



# LEARNING SUSTAINABLE WAYS

“Climate change is moving faster than we are, but we don’t give up because we know that climate action is the only path.”

ANTONIO GUTERRES, UN SECRETARY-GENERAL

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# PREFACE

Climate change as a result of human activity is a fact. Among the consequences are melting glaciers, floods, climate refugees, landslides, desertification and rising temperatures.

The UN Intergovernmental Panel on Climate Change (IPCC) has concluded that a 45 per cent reduction in global carbon emissions by 2030 is essential if we are to reach the Paris Agreement goals and cap rising temperatures at 1.5 degrees Celsius.

By 2050, our CO<sub>2</sub> emissions must be slashed to zero, this net zero scenario means there can be no further greenhouse gas emissions whatsoever.

Why are those of us living in the rich world over-consuming when hunger and poverty are the daily lot of many in less fortunate parts of the world and people there struggle to survive? How are we to tackle issues such as poverty, starvation, social inequality and loss of biological diversity? The questions are many and no obvious answers spring to mind even though we are inundated with fresh information each and every day.

In 2015, heads of state and government the world over adopted the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDG), including education, SDG 4 “Quality education”. One of its targets, 4.7, states that education is a fundamental human right and calls for us to “... ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture’s contribution to sustainable development”.

This material sets forth the state of the world as it is today, and describes the mission tasked to schools and the opportunities these have to contribute to a sustainable society. After each section a question is provided for you to reflect upon either by yourself, together with your team, or with students in the classroom.

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*We need to do more, and we need to do it quicker: we need more ambition and accelerated action by 2020.”*

ANTÓNIO GUTERRES  
SECRETARY-GENERAL  
OF THE UNITED NATIONS

“Living is like traveling through a landscape of easy or rugged terrain, light or dark places, in all conditions and with hidden surprises.”

ARNE NAESS, LIFE'S PHILOSOPHY



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# THE DRAGONFLY'S LANDSCAPE

## - a reflection about learning sustainable ways

**The canoe eagerly follows the loops of the river downstream.** Our paddles dip rhythmically into the flowing water, but in one of the meandering curves we run aground. We are forced to painstakingly pole ourselves free. After a brief discussion we agree to avoid inner bends; standing water and silted stretches make the river difficult to navigate. Behind us we hear a rustling sound. Millions of mosquitoes, flies and dragonflies are darkly silhouetted against the setting sun.

Fascinated, we realize that the rattling the sound comes from the wings of dragonflies, as they fly hunting for food. Soon we approach the next river bend and this time we choose the energy-rich and powerful current of the outer curve. No sedimentation, instead deep and forceful. We are propelled ahead, effortlessly and without hinder.

Turning around every now and then and discovering the unexpected gives rise to new thoughts.

The dragonfly, a virtuoso of the air, is an ancient insect that hasn't changed much in almost 300 million years. It can fly both forward and backward, hover and even mate in the air. All this with help of delicate, translucent wings – it's a wonder they don't collapse! But the dragonfly lives according to the principle of minimalism: resource efficiency and strength are its cardinal virtues. The thin wing ribs are shaped in a hexagonal pattern, affording stability and resilience. The dragonfly has found out how to live sustainably over time!

The resilient dragonfly flies over a stream, a meandering and searching gestalt that can easily be seen as a metaphor for the landscape of learning – learning as a two-fold process. When we as individuals are provided with new information we need a period of calm deliberation, a space for reflection; after a while things sink in and are incorporated into the repository of our experiences, a place where what is new is

laid down (sedimented) in our inner, where it settles into layers that give rise to new knowledge.

But the energy of the outer curve is also important, it can function as a new and powerful stimulus. Human beings need challenges so that old deep-seated ways of thinking are influenced, changed and transformed.

To dwell in the space between the inner and outer curves in real life, where the experiences are your own and consequently personal, at the same time as they are forged in a social context, is an important pillar of learning.

“To live is to wander a landscape”, the Norwegian philosopher Arne Naess observes. It is difficult to foresee what the future holds. Let us step forward and invest meaningfully in the development of sustainable learning. Let's join the dragonfly in its winding metaphorical landscape and with eyes wide open search out sustainable knowledge.

Join us on a voyage of discovery into the future where we can only imagine the possibilities lying just around the next bend in the river.

### REFLECT UPON:

How can you as a teacher encourage children and young people to realize that all living creatures are part of one and the same ecosystem?

#### Arne Naess

Ecosophy is a nature-inspired philosophical approach that strives to heighten ecological awareness and the commitment of the individual to environmental matters. The founder of ecosophy and its principal proponent was the Norwegian philosophy professor Arne Naess.

#### Glossary

**Sedimentation** – process of deposition of a solid material from a state of suspension in a fluid

**Metaphor** – figure of speech, a thing regarded as representative or symbolic of something else

**Metaphorical landscape** – a poetic expression for a perspective that highlights a variety of different images and symbols



“The least we can do is as much as possible”

PÅR HOLMGREN, METEOROLOGIST NATURAL DAMAGE SPECIALIST AND MEMBER OF THE EUROPEAN PARLIAMENT/ GREEN-EUROPEAN FREE ALLIANCE.



# THE WORLD OF TODAY

We live as if we had 1.7 planets at our disposal. Our lifestyles and the ways we exploit Earth’s resources are not sustainable. The planet’s temperature is on the rise and as a result extreme weather is becoming increasingly common. At the same time biodiversity is decreasing at an alarming rate.

Forests are devastated and animal species drastically reduced or are dying out. The developed world, which, among other things, is responsible for the greatest emissions of greenhouse gases, is the one least impacted by climate change.

The challenges are enormous: the developed world must reduce its impact on the planet and poor countries must be given a chance to develop. What can we do together to solve this difficult equation?

## LIVING A GOOD LIFE

Everyone wants to live a good life, but what this actually means depends on where in the world you live, the culture or religion you are part of, and so on and so forth. In the best of worlds, you are able to decide for yourself the direction and content of your life. You may want to grow tomatoes, take a holiday in Greece or run a cafe.

The choices you make affect both nature and people. Other people’s life trajectories may cross yours and conflicts of interest may arise with many ethical dilemmas as a result. How can you as an individual navigate a complex world where so many around you are vying for your attention? What does sustainable really mean? Is it justifiable to fly to Thailand every year? Is it necessary to eat so much meat? How is it possible consume both ethically and ecologically sustainably? When is your life satisfaction at its highest level?

What is a good life for you and me and the rest of the Earth’s population? Can our lives be improved? What do you long for? What exactly is well-being, welfare? Is it “getting along well”, prospering? What basic needs must be satisfied?

### REFLECT UPON:

What is your vision for a good life?

## WORLD WIDE FUND FOR NATURE – WWF

WWF was established in London in 1961 to raise money to save endangered animals in Africa. Today, WWF is a global nature conservation organization with a broad focus.

Our mission is to stop the degradation of our planet’s natural environment and build a future in which people live in harmony with nature. To this end we deploy tools such as nature conservation, targeted research, lobbying, information and education to preserve ecosystems and species, but also to solve the root causes of environmental problems.

In a global perspective, individual human beings are very small. However, a lot of people acting together can make a difference.

### WWF’s three strategic pillars are:

- To protect natural areas and wild populations of plants and animals, including endangered species;
- To promote sustainable approaches to the use of renewable natural resources
- To promote more efficient use of resources and energy, and the maximum reduction of pollution.



The so-called “overshoot day” clearly illustrates the dilemma. See the diagram below. Globally, the date in 2019 was July 29.



SOURCE: GLOBAL FOOTPRINT NETWORK

There are different ways of illustrating the state of the planet. One way is a country's Overshoot Day, the day on which the world's overshoot day would fall if all of humanity consumed at the same rate as people living in that particular country.

## HOW IS THE PLANET DOING?

How is the Earth really doing? WWF uses two metrics to determine the state of the globe.

### Living Planet Report

The report is available here:

[https://wwf.panda.org/knowledge\\_hub/all\\_publications/living\\_planet\\_report\\_2018/](https://wwf.panda.org/knowledge_hub/all_publications/living_planet_report_2018/)

### The Living Planet Index

One parameter is biodiversity. The Living Planet Index measures changes in population sizes for 4,005 species of the world's wild vertebrates (mammals, fish, birds, amphibians and reptiles). Unfortunately, the trend is bleak – the curve has turned downward. Between 1970 and 2018, the Living Planet Index decreased by 60 per cent.

### The ecological footprint

The other thing we measure is how big our impact on the globe is, that is, our consumption of resources and the effect this has on the planet: Our ecological footprint. The pressure on natural resources is constantly increasing. Global consumption means that a world citizen lives as if we had 1.7 planets at our disposal.

### Overshoot day

The Global Footprint Network has coined the term Overshoot Day to illustrate the over consumption of Earth's resources.

