

Sustainable Schools Handbook

A guide for teachers and decision-makers to integrate sustainability in all areas of their schools.



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Introduction

The European Sustainable Schools Awards (ESSA) were developed for an Erasmus+ project. This project was a collaboration between partners in three countries:

- Nikola Karev School (Skopje, North Macedonia)
- Together for Success (North Macedonia)
- Iroko (Spain)
- ArteTeka Ltd (Ireland)

We took applications from schools across the Erasmus network, inviting them to show us the work they do to be more sustainable. We received **52 applications** from schools across Europe. After assessing the applications, we invited **12 schools** to attend a summit in Skopje. At the summit, teachers networked and learned from each other, gaining knowledge and new practices to take back to their workplaces.



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“Participating in this event made me feel inspired and more confident to bring new ideas back to my school.”

- Teacher from North Macedonia

Students had the chance to meet peers from other countries, making new friends and connecting others who are passionate about climate issues.

“The summit was amazing, all the people were so warm, kind and energetic. All of the summit went on with a smile on my face. Even though I felt nervous presenting, I feel proud and thankful now!”

- Student from Turkey

In this handbook, we have gathered learning and useful resources from the summit to help educators to:

- Lead activities to encourage sustainability in their schools
- Collaborate with teachers and schools from other countries
- Connect students with peers from across Europe
- Engage colleagues and students on climate and sustainability issues
- Recommend ideas to school decision-makers to improve sustainability practices
- Select sustainable materials for school activities



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Activities

In this section you will find activity plans to use in your schools. These activities are great for encouraging collaboration and creative thinking about sustainability.

Activities:

1. Soul Bird
2. Seasonal Food Posters
3. Tackling Environmental Challenges in Schools



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1. Soul Birds

This activity is a great way for students to use their creativity and express themselves, while learning about different types of birds.

At the end of the activity, you should have a colourful flock or birds that you can display.

Duration: 1 hour

Materials:

- A4 size black and white outline images of birds. You can use the templates included, or pick birds that are common in your local area.
- Coloured pens, pencils or paints.
- ✓ • Glue or sticky tape.



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1. Soul Birds

Instructions:

- Hand out the images of the birds. For around 15 minutes, talk about the different types of birds you have handed out, explaining their importance for local biodiversity. Invite students to share what they know about local wildlife.
- Ask students to pick a bird, and begin decorating it. Give them 30 minutes to do this, allow plenty of time for them to plan their design. Encourage them to be creative, using any colours or designs they like.
- At the end, ask students to talk in pairs for 10 minutes about their bird. They should share why the design they made represents who they are.
- ✓ At the end, put all the birds together and display them in your school.



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Templates

You can copy and print out these examples on the following pages to get started!

Here are some examples from the ESSA summit:



