



GAIA YES!

Youth Education for
Sustainability

LEARNING ABOUT SUSTAINABILITY THROUGH INSPIRING STORIES FROM PRACTICE

This book is a collection of inspiring stories about sustainability. It is written for young people and includes appropriate research questions. In order to gain a holistic vision on sustainability, this book focuses on the twenty sustainable GAIA YES themes. The research questions are approached from five different perspectives on sustainability, namely: social, ecological, economic, cultural and I.

This work was developed by GAIA YES
www.esd.college

Colophon

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Foreword

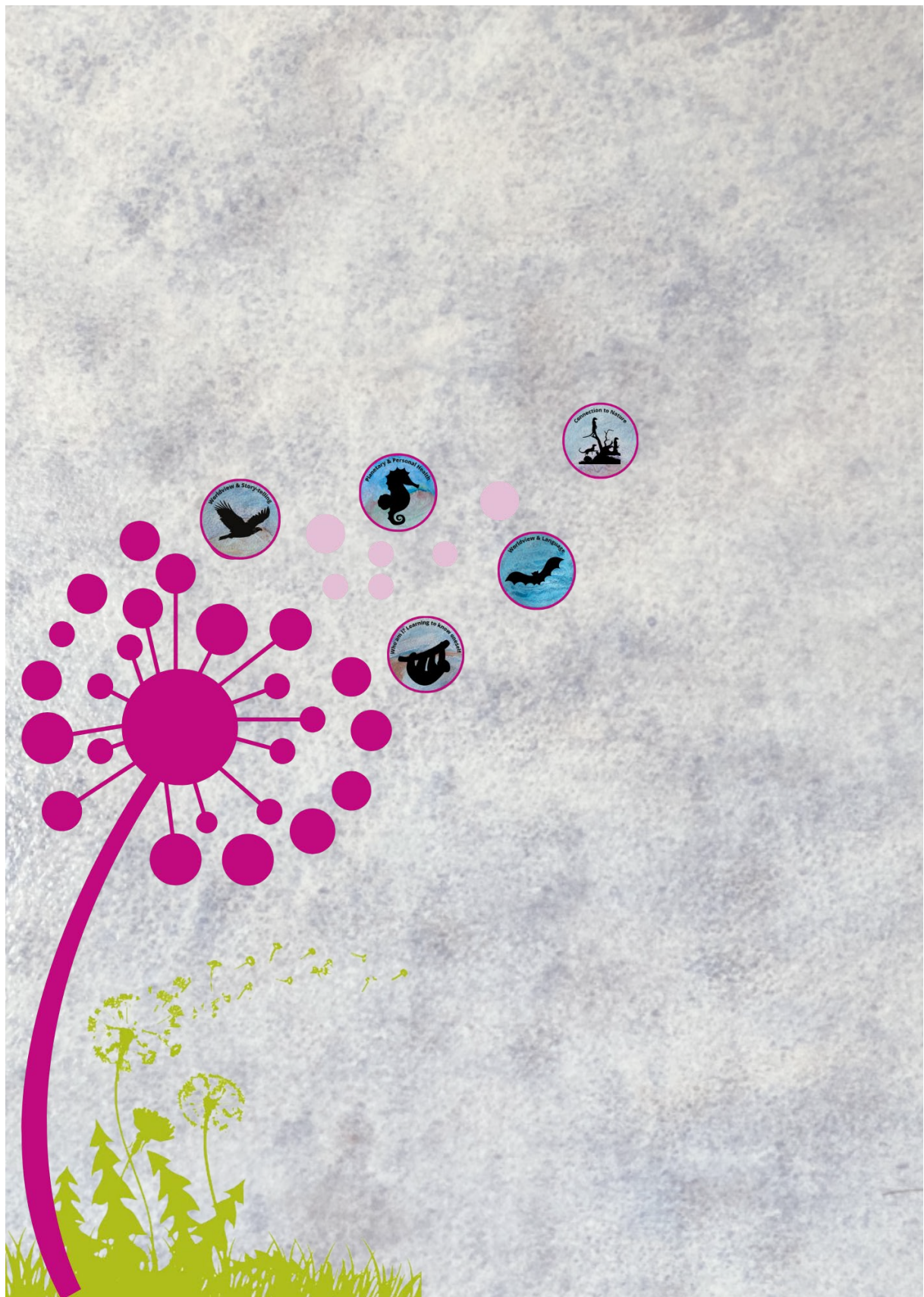
Stories that you never forget, that change your life and your attitude towards life forever. Stories that change your world and the world of others: world stories.

Stories about life considered in its essence and stories that, at the same time, deepen every conceivable dimension: socially, culturally, economically, legally, organisationally, ecologically. Considering life from the perspective of all these different dimensions, things can be better and truer!

Life needs people that are enthusiastic and inspired to take on all the challenges in the world.

These world stories invite people to take the relay baton of inspiration and courage and carry it on. Out of love, out of passion, out of the conviction that things can and must be better today

WORLDVIEW



1.1 Worldview & Story-telling

1.1.2 Voice of the Earth

Mr Tesfa stands at the window, musing. Like every day, I wave as I pass his house. He looks up and smiles when he sees me, but there is sadness in his eyes. He just can't seem to settle down in our country, under the watery sky, in this grey area of stone and concrete.

This spring, I greeted him for the first time while he was hoeing with his back bent in his vegetable garden. He offered me a cup of tea and a little later we were sitting on the bench in front of his house, chatting happily. As I admired his bean plants, he began to tell me about the land in his homeland where his family had grown their own food for generations. Their life in Ethiopia had been simple, but they had enough to live on. Until their land fell into the hands of a large coffee plantation. He shook his head sadly and I understood that his little postage stamp garden thousands of kilometres away from his homeland must be a poor consolation.

After our first encounter Mr Tesfa and I have been speaking to each other more often. Thanks to our meetings, I am learning to look at life in the West with different eyes. According to Mr Tesfa, it is not developed and prosperous, but impoverished and alien to the world. He can hear this from the way we talk, because language determines how we as humans relate to the earth. According to him, when we 'go out into nature', we mainly see a place to enjoy ourselves instead of our natural habitat, of which we are a part. When that same nature is in the news, it is often about running out of 'resources'. Have we come to believe that nature is subordinate to people? And have we come to see the earth as a bottomless pit? What a contrast with Mr Tesfas ancestors, who have always respected nature as a living system, in which everything is connected. They made grateful use of the abundance that Mother Earth produced, but respected her limits because they knew that they were dependent on her.

Meanwhile, old Mr Tesfa bravely and stubbornly holds his ground. Not by adapting, but by sticking to his principles and above all, not giving up hope. That is perhaps the most important lesson he taught me. "Tesfa means hope in our language," he had told me one day. He faces his feelings of despair and melancholy by connecting with the little pieces of nature around him: the twittering birds on the roof, a butterfly fluttering by, and of course the

growing crops in his garden. In his own way, he still listens to the Voice of the Earth and thus honours his family name day after day.



Ethiopian landscape near Lalibela.
(Photo: Erik Hathaway / [Unsplash](#))

Research questions

Social

Why does Mr. Tesfa call the western society impoverished and unworldly?

Mr Tesfa says he can hear the Western worldview reflected in the way we talk. How do you think language can influence the way we look at the world?

Ecology

Watch the documentary '[The Rights of Nature: A Global Movement](#)'.

How does the Western worldview differ from that of indigenous peoples, such as that of Mr Tesfa and his ancestors? How does this affect life on earth?

Economy

All over the world, rivers and natural areas are recognised as legal entities, giving them a 'voice' in our economic system. See if you can find an example of legally recognized nature for each continent.

What could the attribution of names and identities to natural areas mean for (economic) prosperity?

Culture

The choice of words determines how we think about something. How does the emotional value of words such as 'resources', 'environment', 'sustainability', 'biodiversity' and 'climate change' influence our perception of nature?

We can change our perception through our use of language. What alternative descriptions can you think of for the terms mentioned above?

Let your imagination run wild and think of different ways to use language to create more connection with the earth and to make nature come alive.

I

Which natural area or element in your environment would you like to give a voice to?

What effect does 'personifying' a tree, river or cloud have on the way you experience nature?

Joanna Macy (1929), eco-philosopher, Buddhist and scientist, developed 'The Work That Reconnects' to reconnect with nature. Listen to the poem '[Widening Circles](#)' that Macy translated from the poet Rainer Maria Rilke. Also try the ceremony of '[The Council of All Beings](#)' to experience life on earth from a different perspective.

