mediation of teachers. This is the case, for example, of centres that organise an allotment, where all groups have their own plot; plans to improve waste management, to save energy or water, to reduce noise or more sustainable mobility, or when introducing changes to playgrounds or gardens. In all cases, it is essential to obtain the complicity and consensus of students and teachers involved, establishing a strong coordination system through the E+S Committee and heads of year, who must gather and relay information on progress with actions and selecting an efficient communication tool.
- ✓ Sometimes, centres organise actions as part of a subject on the syllabus, a programming unit or a project, in the form of a credit or research project. In this case, the action is led by a class group, motivated by one member of the teaching staff of more. Depending on the phase of education, teachers choose the project that best adapts to their needs, via different methodologies (for example, troubleshooting, learning and service, project work, game-based learning, exploring or examination).
- ✓ Some centres have the E+S Committee lead the action, inviting other students and the educational community to participate at given times.
- ✓ Other centres join forces to embark upon actions with a bigger impact, such as demonstrations in public spaces or ceremonies involving political representatives, generated as a result of contact between centres at a seminar, work group or micronetwork.



In any case, once the action has been performed, it is time to **share the results, both within the centre and further afield**. Actions generating quantitative results are easy to communicate. It is eye-catching to announce that energy consumption at the school has been cut by 20% or 80% less aluminium foil waste has been generated. However, we must also find a way to communicate more qualitative actions, related to learning, internal and external relationships and attitudes when it comes to organisation.

FOR REFLECTION

- The main purpose of actions that form part of the More Sustainable Schools project is educational, as students are the primary target audience. When deciding on and designing the actions to be implemented, we start from the premise that students are at the centre of learning and we must approach this from the broadest sense, not merely just the acquisition of new habits.
- Remember that habits are a behaviour that are acquired based on the regular practice of a specific conduct. Learning is relatively easy: it is simply a question of repetition, it does not involve any reflection and is not up for debate. Gradually, when a habit is acquired in a specific context (for example, at an educational centre or as part of a class group), it tends to be associated with this context.
- As part of a sustainability project, we are particularly interested in achieving changes that are brought about by the increased awareness generated by understanding why we do what we do. Thus, new behaviours learned will serve us throughout our entire life and the learnings acquired in one context can be transferred to another.

DISCOVERING AIR

“Is the air we breathe harmful to our health?”, students on the environmental committee at **Escola Vedruna Gràcia** asked themselves this question, as air quality in the immediate environment at the school is one of the topics that was of most concern to the educational community at the centre. Firstly, the decision was made to perform a diagnosis of the starting point. With younger students, experiments were performed to discover the effects of pollution, while older students measured the different pollutants (with devices on loan from the environmental education documentation service). They checked that the results surpassed the air quality limits recommended by the WHO and, based on this discover, asked for advice from experts in the field, who reported that the levels of pollution seen could affect the development of children, in particular, the youngest children.

Once the problem was detected, a communication campaign was drawn up to raise awareness about this topic and contact was made with the Gràcia district to file a formal request for action to be taken to reduce contamination. This initiative won the 2019 Premio Blanquerna Impulsa.



◁ ASSESSMENT

Reflect as a group to improve.

WHAT?

Now we come to the assessment phase; however, this is something we should be doing throughout the entire process. An assessment is a **dynamic, continuous and systematic process**, a part of which we verify whether something has worked or not in relation to the objectives we set ourselves. Generally speaking, an assessment can be defined as an **action of reflection that generates information** about a process and its results, which serves to adjust the project's objectives and strategies.

This allows us to learn from experience, feeding back into the project and continuing to improve and innovate.

Over the course of the process, the monitoring and evaluation of results are key aspects in identifying possible deviations and making the necessary adjustments,

introducing improvements into the action plan.

Further still: by regularly performing evaluations, this feeds back into the definition of objectives and selection of strategies and instruments both in the working framework in the classroom and wider school. Gradually, the assessment makes it possible to improve student learning by providing information about what can be improved. It is about measuring students' knowledge of concepts, procedures, skills, values, data and any other issue that can be taught. Furthermore, it places students in front of key questions about any learning process: how am I learning it, what am I learning it and why am I learning it.

Continuous assessments and self-assessments entail the **progressive increase in knowledge**, allowing us to highlight aspects that would otherwise remain hidden and accurately address the nature of processes, the elements involved, organisation methods, their impact and consequences.



Furthermore, **at the end** each project, the programme requires the preparation of a **report as a tool for assessing experience** and analysing change, the keys to success and the comprehension of obstacles. It is not, and should not be considered, a control instrument, but a **strategy that makes it possible to extract learnings and continue innovating** as regards education for sustainability, based on the centre model originally conceived.

The report is a **tool for communicating with other** centres and groups, who can use it as inspiration and as a channel of communication between each centre and the coordination of More Sustainable Schools. It leaves a documentary legacy about the processes and experience for future teachers and students.



The report must contain a description and assessment of the process and actions undertaken; however, gradually, consideration should be given to the following questions, answering them accordingly:

1. Which groups have participated in the project and how have decisions been taken?

We recommend listing the groups that have been involved in the project's development, as well as the groups that participated in the E+S Committee. It is important to evaluate the type and degree of participation, in other words, whether they have participated in the decision-making process, in the design of actions or the implementation of proposals and the factors that have facilitated or hindered this participation.

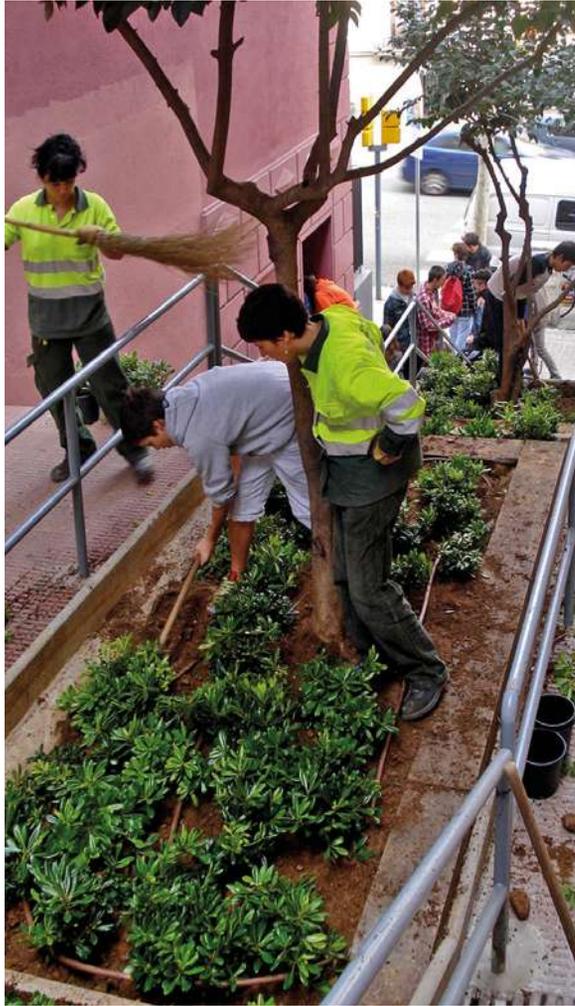
If we have formed part of the Barcelona More Sustainable Schools network for more than one academic year, consider explaining the possible reasons for the increase or decrease in participants and their degree of dedication to the project.

