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GREEN DIARIES COMPENDIUM

Personal stories on sustainability by
vocational education teachers
and staff members

2023-2025



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Deposit for bottles and cans: too much effort for 15 cents

Green Diary for Erasmus+ VET Schools Doing Green project

Mieke Mulwijk

Drama teacher at Alfa-college, Groningen

The Netherlands

Related to SDG 12: responsible consumption and production

Since July 1, 2021, deposits on small plastic bottles have been introduced in the Netherlands. Since April 1, 2023, there has been a deposit on all cans of drinks. This concerns a €0.15 deposit per bottle or can. You can easily recognize which bottle or can has a deposit on it by the deposit logo. The main reason for introduction was to prevent bottles and cans from ending up as litter on the street or in nature.

Our canteen also sells drinks, some in packaging with deposit.

In our campus a large black plastic bottle was placed to encourage students to put empty deposit bottles in it. Where the proceeds go is not clear. I have no idea if this collecting bottle ever is or was used because the bottle is opaque. It is also not placed in a good visible location and is often pushed aside in a corner.

Students cannot return packaging, purchased in the canteen or brought from home, for the deposit at school. They therefore have to take cans or bottles home to hand in at their own supermarket.

That's probably a lot of effort for 'only' 15 cents. As is walking all the way to the canteen to throw them in the black plastic collecting bottle. At the end of a teaching day, there are often bottles and cans in the trash bin in my classroom.

I'll fish them out before cleaning department throws everything into a large garbage bag.

When I once asked a student why she threw her deposit bottle in the trash bin in the classroom, she answered: "That's a good thing, because I don't throw it on the street. "So the message, at least part of it, got through.



Large black container for collecting empty bottles and cans is placed in unfavourable location. Photo by: Mieke Muilwijk



Icon on the bottle shows that 15 cents can be got back when returned.



Vintage & second hand made easy: Swap Spot at Alfa-College

Green Diary for Erasmus+ VET Schools Doing Green project

Mirjam Pruis

Alfa-college

Groningen, the Netherlands

SDG 12: ensure sustainable consumption and production patterns

We produce and consume a lot of products in our lives. This is one of the main problems of inequality in the world. At Alfa-college we find it important to teach our students that products that no longer serve them might be of use to someone else.

By creating a physical spot where students can offer things they no longer need and take things they do need, we create awareness about the lifecycle of stuff. At the Swap Spot, which is located in a central hallway at the location Kluiverboom, there is room for (baby) clothes, there is a closet to put small household things and there is a shelf to share books.

Background information is also part of the Swap Spot, without it being too pedantic. There is an explanation about SDG 12, saying: “Pay attention to what you buy and how it is made”. At the other end of the Swap Spot, there is a reversed pyramid, the “Pyraless” teaching students what is the most sustainable way of consumption. From bottom to top it says: “Buy, Make, Secondhand, Share or Swap, Use what you got”.

As a school we also aim to include everybody, which is why we have free menstrual products and free breakfast available to our students. We think that the Swap Spot also contributes to SDG 1 (No poverty) and SDG 10 (Reduce inequality).

What we already learned just a few months after creating the Swap Spot, is that some students feel slightly ashamed to openly look for something at the Swap Spot. We do notice that it is actively being used, since new products keep being added and products are being taken. We assume that students find a quiet time to visit and make use of the Swap Spot.

Our advice to other schools who want to create a Swap Spot would be to create it in a quiet but easily accessible place in the school. Our Swap Spot is located in a hallway, which seems to be a perfect place because students pass by a couple of times a day so they can check the place without having to go there deliberately.



The Swap Spot at Alfa-college Kluiverboom with SDG 12 explained. Photo by: Mirjam Pruis



Art & Crafts teacher Bertine Bruulsema, one of the teachers who initiated the Swap Spot. Photo by: Mirjam Pruis

Library for books and games

Green Diary for Erasmus+ VET Schools Doing Green project

Nelleke Vos

Alfa-college

The Netherlands

SDG 1: no poverty, SDG 12: responsible consumption and production

In the consumer society we live in, people (and students) tend to buy and discard items too easily. This costs money, energy, and generates a lot of waste that ultimately needs to be processed.

When people make more conscious purchasing decisions and choose to exchange or donate items, the production and processing of waste can decrease. People, and students in particular, need to be made aware that we can contribute to a society where we make better use of each other's belongings when we no longer need them.

This benefits not only the environment but also those who have less money to spend. It's a win-win!

Recently, a cabinet has been placed at school where students and teachers can leave games and books so that others can borrow or exchange them. Students who cannot afford books or a library can still read this way.

This also motivates students to read, which is important since research has shown that reading motivation and skills among Dutch youth are quite low.

Additionally, students see that it is normal to give used items a second life. They are encouraged to participate in a circular economy.



In this photo you can see the cabinet. It is located in the cafeteria, which is used by all students and teachers. The cabinet has since been filled with more books. Photo:

Nelleke Vos



The board next to the cabinet states that everyone is welcome to add, borrow, and exchange items for free. Photo: Nelleke Vos



Signs for awareness

Green Diary for Erasmus+ VET Schools Doing Green project

Nelleke Vos

Alfa-college

The Netherlands

SDG 1: no poverty, SDG 2: zero hunger, SDG 3: good health and well-being, SDG 8: decent work and economic growth, SDG 12: responsible consumption and production, SDG 13: climate action, SDG 15: life on land

Around me, I see that many people are not aware of how we can all contribute in simple ways to a healthier, more conscious society.

This is often attributed to comfort zones, habits, and a lack of knowledge. This can relate to living healthier ourselves or helping the world and the environment, even in small ways.

When everyone takes small steps, things will eventually start to change, and we can pass this on to the next generation, who will then know no other way.

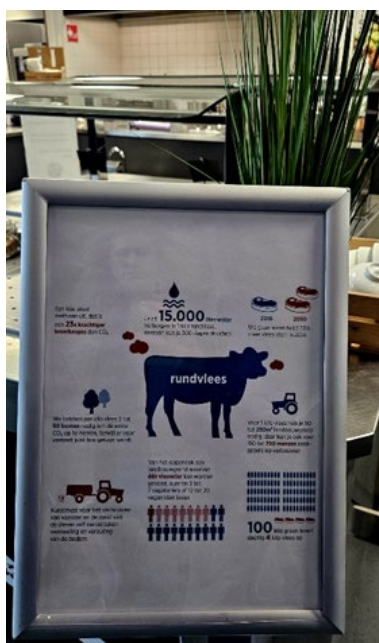
The first step is raising awareness about the need for more sustainable activities and then figuring out how to incorporate them into daily life (often in very simple ways).

In connection with the school-wide "Sustainability Week," there are various signs around the school featuring infographics that encourage students and teachers to think more consciously about themes such as smoking/vaping, meat consumption, and environmentally friendly activities in the workplace.

Students are also encouraged to participate in sustainable sports projects in developing countries like Suriname and Ghana.



Internationalisation: students can participate in various international sports projects in countries like Suriname, Ghana, and Costa Rica. They provide sports lessons for children from lower social-economic neighborhoods. Photo: Nelleke Vos



In the cafeteria, you'll find this sign. It visually describes the impact of eating meat on the environment. Hopefully, students and teachers will read it and occasionally choose a vegetarian or vegan option. The cafeteria is already more focused on vegetarian options than on meat! Photo: Nelleke Vos



Both signs encourage students to think about smoking and vaping. They prompt the question: *Why do you vape?* For smoking, students are challenged to stop for 28 days. In the Netherlands, there is a campaign called *Stoptober*, where smokers and non-smokers in support each other in not smoking for 28 days during October. Nelleke Vos



This board is located in the teachers' workroom. Teachers and staff are encouraged to be more mindful of energy use and consumption. It provides ten practical tips that are simple yet effective.



What is on the sign:

- *Try not to use paper*
- *Bring your own lunch*
- *Use energy-efficient bulbs*
- *Go by bike to school*
- *Turn on the heating as little as possible*
- *Travel together to work*
- *Unplug devices from the wall socket*
- *Recycle garbage*
- *Drink from a reusable water bottle*
- *Choose the sustainable option*

Photo: Nelleke Vos



Kitchen garden and other green activities at Alfa-College

Green Diary for Erasmus+ VET Schools Doing Green project

Niels van Ringelenstein

Alfa-college

Groningen, the Netherlands

SDG3: Good health and well-being, SDG6: Clean water and sanitation, SDG 12: ensure sustainable consumption and production patterns, SDG15: Life on land

Kitchen garden

Since the new year 2024, we have started a vegetable garden project at our Kluiverboom location of Alfa College. The preparations have been going on for more than 2 years, now finally we are allowed to start! Two previous artificial grass hills have now been transformed into vegetable gardens with vegetable garden boxes, a path, but also a greenhouse.

The aim is to introduce students through school, to setting up, starting, and harvesting vegetables and fruit from their own vegetable garden. Where does our food come from, how do things grow, the time of waiting it entails, etc.

Students learn what is 'for sale' in this green world but also how to learn to use everything from a plant from start to finish. This project is linked to an study period which covers three 10-week periods, 20 weeks before the summer holidays and another 10 weeks after the summer holidays.