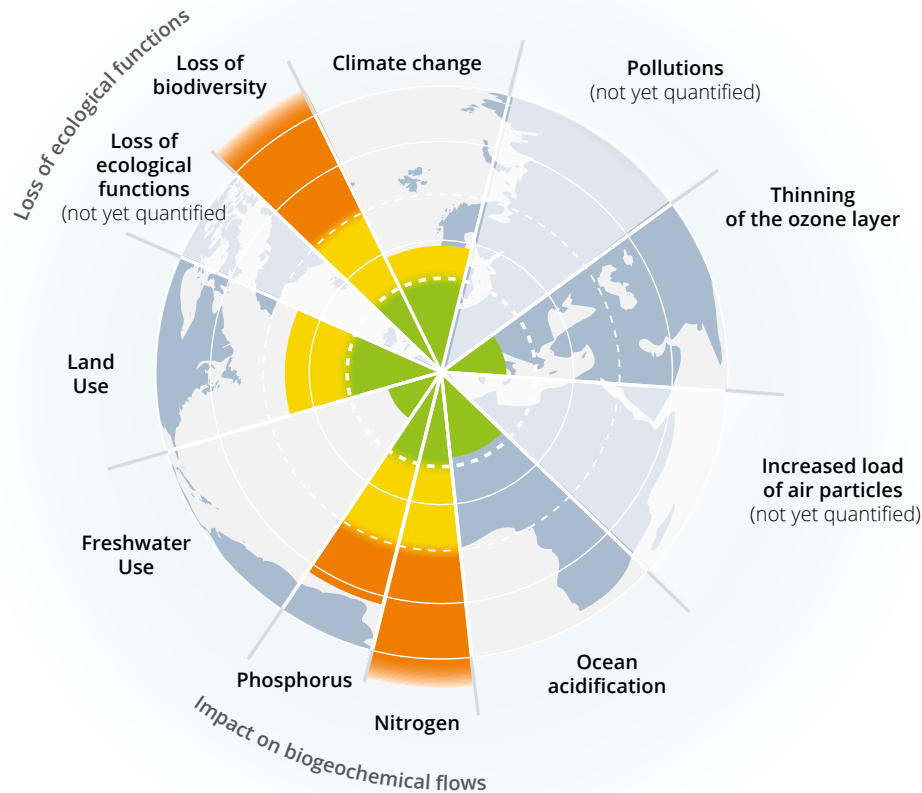
Overshoot Day is the day we consumed the planet's entire annual production of resources. In banking terms, this means that we are starting to live off capital rather than interest rate. A sustainable lifestyle – that is less consumption of natural resources and fewer carbon dioxide emissions – is crucial if Earth's natural resources are to suffice and the planet to remain habitable for a long time to come.

### HISTORYGLOBAL OVERSHOOT DAY

- 2019 - July 29
- 2018 - August 1
- 2017 - August 3
- 2016 - August 5
- 2015 - August 6
- 2010 - August 8
- 2000 - September 23
- 1990 - October 11
- 1980 - November 3
- 1970 - December 29

**The boundaries of the planet have been exceeded.** This is because we are having an ever-greater impact on the climate and the environment and over-utilize the world's resources. Every environmental issue has a tipping point. If this is exceeded there is a risk for significant impact on the environment. Biodiversity is the most transgressed planetary boundary – as a result of human activity species are declining at an unnaturally high rate.

Source: Will Steffen, Johan Rockström et al.



## WHAT IS SUSTAINABLE DEVELOPMENT?

Sustainable development can be seen as a journey, an ongoing process within the planet's own boundaries. Our long-term goal is to enjoy as good a life as possible without harming other people, nature and society through both time and space, in other words – be mindful and considerate! This can be

formulated in three dimensions: ecological, social and economic. Despite all warning signals and intensive environmental efforts, the Earth's condition is deteriorating; plants, animals and ecosystems are impacted, and people are suffering from an increasingly burdensome environmental debt.

**“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”**

FROM "OUR COMMON FUTURE", 1987

At the 1992 Rio Conference, the countries of the world agreed to reverse these negative trends by investing in sustainable development, but what does the concept of sustainable development actually imply? What is it that must not be broken and that should instead be resilient? Which or whose development is being referred to?

In his research at the Stockholm Resilience Centre, Johan Rockström highlights the concept “planetary boundaries”. Rockström and his research team believe that human societies transgress planet boundaries through irresponsible behaviour, and that this can provoke disastrous environmental effects. The most violated and tangible planetary boundary is loss of biodiversity, as species become extinct at frighteningly high rates as a result of human activity.

### Anthropocene

The Anthropocene, or the age of man, is a new geological period extending from the industrial revolution to the present day. It is a period in which man has left indelible traces on the planet, such as climate change, toxic mine tailings, rainforest deforestation and eradication of animal species.

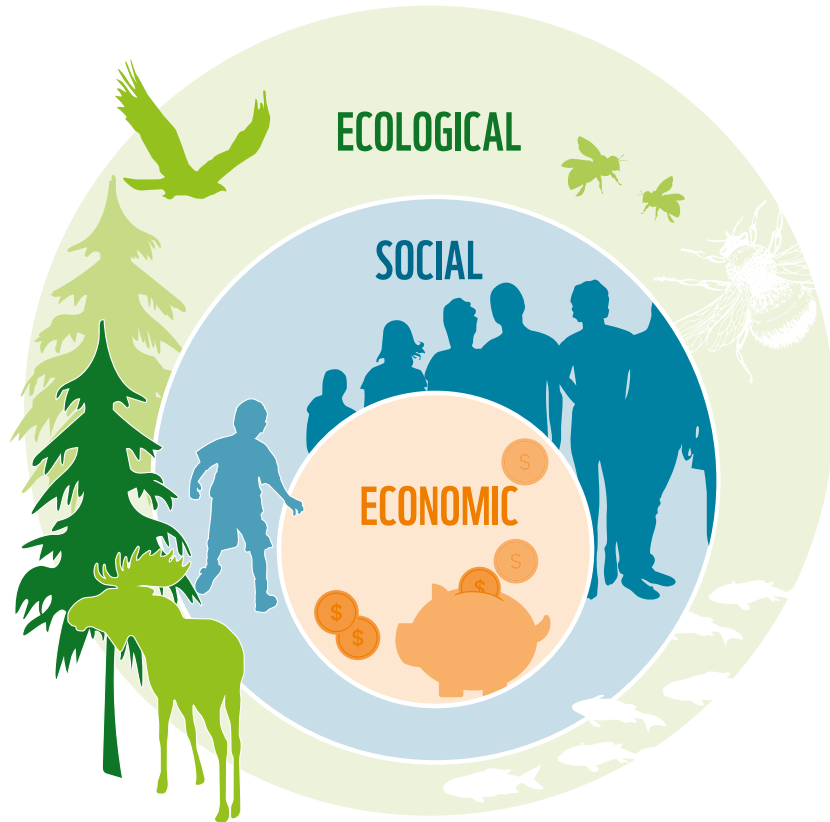
The UN definition of sustainable development is based on human needs. But whose needs? Mine or yours? Is it merely a question of satisfying basic needs such as food and clothing? Or do we include the pleasure we get from travelling and filling our homes with beautiful furniture and expensive IT equipment?

To expand the concept of sustainable development, the climate summit held in Rio envisioned a holistic approach for the future:

Sustainable development is said to be about combining three aspects: the ecological, social and economic. There are various interpretations of this; some emphasize the importance of a functioning nature and environment, others democracy and equality and the stable economic growth of society.



Our economic and social needs and rules of play must abide within a framework that ecosystems are able to sustain over the long term



## THE THREE DIMENSIONS OF SUSTAINABLE SOCIETY

Three overlapping circles illustrate the dimensions of sustainable society:

### ● THE ECOLOGICAL CIRCLE

The outer ecological circle is about safeguarding well-functioning ecosystems with great biodiversity – an ecological foundation that underpins absolutely everything. It is imperative to preserve nature’s long-term, ecological processes, these constitute a life insurance for humankind in the future. Nature provides a variety of free services such as natural water purification, the filtration of UV rays and pollination by insects. Everything in nature has its place in the scheme of things. The ecological circle sets an external framework that circumscribes all human activities.

“ There are many definitions of sustainable development, but ultimately that which matters is that we:

- care about ourselves
- care for others
- care for the planet
- care for future generations”

DEPARTMENT FOR EDUCATION AND SKILLS, UK

### ● THE SOCIAL CIRCLE

The social circle embraces the human dimension – we live in a local and global society in mutually dependent relationships under which we must share the resources of the earth equitably based on democratic principles. In short, we should build a society where our basic needs are met, and human rights respected. The social aspect is constantly nurturing the good things life has to offer. Which human needs should we prioritize? How can we create a society that highlights human well-being and simultaneously honours key values such as security, participation, tolerance and culture?

### ● THE ECONOMIC CIRCLE

The economic circle is about husbanding resources – being frugal with those we have at our command, human as well as material. An economy that does not consume its capital but makes do with the accrued interest. Economic development that delivers economic benefits to society as a whole and does not jeopardize man-made and naturally occurring capital.

An economy that is not socially equitable or one that violates ecological frameworks is not sustainable. In other words, acting sustainably is paramount to acting economically. In its conservation efforts WWF takes ecological issues as a springboard and then tackles the social and economic dimensions.