2. How has the centre improved as a result of the action taken?

We should ask ourselves what has changed as a result of the action taken and the degree to which our objectives have been achieved. These changes should be assessed across the five scopes in which we can take action to make the centre more sustainable: sustainability culture, teaching, governance, surroundings and community.

3. How have we interacted with the community as a result of these actions?

Verify which actions have changed the way in which we interact within and outside the educational community. Consider the degree of horizontality, equity and transparency in relations with the community. Look at the degree of cooperation between all agents involved and the extent to which we have been able to improve the social climate.



4. What impact has it had on the student's learning?

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This section is critical, as it must include aspects about conceptual learnings, but also learnings to “be capable” of taking action (skills) and to “feel capable” of doing so (empowerment). In short, the degree of personal development that we have managed to foment in the student.

5. How have we disseminated what has happened and what communication actions have we used?

Evaluate the channels of communication employed during the project to reach the entire education community and ensure the visibility of the processes we have embarked upon. Specify, as applicable, how we have relayed the progress made outside the centre, both amongst neighbours, the district, the city and beyond.

6. How have we evaluated everything that has happened?

Here is a good time to explain the way in which we have evaluated what has been done. Have continuous evaluations been performed or did we not meet up until the project was over? What criteria and indicators have been employed? What actions, methods and dynamics have been used? What role have students played in the assessment?

WHO?

It is essential to give the entire educational community the opportunity involved in the sustainability project to express their opinion about the progress made, their participation, what has changed and what is still to be changed, what has been learned, etc. To this end, the evaluation becomes a need in order to sustain the quality of the project while generating a context for collaborative work and learning.

Before starting the evaluation, it is important to decide **who will perform it and how they will be organised**. Here are a few alternatives that can be used in conjunction with one another:



WHO EVALUATES	HOW THEY ORGANISE THEMSELVES
<p>Proposal 1. Teachers who form part of the E+S Committee.</p>	<p>When there are two teacher or more, they can divide the task between themselves, assuming responsibility for preparing the different parts.</p>
<p>Proposal 2. Students who form part of the E+S Committee.</p>	<p>Students (depending on their age) can assume responsibility of the following factors: writing a text explaining what changes they have seen at the centre in making it a sustainable school, interviewing key people to identify the evaluation and proposed improvements, preparing a survey aimed at classmates, summarising the conclusions of the survey and disseminating them, gathering together proposals for the future or encouraging each class discusses what has changed, what needs to be improved, etc.</p>
<p>Proposal 3. All members of the E+S Committee: leadership, teachers, students, families and non-teaching staff.</p>	<p>The actions performed by each group should be assessed by the group itself.</p>
<p>Proposal 4. Others: the floor is given to other groups who do not form part of the E+S Committee.</p>	<p>Groups who do not form part of the E+S Committee should be given the opportunity to express their opinion.</p> <p>For adults and older students, this could take on the form of interviews or a physical space at the centre to obtain their opinion about what has changed having formed part of the E+S Committee.</p> <p>For smaller children, this could be suggesting that they reflect the changes seen at the centre as part of the More Sustainable Schools project in the form of drawings, either by themselves or in groups.</p> <p>Another option is to investigate the impact that the project has had on them: discuss, for example, what they believe they have learned, whether they would say their way of thinking or acting has changed, whether they have shared these learnings with their families, whether they think it has helped to change what they do at home, how, etc.</p>

HOW?

It is worth bearing in mind that any assessment consists of at least the following tasks:

- ✓ **Define the aspect being evaluated and explain the criteria and indicators to be used.**
 - The criteria define the aspects that we aim to evaluate; these are the guidelines about the learnings taken on by students and helps to define the framework of expectations about what is to be achieved. This could be referred to as the “ideal”. They are used to determine whether the educational practice or action is considered “high quality”.
 - The indicators are evidence that help to determine the degree to which objectives have been achieved. They are directly related to the criteria and quantitatively or qualitatively measure the degree to which indicators have been achieved; they tend to be directly observable actions, as they must take good evidence into consideration. Evidence that is not measurable and, therefore, cannot be indicated, is not a good form of evidence and we must look for an alternative.
- ✓ **Select the most appropriate instruments and gather the evidence.** A few of the instruments we suggest include: narratives, questionnaires, photographs, interviews, captions, reports, portfolios, observation groups, class or meeting newsletters, etc. Each instrument has its own characteristics, which are complementary. More than one instrument is often used or information is compared.
- ✓ **Analyse and interpret the information.** The most interesting task when performing the evaluation is interpreting the information. The purposes that we have defined at the outset will serve as a guide for choosing the most relevant data. The analysis and subsequent interpretation will offer us clues about the adjustments that need to be made.
- ✓ **Decision making and proposing improvements.** Sometimes, the evaluation will help us to emphasise success stories and on other occasions, they will encourage us to expand or consolidate a single line of action.

- ✓ **Communicating the results and decisions made** in a clear way to the entire educational community, so that everybody can take their own and thus motivate and involve more people and groups.

When the educational centre decides to start an assessment process, it must be aware of certain essential conditions:

- The people involved must be interested and be enthusiastic about the opportunity to participate, as these are affective or attitude aspects that shape and maintain the achievement of success over time.
- There must be an openness to change and innovation on the part of the participants, as well as a strong commitment from management.
- The conditions must be provided to facilitate the roll out of improvements (organisational, time, space, etc.)
- The commitment and participation of everybody or a large part of the educational community must be generated. For example, making their support public, making it clear that the goal is to make improvements, not impose sanctions, asking for constructive criticism from those not directly involved, etc.