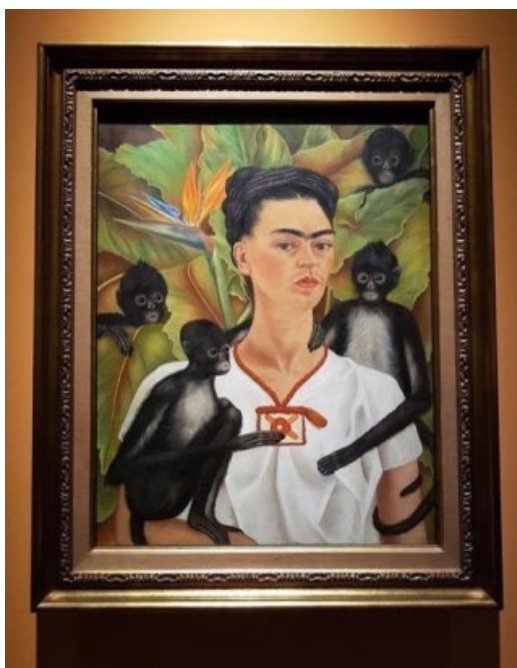
1.2 Who am I? Learning to know oneself

1.2.1 Frida Kahlo

Harry and Diane are visiting the Drents Museum with their class to see the exhibition about Frida Kahlo (1907-1954). The Mexican painter is known for the more than fifty five intimate self-portraits she has made, portraits that give a glimpse into her life. Frida grew into a free-spirited icon who fought for the rights of women and the lgbtq community. Next week, Harry and Diane will get to work on a self-portrait during the handcraft lesson.

Diane and Harry look at the many works of Frida Kahlo. It is as if they are stepping into her life themselves. Frida's life was not easy. She wanted to study to become a doctor, but a serious tram accident on her eighteenth birthday put a stop to her ambitions. Frida had to stay in bed for months to recover from the accident. Her parents hung a mirror above her bed and put an easel next to her bed so Frida could draw herself. Whenever Frida was having a difficult time, she would show her parents how far she had come in her recovery process by painting herself. This period marked the beginning of her painting career. From that moment on, Frida used painting to express, process and represent emotional processes within herself.

"Look", Diane says to Harry, "here Frida is wearing men's clothes. She has painted herself with short hair and a light moustache. I think that's cool!" Harry and Diane often have conversations about being a man and a woman. Diane doesn't really feel like a man or a woman. She is, as they say, non-binary. Harry has been in love with a man. He likes hanging out with Diane, because he feels that she really understands him. Many boys in his class don't. They bully him and make nasty remarks about him being gay. Secretly Harry is also a bit in love with Diane. But Diane is not at all concerned with falling in love. So he keeps quiet about it and just enjoys the time they have together.



Frida Kahlo, Self portrait with Monkeys.

Research questions

Social

Frida was a great advocate of equal rights. Not just for men and women, but for everyone who at that time was treated unequally because of their orientation, race, mental condition or disability. She regularly took part in demonstrations, whether it was about equal rights for homosexuals, women or transgenders. Frida died in 1954. More than 60 years have passed. Do you think inequality has decreased and/or equal rights have increased since Frida's death? Do you think the demonstrations that Frida took part in were useful? What do you think are the factors that perpetuate 'unequal treatment'?

Ecology

In Frida Kahlo's self-portrait '[Along the Borderline Between Mexico and the United States](#)', on the Mexican side you see plants with roots deep into the earth, and on the US side, electricity wires, which even run a little bit towards Mexico. What do you think Frida wanted to say with this painting? And what does this self-portrait tell us about Frida herself?

Economy

Frida's passion for equal rights and art originated from her disability. How many chronically ill people are living in your country? What are the five most common chronic diseases? What positive effects does work or art have on chronically ill people? What could you do to help chronically ill people find work and get back to work?

Culture

Frida painted herself with heavy eyebrows and a moustache. What did she want to show with that?

I

When you look at yourself in the mirror, what objective observations can you describe about yourself? Are there any characteristics that you would like to see differently? If you were to make a self-portrait, what would stand out? What makes you you? Try it! Also watch this [video](#) about the iconic Frida Kahlo.

1.3 Planetary & Personal Health

1.3.4 Survival in nature

"In about an hour we will arrive at the first hut", Robert says cheerfully. He has done several bushcraft courses, in which you learn to survive in nature. Now he has been walking with Laura and Astrid for a few hours through the snowy mountains. "It's beautiful here," Laura says happily, and right after that she slips on a rock. "Ouch", she shouts loudly, "my ankle! Robert runs to her and cools her sprained ankle with the snow. Laura is devastated; she was even wearing her new mountain shoes.

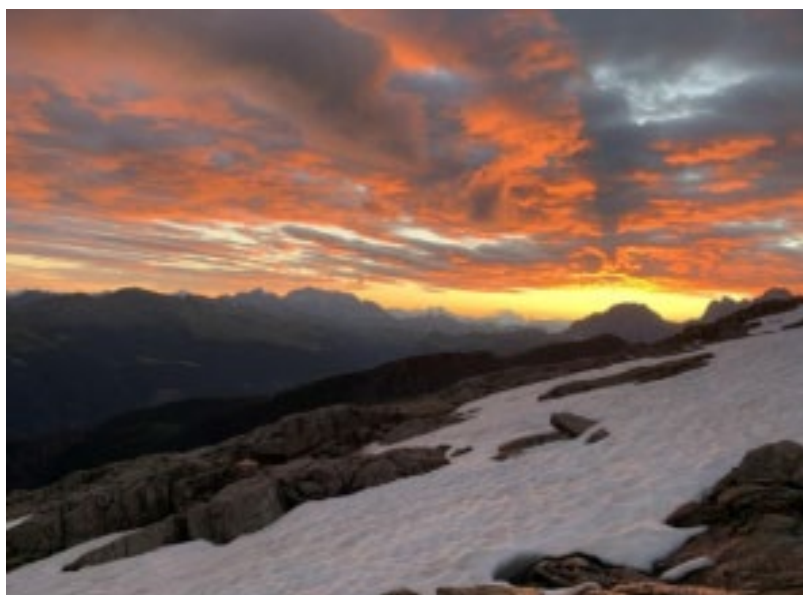
While they are looking at Laura's ankle on a rock in the middle of the snow, the weather changes. Within minutes the sky turns pitch black and a thunderstorm erupts. Through the noise of the storm, Astrid shouts: "It's absurd, you can't even see twenty metres any more because of the rain. "The hut is only five hundred metres away. Behind that ridge", Robert shouts back. But in the fifteen minutes that they sit still, he feels himself cooling down. Laura confirms what he thinks. "The pain isn't too bad, but I'm starting to get cold."

Robert's thoughts go full speed ahead: We have to get to a shelter within half an hour or we will get hypothermia. But Laura can't walk anymore, we don't know exactly where the shelter is, we can't see anything because of the dark and the extreme weather and we are cold.

Now what? Then suddenly he shouts: "We'll pitch the tent here". All these small problems that can normally be managed now create a potentially life-threatening situation and splitting up is out of the question!

He takes the pans out of his rucksack and asks Astrid and Laura to dig a hole with them. Together they pitch the tent as best they can and Robert pushes the ladies inside. "Take off all your clothes," he commands, "because they are wet. Light the gas burner as a stove and eat and drink warm things." Robert himself is still standing outside when lightning strikes nearby. Pink. Purple. Beautiful colours. It's an explosion at less than fifty metres away. Only around eleven o'clock in the evening does the storm subside. "We'll make it", mumbles Robert, although all the sensations make it impossible to sleep. The three of them chat until

it gets light and together they watch the sun rise. "This is really the most beautiful sunrise ever", Robert says with relief.



The most beautiful sunrise ever on the Translagorai track, Dolomites, Italy.

Research questions

Social

During bushcraft you learn, among other things, first aid with things from nature and how to cooperate with nature. What example of this is there in this story?

Have you ever helped someone? If so, how did it feel?

Have you ever wanted to help someone, but you didn't know how to? What did you do then?

Ecology

How does Robert make use of the insulating property of snow?

How do you depend on nature? Give some examples. How could you cooperate more with nature? Give an example.

Economy

What can you use nettle ointment for? Find out how you can make ointment from stinging nettles. How much do the materials cost? Can you buy this ointment in a shop? If so, how much does it cost? What is the price difference?

There are many other plants you can use for first aid. Which plants do you know that have medicinal properties? Would you like to know more about them? Why or why not?

Culture

Do you know how to survive in nature? What items/basic equipment do you really need to survive? Look for the SAS Survival Guide on the internet.

How do you get water, food, clothing and shelter in nature?

If you were to live by natural means only, what items would remain in your life? What would you miss the most?

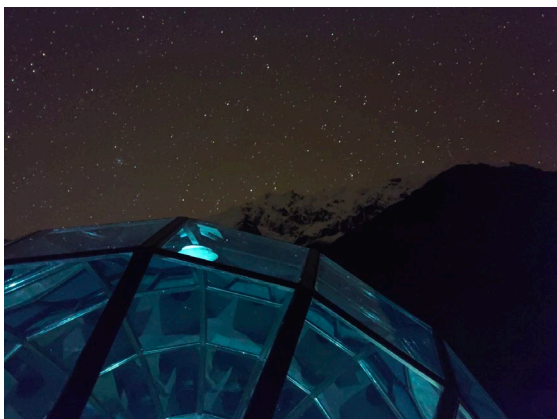
I

How do you feel in different weather conditions?