The government stipulates that every student must obtain 720 SBU (study guidance hours) of optional subjects during his/her study programme. This may be a 'major' elective of 480 SBU and a minor elective of 240 SBU, or three 'minor' electives of 240 SBU each. Optional courses are designed to broaden or deepen a student's knowledge. This may be something related to his/her study programme, but students may also choose an optional subject from another study programme.

For instance, our students choose the optional unit for vegetable gardening or the optional unit for learning skiing, because sport and exercise are also an important part of our study programme. But an optional course to become a nail stylist from the hairdressing course would also be possible.

The soil is in and students are now starting to sow. Besides weekly lessons on setting up a vegetable garden, excursions are also part of the course. For example, a visit to 'Claudy Jongstra' is scheduled at the end of May. She is a craftsman, uses many

natural resources. Among other things, she makes textiles from wool for her works of art: claudyjongstra.com.



Green garden at the school courtyard. Photo: Niels van Ringelenstein

Water tap project

Within school, there are several water taps where students can fill their water bottle. We have recently paid more attention to this by wrapping the taps in an SDG jacket. This after consultation with the facilities and management department, these departments do need to be 'on' and think along in the sustainability story.



Water tap that tells about SDGs, especially about SDG6: clean water and sanitation.

Photo: Niels van Ringelenstein

SDG flag project

As a school, we felt it was important to propagate that we are doing something with the SDG goals and find it valuable. After all, it is also one of the spearheads within the Alfa-college policy.

Therefore we have the SDG logos displayed prominently together with our school flag in front of the building.



Alfa-College and SDG flags. Photo: Niels van Ringelenstein

Vegan catering location days

You used to have to request a vegetarian meal or catering. Now it is reversed. The standard is vegetarian and if you want meat, you have to request it. But even then, local suppliers and responsible meat have been chosen.

During location days where teachers get together to forge new plans and ideas and discuss, the catering is vegetarian. That really is an innovation that fits in these times.



Cafeteria at Alfa-College. Photo: Niels van Ringelenstein



Plants in school for a better climate

Green Diary for Erasmus+ VET Schools Doing Green project

Wendy Kraai

ROC Alfa-college

The Netherlands

SDG 13: climate action

At our school, we acquired many large plants several years ago. Creating calming and healthy environments for students and teachers is a priority. With plants at school, you bring nature inside!

A specialized company provides plants on a hydroponic basis.

Plants in the interior have a positive effect on people. Plants purify the air and maintain humidity, dampen noise, increase confidence, reduce stress, and boost productivity. They even enhance creativity and can promote recovery after illness. In short, with plants we bring a dose of health into our school!

Scientists have been showing for years that well-maintained plants increase productivity. Recently, it has become increasingly clear that people feel more comfortable in a natural environment.

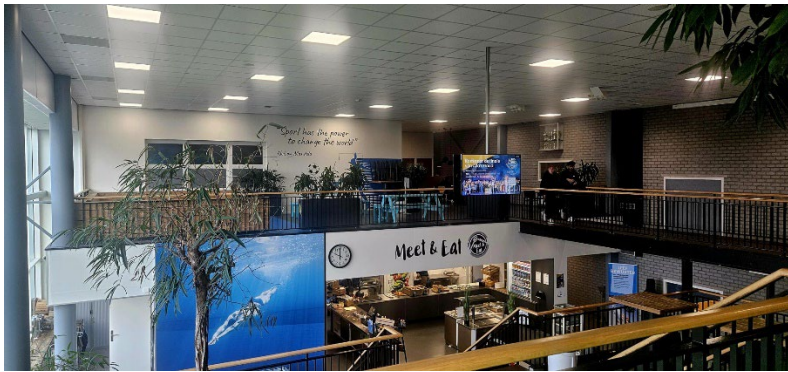
Many studies give a genetic explanation: people have always evolved in natural environments. Only in the last 100 years have people been working in offices, but we still feel better in green and natural environments. We therefore perform better.



Plants at our reception area. Photo: Nelleke Vos



Plants in our hallway. Photo: Nelleke Vos



Plants in our school restaurant. Photo: Nelleke Vos



Rental bikes and cars

Green Diary for Erasmus+ VET Schools Doing Green project

Wendy Kraai

ROC Alfa-college

The Netherlands

SDG 11: sustainable cities and communities

At Alfa-college, we encourage the use of bicycles for appointments in the city. We get a travel allowance for commuting, but for appointments in the city, you do not get an allowance if you travel by car, as you are expected to do these trips by bike.

To make travelling in the city easier, Alfa-college has several rental bikes at each location. Some of them are electric so that you can cycle longer distances or reach your destination faster in bad weather.

The bikes have panniers so you can easily take your belongings to your appointment.

Our students may also borrow the bike.

Besides borrowing a bike, we can use electric shared cars from CommShare. You can borrow these cars if you have an appointment that is difficult to reach by bike or public transport. Think of internship visits, for example. As Alfa-college, we currently have five electric cars parked at a charging station. If you work at a location that does not have a car, you can pick up a car at another location.

There is a 100% mobility guarantee. In other words: is the shared car occupied? Then a replacement car will be arranged by CommShare. You make a reservation via the 'CommShare' app. This app also unlocks the car; you don't need a key.

The third mode of transport you can borrow from us is a cargo bike. This bike is meant for cycling with sports equipment to nearby sports fields or sports facilities. You don't have to use a car this way. The rides are short.



Rental bikes are in a locked bike shed. You can reserve a bike and collect a key to the bike shed and bike from reception. Photo: Nelleke Vos



Rental car by our school. Photo: Nelleke Vos



Introduction of out cargo bike in our school. Photo: Alfa-college's marketing department



Free water: avoid buying plastic bottles

Green Diary for Erasmus+ VET Schools Doing Green project

Alice Piffer and Emily Zancanella

CMC Trento (ENAC)

Italy

SDGs 6: clean water and sanitation, SDG 12: responsible consumption and production

The problem of plastic waste is becoming more and more urgent and some solutions are needed in order to counter the rising consumption of plastic.

In order to stop the tendency of buying plastic bottles at the vending machines during school time, we decided to buy a fresh water machine, where students could refill their reusable water bottles.

The machine provides sparkling and still water, both room temperature and refrigerated. At the very beginning, students were charged 20 cents for a half liter of water, but it soon became clear that people were still preferring plastic bottles and nobody was willing to pay in order to pursue a more sustainable alternative.

For this reason, we decided to take charge of the costs and provide free fresh water for all students.

Therefore, the school covers the cost of the water, making it free for everybody at school. From this moment, students and teachers started to bring their own bottle and refill it from the machine.

This solution hasn't solved the whole problem of plastic consumption, but has provided an opportunity for people that want to be more sustainable and has set an example, showing that our school has an eye on the planet and values its protection over money.



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Fresh water machine

Waste disposal at school

Green Diary for Erasmus+ VET Schools Doing Green project

Alice Piffer and Emily Zancanella

CMC Trento (ENAC)

Italy

SDG 12: responsible consumption and production, SDG 13: climate action

Reducing, Reusing, and Recycling are very important terms for our school.

We try to ensure we produce the least amount of waste possible, trying to make our students aware that everything they discard will end somewhere and have some impact on the planet.

For this reason, we aim at providing our students with ways to improve their consumption habits and environmental consciousness by setting an example on how we dispose of our garbage.

This year we have installed some little garbage bins in every classroom and school environment, that help our students to sort out their litter.

Some little images help them understand where the most common pieces of garbage should be put and our health department is always willing to provide them with some support if any doubt is left.



One of our little garbage bins. Photo by Alice Piffer

Sorting waste in every classroom

Green Diary for Erasmus+ VET Schools Doing Green project

Alice Piffer and Emily Zancanella

CMC Trento (ENAC)

Italy

SDGs 6: clean water and sanitation, SDG 12: responsible consumption and production

Schools often produce a substantial amount of waste and many students may be unaware of the environmental consequences of improper disposal and unsustainable consumption. This lack of awareness can lead to increased pollution and the overuse of natural resources.

To address this, our school has launched a program focused on waste reduction and environmental awareness. Emphasizing the principles of Reduce, Reuse and Recycle, we strive to minimize waste production while helping students understand that every discarded item has an impact on the planet. Through this program, we aim to encourage mindful consumption and responsible disposal practices among our students.

As part of this initiative, we've equipped every classroom and common area with clearly labeled bins to help students sort waste properly, each labeled with visual guides to make disposal straightforward.

This approach not only reduces waste but also instills lasting habits of environmental responsibility, setting an example and encouraging a community of sustainability within our school.



One of our little garbage bins. Photo: Alice Piffer

Recycling fabric scraps

Green Diary for Erasmus+ VET Schools Doing Green project

Giuliana Malacarne and Maria Sicher

CMC Trento (ENAC)

Italy

SDG 4: quality education, SDG 12: responsible consumption and production, SDG 13: climate action, SDG 15: life on land

At our school, we've adopted a sustainable approach to fabric waste. Rather than discarding unused scraps, we collect and store them for future use.

In a recent project, our students opened various bags and carefully sorted the fabrics by color. This meticulous organization allows us to repurpose these materials into new and exciting products, reducing our environmental impact and promoting a circular economy.