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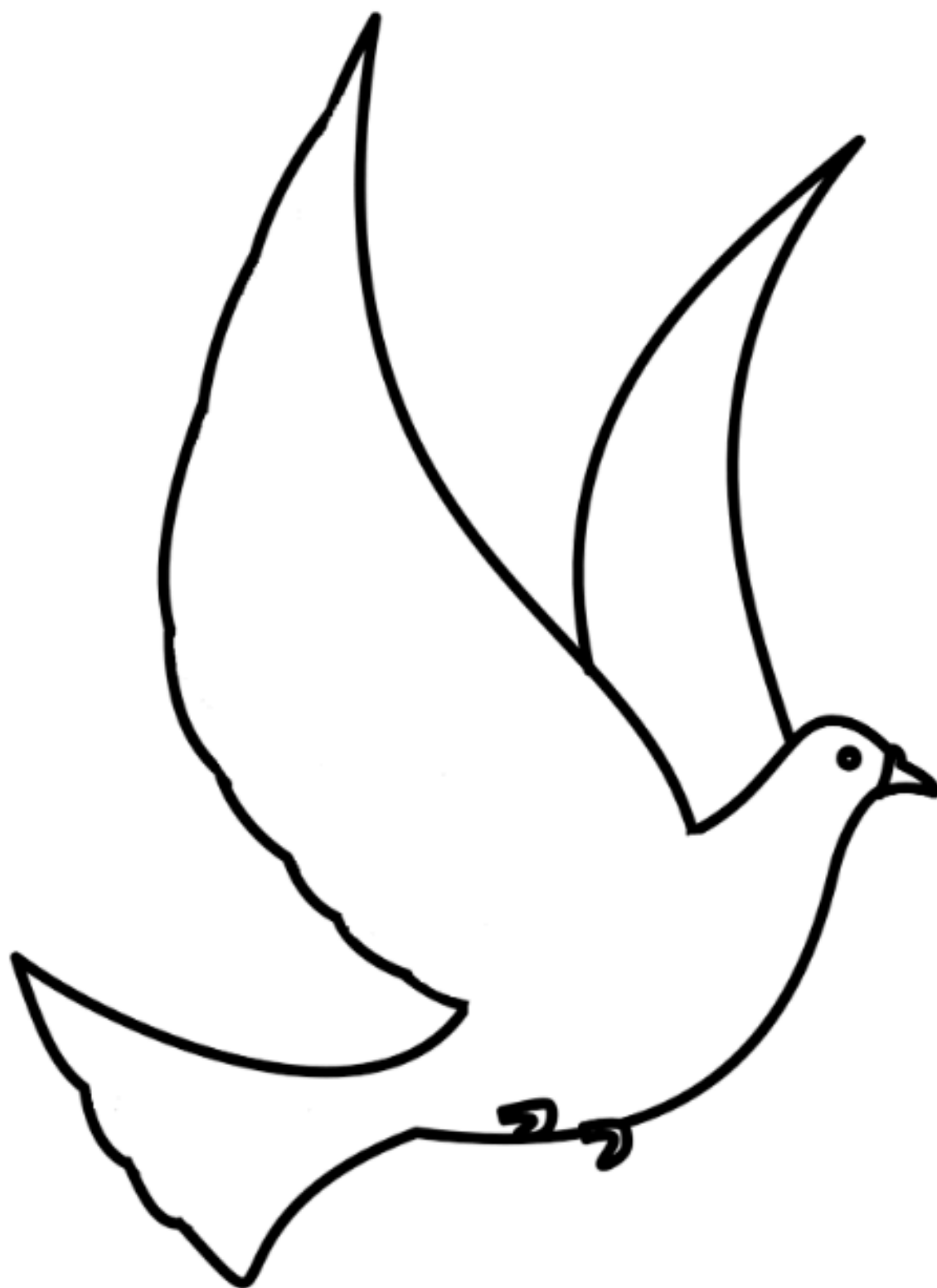
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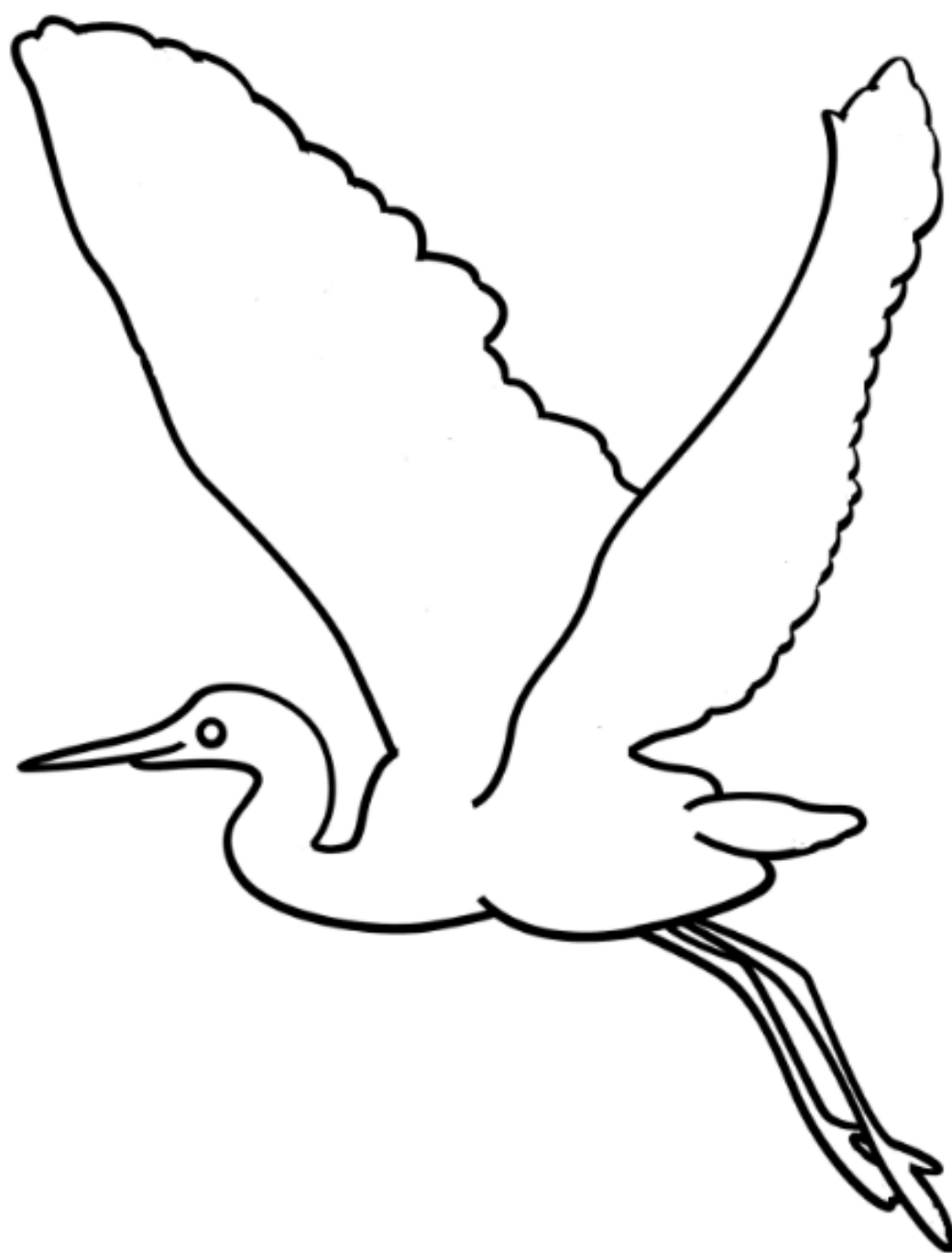
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2. Seasonal Food Posters