Have you ever experienced an extreme weather situation? Were you alone or with others?

And did it make a difference?

Would bushcrafting as a hobby appeal to you? Why?



Camping in the mountains at night.

1.4 Worldview & Language

1.4.1 Language is more than communication

During a trip through Alaska, Bas met an Inuit (formerly known as Eskimo) who was fishing. Bas asked the Inuit where he could pitch his tent for the night. The Inuit looked at him kindly but silently. Then Bas saw that the Inuit slowly repeated all the words he had spoken inaudibly and softly to himself. He "ruminated" all the words that were said and carefully felt each and every word. After a pause of a few minutes he said: "It's alright. Your tent can stand there."

Inuit understand that language is more than words. There is more to communication than meets the eye and the heart. In a snowstorm at minus forty five degrees, you only say the essential words. That's why Inuit talk mainly with their eyes and take plenty of time for silences. Silences, in which the essence of a word is repeated, heard and felt inwardly.

Language is often misused. Around the year 1250, Isabella of Aragon, daughter of the Spanish king, offered a great reward to the one who would help her keep her disintegrating country together without war. Then a wise man came to her and said: "I will write a grammar for the official Spanish language. Then proclaim all your laws in this exalted language. Everyone who wants to deal with you will have to speak one language, your language. This will bring you unity and power." And so it was done. In this example, language becomes an instrument of power.

In 1870, the archaeologist and "language genius" Heinrich Schliemann travelled by carriage from France to Northern Turkey. In those days, every region had its own dialect. Heinrich regularly invited people in his carriage to join in the conversation. At the end of each day he wrote in his diary not only in the different languages, but also in the dialect of the region. In this way, Heinrich learned to speak more than twenty dialects!



Inuit in winter clothing.

Research questions

Social

What social functions does language have?
When are words not needed to communicate?
What does it take to be understandable to another?
Why is language often abused?
What is needed for a full alignment and empathy?

Ecology

How do trees communicate with each other? And how do fungi communicate with each other?
What are the differences and similarities with human communication?

Economy

What role does language play in selling products?
What form does language take when making important agreements, such as purchase agreements?

Culture

Do you know the dialect of the area where you grew up? If so, name a few nice expressions.

I

Can you express yourself in sign language? And in body language? And in pantomime?
Which of these three languages appeals most to you? And why?



Living in a cold environment requires adjustments, also in how you communicate with each other!

1.5 Connection to nature

1.5.1 At home in the forest

Carlos looks at his watch. It is 13:47. He should be at school now, but instead he wanders outside along a forest path. Sunbeams shine through the fresh green foliage and draw shadow patterns on the path. Carlos feels his headache slowly subside. He fills his lungs with the fresh forest air and exhales slowly.

In the silence between the trees, Carlos feels at ease. Much more so than in the city, with its constant clamour of cars, flashing lights and blaring advertisements. The forest also feels more like home than his school, which he sometimes calls 'the learning factory'. He finds his way through the forest effortlessly. Without any signs, but by letting himself be led by what he encounters along the way. He studies the moss, listens to the birds and notices the changes the seasons bring. And when the leaves fall, he sees from the coloured soil which trees and bushes are growing there.

There is less and less nature to be found in Carlos' hometown. The climbing trees from his youth had to make way for housing. Fortunately, last year the municipality had allowed some verges to naturalise and some flowerbeds to become overgrown. Even though it was a cost saver in maintenance, the insects and birds were happy about it. Carlos, too, thought that this 'greening' was progress, but that was not true for everyone. Several local residents had complained, because after all it was the municipality's job to keep things tidy. By the end of the summer, this new piece of 'wild nature' was gone.

"People know nothing about nature," Carlos grumbles softly to himself. Otherwise they wouldn't just leave their rubbish everywhere. He thinks of the plastic soup, which their geography teacher recently devoted a lesson to. Speaking of geography, it's almost 2 p.m., which means his classmates are about to pack up and go to class. Suddenly it strikes him as strange and ironic to be learning from a book and via a digiboard about the Earth, which obviously is outside of the classroom!



Learning along a
forest path
(Photo: Irinalriser /
Unsplash)

Research questions

Social

What does it mean to you that we have less and less greenery around us?

What role does nature play in people's well-being, do you think?

What insights can you find on the internet about nature in relation to health?

Ecology

The lack of nature in built areas is not only to the detriment of people. What value do pieces of green space in our living environment have for ecosystems?

Economy

Nature and sustainability are often not given the highest priority by governments or municipalities. If more is invested in green spaces, are there also economic benefits for us?

What are they?

Culture

In our society, the distance between people and nature has increased. What can be done to bridge this distance and regain a sense of connection with the earth?

I

In the story you read that Carlos comes to rest in the forest. What do you associate with nature? Which nature reserves do you like to visit? And what do you experience when you are there?

SOCIAL



2.1 Communication & Social Skills

2.1.3 Media (un)wisdom

Kashmir is listening to his physics and chemistry teacher in exasperation. She is talking about alternative energy sources, such as wind, water and solar power. Although Kashmir really wants this to be part of the solution to the climate problem, he gets an irritated feeling. Last week, he came across a message on the Internet that he is constantly reminded of during this lesson.

He raises his hand and says, louder than he meant: "But don't you know that broken wind turbines are buried in the earth? And that solar panels are largely non-recyclable when they are written off? And that electric car batteries are often a burden on the environment, even more so than the exhaust fumes from petrol cars?"

The whole class suddenly seems awake and looks at him dubiously. Only after a few seconds, which for Kashmir seems like hours, Esmée says, "Where did you get that from, Kashmir?" And Xander continues: "If this is really true, then how sustainable are these renewable energy sources really?" He looks at his teacher questioningly and the class follows his gaze. Mrs Kohls remains silent for a moment and smiles. "That is such an appropriate critical question. To be honest, I don't know the answer either, but we can find out together. Before we find out the sources and their reliability, I'd like to think about what Kashmir's comments triggered in all of you. I'm very curious about that. Kashmir, would you like to start?"



Wise handling of news and media. _____

Research questions

Social

What do Kashmir's comments trigger in you? Who can you talk to about this?

Ecology

Do some research on the truth of Kashmir's statements.

If they turn out to be (partly) true, how does that affect your ideas about the sustainability of alternative energy sources?

And if they are (partly) false, what do you learn from this?

Economy

Being known as a sustainable company or product has also become a form of advertising.

What are the advantages for a company or product to be called 'sustainable'? Can you give examples of this? And do all these companies really live up to their sustainability promises?

To what extent do you check the advertising on a package or of a company?

Do you check the story behind it? And how reliable is it? Tip: Google figures (energy companies percentage of green electricity, Shell, becoming CO2 neutral) and sustainable labels in the supermarket.

Culture

There is a lot of fake news in the world. Do you always check your sources? Which sources do you find reliable and why?

By using smart algorithms and cookies, companies such as Facebook, Google and Whatsapp select and show you messages which they think will interest you. As a result, you may receive one-sided news items. Arjan Lubach calls this the myth trap. Are you aware of the possible influence of pre-selected messages?

I

What could you do yourself, at home or at school to use energy more sustainably?

2.2 Leadership & Empowerment

2.2.4 The (too) crazy dancer

Every year, George goes to the Lowlands music and dance festival with his friends. He is crazy about alternative rock music and the most bizarre bands play at Lowlands. They camp out next to the festival grounds. This is always quite a challenge. They can borrow a super-heavy army tent from the scouting club, but it's a big hassle to put it up. When the tent is finally pitched, the boys are ready for a beer.

A wristband allows them to enter the festival grounds. It has rained a lot and the ground has become very muddy. Joris doesn't care, because the sun is shining now and it's nice and warm. His friends are already queuing up to get coins for drinks.

George hears rock music coming from one of the tents. Four baby-faced kids are playing tight drums and bass lines and blazing guitar riffs. They rock hard and the audience goes completely crazy. Because he is tired, George seeks a place next to the tent on a slope, from where he can still hear the music well. But because there is so much mud, he suddenly slides down. His clothes are covered with mud! He laughs and decides to go dance.

His friends see George completely covered in mud. Jorge does not hesitate for a moment. He takes off his clothes, slides down the muddy slope and starts imitating George. A few girls, still wearing their rain ponchos, start cheering loudly. A crowd forms around the boys and the group of naked mud dancers gets bigger and bigger. Then for a moment it's quiet on the stage. At that instant, the dancers, all muddied up, walk into the tent. After a moment of amazement, both the band and the audience burst into action. A performance never to forget!



Dancing in the mud. _____

Research questions

Social

Stand together with some classmates. Everyone does a crazy movement. After thirty seconds, blow the whistle and everyone does a movement that they have seen in someone else. After another thirty seconds, blow the whistle again and everyone repeats someone else's movement. After thirty seconds, everybody does another movement for the last time. How many different movements were performed in the end? How do you think this came about? What can you learn from this?