The students enthusiastically embraced this initiative, gaining valuable hands-on experience and developing a deeper appreciation for the potential hidden within seemingly discarded items.



Students engaged in the task of fabric scraps classification. Photos by Maria Sicher





Fabric scraps classified by color. *Photos by Maria Sicher*



Using metal bottles to reduce plastic

Green Diary for Erasmus+ VET Schools Doing Green project

Giuliana Malacarne and Maria Sicher

CMC Trento (ENAC)

Italy

SDG 4: quality education, SDG 12: responsible consumption and production, SDG 13: climate action.

Reducing, Reusing, and Recycling are very important terms at our school, as they represent the fundamental principles for ecological and responsible behavior. We try our best to teach students practices to become more sustainable citizens, so they can be aware of their environmental impact. To help them on this, we also provide the right tools that can make it easier to adopt sustainable lifestyles.

For example, in September of this year, we distributed a metal water bottle to every class and every student, a symbolic yet significant gesture that highlights our commitment to sustainability. The bottles, made from high-quality materials, match the colors of our school logo: white and red, creating a sense of identity and belonging among the students.

The initiative to provide metal bottles is a great way to educate students about the importance of reducing plastic consumption, one of the most pressing environmental challenges of our time. This not only promotes sustainability but also encourages students to reflect on their daily habits and consider the impact these have on the planet.

To further encourage the use of the bottles, there is also a water dispenser in the school hall where students can fill their bottles with fresh water. They can choose the water they prefer, opting for room temperature or cold, and deciding whether they want still or sparkling water. This service we offer to students is completely free, removing any economic barriers that might prevent them from using it.

Encouraging students to fill their bottles not only helps them become more aware of the environment but also empowers them to make more sustainable choices in their daily lives.

Every small step counts, and our actions can inspire other schools and the community, creating a positive ripple effect that encourages greater attention to environmental issues. In this way, we hope to form a generation of young people ready to protect and value our precious planet.



Water bottles distributed to the students. Photo: Maria Sicher.



Sustainability circuit - our commitment to ethical and sustainable fashion

Green Diary for Erasmus+ VET Schools Doing Green project

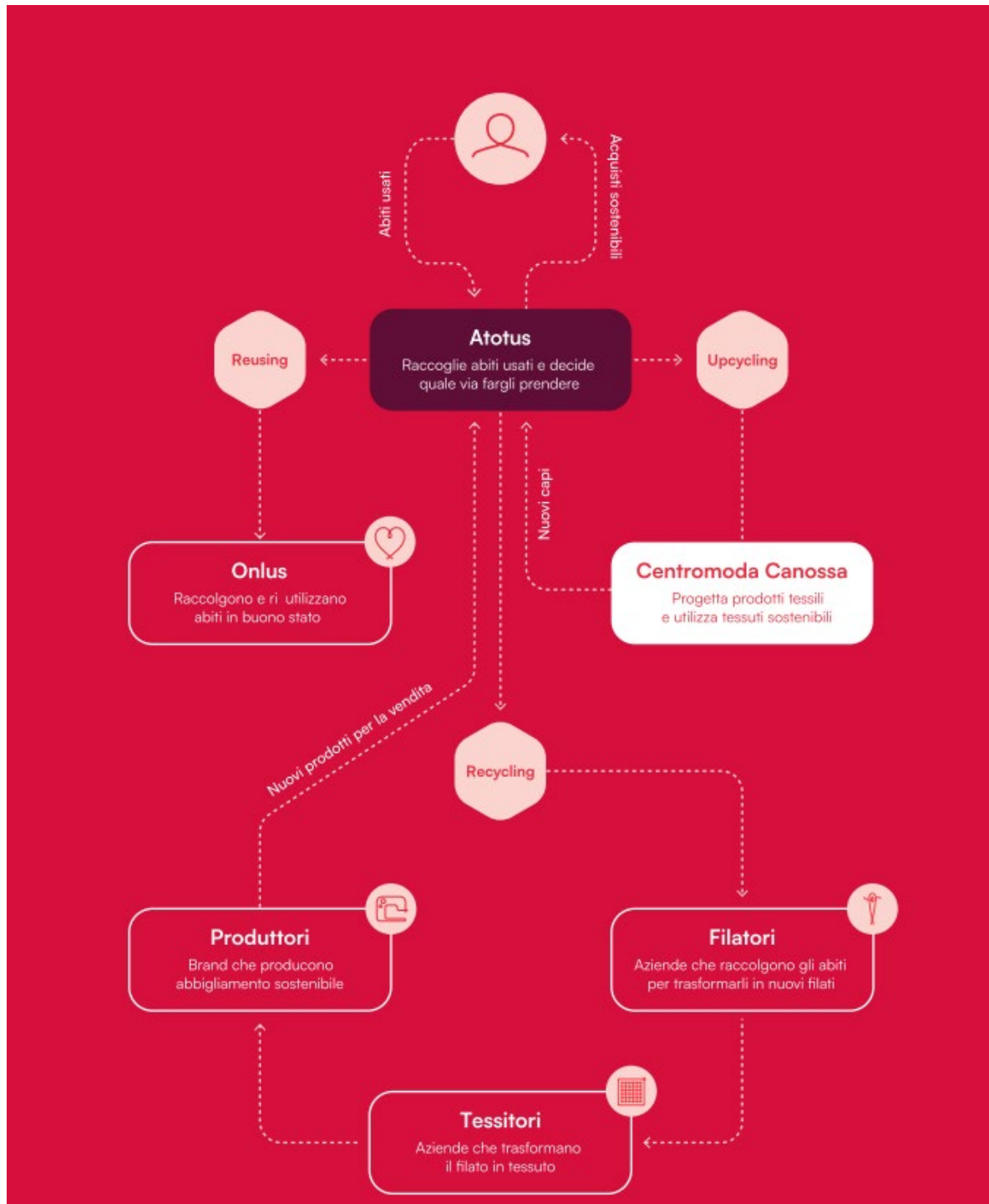
CMC Trento (ENAC) - Italy

SDG 12: responsible consumption and production / SDG 13: climate action

The fashion industry generates significant environmental challenges, including waste from discarded garments and resource-intensive textile production. This contributes to pollution, excessive landfill use, and the depletion of natural resources.

Centromoda contributes to resolving these issues through its integration into a sustainability-focused fashion circuit. This initiative connects weavers and spinners who create fabrics from recycled materials with Atotus, a hub specializing in the collection and sorting of end-of-life garments.

By promoting material reuse, the circuit fosters an eco-conscious production model that aligns ethical principles with aesthetic refinement, ensuring reduced waste and resource conservation while delivering high-quality, sustainable fashion.



The picture details the Sustainability Circuit, emphasizing ethical and sustainable fashion. It shows roles like spinners, weavers, brands, and nonprofits, and highlights Atotus, a hub for garment recycling and redistribution. The idea is to create a closed-loop system where materials are reused, promoting eco-friendly, refined fashion.

Flowers and lettuce in classroom in winter is not a fairytale

Green Diary for Erasmus+ VET Schools Doing Green project

Astra Mõistlik

Kuressaare Ametikool

Estonia

SDG13: Climate action

Never before in history have people spent so much of their lives indoors. Studies have shown that, for example, the average American spends 93% of their time indoors. Life has largely moved from the outdoors to indoors, and the human body hasn't yet fully adapted through evolution to cope with this change. In recent years, many studies have been conducted on the role of plants in reducing human stress.

Our school gave itself a Christmas gift last year. We bought smart garden systems for testing in some classrooms and offices. These smart gardens bring greenery into the spaces and provide a place for the eye to rest.

For example, in the sewing class, students often work in the evenings and on weekends. During those times, the school café is closed, and students usually bring sandwiches with them. The smart garden grows lettuce and dill.

The students are happy that they can put school-grown lettuce in their sandwiches. Additionally, it's nice to taste home-grown greens during the winter.

Additionally, students have said that after the weekend, it's always exciting to come to class and see how much the plants have grown, or if perhaps a flower has started blooming in the middle of winter.

Staff have given feedback that blooming flowers really have a positive effect on people working in the office. One nice thing is that there's always something to talk about when the smart garden is in the office.



Simple observation of plant growth is a good mental health keeper. Photo: Taavi Tuisk

Students design pictograms to enhance waste sorting

Green Diary for Erasmus+ [VET Schools Doing Green](#) project

Erik Riige

Kuressaare Ametikool

Estonia

SDG 11: Sustainable cities and communities

When I've been running projects with students, I often think about how to make the impact stretch beyond just the school walls.

Sustainability issues are a broad topic to dive into, and while discussing it with students, you can find ways to combine the learning process with something that can have a positive impact for the whole community too.

One such project that combined sustainability and design was the pictography of new waste containers in the city of Kuressaare.

At one point, we discovered new shiny metal bins in our town, all labeled in Estonian—'paper,' 'plastic,' and 'deposit' (check out Image 1). As citizens and design enthusiasts, those labels got us wondering: what exactly should go in each bin, and how could we help out a tourist who doesn't speak Estonian but wants to dispose of their soda bottle?