In this activity, students will learn about why it is important to eat seasonal and local food, and what is in season throughout the year in their local area.

At the end of the activity, you will have colourful and informative posters to display in your school!

Duration: 2 hours (including a 10-minute break)

Materials:

- A projector/smartboard/TV
- Large sheets of card/paper
- Paints & paintbrushes
- Newspaper or tablecloths to protect tables
- Pens & pencils & markers
- Erasers
- Internet access (phones/computers)
- Cups for water/pallets for paint



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2. Seasonal Food Posters

Introduction to the topic:

- Show a video explaining briefly what seasonal food is. Here is an example video in English: [Introduction to Seasonal food](#).
 - Note: You may want to show a video in your language.
- Ask the group if they understand what “eating in season” means.
- Explain that it means checking when different produce is ripe, which means it is possible to eat more local food.
- Discuss how eating more local and seasonal food creates a lower carbon footprint, as the food does not have to travel or be grown in heated greenhouses.
 - This means that eating in season can reduce our carbon footprints and have a positive impact for the environment.
- Show them some examples of seasonal food calendars (see below) for inspiration.



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2. Seasonal Food Posters

Instructions:

- Spend 15 minutes explaining and discussing what seasonal food is and how seasonal eating can be good for the climate.
- Split the participants into small groups, they will make one poster per group.
- Get them to spend 10 minutes brainstorming what they think is in season at different times of the year.
- Get them to make a grid divided by the seasons, Summer/Autumn/Spring/Winter, and start noting what they think could be in each section.
- After about 10 minutes of discussion, allow them to use their phones/laptops to check if they were right.
- They should spend about 10–15 minutes making corrections and adding to their list.
- Make sure that they look specifically at what is seasonal in their local region. They may also want to focus on foods that are common in their local diet.



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2. Seasonal Food Posters

Instructions Continued:

- Take a **10 minute break** before beginning to work on the posters.
- After the break, they can spend the rest of the session planning and creating their posters. They should have an hour to work on this.
- These posters can be presented and displayed in the school, so they can make them in their own language.
- Encourage them to plan how they want to present the information, be creative, to make the posters eye-catching and colourful.
- At the end, ask each group to present their poster and share what they have learned.



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Examples & Templates

Here are some examples for inspiration, made by students at the ESSA summit.