"Meeting the learning needs of all pupils in the classroom is a form of social equity, which is a core concept of sustainability.", from the UN ESD Sourcebook.

© GREG ARMFIELD WWF-UK

## GLOBAL GOALS FOR SUSTAINABLE DEVELOPMENT

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# “LEAVE NO ONE BEHIND”

In 2015, 700 million people lived in extreme poverty. That means 10 per cent of the Earth’s population have had to make do on around \$ 1.9 a day.

Simultaneously, poverty in all parts of the world is on the decline, people are more able to live with dignity –invest in themselves, attend school, live decently and access basic health care. As a matter of record, extreme poverty was halved between 2005 and 2015.

Although things are getting better, there are still many challenges: discrimination, gender inequality, inequity, shrinking democratic spaces and, not least, climate change – the crucial issue of our times.

*We are the first generation that can end poverty. We are also the last generation that can slow global warming before it is too late”*

BAN KI-MOON, FORMER SECRETARY-GENERAL OF THE UNITED NATIONS

The Global Sustainable Development Goals (SDGs) are 17 ambitious and universal goals agreed upon by UN member states in 2015. They include eradicating poverty, promoting equality, fighting climate change and safeguarding a peaceful and inclusive world. Global goals are integrated and indivisible, balancing the three dimensions of sustainable development: economic, social and environmental. This is a global, national and local movement with universal goals that concern all nations.

Former UN Secretary-General Ban-Ki-moon coined the phrase: “Leave no one behind”, when the UN targets were launched in 2015. Most countries around the world have taken this mission to heart. The SDGs are a blueprint for working with global sustainability issues at school. For you as teacher, there is a specific assignment in sub-goal 4.7, which calls for ensuring that “all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture’s contribution to sustainable development.”

### REFLECT UPON:

What does it mean to be a global citizen?





“Our biggest challenge in this new century is to take an idea that seems abstract – sustainable development – and turn it into a reality for all the world’s people.”

KOFI ANNAN, UN SECRETARY-GENERAL 2001



In Europe we live as if we had three planets at our disposal – this is burning the candle at both ends.

© ISTOCK

## ECOLOGICAL FOOTPRINT

The ecological footprint is a measure of the average amount of biologically productive land and sea area required to sustain human consumption of renewable resources over one year – and simultaneously deal with concomitant waste. The ecological footprint is expressed in global hectares (gha), and it has more than doubled since 1961.

The average footprint per person in the world is 2.8 gha. The planet’s biocapacity is estimated at 1.7 gha per person, which indicates we consume more than the Earth is able produce sustainably. Because the ecological footprint has increased over the past 50 years this, among other things, means that we are fishing out the seas faster than fish stocks are replenished, and that we are releasing greenhouse gases at a rate that nature is unable to keep pace with and bind.

In 2018, humanity’s ecological footprint averaged 2.7 gha. In other words, we are living way over our means. This means that it takes more than 2.5 years for the Earth to recreate the renewable resources that people used in 2018 and absorb the carbon dioxide emitted. Sweden’s ecological footprint is 5.9 global hectares per person, that is, almost three times as large as that which is available. We face great challenges and crucial choices. Either we continue on as usual – which will lead to an ecological collapse – or we decide to live, eat and transport ourselves in a sustainable way.

### REFLECT UPON:

**We live as we have 1,7 planets at our disposal. For whose sake must we change the lifestyles our consumption dictates? For our own sake? For people in other countries? For coming generations?**

## REDUCE YOUR ECOLOGICAL IMPACT

How can I as an individual reduce my ecological footprint? There are five activities you can change to lessen your impact: transportation, diet, living, your wallet and shopping. These five are responsible for much of our ecological footprint.

### ● TRANSPORTATION

Cut your use of fossil fuels in half – travel climate smart with, for example, public transport or bicycle. Cycling is also good for both the planet and your health.

### ● DIET

Eat sustainably. Reduce your meat consumption, increase your green protein intake and stop throwing edible food away. This is a win-win for both you and the planet.

### ● LIVING

Halve the energy use in your home, choose eco-labelled electricity and double your positive contribution by producing your own renewable electricity.

### ● WALLET

Halve the emissions generated by your savings and double your planetary smart investments. Find a bank, fund manager or insurance company that can help you with this.

### ● SHOPPING

Pay attention to what you buy. Halve your climate impact from shopping and double your environmentally smart habits by using circular\* and digital services. This makes a difference for both the climate and biological diversity.

\* The circular economy, which includes circular services, implies switching to a system that is much more resource efficient. Today we live in a throw-away society – and this is not sustainable. One of the biggest challenges we face, according to UN goals, is sustainable production and consumption. If we can switch from selling products that people consume to people using services, this will be much more sustainable!



### REFLECT UPON

How can schools reduce their ecological footprint?

#### There are a lot of things you can do:

- reduce consumption
- reduce meat consumption and eat more vegetables
- reduce air travel
- travel less by car
- lower indoor temperature
- switch to sustainable energy systems
- buy eco-labelled and fair-labelled products
- buy second-hand clothes
- support environmental organizations, etc.

You can measure your personal environmental footprint here:  
<https://footprint.wwf.org/#/>



“Education for sustainable development is changing the way we see the world.”

INGER BJÖRNELOO, TEACHER TRAINING,  
UNIVERSITY OF GOTHENBURG

# EDUCATION FOR SUSTAINABLE DEVELOPMENT

A multitude of questions arise as we attempt to find the best way to structure education for sustainable development. Let's summarize them under four headings: what, why, how and where.

- **WHAT** should the overarching goal of education be?
- **WHY** is education for sustainable development so important?
- **HOW** should education for sustainable development be organized?
- **WHERE** should education for sustainable development take place?

WHAT?

## WHAT should the overarching goal for education be?

The goal of education is to provide everyone with the information and motivation they need to act for sustainable development. Education for sustainable development embraces all the processes that foster the knowledge, skills, values and attitudes that support the efforts of individuals, schools and society to promote fairmindedness and justice, economic security, ecological sustainability and democracy.

WWF emphasizes that Education for Sustainable Development can be seen both as an overarching perspective and an ongoing process in a changing world. Our long-term goal must be to live as good a life as possible while avoiding long-term harm to other people, nature or society.

If they are to act toward sustainable society, individuals must possess well-developed action competence skills – that is, knowledge, opportunity and motivation.

Action competence for sustainable development refers to the will and ability to influence lifestyles and living conditions locally, globally and over time.

Ellen Almers, Jönköping University (2009) defines action competence as follows: *“The ability to engage as a person, together with others, in responsible actions and countermeasures for a more humane and compassionate world based on critical thinking and imperfect knowledge.*



# WHY is education for sustainable development so important?

“Education can, and must, contribute to a new vision of sustainable global development.”

UNESCO, 2015



The development taking place in the world today is unsustainable, we can all pretty much agree on that. Achieving sustainable development requires constant learning about diverse and complex issues and how these issues are interrelated and affect each other, but it is also about being able to relate to not knowing. Those of us who are alive today and the generations to come must be able to live with and adapt to change.

Today's society is in constant and rapid flux. No one can say for sure what the future will bring, but if children and young people are to deal with this changing world, schools and education must be forerunners when it comes to innovative thinking.

The majority of the world's children attend school, although many of them quit far too early. Thus, the role of education in working towards sustainable development is vital. If we can make Education for Sustainable Development a shared approach across all school curricula, we can together take a big step towards a sustainable future – ecologically, socially and economically. Education in general and Education for Sustainable Development in particular, are human rights and powerful drivers for sustainable development.

Sustainability issues play an important role in education. Target 4.7 states that by 2030 we must “ensure that all learners acquire the knowledge and skills needed to promote

sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development”

Here, the central role of the school is emphasized in the change management towards sustainable development and the various components that make up that practice.