We decided to contribute by enhancing the existing labeling with pictograms to simplify waste sorting for a wider audience. As a result, three different pictograms were created, which seamlessly integrated with the existing labels (see Image 2).

We produced them independently on vinyl (sticker-like material) and installed them on the bins on a sunny spring day (see Image 3).

The conclusion of the project brought satisfaction for several reasons. Students had the opportunity to complete the entire design cycle, and the feeling of making a small personal contribution to the benefit of the community still warms the heart. Of course, the pleasant spring day outdoors was an added bonus.



Trash sorting station before the new pictograms were installed. Photo: Erik Riige.



Pictograms.



Pictograms were installed to garbage sorting bins. Photo: Erik Riige.



Reflecting on AI ethics and practical applications

Green Diary for Erasmus+ [VET Schools Doing Green](#) project

Karl Gregor Rauniste

Kuressaare Ametikool

Estonia

SDG 12: Responsible consumption and production

At Kuressaare Ametikool, we held an exciting workshop where all our IT students were involved in hands-on activities and discussions focused on AI and ethics. The aim was to deepen their understanding of ethical considerations around AI and to explore practical ways they could use AI responsibly and creatively.

The workshop covered a series of activities designed to engage students in critical thinking, problem-solving, and skill development, with an emphasis on ethical considerations and practical applications.

We started with a debate on AI ethics, where students discussed topics like privacy, bias, and accountability. Each team took a different stance on key ethical issues in AI, allowing them to explore multiple perspectives. This debate helped students evaluate the potential consequences of AI and make them to think about their responsibilities as future IT professionals.

Students explored how AI tools could aid in research and fact-checking, but they also examined the risks of misinformation if AI outputs are blindly trusted. They tested how AI-powered tools do research while learning about the importance of verifying AI-generated information. We discussed strategies for ensuring information accuracy, emphasizing the human role in overseeing AI outputs.

Next, we introduced a hands-on activity where students developed voice skills using Alexa's development tools. They created voice-driven applications designed to solve real-world problems, such as organizing information or providing educational resources. Students learned how voice AI can be used responsibly, and they explored ways to design applications that respect user privacy and transparency.

We organized a chatbot challenge, where each team was tasked with designing an AI chatbot to address specific user needs—like customer service or information sharing. Teams were encouraged to integrate ethical guidelines into their chatbot designs, such as transparency in



chatbot interactions and respectful handling of user data. The challenge highlighted the balance between effective AI design and ethical responsibility.

As the final activity, students collaborated on a project aimed at preventing misuse of AI. They brainstormed potential risks associated with AI misuse, such as spreading misinformation or using AI in ways that could violate privacy or ethical standards.

Throughout the workshop, students worked with both the technical and ethical aspects of AI. We encouraged them to reflect on the balance between innovation and responsibility, directed their reflections to how they could use their skills to create a positive impact.

Reflecting on the negative impacts of AI on knowledge management

Green Diary for Erasmus+ [VET Schools Doing Green](#) project

Karl Gregor Rauniste

Kuressaare Ametikool

Estonia

SDG 12: Responsible consumption and production

In our class at Kuressaare Ametikool, we had an engaging session where students explored AI's role in knowledge management—not only the advantages but also the potential downsides. Together, we looked into areas where AI might present challenges and brainstormed solutions for keeping these issues in check.

We told students to imagine themselves as part of a team that uses AI daily to organize and analyze information and to consider: *How can we ensure that AI remains beneficial without causing long-term problems?*

AI often automates tasks that skilled individuals used to handle, like data analysis or decision-making. While it can save time, there's a risk that people will lose these skills if AI takes over entirely. We asked the students to imagine a scenario where AI does everything—how could they keep their expertise sharp?

Students agreed that skill-building workshops could help keep important expertise alive. Even if AI handles certain tasks, regular practice would keep them familiar with the processes behind AI-generated results. We discussed how AI could be used as a support tool rather than a full replacement, for example where AI gathers data but people interpret it. This would help students retain analytical skills and remain engaged in the decision-making process.

AI can process vast amounts of information quickly, but it is not infallible. Misinterpretations or errors in AI's analysis can lead to significant mistakes if users blindly trust the outputs.

Students recognized the importance of reviewing AI-generated information before relying on it. Like fact-checking, it's a way to trust AI but also verify its output. Students said it would be



helpful to understand how AI makes decisions, as it would allow them to identify when something seems off. This creates a deeper understanding of AI's capabilities and limitations.

AI requires a lot of computing power, which consumes energy and resources, contributing to carbon emissions. Students were surprised to learn how much energy is needed to train AI models. We brainstormed ideas on how data centres could adopt renewable energy sources like solar or wind, making AI usage more sustainable.

AI often generates vast amounts of information, more than people can easily process. This overload can make it difficult to identify the most important information. Students explored how prioritization algorithms could highlight the most relevant data, helping them focus on what's truly important.

To conclude, we asked the students to choose two areas we covered and come up with their own prevention strategies. They were encouraged to think about how they might apply these strategies in real-life scenarios.



Material recycling helps to experience a sustainable mindset

Green Diary for Erasmus+ [VET Schools Doing Green](#) project

Sille Lapp, VET teacher

Kuressaare Ametikool

Estonia

SDG 4 – Quality education. SDG 11 – Responsible consumption and production

I have conducted workshops and class activities with learners and teachers, where we have created items ourselves from simple, easy-to-access materials.

The goal is to offer the joy of self-making alongside developing manual skills and practically experiencing what production waste and leftovers mean and what can be done with them. Also, to broaden the mindset that materials can have a new life when approached creatively.

I will share experiences from two workshops.

Wearing reflectors during dark hours is mandatory in Estonia. Companies producing reflectors have leftover pieces of reflective material, which I have asked for and always received.

We made unique reflectors from the production leftovers of reflectors with various groups of students and guests.

There was great interest and satisfaction in making something by oneself!

In the school kitchen, there are leftover tin cans that are usually thrown away. Together with learners studying property maintenance, we made small trash cans from these cans and leftover wallpaper. We discovered that measuring can be surprisingly challenging work. Learners were able to develop creativity and left the class in a good mood.



Materials for and product of reflector making workshop. Photo: Silje Lapp



Reflector-making workshop. Photo: Silje Lapp



Teachers and adult students at reflector making workshop. Photo: Silje Lapp



Students at workshop where they made garbage bins. Photo: Silje Lapp.

Voluntary bottom-up activities bring sustainability to the limelight

Green Diary

Taavi Tuisk, Kuressaare Ametikool, Estonia

SDG 13: climate action

At Kuressaare Ametikool we have for 3 years had a green workgroup “Green Cell” that brings together teachers and students who are finding ways to work in little steps to make our VET school more sustainable.

People have different levels of attention and interest towards sustainability. Some are tired of the topic, there is green anxiousness, some try to get it out of their head. Still, the movement towards becoming more sustainable and climate neutrality is here to stay.

Our Green Cell is trying to do something about it. We have Teams chat channel where we share links and ideas. We meet regularly. We have subgroups working on specific topics.

As the Green Cell is based on bottom-up principle, we do not deal with strategy. At least yet. We do small steps. We have organised community event “Bike Friday” to raise awareness on the climate friendly transportation and movability. We have subgroups that have designed box to collect batteries, design signage for improve sorting of the waste, printing on both sides of the paper. Our subgroup on student hostel has achieved that we have sink erator at the kitchen so food waste has less chance to end at general waste.

One of our most ambitious ideas has been to make our school courtyard car-free. Honestly, there is not much support for this yet. But we’ll keep this idea in our minds.



Caption: Green Cell members vote on which ideas should be the priorities to work on.

Photo by: Liisa Nõukas



What do students think about sustainable lifestyle?

Green Diary for Erasmus+ [VET Schools Doing Green](#) project

Tiiia Jõgi, VET teacher

Kuressaare Ametikool

Estonia

SDG 13 – Climate Action

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Kätriin is talking about trash what we can find practically everywhere and what are mainly non degradable packages. Photo: Tiia Jõgi



Jarmo and Raul think that our forests should be free from garbage but still there are a lot of people who just bring their old furniture, electronics etc. and try to hide it somewhere in the forest. Photo: Tiia Jõgi



Reiko introduced us endangered animals and ideas how to protect them. Photo: Tiia Jõgi



Sergei told us about living creatures in our forests: bears, wolves, deer, elks etc. Photo:
Tiia Jõgi



We don't have to buy new window frames, just reuse old

Green Diary for Erasmus+ VET Schools Doing Green project

Karoliina Pyykkönen

Live Foundation

Finland

SDG 4: Quality education, SDG 12: Responsible consumption and production

Refurbishing the old towards ecological goals is an important task related to sustainable development.

Finland is committed to objectives that promote a balance between the environment, economy and social well-being. This is based on Society's Commitment to Sustainable Development, which was adopted in 2016. According to this commitment, Finland aims to create a prosperous and globally responsible society that secures the carrying capacity of nature.

Live Foundation is part of this global learning process, which aims to create a sustainable future in society and the world. We are also committed to educate our students in line with our commitment to sustainable development.

At vocational college of LIVE every year students in surface treatment repair and repaint old window frames. That way we teach and students learn how to be more sustainable. We have a lot of furniture, doors and window frames, what we can repair and give them long life.