Examples & Templates



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Examples & Templates

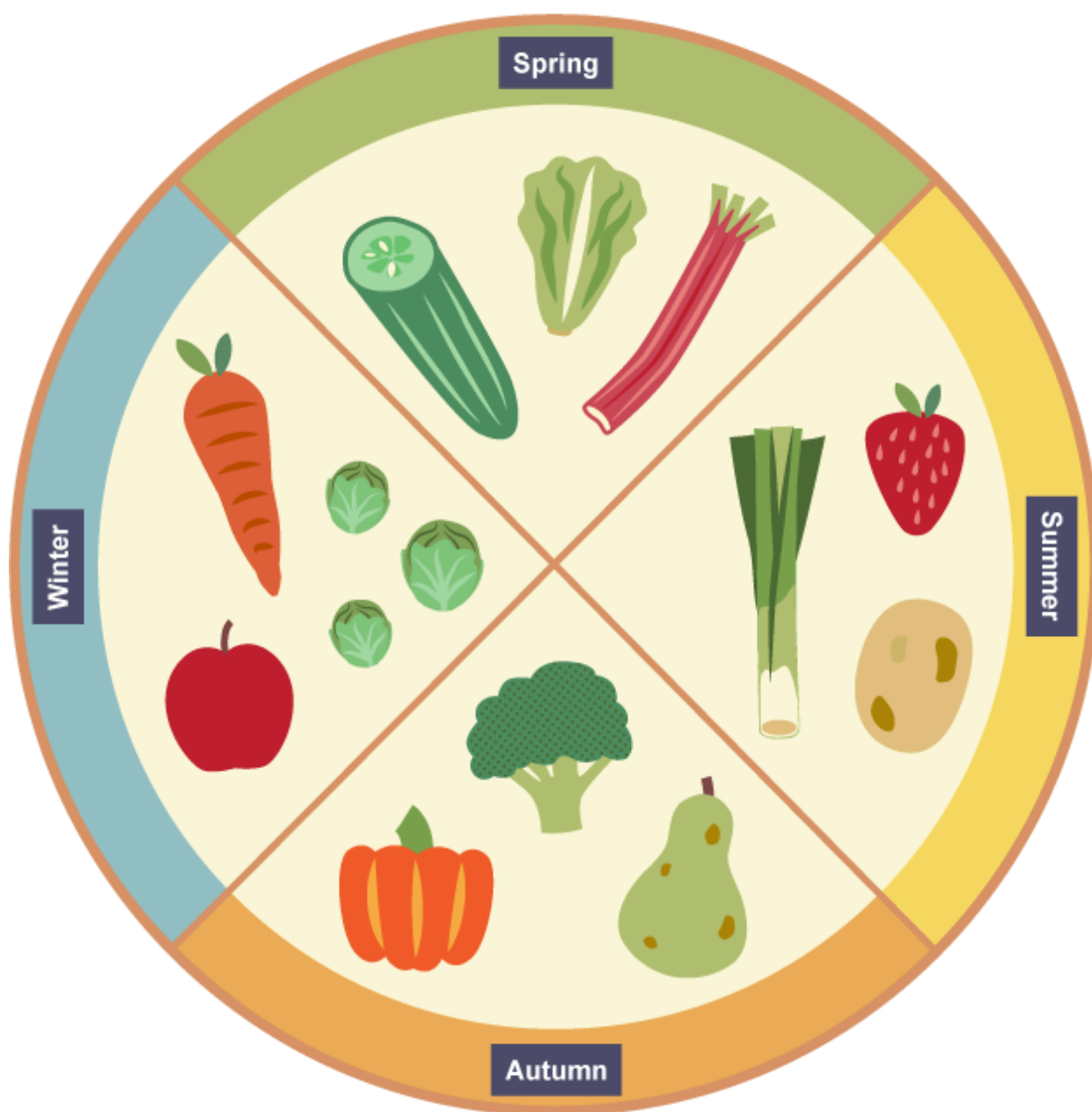
Here are some templates that you can use.



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Examples & Templates



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3. Imagine a sustainable school

In this activity, you'll engage your class and colleagues to identify key environmental challenges within school settings and propose realistic, sustainable solutions.

Duration: 2 hours (with a 10-minute break)

Materials:

- Poster paper
- Markers, pens and pencils
- Information on each topic (printed or displayed digitally)
- Post-its



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3. Imagine a sustainable school

Topics:

- Transportation
- Water Management
- Biodiversity
- Climate Change
- Waste Management
- Energy Use

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3. Imagine a sustainable school

Instructions:

- Divide the class into **groups of 3–4 students**.
- Assign two environmental topics to each group, ensuring that all topics are covered across the class. You can repeat topics if needed.
- Distribute the resources for each topic and give the groups around 10–15 minutes to review and discuss how these issues present themselves in their schools.
- Now the class will spend 20–25 minutes discussing and brainstorming, thinking about their experience of each topic, identifying **key challenges faced in their schools** and thinking of sustainable solutions to make improvements.
- You can use **guiding questions** to focus discussion (e.g., “How can we reduce water use?” or “How can biodiversity be supported on campus?”)
- Take a **10 minute break**.