Ecology

Jorge begins to imitate George, because he likes George's dance moves. Animals also copy each other's behaviour and sounds. For example, a squirrel that observes another squirrel cracking a nut becomes better at it. Look up videos of animals learning by copying. Watch them with the class and choose the top three of the best ones.

Economy

Copying is sometimes cheaper than inventing again. Please describe two production techniques based on making the same thing over and over again.

Can you think of a production method that only creates unique products?

Imagine you are an entrepreneur. In which case do you choose for production based on 'imitation' and when do you choose for production based on 'uniqueness'?

Culture

Watch the video about [‘The First Follower’](#): What can you learn from this about leadership? Put a blindfold on one of your friends and try to move him or her around the room. Give this person small tasks, such as smelling a flower, standing on an elevation, etc. Swap after five minutes. Then discuss your experiences.

I

How do you see yourself? As someone who often takes the lead in groups or someone who more often follows?

Try doing the opposite for a day.

How did you experience this day? What did you like and what did you find difficult?

What did you learn from this experience?

2.3 Community building & Embracing Diversity

2.3.3 Aligning with each other

It is Friday morning and the whole class is restless. The teacher is telling a story that hardly anyone can follow and the pupils are messing around in groups or staring out of the window silently. When class is finally over, the theatre lesson begins. Most of them find it quite scary to stand on a stage and be looked at by everyone, but today we are going to do something else. In this assignment you are not allowed to talk...

We have to form two rows facing each other. The people in one row close their eyes and the people in the other row slowly come closer, step by step. Everyone has to feel for themselves how close they want to get to the other person. You should only look forward and not pay attention to what the other people in your row are doing. When you feel that you are close enough to the other person, you stop. When everyone has stopped walking, the people in the other row can open their eyes and feel if they want to take steps forwards or backwards.

I find myself standing opposite a girl whom I have to sit next to in class. I walk forwards a bit. How can you tell what is a good distance? And why? I'm standing quite close now, maybe it would be more comfortable to have a bit more space. I take another step backwards. This distance feels good.

The teacher says: "Now the people in the other row can open their eyes." There we are, looking at each other somewhat uncomfortably. She takes a step back and smiles. I never thought it would matter so much where you stand, but it feels good because I can decide for myself what I want.



The next task is to discuss in groups what the purpose of this task would be. Right at the start of making up groups, I notice that I am more aware of my position in the room in relation to the others. I pay particular attention to what the others like, by looking at how they react when I sit a bit closer than usual. Most of them move backwards without noticing it, but two girls move closer. We haven't even started talking and already it feels like everyone is more at ease and paying attention to each other.

What is your limit?

Research questions

Social

What do you think is the purpose of this assignment? What does the teacher want to achieve? And what does it have to do with group formation and diversity? Name three goals that this assignment aims to achieve.

Ecology

A better world needs better cooperation. Think about what you are good at when you have to work together. Do you see the overall picture, make sure everyone feels comfortable or do you ask the critical questions?

During a next group assignment, consider whether more or less of your talent is needed. Should you step forward with what you want or should you make more room for others?

Economy

In what kind of situation could people in a company learn the most from this?
What kind of problem or situation could you discuss as a result?

Culture

Did you know that there are dozens of similar exercises that can help with group formation and conflict resolution? Look them up online and choose one that you can do with a small group. Keywords that you can use in your search are: trust exercises, team building and theatre warm-up. Afterwards discuss together what you experienced during this exercise.

I

Today, notice how you stand or sit in front of another person. Which position and distance make you feel comfortable? And what is the effect on the other person?

Also notice what happens when you stand a little closer or further away than usual. How do people react to that?



In tune with each other. (Photo: Dreamtime)

2.4 Heritage and Local Wisdom

2.4.3 A good ancestor

The sisters Zoe and Chris are walking around a dolmen. They are on a holiday in Havelte, the Netherlands. "This is where we celebrated Aunt Monica and Uncle Henk's wedding day," their father tells them. He points to a clearing just in front of the dolmen: "Look, we have made a gate there, through which the bride and groom walked. On one side seven women were standing and on the other side there were seven men. At that very moment, a buzzard came flying towards us. Coincidence?"

"Why did they do that?", Chris asks. "Your aunt and uncle got married in the Celtic way, by handfasting," their father explains. "They wanted their ancestors to be honoured at that important moment in their lives. By making a gate out of seven men and women and walking through it, they were reflecting on the seven generations before them and looking after the seven generations to come after them. There were two musicians beating drums in a rhythm similar to our heartbeat. I think that is why the buzzard came flying towards us."

Chris and Zoe are silent. That must have been very special. "I still don't understand everything you say," Chris says. What is handfasting and who are meant by ancestors and the seven generations before and after us?" Father continues: "In the originally Celtic ritual of handfasting, two people are connected by a cord. This is a physical cord that is loosely wrapped around the wrists and that symbolises the bond you have with each other. This can be for a year and a day and for as long as the love lasts. By ancestors, we mean the people who lived before you, such as grandparents, grandparents' parents, and so on. Just like you girls will be the ancestors of the next generations."

Zoe has not finished yet: "Why was the wedding here, these are actually gravestones, aren't they? Their father looks thoughtful: "Actually, nobody is quite sure what the dolmens stand for. It is said that the dolmens are built on special power places and that a dolmen is a mystical place itself. Maybe that is why Monica and Henk confirmed their connection here. You'll have to ask them again."



Dolmen.

Research questions

Social

Why do you think Henk and Monica find it important to honour the ancestors at important moments in their lives?

Do you know any other nations that honour their ancestors at important moments in life?

How do they do it?

Ecology

In the song '[Your Ancestor](#)', Nynke Laverman asks, as an ancestor of our time, forgiveness from future generations. What is she asking forgiveness for?

How does Nynke explain to the next generations how the denial of the problems by more and more growth has come about?

What does Nynke think about climate change?

What is your opinion on Nynke thinking about the generation after her?

Economy

Nynke also sings: "You say growth was my Holy Grail. Yes it was and it failed." She describes the current economy based on growth. Why do you think that assuming eternal economic growth ultimately fails?

Watch the video '[The Impossible Hamster and Economic Growth](#)'. What does this video tell about the pursuit of growth?

Culture

The most important question we should ask ourselves, according to Roman Krznaric, author of the book '[The Good Ancestor](#)' is: 'Are we a good ancestor?'

What does he mean by that?

I

Henk and Monica tied themselves by a cord for as long as their love lasts. Every year, they ask themselves if they want to renew the commitment for another year and a day. What would it be like for you to make a commitment for a year and a day? And for as long as love lasts?

What do you like about it and what do you dislike about it?

2.5 Education and Social Transformation

2.5.3 Climate March

"Are you coming, Sofia?" Simon knocks excessively hard on his sister's door. "Yeees, I'm coming." Sofia calls back. She quickly grabs her phone and steps out into the hallway. Simon frowned at her. "I've checked the information from the organisation again, just to be sure", she says cheerfully. Today, they are participating in the Climate March.

They have breakfast in the kitchen and at the same time they make a packed lunch. "You guys be careful," her mother says, looking mainly at Simon. Simon nods, while putting a last bite of croissant into his mouth. Then mother gives Sofia a quick kiss on the cheek and asks: "Did you bring the banner?"

"Yes, I have," Sofia replies with a smile. Last night she already neatly folded the banner and put it in her rucksack. Last week she and her classmate and best friend Mickey painted a banner with the text 'There is no planet B!' Below they painted the earth with green and blue. Sofia is quite proud of the end result. Today, she will show everyone that something really has to be done about climate change.

"From the station, you're going to Amsterdam with the class and the teacher, right?" their father asks as they get on their bikes. "Yes", Sofia replies, "and we'll send a message when we leave from there again". As soon as they are at the station, Simon runs straight to his friends. Full of excitement, Sofia sits next to Mickey on the train. "I just saw on my phone that there are already about 10,000 people," Mickey says enthusiastically. "Today we draw attention to the climate with really a lot of people, that feels so cool". Sofia nods and she thinks about what her teacher has told about Greta Thunberg. "It's really admirable that a fifteen year old girl has been able to inspire so many people to take action", she thinks. "And today I'm also part of that."



There is no planet B!

Research questions

Social

Have you ever campaigned for something? Did you do this alone or together? Have you ever felt part of a large group/movement? If so, how did it feel?

A common goal can connect people. What are the advantages and disadvantages of wanting to achieve things together?

Ecology

With the climate march, especially young people draw attention to climate change. What do you know about climate change? Do you ever worry about climate change? Why or why not? How do you deal with that?

Economy

Choose a specific climate change issue. What could you achieve alone, with your class, with your school or with your village/city to do something about it or to better cope with it?

Culture

Which major demonstrations/actions have taken place in your country recently? What were these demonstrations about? Did these demonstrations/actions receive positive or negative attention in the news? Why was that? What do you think are the limits of a demonstration?