By renovating old objects and parts of buildings, we do not increase the waste load or need to acquire new furniture and we are pleased to use these objects.

We repair clients' stuff. When we have got these at school, students first wash them. Then they take off old paints with heater. They sand wood parts and change glasses if they are broken. Then they paint once or twice and reglass those window frames.





Old and new. Photos: Karoliina Pyykkönen



Electronics repair shop is for community and students

Green Diary for Erasmus+ VET Schools Doing Green project

Kimmo Kotro

Live Foundation

Finland

SDG 12: Responsible consumption and production

The electronics repair workshop at the vocational college Live (www.livefix.fi) is a place where students can learn to repair a wide range of electronic devices for customers. The workshop is known for its affordable repair services, making it accessible to the community. Pricing makes it also possible to bring in devices that wouldn't be repaired in any other workshop. The focus is on providing high-quality repairs while promoting sustainable practices.

Livefix offers very affordable repair services, we make quality repairs accessible for everyone. Diagnosing the problem does not cost anything.

Students learn to interact professionally with customers, understanding their needs and explaining the repair process clearly.

A systematic approach to diagnosing issues is taught, using tools like multimeters and oscilloscopes. This way the students will learn how electronics work in general and after a while they know how to diagnose a fault in any electronic device.

We are trying to keep detailed records of diagnostics and repairs, although we are still developing this process. This helps track progress and identify common issues.

We repair devices in component level so students learn to repair PCB-boards by replacing individual parts. This requires soldering.

Training includes diagnosing and fixing software issues, such as firmware updates and operating system repairs. This is in computers and other devices that includes software that is accessible for us.

Electronics materials are not eco-friendly, but we try to use all materials as eco-friendly as possible. We try to use as much as possible components from non-repairable devices. We also recycle e-waste responsibly.

Repaired devices undergo thorough testing to ensure they meet quality standards and function correctly. This is a very important phase to teach to the students. Many devices seem to work fine when tested for a short time, but they fail a longer test.

Repairing and reusing electronic devices helps to significantly reduce the amount of e-waste that ends up in landfills, preventing harmful substances from contaminating the environment.

Manufacturing new electronic devices requires a substantial amount of raw materials and energy. By repairing existing devices, we conserve these resources and reduce the environmental footprint associated with production. Learning to repair electronics equips individuals with valuable skills that can lead to job opportunities and self-sufficiency, fostering a culture of sustainability and environmental responsibility.

The repair shop does not only provide essential repair services to the community at affordable prices but also raises a sense of environmental responsibility in students.



Work in progress, repairing a laptop which has a broken charging port. Photo: Kimmo Kotro



Soldering machinery. We can replace SMD-components.



A television waiting parts so we can repair it. Photo: Kimmo Kotro



A counter where we take jobs in. All the jobs are in our workshop database. Photo: Kimmo Kotro



An ecological and environmentally friendly cleaning method

Green Diary for Erasmus+ VET Schools Doing Green project

Pia Törnwall

Live Foundation

Finland

SDG 3: Good health and well-being, SDG 13: Climate action

Cleaning chemicals are not a sustainable solution. Research shows that cleaning chemicals cause problems for cleaners, facility users, surface materials, and our shared environment.

This is why at Live Foundation we have entered into a license agreement with Green Berry oy. Ownwell is a chemical-free and environmentally friendly cleaning method developed in Finland.

At the vocational upper secondary qualification in Cleaning and Property Services, our students use the chemical-free Ownwell method every day.

Student Laura Salu and instructor Marianne Järvelä are practicing and washing floors with a floor washing machine. The floor washing machine works with the Ownwell method, which is based on purified tap water, to which natural microbes are added. Marianne says that this way we can clean without chemicals.

Laura said that she is very pleased that no chemicals are used in cleaning. She explained: "This cleaning method is a good solution because it does not burden the environment and because it is a healthier option for both the cleaner and the occupants of the premises when there is no need to come into contact with chemicals."



Marianne and Laura clean the floors without chemicals at Live ´s premises. Photo by: Pia Törnwall



Laura is pointing out the Eco button for an extra water-saving cleaning program. Photo by: Pia Törnwall



Morning meetings at construction site

Green Diary for Erasmus+ VET Schools Doing Green project

Tiina Hellström, Karoliina Pyykkönen

Live Foundation

Finland

SDG 3: Good health and well-being, SDG 4: Quality education, SDG 8: Decent work and economic growth, SDG 12: Responsible consumption and production

In Metsälä 5 location of our school we have every Monday morning a so-called construction site meeting at 8.00.

We have several goals for these meeting:

- community spirit
- interaction
- professionalism
- responsibility
- sustainable development
- occupational safety

We had many reasons for starting these meetings. For example, students had a lot of absences, they did not get to know each other, did not know the week's program in their studies. We wanted to hear the wishes of the students.

At the first meeting we told the students that in working life a construction site meeting is a normal routine. And in any case in the future our students will be working at building sites.

Before we started meetings, personnel planned a meeting structure:

- the chairman changes
- takes 15 minutes
- current topics (construction sites, instructions)

- student feedback (feedback, idea, suggestion)
- responsibility and sustainable development
- competition

Competition ideas are also related to sustainability:



Competition example: How much do unwashed brushes cost? Right answer: almost 500 euros! Photo by: Karoliina Pyykkönen



Making new rack from scrap materials

Green Diary for Erasmus+ VET Schools Doing Green project

Kari Soronen

Ammattiopisto Luovi OY

Finland

SDG 12: responsible consumption and production

We made a new storage rack for tin plates, using scrap metal. We also used parts of an old broken rack. We saved a lot of money at the same time.

The scrap metal was found on the school premises; it was not in use by anyone, and no one claimed ownership of it.

We are unable to weld ourselves, so we asked the Oulu vocational school to do the welding work. In exchange for the work, they also received scrap metal for their own use. Some of the required metal was taken from a broken rack.

We couldn't just repair the damaged rack because it was too broken and too small. In the warehouse, we also store teaching materials for other fields. The rack was needed for the storage of metal sheets.

The warehouse curriculum includes the storage of all types of goods, as well as ensuring the proper storage and condition of the products in the warehouse. Other fields order materials from the warehouse for educational use. All the work were done with the students.



Old rack: too small and too broken. Photo: Kari Soronen



The new rack. Photo: Kari Soronen

Thematic team supports emotional and safety skills

Green Diary for Erasmus+ VET Schools Doing Green project

Kari Soronen

Ammattiopisto Luovi OY

Finland

SDG 13: Climate action

Cargo cloths are essential for transporting large loads. In training, we aim to do as many customer jobs as possible, meaning transporting loads based on the customer's needs, not just for practice. Several cargo cloths are needed every day.

Inspecting the condition of load straps is part of the qualification unit for cargo transport. The driver must ensure that the load is safely loaded and secured in accordance with the requirements of laws and regulations.

In terms of sustainable development, it is preferable not to always buy new cargo cloths, but to maintain the ones already in use. The components of a cargo cloths can be separated from each other. If the locking mechanism is in good condition but the strap is damaged, the lock should be salvaged.

On the other hand, parts from the opposite side may break, but by combining the functional parts, a serviceable cargo cloth can be created. According to the law, load straps must not have abrasions or cuts. Some cargo cloths can be cut at the damaged area, and the remaining strap can be refurbished and put back into use. We teach students to check the condition of cargo cloths and make repairment needed.

We checked the condition of decommissioned cargo cloths. We repaired and greased the locks. we also removed the damaged parts from the cloths and burned the end closed. We got usable stuff from the waste.

This reduces the consumption because less new clothes are needed.



Repairing cargo cloths reduces the need for new ones. Photo by Kari Soronen

Improving the waste sorting room

Green Diary for Erasmus+ VET Schools Doing Green project

Kari Soronen

Ammattiopisto Luovi OY

Finland

SDG 13: climate action

We noticed with the students that someone had brought cardboard, packed in black garbage bags, into the mixed waste container in the waste disposal room.

We opened the bags and sorted the cardboard into its designated collection container. We also created instructions for waste sorting for the building's users, both students and staff. We have started weekly inspections in the waste disposal room.

We check that the waste is sorted correctly and take action if we notice incorrectly sorted waste. This activity is in line with the curriculum's sustainable development practices

With this kind of action we get less mixed waste, more cardboard for reuse. We put more attention to waste management and so do the others too when they see us working.



Waste disposal area in the beginning. Photo: Kari Soronen



Contents of the cardboard waste container in the beginning. Photo: Kari Soronen



Situation after our action. Photo: Kari Soronen



Changing the way of thinking

Green Diary for Erasmus+ VET Schools Doing Green project

Katja Holanti

Ammattiopisto Luovi OY

Finland

SDG 13: climate action. 14, 15:, live below water, live on land

We already know how to sort waste and recycle, as well as make sustainable choices regarding food. Many may feel uncertain about what to do next for a sustainable future.

I presented the impact of inner development (IDGs) on promoting sustainable development to the management team of the vocational school Luovi and the local leadership team.

Internal development aims to better understand the effects of our own choices on the complex and distant goals of sustainable development. I noticed that many found it difficult to understand the cause-and-effect relationship: that my small actions can influence how the environment is polluted on the other side of the world.