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3. Imagine a sustainable school

- Now spend 35 minutes creating the poster. Each group should draw the school layout on the poster, or you can provide this in advance.
- **On the poster, they should:**
 - Highlight areas impacts by assigned topics (e.g. bike racks for transportation, garden for biodiversity).
 - Highlight areas of challenge (e.g. food waste in the cafeteria).
 - Annotate the poster with their ideas for solutions.
- Encourage them to use **colour and drawings** to make the poster clear and engaging.
- The groups will now each spend 2–3 minutes **presenting** their ideas to the rest of the group
- At the end, allow 10–15 minutes for **reflection**. Think about what common challenges were identified, what proposals could easily be implemented and how students could lead in making these changes.

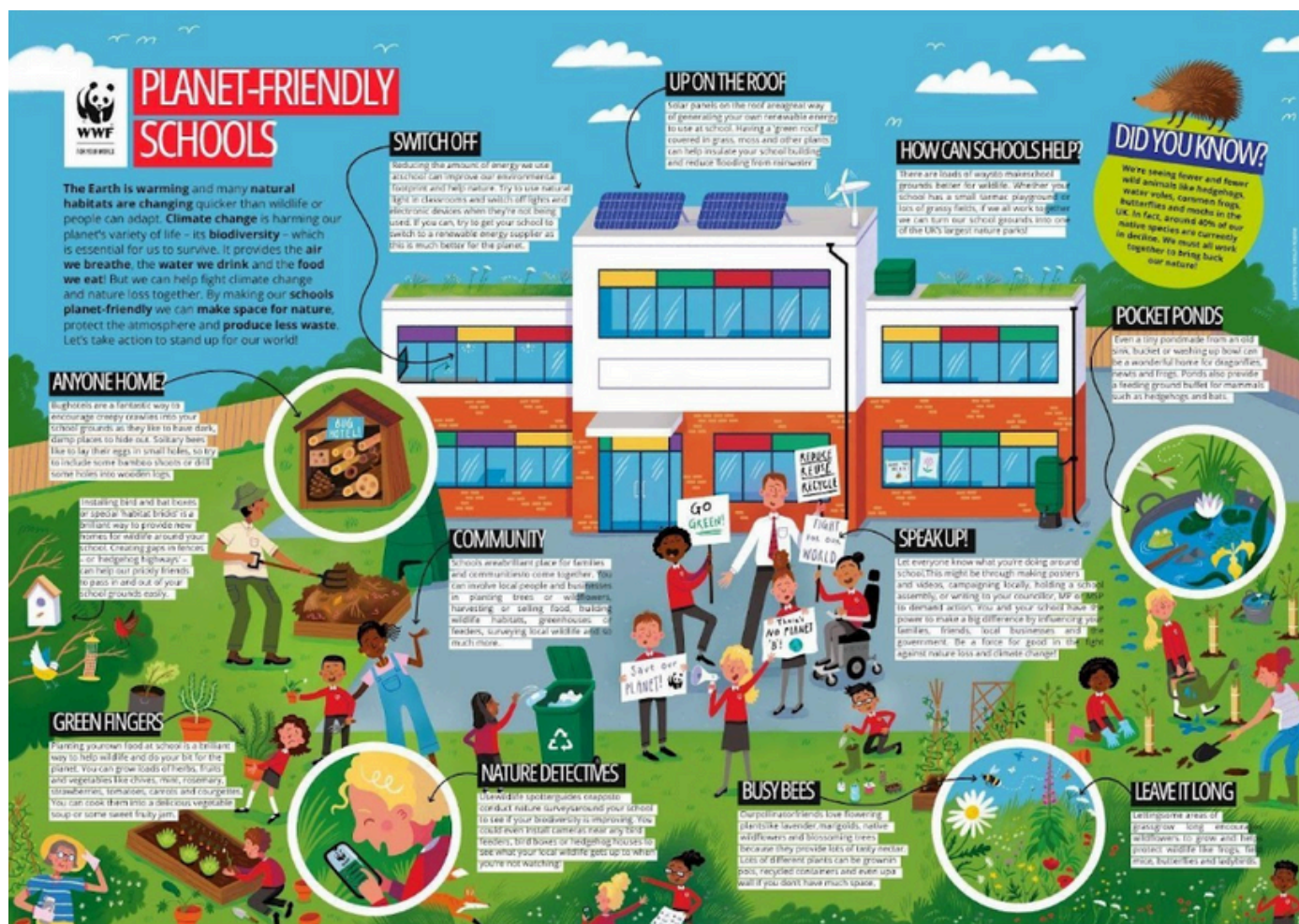


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Supporting Resources

Here are some templates that you can use.