If, on the other hand, the proposal is not consolidated and shared by everybody, we recommend starting with simple, short procedures, as they are more likely to be accepted. Once the positive aspects are visible and there is a greater openness to change, more complex procedures can be rolled out.

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Once we have evaluated our work, we will more than likely have lots of good ideas to introduce improvements, take new action and share the process, successes and potential difficulties with people and institutions. Therefore, this could be a **good starting point for the new project.**



FOR REFLECTION

- Proposing projects from the perspective of the evaluation is an effective way of transforming educational centres. We need evaluations to design and improve projects. Conceiving projects from the perspective of the evaluation means:
 - Evaluating by using clear, operational criteria conceived in advance.
 - Thinking explicitly about the project's goals.
 - Thinking explicitly about the methodology for achieving these objectives.
- The incorporation of good questions and evaluation dynamics, the contextualisation of learnings, placing greater value on the process rather than on results, promoting active participation and a deeper collective reflection are all strategies that completely change the likelihood of achieving the goals set and really transforming the social climate of actions and the involvement of the entire community.
- What is most important is not the actions we end up actually doing, but rather what we learn when taking these actions. The educational centre is a learning community that takes democratic decisions to improve the centre and its surroundings.

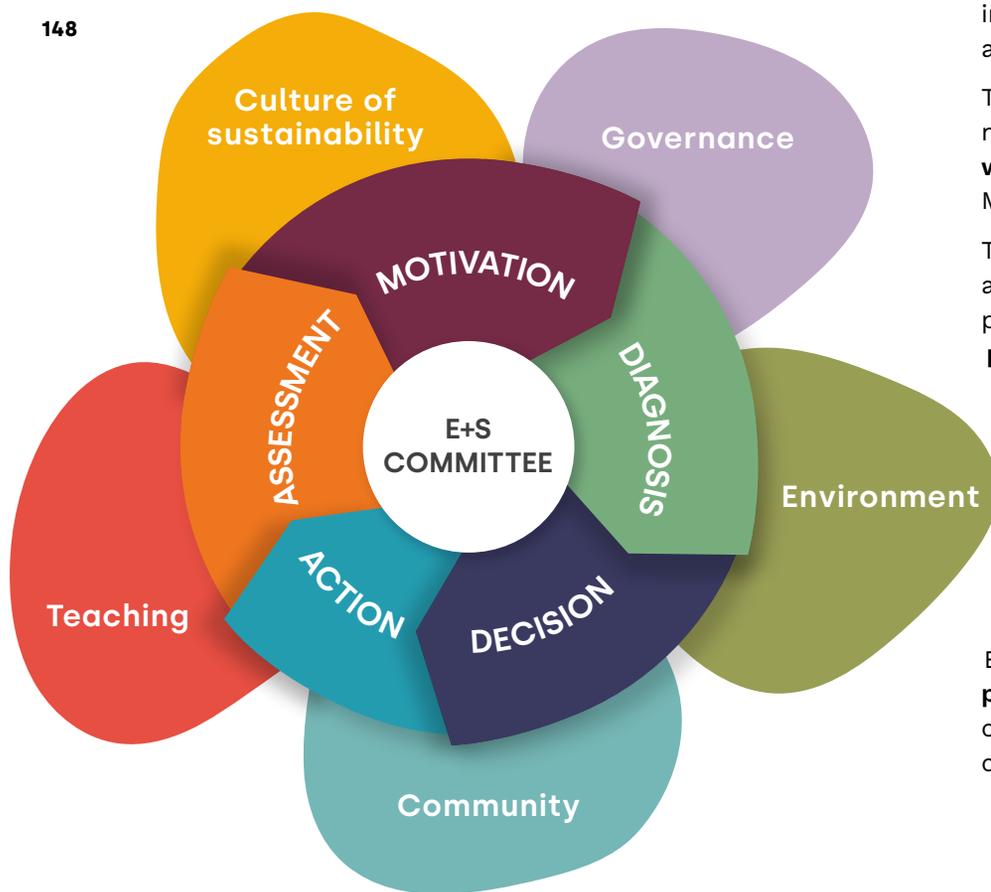


CONTINUOUS JOINT EVALUATIONS

At **Escola Molí de Finestrelles**, the E+S Committee is made up of teachers and students and, in addition to other aspects, they assume responsibility for assessing the actions taken over the course of the school year. At regular meetings, they address the day-to-day aspects of the allotment, personal relationships, respect for cultural diversity or selective waste collection at the centre. In turn, teachers evaluate the project bearing in mind the criteria and indicators defined for each goal.

Having well-defined criteria helps to detect achievements and decide on proposed improvements to continue making progress. Autonomy, responsibility, experimentation, expressiveness, cooperation between students, inclusion of sustainability in the centre's documents or considering the complexity of all actions are a few of the goals appraised in recent projects.





IN SHORT...

Becoming a **More Sustainable School** involves including sustainability criteria across all areas of our schools.

These are **5 interconnected areas**, which mainly respond to the questions **why? what? how? where? and with whom?** Making our centre more sustainable.

The changes in this area will be gradually achieved as we undertake our successive projects through a **cyclical 5-phase process: motivation, diagnosis, decision, action and evaluation.**

The project is open to the **participation of the entire educational community** and is led and coordinated by joint leadership formulas. The **E+S Committee** is the **driving force.**

Each centre uses its own **transformation pathway**, focussing each year on certain aspects with a view to making continuous progress.

A PARTICIPATORY AND NETWORKED PROCESS

Escola Can Fabra has participated, in cooperation with two other centres, in the project to *adapt schools to climate change through green, blue and grey*, receiving financing from the European Commission's Urban Innovation Action (UIA) programme. The goals: interventions at the school to reduce the impact of climate change and adapt to it, as well as raising awareness amongst the educational community about the need for climate action. Thus, with technical assistance and networking, in cooperation with the entire educational community,

a participatory process has been put in place to propose solutions that make it possible to protect everybody against heat: reducing the playground size and planting bushes, increasing shade and water sources in the playground and setting up solar protection on the building's façade. The result provides spaces that are adapted to high temperatures while improving the spaces for recreation and learning; furthermore, when necessary, the centre will be available to the local area as a climate refuge.