It's eye-opening to think that an order from some cheap online store contributes to pollution in production countries, often in East Asia. It's not the people living there who order these products, but we are, people living in developed Western countries.

So, it matters what I order from cheap online stores. For me, it may be a few euros, but for people living in the production country, it's about their entire living environment.

We need to think all the world, not just our own home, city or country. We have the whole planet to save.

Read more about Inner Development Goals (IDGs): [Inner Development Goals – Inner Growth for Outer Change](#)

SDGs in teaching

Green Diary for Erasmus+ VET Schools Doing Green project

Marjaana Pakanen

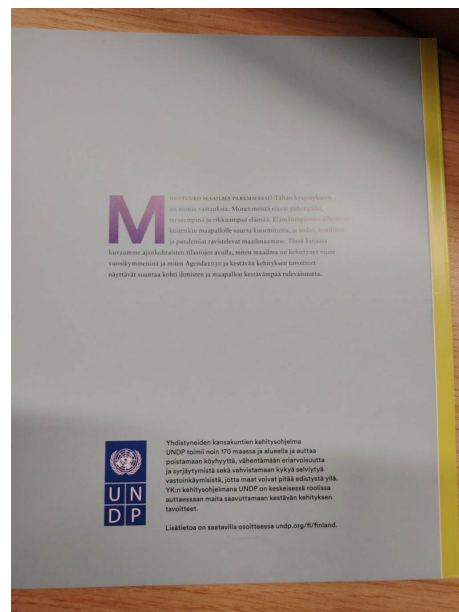
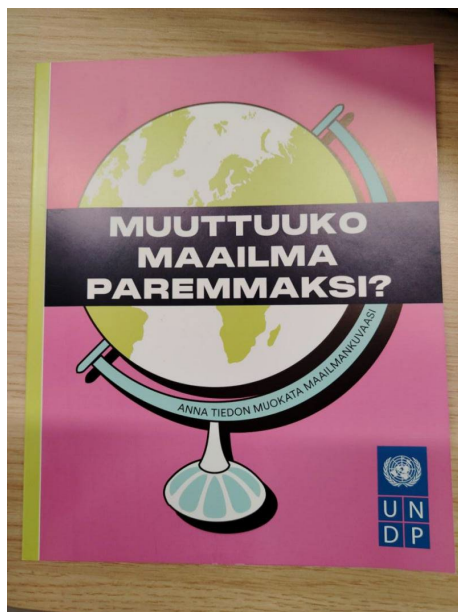
Ammattiopisto Luovi OY

Finland

SDG 3: good health and well-being, SDG4: quality education, SDG 13: climate action

I ordered the material prepared by the Ministry of Foreign Affairs regarding The Sustainable Development Goals (SDGs). The material included a book that presented the SDGs with the help of the latest statistics.

In addition, the material included links to YouTube videos where the matter was clarified and deepened. The students read the material and watched the videos, after which they answered the questions, I prepared regarding the material. In these questions, we pondered the ideas brought about by the matter and thought about our own choices in everyday life compared to SDGs.



Front cover and back cover of the book. Photo: Marjaana Pakanen



Attitudes, can they be changed and who does it?

Green Diary for Erasmus+ VET Schools Doing Green project

Marjo Pihkakoski

Ammattiopisto Luovi OY

Finland

SDG 12: Responsible consumption and production, SDG13: Climate action, SDG15: Life on land

We were sitting at the coffee break table at work. Sometimes the topics of conversation during coffee breaks turn to work and students. This time, the discussion was about printing.

Students keep a weekly electronic diary in the Bookcreator app. Staff or students themselves photograph their work tasks throughout the week, and one day a week is scheduled for producing the diary's content. Students study in a qualification program aimed at preparing them for work and independent living, which lasts from one to three years. Thus, a lot of material accumulates in the diary.

Some staff support the idea of printing the diary for each student annually, while others believe there is nothing wrong with it being in electronic form, as it can be browsed and read at home just as well.

We are trying to reach a compromise on the matter. The options suggested on the table are as follows: not printing it at all, printing only one year at a time and arranging images and texts as compactly as possible on the pages, and one suggestion was to print the diary as it is, without condensation, with all its pages included. I reminded them that it could have as many as 100 pages and questioned whether all students even considered it important to receive a paper version.

Then it happened, the moment that made me think: "Oh no!" I heard the words: "What we do doesn't matter."

I was quite astonished by the thought that our actions would not matter, for better or worse. I corrected the situation by emphasizing that our actions do have significance. It is also crucial to teach this to our students.

We can influence attitudes, both our own and those of others. It is very important to highlight how we can make a difference with all our actions, functioning in accordance with the sustainable development goals in our daily lives and work.



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“Nobody make a greater mistake than he who did nothing because he could do only a little.” Edmund Burke (1765-1794)



Free breakfast and lunch at school

Green Diary for Erasmus+ VET Schools Doing Green project

Marjut Kipinä

Ammattiopisto Luovi OY

Finland

SDG 3 Good health and wellbeing

To everyone's delight, we have started offering morning porridge from February 2024. Offer consist of porridge with butter and water or skimmed milk to drink.

Morning porridge offers a good start to the day and brings all the students and staff of the group to the same table right from the morning. This initiative aims to increase study and work well-being and community spirit.

The morning porridge "experiment" has received really good feedback. During the first weeks, there were about 30-40 people on average, since then the number has grown and is currently an average of 100. Morning porridge has had a positive effect on our group and above all it has become a socially important moment.

Staff can "redeem" free porridge by bringing students from their own group to eat. I have noticed that now the students are already asking for the morning porridge. I think this is a very good thing, because not everyone has the opportunity to eat in the morning at home.

This is how we also teach important good lifestyles to young students. Everyone can dose the porridge and food themselves, so that the amount of food going to waste is as small as possible! Morning porridge has not had a negative effect on lunch sales.

In addition, school food is a very important part for many. Students in a poor financial situation therefore receive at least one warm meal during the day. A healthy lifestyle is especially important in the agricultural sector, precisely because the work can be physically and mentally very hard at times.

We have free school meals for students, also for the staff if a staff member takes a student from his group who for one reason or another needs support in eating, and eats with him.

Here, too, you must always remember that we take care of the student's rights and learning, and socially sustainable development as a topic is important to us.

We always have a vegetarian option available. Vegetarian food was first in the menu for the first few weeks. Unfortunately, this had a negative effect on food waste, when the students did not notice what food they were taking.

Leftover food can be bought from the canteen if there is any left over. We use meal announcements so that the kitchen staff can assess food consumption as accurately as possible and thus minimize food waste. In my opinion, the importance of school meals and its positive effects are not talked about enough.



People queuing for breakfast porridge. Photo by Marjut Kipinä.



School canteen where students and teachers eat together. Photo by Marjut Kipinä



Sharing environments in the animal care education

Green Diary for Erasmus+ VET Schools Doing Green project

Marjut Kipinä

Ammattiopisto Luovi OY

Finland

SDG 12: Responsible Consumption and Production

We are on the verge of a very important topic when we talk about responsible consumption.

In this moment and in the future, we are the ones who have the opportunity to influence consumption habits. In the field of natural resources, keeping one's own fields, machines, or one's own production and animal farms is a total impossibility for all those practicing in the profession, or at least I would like more of an idea of cooperation, specifically in terms of sustainable development and the future.

We have two large vocational schools in Muhos (near Oulu, Finland), and our cooperation is extremely important.

At the moment, we rent two different learning environments from OSAO(another VET school): their existing robot barn and small animal farm.

I and many other members of the team think this way works well. When we understand that not everyone needs to have their own space, we can see a lot of possibilities in it.

Renting gives educational institutions the opportunity to offer their students a wider selection of learning environments and opportunities, which might otherwise be too expensive or difficult to acquire in their own facilities, and moreover unprofitable.

Access to different learning environments can enrich the curriculum and offer students more diverse learning experiences.

Such versatility can promote the development of practical skills and better prepare students for working life. Renting makes it possible to share resources, such as premises, work machines and special equipment, between different educational institutions. This really reduces costs and increases the utilization rate of the premises.

All of our main learning environments are located in the Muhos area. Of course, it requires moving to the place by car in the morning, even then we always like to move with a full car and anyway we think about moving as rationally as possible.

Sometimes we go further afield to implement bigger projects, for example horse stables in the Oulu area are very happy to hire us for a day for repair or landscape maintenance tasks.

I am therefore of the strong opinion that everyone does not have to own when creating a good and safe contract that is pleasant for all parties and a functional learning environment.



Learning environment for animal care professions that is used by two different VET schools. Photo: Marjut Kipinä

Harassment contact person activity

Green Diary for Erasmus+ VET Schools Doing Green project

Sonja Pelkonen

Ammattiopisto Luovi OY

Finland

SDG 3: Good health and wellbeing

Luovi has been training harassment contact persons since 2018. Almost every location has its own designated harassment contact person, with a total of approximately 30 contact persons.

A harassment contact person is someone students can approach if they experience bullying or harassment, either from other students or staff.

The harassment contact persons at Luovi keep in touch through Teams. They aim to meet in person once a year, and Teams meetings are organized five times a year.