I

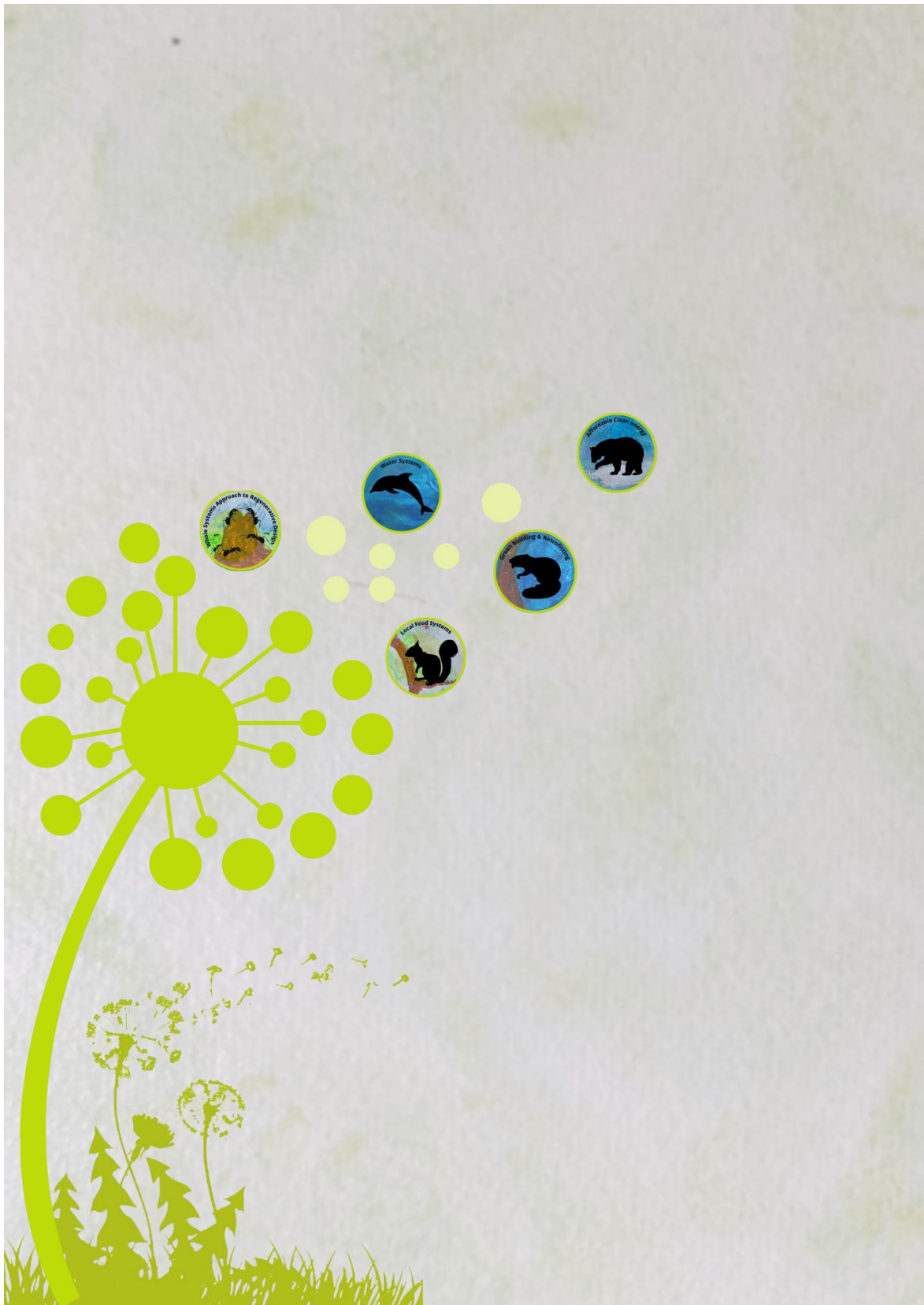
What would you like to campaign for?

Why is this important to you?



Young people make themselves heard! Taking action to preserve a healthy planet.

ECOLOGY



3.1 Whole Systems Approach to Regenerative Design

3.1.3 From rich to poor soil

On a third of the arable land in the world, more of the cultivation layer is lost than fertile. Experts warn that this erosion is eating away the very foundations of our existence. According to a [UN University study](#), encroaching deserts could make fifty million people in Africa and Central Asia obliged to flee over the next decade. Raine and Thomas want to understand how desertification occurs and what you can do about it. Therefore they start to investigate the shifting sands around their school.

Worldwide, and also in Europe, many areas have changed from rich natural environments to barren sands. By studying the soil closely, you can begin to understand how this can happen. Raine and Thomas have made a soil profile of the nature reserve behind their school. What they noticed was that there are different layers in the soil profile: pale and dark sand layers alternate.

"To understand something about the soil, it is important to know the history of an area," their teacher says. During their research, Raine and Thomas discover that there were old settlements near their school. Raine: "The farmers used to cut down the forest and let their sheep graze on the arising heathland. In the evening the sheep went into the stable. On the stable ground the farmers would put down scraped up heather. The farmers mixed this heather with the sheep's faeces and then they used it to fertilise their fields. The areas where the sheep were grazing thus became poorer and poorer, meanwhile the scraping eroded the soil even more and created drifting sand. As the plants and humus layer disappeared, the soil could no longer remain moist and there were no longer any roots to hold the sand, so the wind could cause the top layer of the soil to drift. A hundred years ago, farmers started using artificial fertiliser, which caused the poor drifting sand areas to become overgrown again."

The teacher says: "In the past, heathland was part of agriculture, but nowadays we think heathland and shifting sand areas are beautiful and we call it nature. Due to the use of artificial fertilisers, dehydration (lowering of water levels) and acidification, a lot of nature is disappearing and the nature that remains is poor. Raine responds, "It's still strange that we



are now making an effort to preserve heathland and drifting sand areas, while they have been created by deforestation and (too) intensive agricultural use, while elsewhere in the world attempts are being made to prevent desertification by combating deforestation and over-intensive grazing!"

Dried up forests (Photo: Arnold van den Burg)

In the soil profile found by Raine and Thomas, the top layer of yellow sand is drift sand: it has drifted over the original heathland soil. On top of the subsequent grey layer used to be heathland. Because the soil here is naturally acidic and the average rainfall in the Netherlands is high, many plant nutrients dissolve in the top layer of the soil and sink deeper into the soil. Since there's less acidification deep under the ground, the nutrients dissolve again (precipitate). You can see this by the very dark brown layer underneath the grey layer, which is formed by iron oxides (rust). Below this layer you will find drift sand again. If you scrape the heathland soil down to below the iron layer, the sand underneath will start to drift and you will get a drifting sand area instead of a heathland area.



Photo Arnold van den Burg

Research questions

Social

Look on the internet for historical topographic maps of your country or the area where you live. What did it look like 100 years ago? What do you notice? Do you see erosion somewhere?

Why do you think the UN University concluded in their study that encroaching deserts could cause 50 million people to flee in the future?

Ecology

How can deserts arise from erosion?

In the 1970s and 1980s, southern Niger was an emaciated country, plagued by prolonged droughts, poor harvests and famines. The Sahara became larger and people could only survive with Western food aid. This same area has now been transformed by local farmers into a green, fertile park landscape. Can you find out how the farmers did this? Which tree was important for this transformation?

Economy

Why is nature impoverished by over-fertilisation, acidification, salinisation and desiccation?

What does the government do about this situation?

What consequences do government measures have for farmers in relation to acidification, desiccation, salinisation and over-fertilisation? And which companies also have to take these measures into account? Think, for example, of nitrogen policy for air traffic.

What would a closed loop system for farmers look like? Make a poster of this.

Culture

What makes a landscape alive and in balance? And due to what factors some landscapes are not alive and in balance anymore? Think for example of fallow land or undefined soil?

Undefined soil means that the soil is present, but it no longer contains life, such as worms, fungi and plants. There are seven aspects that can be used in combination to assess the quality of a landscape:

- * landscape embedding
- * history
- * water management
- * soil quality
- * heterogeneity
- * biodiversity of flora and fauna (what belongs here?)
- * frame of reference (what does a landscape with the same aspects look like elsewhere?).

For the area close to your school, draw a picture of these seven aspects. How alive and in balance do you think the soil is? If you were to give a mark for the quality of the soil, what mark would you give it? What is your opinion on the quality of the landscape?

To combat deforestation, organisations are committed to planting as many trees as possible. Which organisations in your neighbourhood are doing this? See if you can help with tree planting and make a nice report for the school paper. Which tree species do they plant? Why this one and not other species?