Making progress with the network of More Sustainable Schools

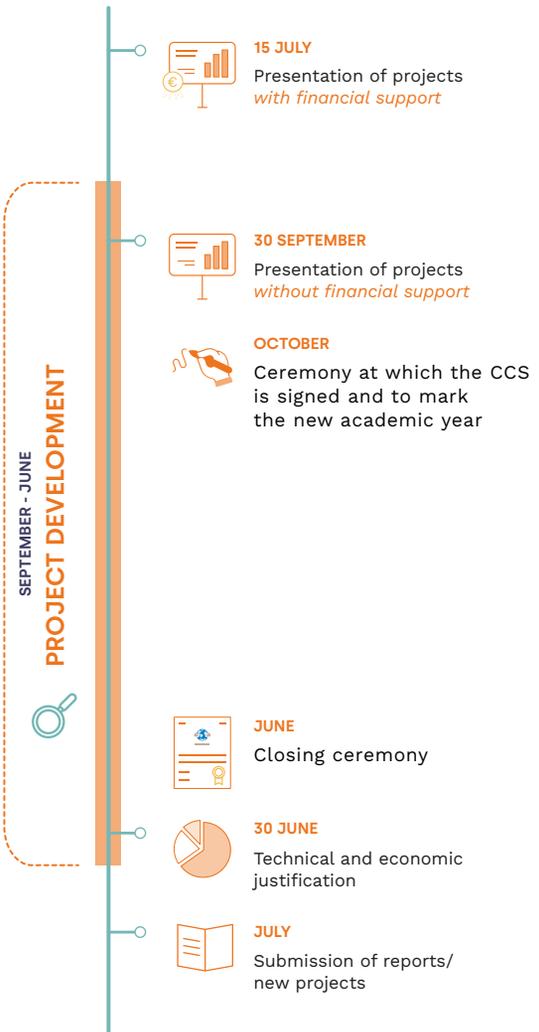


DURING THE YEAR

◊ AT THE START OF THE YEAR

CEREMONY FOR SIGNING THE CITIZEN COMMITMENT TO SUSTAINABILITY

In the same way that institutions, companies, shops, universities, professional colleges, associations and trade unions adhere to the Citizen Commitment to Sustainability as part of the More Sustainable Barcelona network, educational centres join the network at the start of the school year, as part of a solemn ceremony at Barcelona City Council's Saló de Cent. As a result, **they commit to contributing to the city's transformation** through their actions. As part of this ceremony, in addition to municipal agents and authorities, students, teachers and representatives of families are invited to take part. This ceremony reinforces the sense of belonging to a network with a shared commitment: promoting sustainability amongst learning communities.



Centres that form part of the network are invited to this ceremony, as are those renewing their commitment as part of a three-year project. Newcomers are often given a symbolic welcome gift: a tree being planted, as a symbol of the start of the project which, gradually, as it is watered and cared for, will grow, just like their sustainability project. Centres with three-year projects receive a plaque acknowledging their commitment.



DRAFTING THE PROJECT

As we have seen in chapters 4 and 5, to become a more sustainable centre, sustainability criteria must be employed in all areas of educational life. To this end, **each school year, each centre chooses its own project.**

As part of this project, the centre decides where to dedicate its efforts, based on its needs and possibilities. They must ask themselves what their priorities are, what areas they want to address, what goals and milestones have been set, the expected time line, how responsibilities are distributed, who they can collaborate with and the indicators for identifying progress with sustainability at the centre (in any of the five scopes or all of them).

It is critical to have a project that has **clear objectives**, monitoring **the actions undertaken** and well-defined **evaluation indicators.**

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The More Sustainable Schools programme advises the centres and, if necessary, help them to prepare the project. Once prepared, the document is submitted online, within the deadline established for each period.

Each centre organises the motivation and participation actions to involve as many agents as possible, deciding on the measures that need to be taken to diagnose the problems detected and schedule the syllabus activities and communication initiatives that make it possible to respond to what needs to be resolved or improved.



➤ ASSISTANCE DURING THE SCHOOL YEAR

To assist centres, provide support to teachers and contribute to the success of the projects, the More Sustainable Schools programme offers a range of **services aimed at meeting different needs**, both when it comes to advice, training, information and resources and in terms of communication and networking. The potential recipients of this service include all groups that make up the educational community at all centres in the More Sustainable Schools network, in other words, infant (0 to 6 years), primary and secondary schools, further education study and vocational study centres, adult education centres and specialist and adapted education institutions in Barcelona. The use of these services is voluntary; however, without a doubt, it is one of the main benefits of belonging to the network.

ADVICE AND CONSULTATIONS

Centres can submit their queries to the programme's team either in person, via email or over the phone. Furthermore, **each educational centre has a dedicated expert** who knows all about the project, is responsible for monitoring it and, when necessary, meets with the E+S Committee, visiting spaces at the centre and, in short, having an in-depth understanding of the reality of the educational community to help it to improve.

COMMUNICATION

On the **programme's website**, and through the **More Sustainable Schools newsletter**, there is a lot of up-to-date information for centres about the network's activities, interesting resources, inspirational experiences, etc. At the same time, they can share their actions to inspire other centres. The programme has a Vimeo channel with videos that over the years have been published about More Sustainable Schools, which can serve as useful tools for increasing knowledge of the project amongst different groups in the community.

TRAINING

More Sustainable Schools offers **technical and pedagogical theory and practical training** on a variety of topics. It places an emphasis on the topics chosen by the centres, the educational instruments and methods to promote sustainability, the strategies for preparing the diagnosis and improvement plan, strategies for improving participation and interactive processes, group dynamics and evaluation tools. It also promotes theoretical reflections on actual practices.

The **annual training programme** consists of courses, seminars, work groups, talks and workshops and is aimed at the entire educational community. This seeks to **expand the culture of sustainability and knowledge of socio-environmental topics, promoting the exchange of experiences and improving practices at educational centres.**

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Over the years, topics like school allotments, food and consumption or school playgrounds have features in many projects and **permanent seminars** have been set up to discuss these issues, providing a space for continuous exchange during the school year. In these spaces, teachers address the topic in more detail, find out more about the resources to work on it in the classrooms, exchange experiences, create shared projects and network. Seminars are vibrant and



the programme is flexible and adapted to the needs of centres. When there is enough interest in a topic, a new seminar can be organised and should interest decrease, it can be considered as completed. Seminars encourage **peer learning** based on each person's own experiences; teachers who share their progress make suggestions and acknowledgements and those who are unsure how to get started find inspiration, tools and motivation. These spaces are designed to benefit participants, although the work undertaken has a positive impact on the entire network: for example, as a result of the food and consumption seminar, a food guide ended up being published. [Alimentació. Guia informativa i proposta d'activitats per promoure l'alimentació agroecològica](#) [Informational guide and proposed activities to promote agroecological food], a reference document for all educational centres looking to address the topic of food as part of their sustainability project.