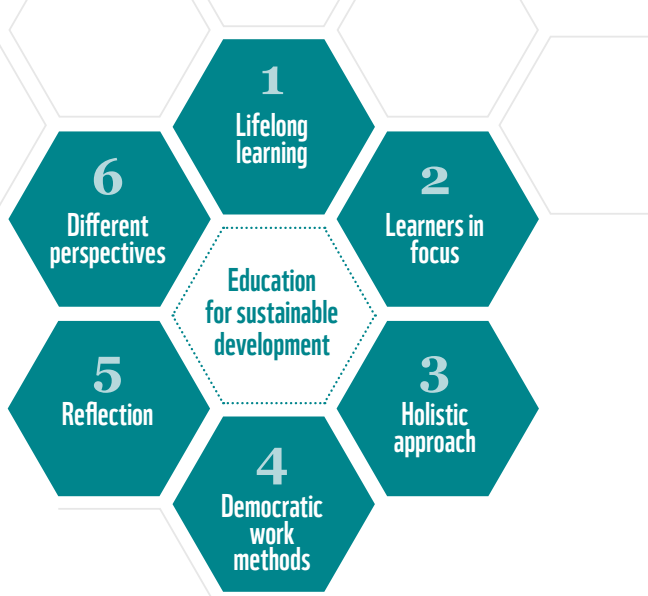
In many countries around the world ESD are included in the school's regulatory documents and curricula. In Sweden, sustainability issues are clearly prescribed in preschool, compulsory school and upper secondary school curricula. In Cameroon, too, ESD has been integrated into most curricula for elementary schools, technical schools, teacher education colleges and to some extent in the curricula for upper secondary schools. Another example is Zambia, there ESD is an integral part of environmental studies, and is described as values, knowledge perspectives and attitudes that contribute to environmentally friendly measures and solutions to environmental problems. ESD is described as a “distinct form of environmental education, which focuses on adopting an educational strategy on sustainability issues to improve students' ability to understand, participate in and



become better at resolving disputed conflicts with ecological, social and economic interests. in our environments.” (Zambia Education Curriculum Framework, 2013)

Teachers have endless opportunities to prepare children and young people to become good citizens able to make sustainable choices. The opportunities for

theme work based on different subject-specific approaches to sustainable society are clearly supported in many countries' curricula. For example, collaboration between the social sciences and biology can illustrate aspects of the sustainable society – actualizing the content of the curriculum while working to achieve sustainable development goals.



Education for Sustainable Development revolves around six pillars



## HOW should education for sustainable development be organized?

Knowledge is very much about dealing with problems in a changing world and moving forward, like a river meandering through a landscape.

Notwithstanding living in a so-called knowledge and information society we see, in spite of all the education and schooling we have received, an increased environmental impact on the planet. New thinking in schools is necessary to meet the challenges we face.

But how should education for sustainable development be organized? Are today's youth really equipped to work for sustainable development? Have they been given sufficient knowledge and skills to handle complex issues such as consumer choice? Do they possess innovative and solution-oriented tools for creating a sustainable present and future?

In her dissertation "Environmental collapse or sustainable futures?" (2017), Kajsa Kramming examines secondary school students' views

on environmental issues. Although they are aware of today's environmental issues, they find it difficult, or impossible, to do anything to avoid an environmental collapse. It is a bleak picture that is being painted, but young people are fully in agreement with WWF in insisting that there must be immediate action if we are to reverse the prevailing negative trend.

In sharp contrast, we see today a large and growing commitment among young people. One example is the Fridays for Future movement, which has energized millions of young people around the world to protest against the lack of concrete decisions and paucity of action to deal with the climate crisis. How can schools reach out to young people who feel powerless and weaponize their awakening awareness and increasing commitment?

### A journey in six stages

Education for Sustainable Development encompasses all the processes that contribute to developing the knowledge, values and attitudes that strengthen the individual, school and society in the quest for social justice, economic security, democracy and ecological sustainability, both now and in the future.

The world is in constant flux. Learning in the field of sustainable development must also move forward and can never merely consist of a list of items to be checked off because you think they have been adequately addressed.

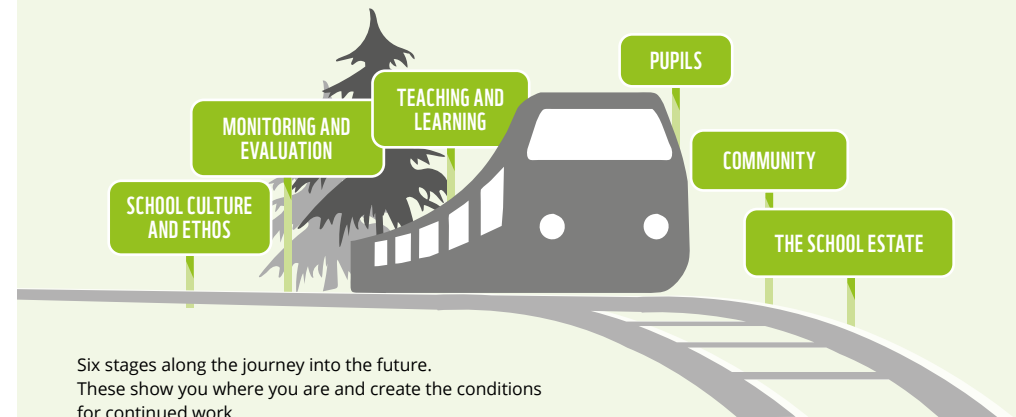
The process of Education for Sustainable Development is complex and shifting and some schools may find this hard to deal with. Of course, the direction work to promote ESD takes will depend on the resources available in the form of personnel competence, motivation and driving force.

Of great importance is the position and goal awareness of school management different aspects of ESD are incorporated into the school's development work.

### Whole school approach

In our efforts to develop the role of the school and sustainable development, we have identified six developmental areas under the whole school concept. Education for sustainable development is not something that only takes place in the classroom during formal lessons. ESD should permeate all school activities and involve everyone at the school, expanding out from the classroom and the playground to include core values and societal challenges outside the school.

Embracing the whole school concept may be the way to create a vision able to provide the power and energy needed if we are to deliver a sustainable future.



Six stages along the journey into the future. These show you where you are and create the conditions for continued work.



## Lifelong learning

Society offers formal learning through preschool, elementary school, secondary school, adult education, etc. But a lot of informal learning takes place in our daily lives – every day, around the clock. As long as you live you keep on learning. A child takes his first hesitant steps, learns how to talk, ride a bike and then it is time for school. TV shows, books, social interactions, excursions, challenges, scraped knees and elbows, laughter ...

Curiosity is perhaps the key to lifelong learning. To search eagerly, discover, uncover and wonder. The path to knowledge is rarely straight and narrow, instead it is mostly awkward, twisty-turny and roundabout. Curiosity can be a bridge between ourselves and the outside world, between you and me.

Everything we humans learn affects how we as individuals understand the world around us. Therefore, in different educational contexts, it is vital to pay due attention to personal experience and individual knowledge.

### REFLECT UPON:

In what way can you, as a teacher, encourage children and young people to think originally and creatively about sustainability issues?

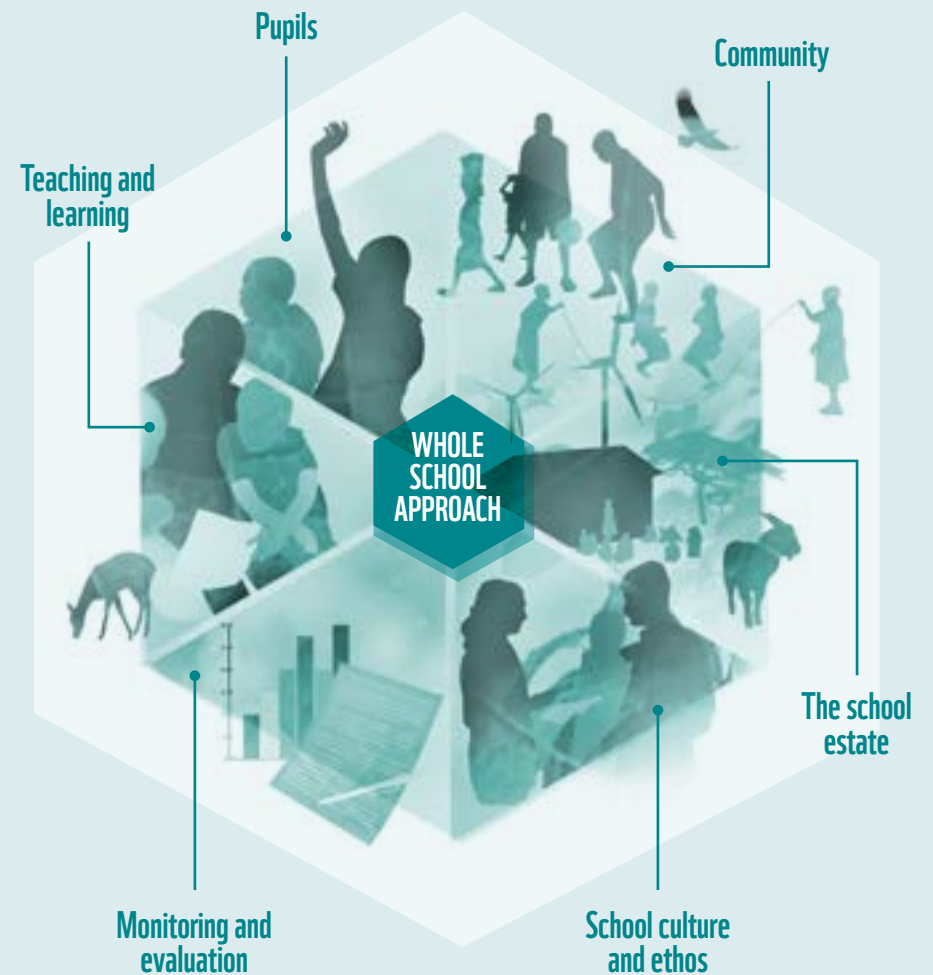


The hexagonal shape is nature's strongest building element, due to its use of the least possible amount of resources. If you want to build sustainably, build hexagonally!