Local harassment contact persons organize various activities, such as “*Häryjen hetkiä*” (Moments of Discussion). In Oulu, harassment contact persons organize these moments about 5-6 times a year.

The purpose of these events is to share information that bullying is not tolerated at Luovi and that active measures are taken to combat bullying and harassment. The harassment contact persons also train students to discuss relationships, friendship, sexuality, and boundaries.



Infographic about harassment contact persons. Created by Sonja Pelkonen.



The green poster, titled "Vihreän valon kosketus = hyvä kosketus" ("Green Light Touch = Good Touch") showcases examples of positive and friendly interactions. These include comforting gestures, affection between friends and family, and respectful physical contact. It emphasizes that good touches make people feel safe, respected, and supported. Photo by Hanna Komulainen.



The red poster, titled "Punaisen valon kosketus = huono kosketus" ("Red Light Touch = Bad Touch"), illustrates unwanted or harmful interactions. Words like "Pakottaminen" (forcing), "Lyönti" (hitting), and "Kipu" (pain) highlight types of inappropriate or harmful contact that are not tolerated. This serves as a reminder that everyone has the right to personal boundaries and respect. Photo by Hanna Komulainen 2024



Thematic team supports emotional and safety skills

Green Diary for Erasmus+ VET Schools Doing Green project

Sonja Pelkonen

Ammattiopisto Luovi OY

Finland

SDG 3: Good health and wellbeing

At Luovi Vocational College, there are collaborative teams organized around various themes. These include the media team, sustainable future team, safety team, digital team, student sports team, student well-being team, staff well-being team, music team, transition phase team, and the emotional and safety skills team.

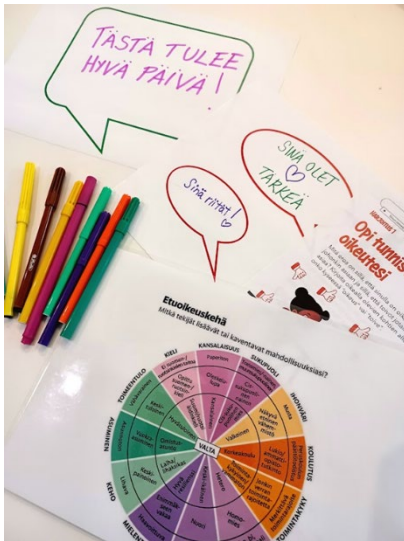
Each team plans and implements activities related to their theme for both staff and students. They meet on the last Thursday of each month from 2:15 to 3:45 PM and are responsible for organizing at least one event related to their theme during the academic year. All staff members in Oulu belong to a team.

Each team has a chairperson who schedules meeting invites and coordinates with other team leaders a few times a year. Events planned by the teams are added to the college's annual calendar.

The emotional and safety skills team consists of 11 members. Their mission is to teach students emotional and safety skills and to provide training for staff on teaching these skills.

The goal of emotional and safety skills education is to prevent emotional and physical violence against young people. These skills support well-being and help maintain the capacity for work and daily functioning, and they are essential for young people's future careers.

In 2024-2025, the team organized a theater performance and a workshop on privilege during Anti-Racism Week, focusing on emotional awareness and equality. The performance, conducted by a local theater group, centered on emotions and perspectives on equality. After the theater event, groups discussed their thoughts in their own sessions.



This display at Luovi encourages self-worth, positivity, and awareness of social privileges. Positive messages like “Tästä tulee hyvä päivä!” (“Today will be a good day!”), “Sinä olet tärkeä” (“You are important”), and “Sinä riität” (“You are enough”) aim to boost confidence and self-esteem among students and staff.

The “Etuoikeuskehä” (“Privilege Wheel”) helps students explore and understand factors that can enhance or limit opportunities, such as nationality, language, gender, education, and socioeconomic background. This tool, along with resources to “Know Your Rights,” supports Luovi’s commitment to fostering an inclusive and supportive environment where everyone feels valued and empowered.

Photo by Hanna Komulainen.



Thematic team promotes sustainability

Green Diary for Erasmus+ VET Schools Doing Green project

Veli Mathlin

Ammattiopisto Luovi OY

Finland

SDG 11: Sustainable cities and communities

We have a team for sustainable future at Luovi Vocational education and training. The team includes 10-15 staff members.

Our mission is to develop Luovi's activities towards sustainable future. We have organized various sustainable development activities during the academic year.

For example, we had second hand shop at this spring. Staff members were asked to bring something they did not need anymore and also from organization we had no longer needed equipment to sell at the event. Students had a right to take what they needed for individual life for free. Many of our students have just moved into their own apartment or they live at the school dormitory.

In addition, we try to maintain the theme of sustainable future constantly, for example by posters within one of the goals of sustainable development at the time. Main idea is to help students and staff to discover and find out ways to encourage to take the goals and the habits of sustainable living in their own life. Every goal is shown certain time and afterwards the ideas are shared in the school's inner website.

We also had a sustainable development week every year. During the week has been some actions, expert lectures and speeches. For example, we changed the vegetarian food at the first place at the menu and that increased the consumption of vegetarian food.



Creating arboretum for students and community

Green Diary for Erasmus+ VET Schools Doing Green project

*Ibai Colino Fernandez de Liger
San Viator Sopuerta
Spain
SDG 15: Life on Land*

We are a team of forest management technicians from San Viator in Sopuerta, working with an eco-friendly and sustainable project for [Asteklima 2030](#).

This project involves establishing an arboretum on a selected forest plot owned by our educational center. The arboretum will primarily feature native species, enhancing local biodiversity and promoting environmental education within the Sopuerta community.

To facilitate this, we will prepare the pathways to ensure safe and easy access for visitors, enabling them to observe various botanical species comfortably. Additionally, we will create signage that includes each species' name, characteristics, and intriguing facts.

The primary goal is biodiversity conservation. The project aims to protect native and threatened plant species by creating a sanctuary for local flora, thereby fostering biological diversity.

Additionally, we seek to provide environmental education. Through educational programs and workshops, it will teach students and community members about the importance of flora, conservation methods, and sustainable development.

We plan to involve local residents in the creation and maintenance of the arboretum, fostering a sense of belonging and teamwork. This effort also aims to provide a recreational and leisure space that enhances the community's quality of life through outdoor activities.

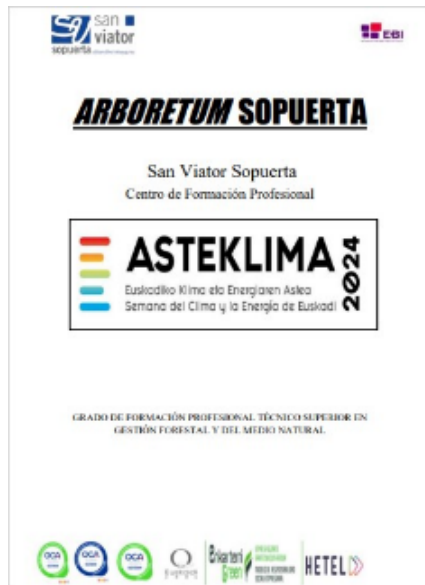
We also hope to establish a bird observatory, attracting different bird species and allowing the community to observe their appearance and lifestyle.

Lastly, the project will support the SDG) through informative campaigns and practical activities. The goal is to familiarize visitors with the Agenda 2030 SDGs and underscore the importance of sustainability.



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*Arboretum Sopenuerta, the format in which the students are going to work. Screenshot:
Ibai Colino*



Teaching and empowering: quality training for students with special needs

Green Diary for Erasmus+ VET Schools Doing Green project

Iker de la Presa

Centro San Viator Sopuerta

Spain

SDG 4: Quality education

In this Green Diary I will address the problem of how to provide inclusive and equitable quality education and enhance learning opportunities for students with intellectual disabilities (known as SAT students)

I share our experiences with the SAT program, where our higher-degree vocational training students engaged with intellectually disabled students. This initiative not only enriched the educational journey of the SAT students but also fostered a sense of empathy and responsibility among our vocational trainees. Watching them explain and demonstrate the constructed models to the SAT students was a poignant testament to the power of inclusive education.

Introduction to the initiative

At Centro San Viator Sopuerta in Spain, our commitment to inclusive education aligns with the principles of Sustainable Development Goal (SDG) 4: Quality education. This initiative provides training for students with intellectual disabilities and empowers them to engage in hands-on, practical learning experiences alongside our higher-degree vocational training students. By merging these two groups, we bridge educational gaps, reduce inequalities (SDG 10), and create meaningful opportunities for growth and understanding for all students involved.

Objective and green action focus

Our primary goal is to offer SAT students equitable access to quality education, personalized training, and supportive learning experiences. Through this program, we address a significant gap in education by ensuring that students with intellectual disabilities receive inclusive, individualized support. The approach encourages a nurturing learning environment where SAT students not only learn new skills but also gain confidence through consistent, respectful interaction with their peers in vocational training.



Structure of the program

In the program, vocational training students work closely with SAT students, serving as mentors and guides. Together, they tackle practical projects, such as constructing models and handling tools, that allow SAT students to develop new skills and learn by doing. The vocational students explain each step patiently and adapt their methods to the needs of their peers, which deepens their understanding of concepts, fosters creativity, and builds empathy.