MICRONETWORKS

Centres interested in the same topic have the **option of developing their project together** as part of a micronetwork, where they share their experiences and data with other participating centres.

Teachers have access to specialist technical advice and resources designed specifically to provide motivation about the micronetwork's chosen theme, to mobilise the educational community and to guide the development of the project during the school year, adapting to the different school phases. As is always the case, students are at the heart of both the diagnosis and all actions and communications. Emphasis must be placed on each centre **sharing data** to obtain an **overview** and facilitate **joint**

reflection. All in all, micronetworks are a major ally for centres who decide to embark on a project related to any of the existing topics. Participating in a micronetwork is an opportunity to share experiences, activities and educational proposals, comparing results and combining them to provide for more powerful changes and, in short, **make joint progress with others, delving deeper into a specific topic.**

Micronetworks are set up or dissolved depending on the interests of centres and the emerging topics in the city.

→ “More Sustainable Packaging”

The “More Sustainable Packaging”/ More Sustainable Lunches network encourages projects that share the objective of **reducing single-use packaging** used for packed lunches based on a wrapper prevention plan. It involves performing an initial analysis of the type and weight of packaging generated by a group of students, introducing measures and actions to change the situation, perform a second diagnosis and measure the success of the plan, proposing continuity and improvement actions. At the same time, there is the option of performing an analysis of the types of lunch consumed and pursuing healthier eating habits.

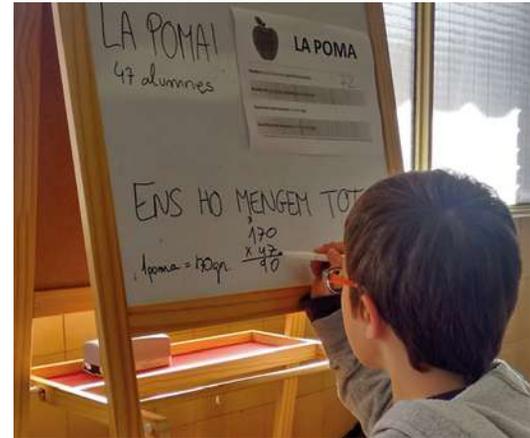


→ “Waste Prevention Plan”

The “Waste Prevention Plan” micronetwork sees centres start by diagnosing the amount and types of waste generated, as well as the places and reasons for them being generated. This is then used to detect opportunities to reduce this waste and organise **actions to reduce** this waste and implement and quantify results. The continuous assessment of the plan makes it possible to keep it up to date and continue to plan improvements in line with the needs of each centre. The actions and results must be communicated every step of the way to motivate and mobilise the centre as a whole. To help with this process, centres have access to the More prevention, less waste guide. Guide for preventing waste at educational centres. [“+ prevenció, - residu” \[More prevention, less waste guide\]. Guide for preventing waste at educational centres](#) in addition to specialist technical assistance.

→ “Let’s eat everything”

“Let’s eat everything” is an initiative implemented during free time in the dining room that looks at **food waste**, the origins of food or concepts like local sources, conscious consumption and the ecological footprint. The activities proposed can be undertaken in both the classroom and in the dining room. For a limited amount of time, centres gather information about food that goes to waste and design actions to counter it.



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→ “Sssplau”

The project launched by the “sssplau” network encourages students to learn about the real problem posed by noise and get involved in **improving acoustic comfort** at the educational centre and surrounding area. Following an analysis of the circumstances of each school, this proposal seeks to discover spaces and times of the day that are more problematic in each one, identifying the noises, understanding their impact on health and learning and looking for a compromise to take joint actions that can improve acoustic quality. Centres have access to the [“Sons i sorolls”](#). [\[Sound and noise\]: information guide and proposal for educational activities to improve acoustic quality](#) in the form of a support.



→ “We compost and learn”

“We compost and learn” is a proposal aimed at centres looking to focus on organic material, working on allotments and with **organic waste** generated in the dining room. The small physical and biological system produced at composters or worm farms provides the opportunity to include theory and practice about natural systems in the syllabus in addition to representing a waste prevention action.



→ “School breathes”

“School breathes” is the name of a municipal programme of initiatives for **improving air quality in school environments** such as awareness-raising actions aimed at the entire school community. It consists of four scopes: urban space, classrooms (with one proposal for primary schools and another for secondary schools), recreational spaces and cross-cutting and pedagogical aspects.

Primary schools looking specifically at air quality have the opportunity to do so as part of this micronetwork, as part of which older students diagnose the levels of pollution at the educational centre, analysing and proposing actions to reduce it and evaluating and communicating their experience and results to the rest of the community. Participation in this project represents an opportunity to work on atmospheric pollution in the classroom as well as how to perform scientific research to generate evidence and make informed decisions in this area.

Secondary students participate in the “Let’s air” micronetwork, which aims to perform an **ecological audit of air quality**. This tool serves to address, at an individual level and receiving technical support, the problem of atmospheric pollution, both at entrances to schools and once inside, with the active participation of students throughout the process.



→ **Safe and sustainable mobility**

“Safe and sustainable mobility” offers the possibility of learning how to design a **communication campaign** with the aim of raising awareness about the importance of safe mobility in the areas surrounding schools. Through **pacifying transport**, children and young people are given greater autonomy and sustainable mobility is encouraged. Centres have access to the [“Mobilitat i qualitat de l’aire” \[Mobility and Air Quality\]. Information guide and proposal for educational activities to improve mobility and air quality in the city of Barcelona.](#)



→ “Add energies”

The “Add energies” initiatives is aimed at secondary school students looking to aim their project at understanding what energy is, how and when it is used and the environmental and social impact of the current energy model. It encourages the educational community to become empowered, **offering tools to save energy**, improve comfort and encourage the use of renewable energy from the educational centre.