FOTO: JENNY LINDELL

### Tips on how to do this:

- Create a democratic vision for your pre-school or school, based on the regulatory and policy documents and Education for Sustainable Development. Examples of appropriate components in a vision statement: learning for life, student positive self-image, social ability, belief in the future and action competence.
- Make sure that Education for Sustainable Development is clearly profiled in the preschool or school mission and vision statements and reflected in its core values.
- Everyone at the preschool or school should be made to feel involved in decisions that impact school activities.



### WHOLE SCHOOL APPROACH

School development can be summarized in the above illustration. Education for sustainable development is not just about teaching, it is about so much more; about the purchases you make, how you grow your vision, the climate between teachers and students, about student participation in decision-making processes, about collaboration with society in general, and so forth. ESD could be described as the involvement of the entire school in a focussed effort to penetrate six developmental areas.





## Learners in focus

Knowledge can be labour-intensive to acquire, but it is easy to carry around with you – it has been assimilated into your body, internalized – and it is personal. Knowledge is built up by lifelong learning in interaction with other people in continuous social exchange. Sometimes you are on your own, at other times you are able to exchange thoughts and ideas with others. All the time, learning takes place against a social and cultural backdrop. A consequence of this epistemological approach is that it emphasizes the importance of activating the prior knowledge possessed by the individual. Setting sustainability issues as background gives you the opportunity to point out connections with existential issues that will affect children and young people profoundly.

### REFLECT UPON:

How do you utilize the knowledge children and students already possess in your teaching? How do you establish connections between the everyday lives of those being taught and that which they are learning?



### Tips on how to do this:

- Organize preschool/school teaching in a way that facilitates cross-disciplinary work.
- Create a working group with representatives from management, work teams, teachers, staff and students. The group should meet regularly and tasked with running and developing work with Education for Sustainable Development.
- Regularly train all staff in Education for Sustainable Development and ensure that they are well versed in developmental work.

The picture shows a new way to present global goals. At the bottom is the base – ecological sustainability, followed by social and economic sustainability. The base sets the limits for the levels above it.

ILLUSTRATION: WWW.STOCKHOLMRESILIENCE.ORG



## Holistic approach

Education for sustainable development provides context and purpose along with knowledge that feels relevant, meaningful and is rooted in the everyday lives of children and students. Basic knowledge of the external ecological framework underpinning society is vital. This may be knowledge about the planet's boundaries, energy flows, various cycles, or the interactions within nature and biodiversity. It may also be knowledge about human needs, language, culture, the creative process, ethical dilemmas and the meaning of life, and how we can meet the challenges of the future by deploying a raft of energy and resource-efficient technical solutions.



**An example:** When I eat breakfast consisting of a sandwich and a bowl of yogurt and granola and I raise my eyes above my coffee cup I realize that I am consuming both local and global natural resources. My breakfast has an impact on rainforests on the other side of the world. Much of what I eat contains palm oil, often produced in converted rainforests in Malaysia and Indonesia. In the palm oil plantations that have replaced the forests migrant workers work under harsh and inhumane conditions – and the continued existence of the orangutan is now acutely at risk due to a shrinking habitat. Life is, to say the least, complicated. It is no longer possible to study all parts separately, in isolation. Everything is connected. My social behaviour can have ecological consequences in the same way that ecological disruption can force me to lead a different sort of life. If I am to understand the impact my breakfast habits have on sustainable development, I must analyse global value chains: forests that are converted into arable land and planted with the palm trees to deliver the oil used to make my sandwich spread.

#### REFLECT UPON:

How do you as pedagogue/teacher approach the three sustainable development dimensions – ecological, social and economic?

#### Tips on how to do this:

- Highlight and dissect current events in the student's immediate environment.
- Work thematically and multidisciplinary at all grades.
- Ensure that education for sustainable development is prominent in school course and work plans for all subjects.
- Let the extended classroom be a natural part of activities and bring nature and society into your teaching.
- Plan and implement lessons with a focus on various conflicts of interest, both local and global.



## Democratic work methods

Sustainable development demands participation and commitment from everyone. We influence social development in different ways and in different roles; as consumers and producers, as politicians and citizens.

We are not born as democrats. This is something that we have to learn early on and then we have to work at keeping this lesson alive. Step by step we build a democracy. If we are to participate in the societal project, we must be involved, engaged and motivated.

When we are young, we must learn how to become social and empathic beings; why it is important to show consideration to others, express our own thoughts while listening to those of others, respect other people as fellow human beings and respect their opinions, cooperate, take responsibility, reflect, become involved, and much, much more. Democracy is based on the equal value of all people and caring about and respecting one another, even though we may be different.

Later in life, democratic education can also be about in-depth reflection, training in argumentation, source criticism and being able to make democratic decisions. Day-to-day democracy within the school is facilitated if the entire collective – students, staff, school directors and parents and carers act in a spirit of democracy. Student influence may be formal or informal, individual or collective. It may involve individual development plans and everyday exchanges as well as student councils and collaborations with the outside community. The concept of Education for Sustainable Development is democratic in its form.

#### REFLECT UPON:

How can you work democratically and involve the children in your classroom?

#### Tips on how to do this:

- Let students become involved in, for example, the way in which playgrounds are designed and managed.
- Make sure that children and young people feel secure enough to express their own opinions.
- Make sure that the social learning environment is roomy and accommodating, both during lessons and breaks.



*Working on democratic methods in the school is foremost a sign of respect for the rights of our children. The Department of Education mandates that all schools must be child-friendly and I think there is no better way to make a school child-friendly than acknowledging and respecting the rights of the children”*

ROLAND P. DEL ROSARIO, HEAD TEACHER, SCIENCE, FOCAL PERSON, OUR CITY 2030 - JUDGE FELICIANO BELMONTE SR. HIGH SCHOOL, QUEZON CITY, PHILIPPINES.

## Reflection

We live in the midst of an unruly sea of impressions of which we are only able to take in a fraction. It is upon reflection that experiences become knowledge. Sometimes it is necessary to pause and take the time to reflect.

Reflection may take many forms. It can be a silent, persistent and unconscious inner dialogue. It can also be a structured conversation with others. Listening, speaking, writing and creating art are important reflective tools. Documenting your actions, being critical and asking questions are crucial aspects of the art of reflection.

Fact resistance and lack of source criticism are major challenges. An example of this is how should we react when those in power and opinion leaders deny scientific facts and question climate crisis. We do not have all the answers when it comes to sustainable development in a society under development. Many issues are complex and require extensive analysis and reflection. We need to think creatively all the time, question current trends and ways of thinking in a process-oriented pedagogical approach. Educators are included in this as well: dare learn something new!

### REFLECT UPON:

How do you encourage your students to criticize sources?

#### Tips on how to do this:

- Let children and young people work in close collaboration with local companies and other actors.
- Give children and young people the opportunity to disseminate what they have learned via exhibitions, plays, open houses, participation in social issues, etc.
- Invite parents and carers to participate in school activities and inform them about what you do and how the school functions.
- Spread the school's experience of Education for Sustainable Development at local seminars to which staff from other local schools as well as politicians and officials have been invited.

“

*We do not learn from experience... We learn from reflecting on experience”*

JOHN DEWEY



## Different perspectives: controversial questions in the classroom.

**Teaching Controversial Issues – Through Education for Democratic Citizenship Human Rights (published by the Council of Europe 2015), states that:** “Controversial issues embody major conflicts of value and interest, often coupled with disputed claims about underlying facts. They tend to be complex with no easy answers. They arouse strong feelings and have a tendency to create or reinforce divisions between people engendering suspicion and mistrust.”

Issues related to sustainable development can be both daunting and challenging and may give rise to a wide range of views and opinions. Many issues and problems around sustainable development can be viewed from several different perspectives, a solution that works for one person may be unsatisfactory for another. This, in turn, can make it difficult to deal with these issues in the classroom – there are no “right” answers. However, this does not mean that schools should avoid touching upon issues related to climate, gender equality, democracy and other complex but important issues.

### An example of a controversial issue:

In your hometown, politicians have decided to ban the sale of sprayed tomatoes. They argue that we have to reduce the use of toxic chemicals, both for the sake of the environment and biodiversity and to avoid people ingesting poison. Many people are happy about this decision and feel secure in eating non-toxic food and contributing to a better environment. The growers, on the other hand, say that they will have smaller harvests if they are hampered fighting disease and pest insects and this means they will suffer financially. Moreover, they point out, just rinsing the tomatoes before eating gets rid of any toxins.

Our daily struggle for existence can be viewed from a variety of different angles, among these those rooted in ethical, historical and international perspectives. Competing standpoints and interests can be set against each other. Teaching that utilizes everyday local and concrete reality as a springboard for learning, emphasizes an open and broad-minded approach to various issues and problems and provides fertile soil for well-thought-out individual positions. Issues around sustainable food production cannot be solved with sweeping formulations, but perhaps in respectful discussion where it is possible to demonstrate the importance of biodiversity, health and sustainability aspects of non-toxic foods and so on.