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Supporting Resources

[WWF Eco-Schools Guide](#)

[Making transport sustainable: a guide for teachers and youth leaders](#)

[Sustainable water management in schools](#)

[Biodiversity teaching resources](#)

[Climate change teaching resources](#)

[Waste management in schools: 10 practical ideas to implement](#)

[Implementing sustainable energy practices in schools](#)



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International Collaboration

Working with people from other countries can be an amazing way to learn new ideas to apply in your school. Teachers from different backgrounds can offer new perspectives and teaching methods to test in your classrooms. In this section, you'll find useful tips to develop your international network and to support students connect with others.

"I really enjoyed the presentations from other schools, because I was able to see the perspective from other schools and countries."

"It's hopeful to know that so many other schools in different places are worried but active and working on sustainability. It was rewarding and gave us the energy to continue working for sustainability, as it showed us we are not alone"

Students also gain a lot from meeting peers from other countries, as they can improve language skills, cultural understanding and get inspired by peers with similar interests to them. Teachers at the summit enjoyed seeing their students meet peers who shared the same passion for sustainability.



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“What inspired me the most was seeing students from different countries work together and share ideas to make their schools more sustainable.”

“Many of our students who are engaged in climate change issues can feel isolated around other students, so it was important for them to meet others like them.”

The testimonies from students who attended our summit show how impactful making connections across borders can be:

“The thing I liked most about this event was making new friends from different countries.”

“I really enjoyed making new friends from other countries and learning about them.”

“I loved meeting new people and sharing ideas together!”



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Networking tips for teachers

Here are some tips for how to work with people from different backgrounds. Bear these points in mind to help you collaborate and enjoy working together.

Be willing to adapt: People from other cultures and backgrounds will have different ways of working, and will have different perspectives to you. Be flexible to learn from these and accommodate them.

Be curious: There is always something to be learned from new perspectives. Be open and ready to learn and ask questions.

If unsure, ask: Don't be afraid to ask for clarification if you don't understand something. Cultural differences and language barriers can confuse communication sometimes, so it is always better to ask for more explanation.

Be empathetic: To collaborate properly, you need to respect and try to understand other perspectives. Don't make assumptions, and try to see things from others people's point of view.

Be friendly: Smiling, laughing together and asking lots of questions about other people is important for relationship building. Make an effort to learn about each other and be warm and open.

Be patient: It can be frustrating when someone doesn't understand something that you think is clear. When working across cultures and in different languages, you need to be patient when others need more time to understand something, or if they need further explanation.



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Networking tips for teachers

These tips are written with teachers in mind, but of course these points apply to students too. Discuss these points with your class before involving them in international projects, to make sure they are prepared and equipped to make new friends and connections.

Here are some useful websites to help you network with other schools and teachers outside of your country:

- Join the [eTwinning](#) site to work together on projects, discuss ideas in online groups, and develop your professional skills.
- Consider applying for [Erasmus+ funding](#) to get involved in educational mobilities across Europe.
- Look for training opportunities on [Salto](#) to develop your skills with people from other countries.

After attending mobilities and training courses, make sure to keep in contact and maintain your network.



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Activities for students

Ice-breaking activities are an important way to begin making connections between students. It can help them become more comfortable with each other and **supports collaboration**.

A key challenge when working with students from other countries is the **language barrier**. Here are some fun ice-breaker activities you can use that don't require any speaking. These activities are fun, will get students laughing together, even if they don't speak the same language.

You don't need any materials for these activities, just enough space for your group to move around. You can do them indoors or outdoors.

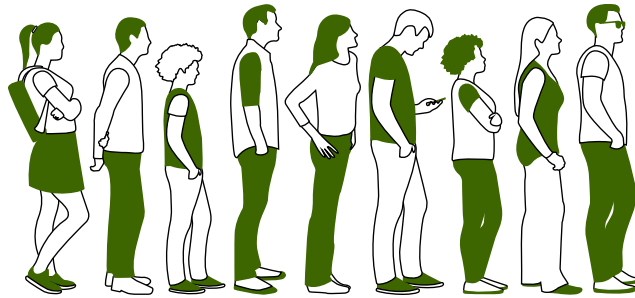
While these activities are written with students in mind, they can also be fun teambuilding or icebreaking activities for teachers!



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Activity 1: Silent Line-Up



For this activity, you need a room big enough for the group to stand in a single line.

Ask the students to get into order based on a category. Once they are happy with the order, they should put their thumbs up. Once all thumbs are up, ask them how they found it working together silently.

You can start with a simple category, such as height. This can be easily done without speaking. They should line up in height order, helping each other to measure and check if they are right.

After that, you can try some more difficult categories. Remember, they aren't allowed to talk at any point!

Some other categories you can try are:

- Birth month
- Day of birth
- Initial of the first name
- Age
- Number of siblings

Practicing this non-verbal communication and working together will help the group connect and learn small things about each other.