→ “Eat sensibly”

The aim of the sustainable food proposal is to encourage a critical awareness amongst the educational community about the social, environmental and health impacts of the current **food model**, as well as making specific changes at the centre, in the field of education and in the dining room towards **healthier eating habits**, with ecological, seasonal and local produce from short circuits and sustainable production models, reducing food waste and waste in the dining room and kitchen.

INTERACTION AND NETWORKING

The More Sustainable Schools programme actively encourages interaction between participating centres with the conviction that belonging to the network offers a long list of **benefits**, beyond just receiving support, advice and resources.

- ✓ Sharing a purpose
- ✓ Creating a sense of belonging and strengthens the commitment
- ✓ Encouraging knowledge and trust
- ✓ Facilitating mutual learning
- ✓ Emphasising diversity at schools
- ✓ Increasing awareness of completed projects
- ✓ Promoting horizontal links between centres
- ✓ Encouraging shared projects
- ✓ Better use of resources
- ✓ Highlights joint results
- ✓ Helps to create and strengthen a shared culture of sustainability

It also encourages the **sharing of experiences** between students and teachers at centres from other cities across Catalonia through the network of schools for sustainability in Catalonia and further afield, as in the case of ESenRED.

In terms of **shared projects** with non-school organisations from the More Sustainable Barcelona network, learning and service projects are organised as well as other collaboration initiatives associated with the programme's purposes.

→ "Let's take care of the planet"

The international youth conference organised under the name "Let's take care of the planet" is an initiative that **mobilises and engages young people** from different towns and cities, regions and countries to analyse and discuss, with the rest of the educational community, the main socio-environmental challenges we currently face. This is a learning construction process between peers that sees young people come together, discuss the topics proposed



and choose representatives to communicate the ideas generated by the different spaces of exchange. In Catalonia, this process is monitored by the Catalan Network of Schools for Sustainability (XESC).

The overall process is structured into four main pillars:

- The notion of responsibility. Recognition of individual and group responsibilities and commitments as the driving force behind the process. Each citizen is responsible within their limitations in relation to access to information and power.
- Youth chooses youth. The delegates, who represent students at the conference, are elected, by vote or by consensus, by their peers.
- Youth teaches youth. A team of young people aged 18 to 30 coordinates smaller workshops held during the conference. They are the facilitators.
- One generation learns from another. Although young people are at the heart of the project, the connection to and dialogue with the generations involved is essential. In terms of an education for sustainability, this feature is even more important when based on the new concepts that young people can relay to their surroundings.

MORE RESOURCES

The programme provides original resources and supports a range of purposes to assist educational centres.

→ Financial support

The programme offers the option of **applying for funding** to draw up an annual or three-year action plan as part of the More Sustainable Schools network.

→ Environmental Education Documentation Service (SDEA)

The Environmental Education Documentation Service (SDEA) is a **specialist documentation centre** aimed at people, schools and institutions interested in sustainability education, particularly focused on the urban environment. Here, centres can request for books, magazines, devices (such as decibel, CO₂, PPM particle and electromagnetic radiation meters or wattmeters) on loan, as well as models, artefacts, board games and teaching kits with a carefully procured selection of resources for teachers and students about energy, water, consumption and waste, mobility and air quality, biodiversity, communication and sound or noise.



→ **Mobile School Green Point (PVME)**

The Mobile School Green Point (PVME) came about in response to the need of educational centres across the city for a practical system to dispose of waste generated at the centre that could not be deposited in street containers. In March 2007, Barcelona City Council rolled out a **dedicated waste collection vehicles** for educational centres across Barcelona to **collect this type of waste**. As well as a collection service, the PVME is a **strong educational resource**, as waste can be deposited by students themselves, either by themselves or accompanied by staff from the centre or their families, when the centre raises awareness of the initiative. The PVME's visit to the school could be made to coincide with culture week, open days or a special milestone during the course of the sustainability project.



→ **Compost, mulch and plants**

Each year, compost, mulch and a series of plant species are offered every year to make schools greener. The aim of this donation is to **supplement gardening**, allotment, playground activities, etc. performed at the different centres, harnessing these green spaces as an educational resource and learning space for students.

→ **“Take a closer look at the parks”**

“Take a closer look at the parks” encourages centres to design and develop a project at a specific park in the vicinity of the educational centre. The idea here is to **rethink parks and see them as an educational space**, on the basis that, if we are to use such spaces responsibly, we need to understand them, experience them, enjoy them and, where possible, carry out initiatives to improve them. Centres have access to the [“Apropa't als parcs” \[Take a closer look at the parks\] information guide and proposal for educational activities to get involved in the city’s green spaces.](#)



→ **B+S platform for the donation of materials**

Some organisations in the More Sustainable Barcelona network have surplus materials, update their furniture or experience situations in which items could be used as resources by other members of the network. To make progress towards zero waste, educational centres can **ask for what they need** on the platform and **post whatever they have to offer**. This helps to harness resources, extending their useful life and encouraging responsible use.



→ “How Barcelona works”

This programme is organised by Barcelona City Council with a view to **offering first-hand knowledge** of the places, events and processes that help to understand the city: what it is like, how it works, how it is managed and how it is transformed to become more inhabitable and more sustainable. Resources are organised into seven main areas, providing an overview of the city. Centres in the More Sustainable Schools network