“

*But I don't want your hope. I don't want you to be hopeful. I want you to panic. I want you to feel the fear I feel every day. I want you to act. I want you to act as you would in a crisis. I want you to act as if our house is on fire, because it is.”*

GRETA THUNBERG, ENVIRONMENT ACTIVIST, 2019





© ISTOCK

How should you handle controversial issues in the classroom where multiple value perspectives and interests collide?

As humans, we adopt different perspectives depending on when and where we live. Previously, people lived and worked in small geographical areas. We cultivated our fields and managed our forests and rarely travelled far from home. The fact that there were countries and people hundreds of miles away was unknown to many, or not seen as particularly relevant to the everyday travail. Today, conditions in different parts of the world vary considerably. Nowadays, we are able to participate in events taking place on the other side of the world, and this enables us to expand our knowledge and awareness of different perceptions and perspectives.

Controversial issues, or problems where there are no simple “right and wrong” solutions, are known as “wicked problems”. A wicked problem can be defined as a problem that is difficult or impossible to solve because of incomplete, contradictory, and changing requirements that are often difficult to recognize. ([https://en.wikipedia.org/wiki/Wicked\\_problem](https://en.wikipedia.org/wiki/Wicked_problem))

Teachers sometimes find it difficult to know which leg to stand on when strong interests conflict around an emotionally charged and controversial issue.

### REFLECT UPON:

How should you handle controversial issues in the classroom when multiple value perspectives and interests collide?

### Tips on how to tackle controversial issues:

- Listen to the thoughts of the children and young people without prejudice
- Work with source criticism and present the facts surrounding various issues
- Raise different perspectives
- Discuss the issue in broad terms



*I believe in a life filled with learning,  
a voyage of discovery outdoors,  
in sunshine, rain and wind.  
I believe in wandering across wide open spaces  
amidst the unpredictable and real.  
I believe in the wind;  
an unexpected gust of intense presence.  
I also believe in the looking glass of reflection,  
the pale cast of after-thought.  
I believe in a life filled with learning,  
a voyage of discovery outdoors.*

GERMUND SELLGREN

© PIXABAY



## WHERE should education for sustainable development take place?

The simple answer is, wherever it will enrich the soil of knowledge.

Lessons are often held indoors in the classroom. But it is important to pose the question: where should these lessons be held? It is valuable to go outside and see with your own eyes a fragile plant, a setting from a bygone era or a farmer toiling on the land. This is inspiring for several reasons. You highlight your own unique experiences that cannot be replaced by those of anybody else. You discover yourself in surroundings brimming with smells, sounds and visual impressions. You are physically active – you can walk, run and move about. Experiencing things with your senses is natural in an outdoor environment. Being a co-creator of sustainable societal development means, among other things, that you have established strong and positive relationships with the natural environment from which we all come and upon which we all depend.

But seeing your immediate surroundings as an arena for learning is just the first step. The outside world is much larger than that. Entering into close and vibrant relationships, study visits to other districts, contacts with and visits to other countries – these are further steps that can lead to an increased understanding of other cultures and a sense that we all share a common destiny. With increasing cultural diversity in many countries, we have begun to realize that the world is coming to us as never before. Building bridges across cultural boundaries is something we encourage at WWF.



WWF emphasizes the value of close contact with nature and society. The importance of cities increases with urbanization. By 2050, 70 per cent of the world's population is projected to live in a city. Here, the knowledge and participation of citizens, especially the young, is an important piece of the puzzle involved in working to bring about change.

This may be about adding ecological features to the school playground, for example by increasing biodiversity with garden plots, perhaps a pond and a well-thought selection of flowers, shrubs and trees. Establishing close contacts with the wider community is also of great value, for example by maintaining dialogue and collaboration with parents and carers, politicians, various experts and others. It could also be about actively participating in local issues.



The global Sustainable development goal number 11:

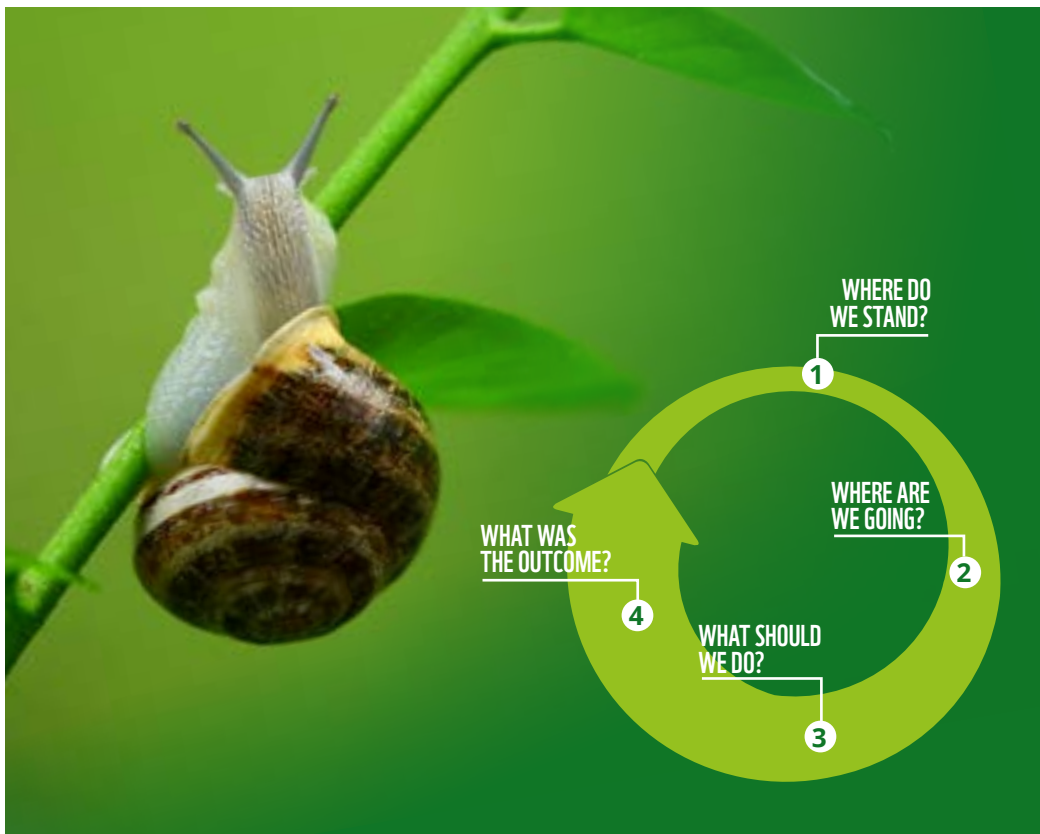
Make cities inclusive, safe, resilient and sustainable

### Some examples:

- Children at a preschool watch a rubbish truck collect bins with clamour and din and are fascinated by the whole rigmarole. They are captivated by the drama, the big truck, and wonder wide-eyed where all the bins are being taken. The staff at the preschool react to the inquisitiveness displayed by the children and utilize their questions in the educational-didactic process. Perhaps a study visit to a recycling station?
- A school class helps the municipal environment department with an inventory of plants in a nature reserve.
- A class launches a campaign for sustainable lakes and seas and writes an op-ed protesting microplastics mixed together with artificial grass and food.
- A school from Sweden sends students to Latvia to discuss Baltic Sea eutrophication problems with contemporaries there.
- Roundtable discussions are a good way of fostering participation in the public debate. Young people get to argue and discuss with researchers, politicians, representatives of various organizations and other stakeholders.

### REFLECT UPON:

How can you as an educator bring the outside world into your teaching?



## MONITORING AND EVALUATION

Everything we do in school, including teaching, break activities and performance appraisals must be monitored, evaluated and refined. This holds true for work with Education for Sustainable Development.

To determine whether or not they are on the right track, schools must adopt a plan to systematically evaluate efforts within Education for Sustainable Development. Involving school management, teachers, other staff and students in systematic quality management, will provide you with a picture of school activities across the board and illustrate the need for development and change.

**If we are to implement systematic quality management, we have to answer these four questions:**

1. Where do we stand?
2. Where are we going?
3. What should we do?
4. What was the outcome?

## Systematic evaluation and Education for sustainable development

● **Where do we stand?** First of all, we must carry out a current situation analysis. How do we approach today's sustainability issues? Are they dealt with in all subjects? Do we work interdisciplinarily? Do we take into account the six pillars of Education for Sustainable Development in our planning: Lifelong learning, Learners In focus, a Holistic approach, Democratic work methods, Reflection and Different perspectives? Do we involve the whole school (Whole school approach) in our efforts? This will subsume our achievements to date.

● **Where are we going?** The next step is to describe our objectives; What do we want to achieve? For example, it might be a good idea to establish a connection with some or all of the sustainable development goals when we work on our pedagogical planning, ensure that all teaching is based on active student participation and democratic working methods, that our work should be theme-based and inter-disciplinary and so forth. Create a sustainability vision for your school.