Activity 2: Silent Team Game



For this activity, you will split your group into teams. This game is a bit more complicated, so make sure to read all the rules before starting. Once you start playing it is very easy!

There should be **two teams of 5-15**, and a **“judge”** overseeing the game. You can play this game outside, or in a large room such as a sports hall. Make sure the rules are explained clearly and in all students’ languages before you start.

The **“judge” decides if any rules are broken** and will tell people when they are out. If you have a large group, you may want more than one judge to keep an eye on everything. **The key rules are in bold.**

Each team lines up, facing each other with around 5-10 metres gap between the two teams. The judge stands to the side in between the teams, so that they can see everyone.



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Activity 2: Silent Team Game

Place an object behind each team. It is the aim of the game to get the other team's object. You can use a book, a shoe, a water bottle – anything you have to hand! Make sure it is big enough to be seen from a distance.

As soon as the game starts, no one on either team is allowed to speak or make any noise. This includes clapping, whistling etc. **Anyone who makes noise is out and has to leave the game.**

To move forward, players can only jump with their feet together. **If they slip or fall, they are out.**

The teams take turns, only one player per team can jump in one turn. **If more than one player from a team jumps in a turn, both players are out.**

They can **only jump forwards, sideways or diagonally**. They cannot jump backwards. **If any player jumps backwards, they are out.**

Players can also **“kill” players on the other team**. To do this, they can jump on their turn and tap the other player. If they jump without falling and tap the other player, that player is out.

The game proceeds with each team taking turns jumping towards the other team to get their object, one player at a time. The game ends when one team manages to grab the other team's object, or if all the other team's players are out.

This game should get students working collaboratively and having fun. As the game progresses, they will work out ways of working together and connecting without talking.



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Getting others involved

Teachers and students at the ESSA summit enjoyed being surrounded by others who are passionate about climate change and promoting sustainability. However, we know that it is not always the case that we get to work with others who care about the same issues we do. This can be frustrating, and demoralising when you are working hard to make positive changes for the environment.

"I learned so many useful skills at this summit. I plan to use these skills by starting a green team at my school, creating recycling and upcycling programs, and encouraging my colleagues to take part in activities like tree planting, clean-up days, and climate education workshops."

"It was amazing to see the enthusiasm of students at this event."

Don't give up though! In this section, you'll find useful conversation starters and activities you can use to engage your colleagues and students, to make them as passionate about sustainability as you. You can adapt the resources below to use with staff or students.



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Activity: Using art to understand climate change

In this activity, you'll use [Earth Nullschool](#) to investigate how climates are changing over time. You'll combine this with art to demonstrate these changes with paint.

This will help engage colleagues and students on climate issues and start important conversations. Focussing on issues that impact people's local area and their lives directly can be a great way to begin engaging them on climate issues.

Duration: 2 hours (including a 10-minute break)

Materials:

- Paint (Red, yellow, blue, white)
- Cups for water/pallets for paint
- Sheets of paper
- Paintbrushes
- Newspaper/tablecloths to protect tables
- Laptops/phones with internet access
- Projector/large screen



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Activity: Using art to understand climate change

Instructions:

- Demonstrate on the projector or screen how to use Earth Nullschool's different features.
 - You can look at particles in the air, temperature, wind and waves.
 - Demonstrate the feature which allows you to look at these factors over time.
- Split them into **groups of 3** to work together. They will try out using Earth Nullschool, finding their region and using it to **investigate temperature and pollution in their local area**, looking at how it has changed over time. Give them 10 minutes to look at the tool and understand how to use it.
- Begin testing the paints, showing them how to combine colours, make a gradient and talk about the **differences between warm and cool colours**.
- Now, they will **take notes on how temperatures have changed in their local area over the last 10 years**. Ask them to write these details down and discuss if they have noticed this change happening.
- They will now individually **paint to represent this change**. They will start by creating a colour of their choice to represent the temperature today, marking today's date in the centre and the temperature. Encourage them to consider warm vs. cool tones when picking a colour, thinking about how they will represent the other years they have noted down.
- They will now mark other dates and their temperatures and blend the colours to make a gradient, **visually representing the impacts of climate change over time**.



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Activity: Using art to understand climate change

Here in an example of the output of this activity:



Starting the conversation

We have gathered some prompts to start conversations about sustainability, climate change and environmental awareness.

You can adapt these to your local area to focus on issues your colleagues and students might be more interested in, or use them to start conversations about the wider impacts of climate change.

Once you have started the conversation and got your colleagues and students engaged, you can begin talking about how to make an impact in your school or community!