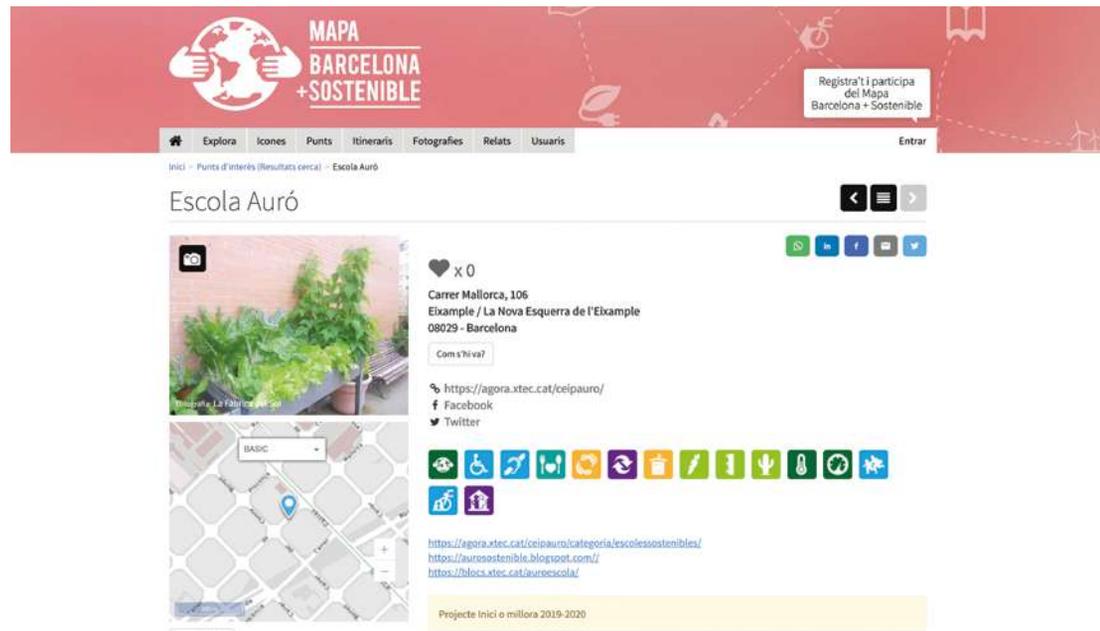
have **preferential access** to these activities, including guided visits to parks, urban allotments, the sewage system, atmospheric control tower, the Magic Fountain, etc. as well as an initiation into using bicycles as urban transport. This **support programme** offers ideas, partners and help to centres who want to embark upon a **learning and service project** in relation to sustainability.



→ **More Sustainable Barcelona Map**

More Sustainable Barcelona Map is an **interactive virtual tool** created collaboratively by citizens, educational centres, companies, associations and the local authority. It shows **initiatives and resources** that help to improve the urban environment, build a fairer and more inclusive social structure and enrich the community and

neighbourhood fabric. It is a resource made available to educational centres with a view to understanding the surrounding area and making other groups aware through photographs and narratives. It is a platform that can be used by educational centres to raise awareness of activities undertaken to improve the city.



➤ AT THE END OF THE YEAR

CLOSING CEREMONY

At the end of the year, all **centres in the network are invited to a ceremony** to celebrate the success stories achieved, enhance the sense of belong to a network, share experiences and receive institutional recognition for their efforts, commitment and future ideas. Two ceremonies are usually held: one for secondary school students and one for infant and primary school students.

The ceremony for secondary school students, vocational training students and adult centres offers the opportunity to exchange experiences, with young people explaining their projects and meeting other young people with similar concerns, where they tell one another about how they contribute to improving their school and the surrounding area. It also serves as an opportunity to meet up with the More Sustainable Schools team one again and meet other experts, raise queries and obtain new knowledge.

The ceremony for infant and primary school students is more recreational, with children participating in workshops and activities related to some aspect of sustainability.

DRAFTING THE REPORT

Once they come to the end of their sustainability projects, centres must write up their report, as explained during the assessment phase. The report sets out the actions undertaken and the results thereof, assessing the process and actions performed, extracting conclusions and providing evidence of everything that has been achieved. It is a **document that summarises and makes it possible to dive deeper into learning processes**, while evaluating the results achieved by each educational centre.



OVER THE YEARS

As previously explained, the network's educational centres work on a sustainability project each academic year.

This project will differ in scope and duration bearing in mind the circumstances of each centre at any given time and it is expected to be more solid and comprehensive as the years go by.

The projects may include:

- **Annual launch project:** for centres joining the network and looking to generate significant changes in their path to sustainability as part of school life or in different areas. They are encouraged to analyse their starting point and embark on an action plan to start making improvements.
- **Annual improvement project:** for all existing centres in the network who want to make significant improvements to one or more areas of the school. This involves evaluating and, therefore, diagnosing the starting point once again, preparing a new project.
- **Annual continuity project:** for all centres that, on account of one-off circumstances, cannot make improvements to their sustainability project and will continue with the same actions taken during previous school years, evaluating them within the framework of the annual plan.
- **Three-year project:** aimed at centres that have been in the network for three years, which have the option of presenting a project for the following three years to achieve a more significant transformation in the way they educate and students learn at the school. When it comes to this type of project, reviewing written documents and enhancing the consistency of what we say and is written is particularly important, as is what we do on a daily basis, with the participation of the entire educational community. Sustainability criteria must be included in the five scopes.

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SUPPORT PROGRAMMES AND FACILITIES

La Fàbrica del Sol

La Fàbrica del Sol - Pg. Salvat Papasseit, 1.
Barcelona

ajuntament.barcelona.cat/lafabricadelSol

A municipal facility specialising in education for sustainable development. Located in Barceloneta Park, the building has been refurbished following demanding sustainability criteria, converting it into a reference point in terms of efficiency and quality in the consumption of resources, comfort and health. It plays host to teams and services that support the More Sustainable Barcelona network and offers regular training activities to citizens.

Environmental Education Documentation Service

La Fàbrica del Sol - Pg. Salvat Papasseit, 1.
Barcelona

www.barcelona.cat/documentacioambiental

The Environmental Education Documentation Service (SDEA) is a centre specialised in environmental educational information and resources aimed in particular at centres in the More Sustainable Schools network, but also at people and entities interested in sustainability education, particularly focused on the urban environment. Located in La Fàbrica del Sol, it offers advice, information and references; consultations; and the lending and selective dissemination of information. The SDEA prepares themed resource collections, pedagogical and experimental kits and lends measurement devices.

How Barcelona works

ajuntament.barcelona.cat/ecologiaurbana/ca/serveis/la-ciutat-funciona/educacio-i-sensibilitzacio/programes-deducacio-i-sensibilitzacio/com-funciona-barcelona

Municipal programme that offers support to educational centres, aimed at providing first-hand knowledge of places, events and processes that help to understand the city and its metabolism. Activities include guided visits to parks allotments, the sewage system, atmospheric control tower, the Magic Fountain, etc. as well as an initiation into using bicycles as urban transport. It also offers ideas, partners and help to centres who want to embark upon a learning and service project in relation to sustainability.

Fab Lab

La Fàbrica del Sol - Pg. Salvat Papasseit, 1. Barcelona

www.barcelona.cat/barcelonaciencia/ca/equipament/ateneu-de-fabricacio-de-la-fabrica-del-sol

Space for digital technology education and literacy as part of the Digital Fab Lab Network organised by Barcelona City Council. Located in Fàbrica del Sol, the Fab Lab structures its activities around rolling out projects to encourage the development of the neighbourhood in the context of fomenting the circular economy and sustainable practices.