3.2 Affordable Clean Energy

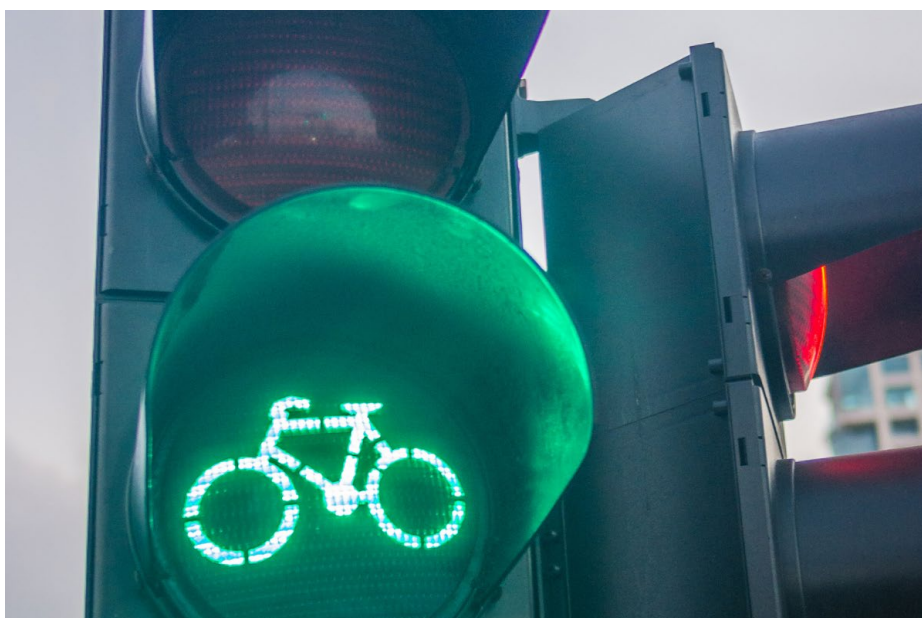
3.2.3 Preferring to travel by car

"I don't understand you," Sem's mother says. "Since you've got that car, you've been using it to go to school more and more often. And you even study environmental science. If anyone should know that the earth is warming up because too much CO₂ is being emitted, it's you. When I used to go to university, I used to ride my bike. I loved cycling the twenty two kilometres through all kinds of weather.

Sem looks outside. He knows that his mother is a bit right, he has indeed been taking the car more and more often lately. But what does she want? His studies are much harder than he had expected, he works on them day and night. He realises that time is valuable and he gets to school much quicker by car. "Look at the weather," Sem grumbles to his mother. "It's raining cats and dogs. I worked until late at night to finish my report. I really don't have time to cycle for forty-five minutes and back."

Sem walks grumpily out of the house and slams the door behind him. His mother feels pitiful and stares at the closed door. Recently Sem has been retreating more and more to his room. His studies are indeed very tough, but the ease with which he takes the car every time, is actually no longer acceptable. And that's not all. He also plays more and more video games and she has seen on the power bill how much extra consumption they have since he installed the new video card. It uses up to 150 Watts at peak times.

Sem's mother is worried about global warming. And it is precisely these kinds of things that you can do something about yourself. Lately she has been arguing more often with Sem about this. How nice it would be if Sem would care about it even a little bit ...



Take the bike instead of the car! _____

Research questions

Social

By taking measures, a government can stimulate cycling. What kind of measures are you thinking of? Can you name at least four?

What do you think about a government investing money to encourage people to use their car less and to use (electric) bikes more often?

Do you think that the measures will actually result in more people riding their bikes?

Ecology

Global warming is one of three planetary boundaries that are being crossed. What does a planetary boundary stand for?

Which two other planetary boundaries have already been crossed?

Economy

Can you calculate how much power it takes for Sem to play a video game that demands a lot of power for an hour?

Sem sometimes plays games for up to four hours a day. What is the power consumption per month? And per year?

How much extra CO₂ is emitted by the use of this game console per year?

Culture

A country that is well-known for its bicycle culture is the Netherlands. Look up how many bicycles an average family (about four people) has in the Netherlands.

How many in France? And in Denmark?

I

How do you go to school or work?

How important is it to you that you save CO₂ by choosing to travel by bike, scooter or by foot?



Nowadays, you can rent a bike anywhere!

3.3 Water Systems

3.3.1 Take out a tile, put in a plant

Floris and Quinn are enthusiastic about the Rainproof project in which their class participates. Now they are walking around with flyers to convince their fellow villagers to remove the paving stones along the façade and to create a beautiful façade garden! They want to win the NC tile-swiping 2022 competition! Their motto: "Tile out, plant in!"

Floris and Quinn used the website climatescan.nl to find out where heat stress and water nuisance occur in their village. They went to those places and interviewed the people living there about how they experience heat stress and water nuisance and what they themselves do about it. What they noticed in their conversations with people is that people who have lived in Amstelveen for a very long time immediately started talking about raising the groundwater level, now that there are far fewer farmers in the area. That would be good for nature. They also think the municipality should do more maintenance, such as removing mud and reeds in ditches. A lot of young residents, however, complain about wet cellars and do not want the ground level to be raised at all. They find the reeds very natural. This is precisely why they moved to an outlying area. Because there were quite a few differences in the residents' opinions about heat and flooding, it was difficult to come up with an action that would suit all residents.

But Floris and Quinn finally found it! What helps against drought, flooding and heat is a green environment, with plants in the ground. And this is definitely possible in the built-up environment. Unlike paving, water in a green flower bed or garden can sink in quickly when there is heavy rainfall. The roots of the plants retain moisture and prevent dehydration and erosion. Besides, the greenery also has a cooling effect. You can work on this yourself very easily. Just lift a few tiles from the street next to your house and put plants in them. This action can be done almost anywhere in any municipality.

Floris and Quinn are particularly motivated to inspire residents to get their tiles flipped. By means of an appealing flyer with tips on tile-flipping and the creation of façade gardens, they hope that as many people as possible will participate. It would be fantastic if their municipality wins the championship!



Green street with façade gardens.

Research questions

Social

Use the climatescan.org website to find places with heat stress and places with flooding in your neighbourhood. Like Floris and Quinn, find out how residents experience these places. What do you notice?

Ecology

Can you explain why a green environment, where plants are directly planted in the ground, is cooler than a paved environment?

Can you find examples of ways in which trees, plants and shrubs can generate extra shade in a particular way? Think, for example, of a grape planted in front of the large glass wall of an earthen house in summer, providing shade in summer and light in winter.

Economy

A low groundwater level is advantageous for farmers. For example, they can work the land with heavy machinery without sinking, because the soil is dry. However, the low groundwater level has an impact on nature. Can you research and summarise the economic interests of a high groundwater level and those of a low one?

If you were a municipal official, what would you recommend to the municipality of Floris and Quinn regarding the groundwater level? And why?

Culture

It is not the first time that we have had to deal with floods, water nuisance, heat and drought. Throughout the centuries several interventions have been implemented; sometimes successful and sometimes not. Do research on the methods your municipality has used to deal with floods, water nuisance, heat and drought in the past. Go to the historical section in your municipality, or study historical maps. What could you learn from them? N.B. If you can't find any useful websites to find information about your country, you can experiment on this Dutch website and click on the English flag: www.klimaat-effectatlas.nl. Or look at the [interactive-atlas](https://www.ipcc.ch/interactive-atlas/) of the IPCC.



I

Check the [Rainproof website](https://www.rainproof.nl) to see what actions you can take yourself to make your own home rainproof and climate proof. Which tips appeal to you? Are you going to implement them or discuss them in your home?

Rainproof Amstelveen; water fountain.

3.4 Local Food Systems

3.4.4 Preserve the future

Pascal (28) lives in a quiet area just outside the village. Together with his parents, he owns a farm with a plot of land where dozens of chickens scratch around, two sheep graze and three pigs root in the mud. Their garden provides more abundance every year and the family knows what to do with it! You will be amazed by their storage shed...

Along the walls are rows of jars and bottles of pickled soups and sauces, preserved vegetables, jams, dried herbs and fruit, all kinds of fruit juices and even home-made cider and elderberry wine. Thanks to various preservation techniques, Pascal and his parents eat home-grown food all year round.

It all started when Pascal was eighteen. At the time, they could harvest so many peas, carrots and cabbages from the small patch of vegetable garden in their backyard, it was impossible to eat all of it themselves. He went to his grandmother for advice on how to store their crops. He tried to cook the harvested vegetables with her. However, that didn't quite work out the way they wanted, so they signed up for a workshop on preserving food. The process of canning is one of the techniques that have been used for centuries to process and preserve food. This knowledge was passed on from generation to generation, but has been forgotten because of the existence of supermarkets, where we can get what we want all year round. A pity, Pascal thinks. To be able to make a living and to use locally produced food in a sustainable way, knowing how to preserve food is valuable knowledge.

Ten years later, Pascal knows everything about the art of food preservation. He collects old (cookery) books and kitchen utensils to preserve as much of our culinary heritage as possible. He also publishes about it on Instagram ([@duurzamekeuken](https://www.instagram.com/duurzamekeuken)) and he gives workshops, because he wants to make the knowledge available (again) and be passed on. He is happy to see that more and more young people are becoming passionate about preservation these days.



Pascal's storage shed
(photo: Pascal
Gelling).