● **What should we do?** Now it is time to think about how to get to our ultimate destination. This obviously depends on where you are at the moment. Maybe you have already come a long way, or you have just begun your journey. Based on your current situation, set up a plan for the road ahead. What do we need to change/work on if we are to reach our goal? What methodology should we employ? What conditions will be required in the short and long term? How can we get everyone at the school involved? And how can we keep the process alive?

● **What was the outcome?** The answers to these questions are followed by an implementation phase in which everyone at the school carries out what you have agreed upon. A little further down the road it will be time to ask, "How did things turn out?" Evaluate the results in the light of your goal and vision. What elements fell into place smoothly? What do you still need to work on? and so forth. Now make a new plan for moving forward.

Working with systematic quality work is a constantly ongoing process of refinement.

### Tips on how to do this:

- Carry out a current situation analysis that will inform you at what level you should initiate change management
- Set up a shared target
- Set aside time for teachers and other staff to regularly monitor and reflect on what they are doing
- Engage students at all stages of systematic quality management



Three factors affect our ability to act: knowledge, opportunity and motivation.



## ACTION COMPETENCE FOR SUSTAINABLE DEVELOPMENT

Every day we impact the ecology in both our immediate surroundings and in far distant places. Humankind's unsustainable lifestyles threaten the future. We must reduce our ecological footprint, and this necessitates drastic change. But how can we bring this about? First, with a meaningful and unbiased transformation across the whole of society – to this end we must develop personal action competence skills for sustainable development. It all comes down to our resolve and ability to influence lifestyles and living conditions and assume global responsibility and respect for future generations, and to whether we are able to acquire the knowledge indispensable for active participation in the societal project. How can we embark on a new, non-destructive path? How can the way we live be transformed? Three factors affect our ability to act: knowledge, opportunity and motivation.

### The three components of action competence

● **Knowledge** is about facts, practical skills: how to influence things, deep understanding, wide-ranging awareness and wisdom, in short, the sum of everything you know. For example, you are acquainted with a farmer who feeds his cows with concentrates containing soybeans cultivated where Brazil's savannas once stood. At the same time, you realize that organic milk should be sourced from cows that have eaten locally produced meal. In other words, you are aware of the agriculture's connections to and dependence on countries on the other side of the world but also, the importance of viable local and ecological milk farming.

● **Opportunities** mean that there are different alternatives and physical opportunities for many – we can! This makes it feel meaningful to contribute to an environmentally sound society. If, for example, organic milk is available at the store at a reasonable price, this increases people's willingness buy it.

● **Motivation**, the inner driving force that sparks the impetus to undertake change. You are stirred – inspired to act – and can see openings in all directions. You may get benefits such as better health, higher status or more time to do the things you want. You have the desire, the will and the courage to act. Learning based on the reality you live in can increase motivation. Encouraging students to identify problems, preferably in their immediate surroundings, and find solutions can have the same effect. Succeeding at school incentivizes. Success spurs motivation.

Maria Ojala, Associate Professor of Psychology at Örebro University, Sweden, has studied the concern young people feel about climate change. The study shows that this worry need not always be negative and destructive. Anxiety can act as a driving force and inform action skills. If concern and angst about climate issues are tempered with feelings such as hope and meaningfulness, action competence is strengthened.

WWF's initiative "Our city 2030" is an example of teaching and learning based on the everyday lives of students and their local environment. This pedagogical project allows students to address the three aspects of sustainable development. The students examine their own municipality's climate and environmental plans, they go out into their surroundings and look at urban development with their own eyes and sketch how the local community might look in 2030 when forward-looking climate initiatives have eventually borne fruit. The project concludes with a climate council in which students showcase suggestions and ideas concerning sustainable city development. Politicians, officials, experts, organizations and others are invited to share the students' visions and solutions. Evaluations at hand indicate that this sort of initiative is much appreciated by young people – "You get to work with real things and there is a target and address for what you do".

For this reason, students must be given ample scope and adequate support if they are to translate words into deeds. Perhaps the most important impetus for behaviour change is belief and faith in the future and a solution-oriented approach. Inspiring hope, applying innovative tools to local and global challenges.

### REFLECT UPON:

How do you convey hope and courage to your students?



## WHAT IS KNOWLEDGE?

Let's pause for a while before we focus on knowledge. Ask yourself the question: "What is knowledge?"

The answers are likely to be many and varied: "Something you learn in school. Reading, writing, arithmetic. Knowing the capital cities of all European countries. How to hammer in a nail or perhaps the ability to find your way through the forest" ...

**“** Human knowledge is never contained in one person. It grows from the relationships we create between each other and the world, and still, it is never complete.”

PAUL KALANITHI, NEUROSURGEON AND WRITER

But knowledge is so much more than that. Learning, or knowledge-building, takes place from the moment you wake up in the morning to the moment you fall asleep in the evening, throughout your entire life. If you regard knowledge and learning as a constantly ongoing process, you must also look at education in a different way than you are accustomed to, with increased emphasis on understanding, reflection and depth. Education should provide opportunities for knowledge and learning, and knowledge should lead to action.

WWF believes in an epistemological perspective that is broad and versatile and that embraces a diversity of values. Human beings are endowed with understanding and possess know-how and practical knowledge.

In its publication Education for Sustainable Development Goals - Learning Objectives (2017), UNESCO describes eight key competencies for sustainability:

1. Systems thinking
2. Anticipatory competence
3. Normative competence
4. Strategic competence
5. Collaboration competence
6. Critical thinking
7. Self-awareness
8. Integrated problem-solving

These key competencies include cognitive, affective, voluntary and motivational elements; hence they are an interaction of knowledge, capacity and skills, motives and affective dispositions. Skills cannot be learned but must be developed by the students themselves, in context with others. They are acquired during action, based on experience and reflection.



THE RENOWNED BROADCASTER AND WRITER SIR DAVID ATTENBOROUGH GAVE A POWERFUL SPEECH AT THE 2018 UN CLIMATE CONFERENCE IN POLAND:

**“** *Right now, we are facing a man-made disaster of global scale. Our greatest threat in thousands of years. Climate Change. If we don't take action the collapse of our civilisations and the extinction of much of the natural world is on the horizon.”*



## THE BIG STORY

We are facing a global, man-made disaster – the largest for thousands of years. Climate change is reported on and debated almost daily. Scientists and experts know what needs to be done, our politicians know, the public has become more and more aware ... But something is missing; why aren't we translating our concerns into action? We need the big story, the one that grabs hold, shakes and inspires us.



For many years, researchers and other experts have stressed climate change as a major threat, and one that we should respond to quickly and forcefully. But why aren't we reacting to facts and engaging to the very core of our being? Is it a feeling of guilt that makes us turn our backs?

The Norwegian psychologist Per Espen Stoknes emphasizes, among other things, distance, doomsday perspectives and denial. Stoknes believes that we experience climate change as something remote in time and space. It is something that will happen 20, 30 years in the future and is illustrated by the fate of polar bears, animals that we will never meet in real life. When we too often hear about this armageddon, it is easy for us to flee rather than accept responsibility. This denial, says Stoknes, is mostly about self-defence. We do not want to change a way of life that has shaped the way we are today.

A cultural approach might be appropriate here; the creation of a narrative describing what brings about climate change and what is happening to people and our relationships with one another and the new societal forms that are emerging. Stories that dependably paint the world 50 years in the future, when we live in a fossil-free society, when the consumer society has been replaced by one that places a premium on other values, where injustices have largely been vanquished by emerging societal forms... but perhaps also a darker scenario, where climate change is spiralling out of control, refugee flows and frequent wars are a harsh new reality.

These stories might take literary form, poetry, dance, video, the spoken word, music and so on and so forth. Perhaps these narratives will inspire, give birth to new thoughts and enable us to more easily penetrate the big, existential questions and understand what these really entail.

(SVT NYHETER, DECEMBER 10, 2018)

PROFESSOR JOHAN ROCKSTRÖM SAYS:

**“** *Music is not only an indulgence for the ears, but also an important part of communication, science and social engagement. Science is not the only path to global sustainability. Music is in fact a combination of the emotional and the rational, a strategic way to bring about change and reconnect us to life and our well-being.* **”**

# WORKING WITH VISIONS

Let's take a glimpse in the rear-view mirror and look back to the year 1970. That year overshoot day was December 29. That was when we had consumed all the Earth's resources for the whole year. We lived globally within one-planet constraints and had no need to “borrow” resources from the future.

Since then, communities and living conditions around the world have changed and evolved, and today the world looks very different. Extreme poverty halved between 1990 and 2012 and continues to decline. More people have access to clean water, more can read and write, more girls attend school and an increasing number of countries are legislating against discrimination. In addition, digitalisation has created new opportunities for people living in poverty. But the flip side of this development is an over-utilization of the Earth's resources due to both population growth and increased consumption. We are borrowing from future generations.

If we instead look into the future, what will things look like on planet Earth 2030 when the Global Goals hopefully have been reached? Have all 17 SDG goals been met? Is there war? Peace? Starvation? Is there an outbreak of environmental disasters? Are there many new inventions? Higher living standards? Mass migration? Do we have gender equality and fewer injustices?