Learning camps

xtec.gencat.cat/ca/serveis/sesc/cda

Learning camps are a network of services located in unique contexts that provide support to teachers, helping students to achieve learning objectives related to studying resources as part of projects undertaken during stays at learning camps, activities in the surrounding area or at the centre itself.

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National Centre for Environmental Education (CENEAM)

www.miteco.gob.es/es/ceneam/recursos

CENEAM collects, organises and disseminates available resources in the field of environmental education and dissemination in relation to sustainability, including those produced by the centre itself and those produced by other institutions. Information is structured into the following thematic blocks: environmental education resources, reference documents for environmental education, thematic mini portals, environmental resources and “Who is who?”.

We share a future. Metropolitan programme for an education for sustainability (PMES)

blogs.amb.cat/educacioambiental

Programme organised by the Barcelona Metropolitan Area (AMB) that aims to raise awareness and offer education about

the environment, encourage sustainable habits, encourage critical thinking and offer citizens the tools and values required to forge a sustainable future. As part of this programme, AMB proposes practices that encourage a change in individual consumption decisions so that they are not based exclusively on short-term economic decisions, but also for other factors to be taken into consideration, such as environmental and energy costs or CO₂ emissions.

Programme of School Activities (PAE)

www.bcn.cat/ccp

Programme organised by the Barcelona Board for Pedagogical Innovation, an educational network made up of citizens' institutions that offer educational centres the opportunity for students to access, with collaboration from teachers, significant experiences that form part of the educational experience. These institutions offer, as part of the range of activities they organise, training to active, responsible and critical citizens.

OTHER RESOURCES

Ambientech

ambientech.org

The Ambientech programme is an educational portal that aims to disseminate and offer an education in sciences, health, technology and the environment to compulsory secondary education students, baccalaureate students and higher education students.

Global atlas of environmental justice

ejatlas.org

Interactive resource that provides information on thousands of ecological conflicts around the world and shows how they follow a similar pattern, despite being thousands of miles apart.

Understand and appraise climate change: group work proposals

www.mapfre.com/ccm/content/documentos/fundacion/prev-ma/cursos/guia-conoce-y-valor-el-cambio-climatico.pdf

Guide containing activities with fundamental tools including a critical analysis of circumstances, collective reflection and debate and the acquisition of skills to recreate a “low carbon” lifestyle. It connects climate change to other environmental and social problems, insisting on the short and long term consequences for human communities (migratory movements, impact on economies, etc.) and the different impacts that each one will suffer depending on their specific circumstances.

Education in relation to the sustainable development goals (SDGs)

xtec.gencat.cat/ca/curriculum/primaria/orientacions/educacio-objectius-desenvolupament-sostenible-ods

Educational proposals to take a global approach to each of the 17 sustainable development goals (SDGs). Each proposal is accompanied by a video of the 2030 Objective programme organised by the Super3 Club, which corresponds to the challenge's SDG.

The history of...

www.storyofstuff.org

Collection of videos presenting current society from a critical perspective and encouraging us to contemplate our day-to-day activities. A number of titles in the collection include: *The history of things, The history of bottled water, The history of plastic, The history of change, The history of cosmetics, The history of electronic devices, etc.*

RECC - Educational Resource on Climate Change

projectes.ersilia.org/RECC

Digital platform jointly created by teaching staff, students and experts in climate change. In terms of contents, they are structured into a series of sections that explain exactly what climate change is, its causes and effects and what actions we can take to combat it. There is section containing resources including educational activities, articles, carbon footprint simulators and videos.

Educational resources

mediambient.gencat.cat/ca/05_ambits_dactuacio/educacio_i_sostenibilitat/educacio_per_a_la_sostenibilitat/suport_educatiu/sostenibilitat/recursos-educatius

Online section containing resources made available by the Catalan government's Ministry for Territory and Sustainability.

Education corner

rinconeducativo.org/ca

This website hosts a wide variety of resources, news articles, activities, videos, pathways, suggestions, murals, visits, etc. for all educational cycles and stages.

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MORE SUSTAINABLE SCHOOLS 2001-2020:

CE Valldaura, CEE Associació Centre Pedralbes, CEE Concha Espina, CEE Escola de Vida Montserrat (ACIDH), CEE Escola Viver Castell de Sant Foix, CEE Folch i Camarasa, CEE Guru, CEE Josep Pla, CEE La Ginesta, CEE Pont del Dragó, CEE Sant Joan de la Creu, CEE Sants Innocents, CEE Vil·la Joana, CEIR Arco - Aragó, CEIR Arco - Villarroel, Centre de Joves i Adults ACIS, Centre d'Estudis Montseny - Poblenou, Centre d'Estudis Roca, Centre d'Estudis Stucum, Centre Educatiu i Terapèutic Carrilet, Centre Educatiu i Terapèutic L'Alba, Centre Educatiu Projecte, Centre Escolar San Francisco, Centre Juvenil Martí Codolar, CFA Canyelles, CFA El Carmel, CFA Francesc Layret, CFA Freire, CFA Prosperitat, CFPA Institut Mèdic Pedagògic Dr. Córdoba, Col·legi Alfageme, Col·legi Amor de Dios, Col·legi Asunción de Nuestra Señora, Col·legi Camí, Col·legi Canigó, Col·legi Cardenal Spínola, Col·legi Claret, Col·legi Cor de Maria Sabastida, Col·legi Cor de Maria, Col·legi Dominiques de l'Ensenyament, Col·legi Immaculada Concepció - Eixample, Col·legi Jesuïtes Casp - Sagrat Cor de Jesús, Col·legi Jesuïtes de Sarrià-Sant Ignasi, Col·legi Jesuïtes Gràcia - Kostka, Col·legi Jesuïtes Poble Sec - Sant Pere Claver, Col·legi Jesús Maria - Sant Andreu, Col·legi Jesús, Maria i Josep, Col·legi John Talabot, Col·legi La Salle Bonanova, Col·legi Mare del Diví Pastor, Col·legi Maria Auxiliadora, Col·legi Maristes La Immaculada, Col·legi Maristes Sants - Les Corts, Col·legi MM Concepcionistes, Col·legi Montserrat,

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