Research questions

Social

Who knocks on the neighbour's door for a cup of sugar these days? Thanks to the supermarket, which can even deliver your groceries to your home, you always have what you need. What are we giving up socially for supermarket convenience?

Ecology

How did people get their food supply when supermarkets didn't exist yet?
Compare this with how we get our groceries now and the effects on the corresponding carbon footprint.

Economy

Due to increased prosperity, we live less frugally than we used to, yet it is often said nowadays that a sustainable lifestyle is not financially viable for everyone.
Do you agree? Do you need (more) money to live sustainably?

Culture

Food preservation techniques are part of our cultural heritage.
Is it important to preserve this knowledge and skill that our ancestors have acquired?
How do you think we can continue to use this knowledge in the future?

I

What techniques do you know to make food last longer?
Which ones could be useful to you? Think of drying herbs for your tea or baking vegetables to make your own vegetable chips.

- Look for inspiration at: foodpreserving.org
- sciencedirect.com
- _____

3.5 Green Building & Retrofitting

3.5.2 Living village

Creating an edible paradise by building houses from living trees using techniques such as arborsculpture and tree shaping. Houses that are located in the middle of a food forest: a forest with edible plants and fruits of shrubs and trees. This is the dream of Bob and Cathelijne. Together with their daughter, they live in a reconstructed recreational house, in which living trees have been incorporated. A very special way of living together with nature.

Their 'living' house is in a recreation area. It seems to be the only way to live in nature that fits perfectly Bob and Cathelijne's dream. For years, they have been looking for a field where they could build an eco-village of 'living' houses and create edible nature. They do not want to destroy an existing forest for housing, a vegetable garden and a food forest. It was not easy to find the ideal spot for their living village. But now they have the place.

Bob prefers to build with what he has at hand and without a blueprint. However, second-hand materials rarely have the prescribed size needed to comply with building codes and regulations. This is even more true for living trees in a house. Nevertheless, for Bob and Cathelijne this is the ultimate way of life. They are totally committed to it!

Bob and Cathelijne from The Living Village are not daunted by this. In all kinds of ways they raise money so they can build their future dream village. By organising a festival, by creating attention and awareness around building with 'living' nature via social media, by participating in television broadcasts and by giving workshops. They also create edible gardens with special sculptures on behalf of others. They hope to inspire others with their exceptional way of building and designing with nature. Also they hope to gain the confidence of the government that this way of building, designing and living with nature is possible.



Living in a living house. _____

Research questions

Social

Why do you think Bob and Cathelijne want to build a village with the technique of "living construction" on a field? Give at least three arguments.

Ecology

Can you find examples from arborsculpture and tree shaping? Make a mood board of the 'ideal living home'. What do you think it should look like?

Source of inspiration: <https://youtu.be/4WRRcQ0Vf6M>

Economy

What is stipulated in a building act? What requirements does a door have to comply with according to the current building act? What do you think about the fact that there are special sizes that a door must have according to the building regulations?

Culture

Can you find information about cultures that live in a "living" house? If so, please describe these cultures.

How did hunters and gatherers live? What was their relationship with nature?

Can you give examples of how the hunters and gatherers lived in harmony with nature?

I

Would you like to live in a "living village"? What would you like? And what would you dislike?



Example of a living house .(photo: Living Village)

ECONOMY



4.1 Shifting Global Economy towards Sustainability & Regeneration

4.1.1 Made for life

My grandmother was born in the 1920s. She lived until the autumn of 2020, but well before her death (at the age of 94) she was no longer at home in this world. Addy had no telephone or computer. She read the newspaper, but what it contained did not mean much to her anymore. Not only because her mental health was deteriorating, but especially because of the unimaginable changes that had taken place in the timespan of her life.

As her Alzheimer progressed, Addy's memories went further and further back in time. It didn't bother her that she often told people the same story. I enjoyed dreaming away in a world of days gone by that I had never experienced. As a child, my grandmother had consciously experienced the scarcity of the war years and she had never stopped living frugally. People didn't know any better in the old days. The grocer on the corner sold his goods plastic-free and he knew the origin of his products. You paid quite some money for new purchases, but they were enjoyed for decades or even generations. Shoemakers and tailors did creditable work, as did handy housewives and grandmothers. Nothing was wasted.

"Sometimes, a feeling of nostalgia for the old days creeps up on me. I wonder why the quality of the past is no longer available. Our shoes and coats last only a few years at most and even electrical devices have an increasingly short lifespan. Is this progress? I find it incomprehensible that masses of clothes are being burnt every year without being worn. And that thousands of chickens are being killed due to bird flu." I hear my grandmother cry out in indignation. No, Addy did not understand any of this, but neither do I. Have we not gone too far in our conception of prosperity?

I now own my grandmother's sewing equipment. Now that she is gone, I repair my own clothes. Old-fashioned? Not at all. I believe that with today's knowledge and resources, we can work together on a future-proof economy, one where production is not about money, but in service of life on earth. For me, the future belongs to things that last a lifetime, so that my grandchildren will also be able to say "Look, this was grandma's".



On the left:
Addy (in the
middle) with
her family,
1927.

Right: Addy's
sewing box.
(Photo: Mara
Andriessen)

Research questions

Social

During the Second World War, the government conducted a campaign to encourage people to grow their own food. Even flowerbeds and parks were made available for this purpose! Why was there so much attention for this, do you think? How does a crisis affect society at the local level?

Ecology

Why is the narrator of the story critical of the 21st-century idea of prosperity? Do the terms 'prosperity' and 'progress' make sense in ecological terms? Why (not)? Devise a new definition that includes the ecological dimension.

Economy

With more and more knowledge and technological improvements, we have been making products that last shorter and shorter. Why are our products not smarter, sturdier and more efficient? Explain, using sources on the internet, how 'planned obsolescence' plays a major role in this.

In our age of consuming and throwing away, the production economy is no longer functional. What should be done to make the economy functional again? What role do you think producers, products and consumers have in this transition?

Culture

Addy lived between the 1920s and the 21st century. Her children and grandchildren grew up in a very different world from her own. Let's explore your life compared to your ancestors'. What was different in your parents' lives when they grew up? And in their parents' lives?

I

In the past, used and worn clothes, shoes and things were patched up. Have you ever tried to repair something?

Maybe you have heard of Repair Cafés: What are these places? Is there a Repair Café in your neighbourhood? What would you like to repair there (or learn how to)?

Sources

[Longest Burning Light Bulb](#), Guinness World Records.

[Planned Obsolescence and its Impact on the Environment](#), Adrian Fontao (2022).

[The Light Bulb Conspiracy](#) (documentary)

4.2 Community Banks & Currencies

4.2.1 LETS

Ben's bicycle is broken and there is no money to repair it. Rianne would like to have her hair cut, but unfortunately, her mother does not have enough cash. Rianne's neighbour Dirk-Jan, on the other hand, can repair bicycles very well and Ben's mother sometimes cuts his hair in the evening. There must be something to exchange?

When there was no money, everyone traded with everyone else. A spearhead for a fish, a bowl of berries for a helping hand with lumbering. This ancient barter system could only work out well if you knew each other personally. With a growing population it became increasingly difficult to maintain this system. Means of payment in the form of shells, beads, coins and securities offered a solution. However, bartering is still an option today. Not everyone always has enough money to buy everything. If you want to exchange in a larger circle, you can go to LETS (Local Exchange Trading System). This is a local network where goods and services can be exchanged without involving money.

The participants of a LETS Circle pay each other with the currency of their local LETS Circle (complementary currency), so the activity doesn't have to be limited to one-to-one bartering. There are LETS circles in a large number of countries. In the Netherlands for example, there are about a hundred currencies such as noppes (Amsterdam), stars (Utrecht), suns (Nijmegen) and gardens (Leeuwarden). Roughly speaking, a noppes, a star or a sun corresponds to a euro. Letseurope is the umbrella organisation of the European LETS circles.

Complementary currencies are becoming increasingly popular. One reason for this is globalisation. Regions or communities that cannot keep up with the pace of development that globalisation brought, seek for new economic strategies. In regions where money is short, barter is sometimes even the dominant economy. Digitalisation made it possible to centrally and transparently keep track of all transactions per LETS-circle. In the Netherlands, organisation [STRO](#) has built the program [Cyclos](#) for these transactions. Cyclos is also used for microcredits and local banks.



Is time really money...?
(Photo: Sharon McCutcheon
/ Unsplash)

Research questions

Social

In LETS, you can exchange things, but also services (i.e. time). How much noppes, stars, suns, etc. would you ask for an hour's work?

What do you think a lawyer charges? And how much does a cleaner charge? Is this a fair system?

Ecology

What are the ecological advantages of LETS?

Economy

LETS participants can afford services or goods that would possibly be unattainable if they had to pay in euros.

Are there any economic disadvantages to such a system?

Culture

Design a poster, which advertises a LETS circle of your own devising.

Focus on abundance.

I

Is there a LETS system in your city?

Become a member (alone or with the whole class)! It is not expensive and it gives you the opportunity to take a look at the supply and demand. Perhaps you will ask for something that you would otherwise not ask for or cannot afford. Be surprised!