Working with visions is an important aspect of education for sustainable development. What the future will look like beyond

the next bend in the river is hard to say. But we can dream and make plans and embark upon as sustainable a direction as possible. Knowing precisely what we will need to master and how we can prepare for an unknown future with today's levels of understanding are important questions that we need to ask ourselves.

We are living in a time of rapid change. Schools should reflect development and change and build visions for a sustainable future. This should be done in an unhurried process that takes the time it needs, and where everyone at the school is involved: students, parents and carers, educators, teachers, other school staff and heads of school.



”

*You say you love your children above all else, and yet you are stealing their future in front of their very eyes.”*

GRETA THUNBERG, ENVIRONMENTAL ACTIVIST, 2019

## VISUALIZING THE FUTURE

Each development process is a journey with known and unknown elements of differing kinds. Incorporation of the new into the old happens in stages. Societal building that will be sustainable further down the road will not come into being on its own, decisions about the future must be made now. Educators are needed to visualize, describe and depict the way things are at the present and what they might look like in the future. Sustainable social building will gain momentum when fearless citizens risk embracing new ways of thinking, both those involving action and non-action, for the survival of the planet, and choose rulers who dare make the boldest decisions.

Working for change takes time. Democracy takes time. Our politicians make the decisions that voters support. In 2010, a Swedish election poster asserted that “The future begins in the classroom”. Let’s start there in the classroom, or rather in the extended classroom, outdoors in nature, creating vibrant relationships with the fantastic globe we inhabit; experiencing the diversity and the creativity of nature, but also pushing for

that which is beneficial and inspiring as we build our societies and fight for the planet, today and tomorrow. Not from a sense of duty, but because of love and gratitude for the Earth and the diversity of life. If those of us working in schools cannot sketch the contours of a future sustainable society, how will our students ever realize that it can be achieved and long and yearn for it to happen?

WWF advocates a vision that delivers drive and energy and aims at a sustainable future. Here the WWF model that involves the whole school can be used as a foundation to build on. See pictures on page 25 and 27

### REFLECT UPON:

**How might you and your colleagues formulate a vision for the future, based on the following:**

**A sustainable society must meet today’s needs without jeopardizing the needs of future generations, where ecological, social and economic dimensions interact with and reinforce each other.**



© WILD WONDERS OF EUROPE / MARK HAMBLIN / WWF

## AN EXAMPLE OF WORKING FOR A VISION

Over a period of three years, WWF Sweden collaborated with ten so-called model schools for sustainable development. One of these schools, Partille Secondary School, worked resolutely to develop a vision, how this was achieved is described below:

A special development group at Partille school presented ideas for a vision based on input from a range of different sources: UNESCO, the Partille School Curriculum, the Curriculum for the Non-Compulsory School System, the Global Secondary School Curriculum, and more.

A working group provided comments and feedback and followed up with a number of workplace meetings, consultations with an area-based partnership group, the school management, heads of school, unions and students. Each word was discussed in detail during a whole year. Thoughts Take Time!

### REFLECT UPON:

**How do we encourage our students to think far-sightedly about a sustainable future?**

In 2010, the new vision was put into practice:

● **Learning for life.** I cultivate my will and my desire to learn in a challenging and varied pedagogy which enables me to take advantage of my creativity, communicate, think critically and solution-oriented and participate in decisions bearing upon work at school, both directly and comprehensively.

● **A positive self-image.** I have confidence in myself because I can be seen, thrive and am able to succeed on my own merits.

● **Social capacity.** I have sympathy and respect for other people, different cultures, human rights, equality and tolerance.

● **Belief in the future.** I am aware that I have power over my surroundings and lifestyle and am able to progress in a positive and sustainable direction.

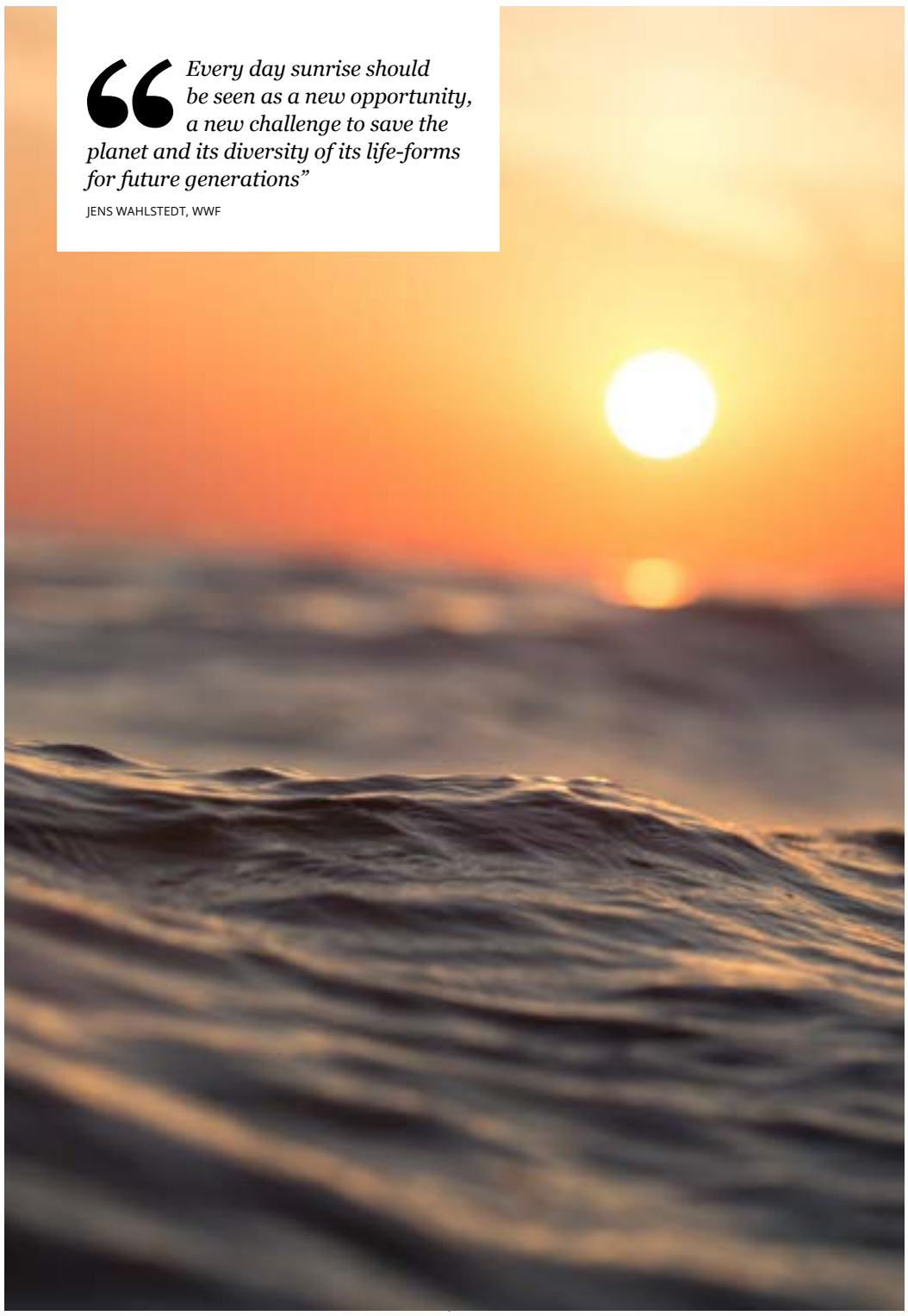


# Conclusion

Life is like traveling in a landscape with smooth or harsh terrain, light and dark places, full of hidden surprises. In this landscape we set out on smaller and bigger expeditions, all the time cooperating and interacting with others. We cannot travel completely by ourselves, as little as we can always stay in the sunny patches. An important part of the journey is taking the time to pause at life's waypoints. A beautiful sunrise, a loving smile, a gripping piece of music, a cloudless sky.

## Tips on material and links

- [www.wwf.org](http://www.wwf.org)
- [www.wwf.se/utbildning/wwf-education/](http://www.wwf.se/utbildning/wwf-education/)
- <https://sustainabledevelopment.un.org/>
- Teaching Controversial Issues- through Education for Democratic Citizenship Human Rights: <https://rm.coe.int/16806948b6>
- Education for Sustainable Development Goals – Learning Objectives: <https://www.sdg4education2030.org/education-sustainable-development-goals-learning-objectives-unesco-2017>
- UNESCO: <https://en.unesco.org/themes/education-sustainable-development>
- Fridays For Future: <https://www.fridaysforfuture.org/>



“ Every day sunrise should be seen as a new opportunity, a new challenge to save the planet and its diversity of its life-forms for future generations”

JENS WAHLSTEDT, WWF



# OUR MISSION IS TO CONSERVE NATURE AND REDUCE THE MOST PRESSING THREATS TO THE DIVERSITY OF LIFE ON EARTH.



Working to sustain the natural world for the benefit of people and wildlife.

together possible.

[wwf.se](http://wwf.se)

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