Empathy and inclusion in action

One of the most impactful aspects of this initiative is the change we observe in both groups. Vocational students gain firsthand experience with inclusive education practices, learning how to communicate complex ideas in accessible ways, which strengthens their teaching skills and sense of social responsibility. SAT students, on the other hand, find themselves in a safe, collaborative environment where they can engage without fear or judgment. This mutual support encourages an inclusive mindset among all students, breaking down social barriers and fostering meaningful friendships.

Outcomes and reflections

Our experiences with this program highlight the importance of empathy, patience, and adaptability in teaching. Witnessing vocational students take the time to explain and demonstrate each model or project for the SAT students reveals the power of inclusive education in real-time.

The program provides SAT students with essential life and technical skills, paving the way for a more equitable educational landscape. For our vocational students, this experience is transformative, instilling a deep understanding of diversity, empathy, and the value of giving back to the community.

Future directions

Moving forward, we aim to expand the program to involve more students, broadening its impact within our community. We plan to introduce new, interdisciplinary projects that encourage greater creativity and collaboration between SAT and vocational students, enhancing the learning experience for all involved.



Bringing together special needs students with car technicians teaches both groups of empathy, patience, and adaptability. Photos by Iker de la Presa



Recycling models: a step towards responsible consumption and production

Green Diary for Erasmus+ VET Schools Doing Green project

Josetxu Pérez

Centro San Viator Sopena

Spain

12: Responsible consumption and production

In this Green Diary I address the problem on how to minimize waste through the recycling of automotive parts from previous projects for current student works.

By repurposing parts from past years' projects, we've managed to both conserve resources and impart valuable lessons on responsible production. This process not only saved costs but also challenged students to innovate and problem-solve using available materials. Our journey has not been without its challenges; however, the commitment displayed by students to embrace sustainable practices has been highly encouraging.

At Centro San Viator Sopena in Spain, students are engaging in a unique project that supports SDG 12: responsible consumption and production. By reusing materials instead of sourcing new ones, students gain practical insights into sustainable practices and develop an appreciation for conserving resources.

The primary goal of this initiative is to minimize waste and encourage sustainable thinking. It allows students to engage firsthand with the principles of circular economy, which emphasizes resource reuse and waste minimization. By using pre-existing materials for their models, students not only conserve resources but also learn how to create value from what might otherwise be discarded. This approach aligns with SDG 12 by emphasizing sustainable production practices and instilling these values in the next generation of professionals.

Project structure and implementation

Students are tasked with designing and constructing new automotive models or projects using recycled parts from previous years' projects. They receive guidance on identifying and extracting reusable components, assessing their condition, and integrating them into their designs. The challenge lies in working with limited materials, which requires them to think creatively and adapt their designs accordingly. This aspect of the project encourages problem-solving, adaptability, and innovation, as students must reimagine old parts for new purposes.

Impact on students and learning outcomes

Throughout the process, students gain a practical understanding of sustainable production principles. By recycling parts, they witness the direct impact of responsible resource use and the value of materials that have already served a purpose. They also develop an awareness of the environmental implications of waste, understanding that every item reused is a step toward reducing landfill waste and conserving resources. This hands-on experience not only saves costs but also reinforces critical skills such as creative thinking, resourcefulness, and teamwork.

Challenges and reflections

While the project has been rewarding, it has not been without challenges. Sourcing the right parts and adapting them to new projects requires a high level of patience, precision, and flexibility.

Students have encountered difficulties when materials were not readily adaptable or needed repair. However, these challenges have become essential learning moments, allowing students to embrace sustainability as an ongoing effort rather than a one-time task. Their dedication to problem-solving and willingness to overcome obstacles have been a testament to their commitment to sustainable practices.

Looking ahead

Inspired by the positive outcomes, we hope to expand this project by incorporating more advanced recycling techniques and perhaps even collaborating with local industries to source additional recyclable materials. Future plans include introducing a workshop series on sustainable design practices and potentially engaging students in larger-scale projects that align with the principles of responsible consumption and production.

This initiative is a foundational step toward equipping our students with the skills and values needed to foster a more sustainable world.





Students experience circular economy, patience, precision, and flexibility while reusing parts from cars. Photo by Josetxu Pérez

Berotegia – school vegetable garden

Green Diary for Erasmus+ VET Schools Doing Green project

Marlene Echevarria

San Viator Sopena

Spain

SDG 12: Responsible Consumption and Production

The "Berotegia San Viator" project revolves around our school vegetable garden, a space where I see students dive into hands-on, experiential learning. Here, they connect with environmental awareness, nutrition, and health in a way that's tangible and engaging.

Our garden isn't just a plot of land; it's a dynamic classroom where active, cooperative learning comes to life. I watch as students interact directly with nature, applying lessons from mathematics, geography, art, and more. It's not just about growing vegetables; it's about cultivating minds and fostering a deeper understanding of the world around us. We also delve into topics like recycling, climate change, and sustainable consumption, using the garden as a launching pad for these vital discussions.

In this project, students aren't just passive observers; they're active participants, cultivating and maintaining the garden. I see them developing a deeper appreciation for local agriculture and sustainable practices. The garden also promotes healthy physical activity, encourages respect for the environment, and instills an awareness of the nutritional benefits of consuming fresh, locally grown produce. It's a holistic learning experience that goes beyond the traditional classroom, and I'm proud to be a part of it.



A group of San Viator students pose by our vegetable garden, where they learn hands-on about sustainability, local agriculture, and teamwork. Photo: Marlene Echevarria

Students design herbariums to promote knowledge of environment

Green Diary for Erasmus+ VET Schools Doing Green project

Natalia Gallot

Centro San Viator Sopena

Spain

SDG 3: Good health and well-being, SDG 15: Life on land

At San Viator school, our students have designed herbariums in order to teach about the plant species found in the school environment.

To this end, the students walked through the forest and green areas near the school and collected samples of plant species. Later, they dried them correctly to place them in a herbarium including the information corresponding to each one of them.

The ecosystem function of forests fulfills one of the particular targets of SDG 3, namely that of substantially reducing the number of deaths and diseases. The existence of green areas near our homes reduces sedentary lifestyles, improves quality of life and life expectancy.

SDG 15 (Life on land) warns of the serious threat to people posed by the increasing trend of forest loss, land degradation and species extinction. It is important for students to know the importance of preserving plant species in our forests.





Collecting plants and creating herbariums teaches students the importance of biodiversity. Photo by Natalia Gallot



Recycling electronics for sustainable projects

Green Diary for Erasmus+ VET Schools Doing Green project

Unai Losa Blanco

Centro San Viator Sopuerta

Spain

SDG13: Climate action

At our vocational training center, we are committed to breathing new life into broken or unused electronic devices. I work alongside students as we disassemble these devices, retrieving the electronic components inside. These components are not discarded, they're collected and repurposed for our projects, allowing us to avoid purchasing new ones.

Our initiative aligns with several SDGs. By reusing electronic components, we contribute to SDG 12 – responsible consumption and production. We minimize the need for new resources and reduce our carbon footprint, as manufacturing new components consumes energy and generates greenhouse gas emissions. Our approach promotes a more sustainable use of technology.

We also support SDG 14 - life below water. Electronic waste often ends up in landfills, and if not managed properly, can release harmful chemicals that reach waterways and oceans. By collecting and reusing these components, we prevent electronic waste from polluting aquatic ecosystems, protecting marine life from hazardous substances.

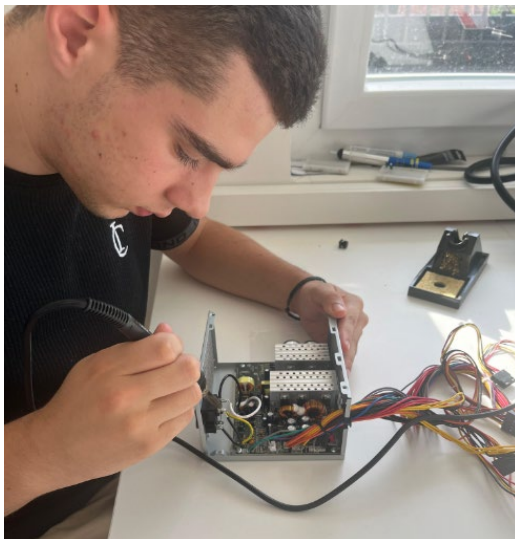
Our work also impacts SDG 15 - life on land. Improper disposal of electronic waste can contaminate soil and harm terrestrial ecosystems. By extracting and reusing components, we ensure they don't become pollutants in the environment.

This supports the circular economy by reducing the demand for new materials. Our students not only learn technical skills in electronics but also gain an understanding of the environmental impact of electronic waste and the importance of sustainable practices. Economically, reusing components reduces the need for purchasing new materials, benefiting our projects financially and highlighting the value of resource efficiency.

This activity empowers our students to become environmentally conscious professionals, capable of integrating sustainability into their future careers in electronics.



Electronics Maintenance students disassembling a broken television. Photo: Unai Losa



Electronics Maintenance student recovering electronic components from an old power supply. Photo: Unai Losa