You can really trade all kinds of things!

4.3 Right Livelihood

4.3.2 Dreaming of a (plastic) free life

"Even your toothbrush is made of wood!" Kamel falls from one surprise to another when he visits Mara. In her house, hardly anything is made of plastic and she tells him that she lives without waste. He thinks she is an unusual lady and her way of life seems rather complicated, to be honest. Why would you make things so difficult for yourself? You can put your rubbish on the street, the council will collect it and you don't have to worry about it.

Kamel clearly doesn't understand and Mara tries to explain. It started when she went to live in a room as a student and felt more and more guilt every time she threw something away. Instead of waste, she saw valuable materials, which she collected for reuse. But her house became full of stuff and it was clear that things could not go on like this. Mara decided: what doesn't go in, doesn't have to go out.

Zero Waste" living turned out not to be as difficult as she had thought. She was able to get almost all of her groceries without packaging at the market, and products that were hard to find unpackaged, such as wraps and biscuits, Mara now makes herself. Yes, it takes more effort than a trip to the supermarket, but on the other hand, living a packaging-free life is more satisfying and less stressful! Still, her conscience kept nagging at her.

Mara dreams of a life close to nature, where she can provide for her own food. A free life, without the pressure of a 40-hour week to pay the rent. But is this dream realistic in the densely populated Netherlands? If it were up to her boyfriend Pascal, they would embark on an adventure to build a climate-proof future in the Swedish countryside. When Mara closes her eyes, she sees a place of abundance and peace, where she can be happy for a lifetime. A place that can also be a safe and warm home for generations to come. But the thought of emigrating overwhelms her. Do her dreams and stubborn idealism carry enough weight to leave her familiar life behind and step into an unknown future?



Compostable bamboo toothbrushes.

Research questions

Social

Why, according to Mara, is a packaging-free life more rewarding and less stressful?

Do you know people who live a Zero Waste lifestyle or do packaging-free shopping?

How come the Zero Waste lifestyle has not yet caught on? What do you think needs to happen to make more people willing to participate?

Ecology

Why do you think Mara chooses to live plastic-free?

Make a list of things you use everyday that contain plastic. Also think about microplastics!

What ecological alternatives can you think of for all these items?

What makes Mara want to live self-sufficient as well as packaging-free?

Economy

On the website of [Zero Waste Europe](#) you can find ways to take action on Zero Waste living.

Have you ever been to a packaging-free shop? Drop by a location near you soon!

Hardly any regular shops and supermarkets join the Zero Waste movement. How come, do you think?

Culture

Whereas Mara feels guilty about the waste she produces as an individual, Kamel does not feel personally responsible for it. Who do you think is responsible for the waste problem: individuals (as consumers), companies (as producers) or the government (as legislator)?

I

Search for a video on Youtube where you get tips for a packaging-free life. For example [this one](#). Choose one idea and tell others why you think it is worthwhile to apply it (at home or at school).

4.4 Revitalising Local Economies & Social Innovation

4.4.1 The Countercurrent

With graceful green letters "The Countercurrent" is written on the door of the farm shop, which sells, among other things, home-grown fruit and vegetables and handicrafts from the surrounding area. What could that stand for? I intend to ask Maria and her husband Simon about the story behind it when I will pay for my shopping.

I have been a regular customer here for years, because I feel comfortable with the small scale of their business. By shopping here, I am aware of where my food comes from and I spend my money on honest products that have been produced with care. I look forward to my weekly trip to the farm shop, which has a warm and welcoming atmosphere. When I hand Maria my basket, I ask her about the name. "Countercurrent is a new movement of small local entrepreneurs who act in a climate-conscious way," she explains. "We have joined, because it is incredibly enriching for us to work together and exchange knowledge and experience. Together we offer an alternative to big brands and commercial chains."

According to the shop owner, there is a desperate need for a countermovement that is not about quantity, speed and cheapness, but about sustainability and quality. It appeals to me too, because I often find myself at a loss as to how I can buy something without being guilty of climate pollution or unfair trade. Such a network seems ideal for consumers who want to shop more consciously.

Maria continues: "On their website, I've seen that more than a hundred local entrepreneurs have already joined The Countercurrent in a short amount of time. Isn't that great? And looking at the diversity of these companies, I really believe that there is a movement going on at all levels of society."

This woman's idealistic enthusiasm is contagious. I return today not only with a bag full of delicious products, but also with a heart filled with hope. Back at home, I open my laptop. I'm curious which other local businesses in my neighbourhood are joining in with 'The Countercurrent'.



Groceries from the neighbourhood
(Photo: Brooke Cagle / Unsplash).

Research questions

Social

Why do consumers choose to shop at small-scale enterprises? What (other) ways can you think of to do your shopping in a sustainable way?

Ecology

Large-scale commercial companies cause damage to our environment. Local entrepreneurs like Maria do not want to contribute to this.

What values are important to climate-conscious entrepreneurs?

And what criteria does a climate-conscious company meet?

Economy

Maria says that cooperating with other local entrepreneurs adds value to her company. What economic motive(s) can you think of for this?

Culture

A small-scale economy used to be the norm. Due to globalisation and technology, mass production has been increasing continuously and the distance between a product and the consumer has become ever greater. According to Maria, a social transition has been set in motion, in which buying and selling locally is once again becoming a matter of course. What could a small-scale economy look like?

What is needed to make this transition possible?

I

Make a list of five local businesses in your neighbourhood. To what extent do they meet your criteria of a climate-conscious business?

Imagine that you could advise these companies. In what areas could they redesign their business to be more climate conscious?

4.5 Legal & Financial Issues

4.5.3 Adopt a sheep

Every year, Jet and Nina go with their grandparents to the sheepfold in Epen. Their grandfather has adopted a sheep for each grandchild. In March the lamb days take place. You can come and admire the newborn lambs in the stables. Every year, it's quite a party. Jet and Nina look forward to feeding the lambs with bottles filled with lamb's milk.

Their grandfather saw a call on television to save the sheepfold. For years, a herd of herded Mergelland sheep has been grazing the Gulp Valley in South Limburg, a beautiful, large and open nature reserve. The grazing sheep ensure preservation and restoration of the extraordinary and specific Gulp Valley flora and fauna. However, since 2011, the landowner State Forest Control can no longer afford this method of nature preservation. As a result, the sheep flock is threatened with extinction.

The Friends of the Mergelland Sheepfold Foundation has therefore launched a playful action. You can adopt a sheep for twenty five euros. You receive an adoption certificate that allows you to visit the sheep flock free of charge. Jet's grandfather was deeply moved by this action. He really enjoys the beautiful hilly landscape and the grazing sheep on the heath. He would hate to see the heath disappear because it can no longer be maintained. Grandpa did not hesitate for a moment and adopted the sheep.

This year, the family of Nina and Jet is staying at the campsite and in the guesthouse next to the sheepfold. It is always a fun time. All of their cousins are there. And even though it's the same every year, they never get bored of these get-togethers! With pride, Jet and Nina walk with their certificate to the entrance of the stables. By now the keepers of the sheepfold know the family well. "Hi, Jet and Nina, are you coming to look at the sheep again? "In half an hour I will give a demonstration with the sheep. Then I'll show how I herd the sheep with the dogs. Are you coming to watch?" Jet and Nina don't mind being told twice. It's a mighty fine sight to see the border collies herding the sheep towards each other. They decide to pick up their cousins so that they can watch the shepherd together. "Yes!," Jet and Nina shout enthusiastically. See you later!"



A newborn lamb searches for milk from its mother.

Research questions

Social

Ecosystem services are described as "the benefits that people derive from ecosystems" (Millennium Ecosystem Assessment 2005). There are four types of services: provisioning services, regulating services, cultural services and supporting services. Can you think of any examples of ecosystem services that are applicable to the sheep flock in the Gulp Valley? Think of supply services like wool, regulatory services like soil regeneration and cultural services like ecotourism. Make a clear table of these.

Ecology

Watch the video "[the Tragedy of the Commons](#)". Describe three examples from your own environment where the principle of the "tragedy of the commons" applies?

Also give three examples from your own environment of social contracts and common agreements that people have made to protect public goods such as air, water and nature, from our own individual impulses and apply the principle "What is good for all of us is good for all of us."

Economy

Nature conservationists pay the shepherd a daily fee for grazing management during the grazing season (eight months per year). The amount is between two hundred fifty and three hundred euros. This is not enough to cover the full costs of a nature management company. Why is it not enough?

Culture

The recreation sector in South Limburg owes its annual revenue partly to the landscape. Yet it is not easy to make the recreation sector, which has an interest in maintaining the heathland landscape, share responsibility financially. What do you think is the reason for this?

Who do you think should make up the operating deficit of the shepherd's nature grazing business?

I

Look on the internet for a sheep adoption organisation in your own country. Would you personally be prepared to adopt a sheep in order to preserve the heathlands? Why or why not?