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Talking to colleagues

- Have you noticed changes in weather around here in the last few years?
- I want to throw away less waste at home. Are there any creative ways you've reused or repurposed items in your house?
- Are there any sustainability challenges we could try to do together?
- What things worry you the most about climate change?
- Do you know anything about what foods are in season at the moment? Maybe we could try introducing a seasonal food menu in the school cafeteria.
- I notice a lot of food waste from the school cafeteria. Do you think there is something we could do about that?
- I was shocked to find out how unethically so many clothes are produced. I started trying to buy more things second hand. Do you know much about how fast fashion impacts the environment?
- I would like to install solar panels on my home but I don't know where to start. Do you know much about renewable energy? Maybe we could try installing solar panels at our school.



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Talking to colleagues

- Do you think we teach the students enough about climate change?
- Have you ever been to a tree planting event? I think it could be fun to organise one at school to make more green space.
- What are some ways we could help bees and other pollinators? Maybe we could start a new garden at school to educate the students about why pollinators are important.
- How do you travel around most of the time? I'm trying to use my car less but sometimes it's hard to travel by bike or public transport.
- Do you ever feel overwhelmed by climate news?
- How do you think things will change in the coming years? How will our students be impacted by the way the climate is changing?
- How could we bring more environmental awareness into our classrooms?



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Ideas to suggest in your school

From these conversations, you can start talking about ideas for new activities you can try in your school. Here are some ideas to get you started.

- Seasonal and locally sourced food on the cafeteria menu.
- Upcycling clubs to teach students how to repair or repurpose clothes and household items.
- Educational tree planting days with a focus on native species.
- Introducing solar panels to have renewable energy access.
- Incentive programmes for students to choose sustainable methods of travelling to school.
- Zero-waste challenges between classes to compete over who can produce the least waste in a week.
- Pollinator planting days to educate students about plants to support bees and other pollinators in the local ecosystem.
- Food waste programme to allow students to take home unused food for free at the end of the school day.
- Cycle to school schemes to teach students safe cycling routes and road rules.
- Talks by local climate activists to inspire students and help them feel more empowered.

Starting these conversations and suggesting new ideas will get your colleagues and students more involved. Making these changes together can be empowering and exciting!



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Recommendations for decision-makers

Making changes to make your school more sustainable needs support from decision-makers, school boards and leaders. Teachers at the ESSA summit felt empowered to make suggestions to leaders in their schools. In this section, you'll find useful suggestions for decision-makers to help them support sustainable activities.

"I will propose some of the activities from this summit to our principal for us to try next year."



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Recommendations for decision-makers

Based on the survey responses from teachers, here are some recommendations for decision-makers at schools to become more sustainable and encourage environmental education:

- Enhance teacher training, offering structured sessions focussed on sustainability, environmental education and climate change.
- Integrate environmental education across the curriculum, not only in typical areas such as geography and biology. Support interdisciplinary and creative ways of teaching about climate change to engage students.
- Seek funding and external support for environmental education initiatives. You may find funding to help you install solar panels, or plant more trees at your school.
- Work with the local community in partnership to gain knowledge and expertise from environmental organisations to support work in the school or educational field trips.
- Empower student ideas, supporting student-led clubs and projects to develop their skills, allowing them to lead.
- Connect with schools in different countries and areas to share knowledge and get new ideas you can try.

Taking these steps will empower your staff and students to work together on making your school sustainable and environmentally-conscious.



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Sustainable Materials

It is important to consider the materials you use in all school activities, making them as sustainable as possible. This sets a strong example for students by showing that you are not only teaching about sustainability, but practicing it in reality. You can also use sustainable materials to educate students about reusing, repurposing and recycling materials. This will equip them with useful skills which they can use outside of school.

In this section, we have put together useful tips for you to bear in mind when planning materials for school activities.



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Sustainable Materials

Firstly, make sure to **check with colleagues and other departments** before you buy new things for an activity. You may find that the items you need are already available, or that there is something else you can use.

Next, **be flexible**. You can often **repurpose** something, or **adapt** an activity to the available materials. For example, you could do the Earth Nullschool activity in section 4 in different ways, based on what you have available.

Here are some ideas that you could use instead of paint:

- Use old paper and magazines to collage. Cut out different images, making sure to gather a range of colours. Students can use these to collage changes in temperature.
- Collect waste, such as plastic bottle caps, crisp packets and aluminium cans. Clean these items and arrange them by colour for the group, and ask them to create temperature sculptures with them, starting with today's temperature at the bottom.



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Sustainable Materials

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- Collect waste, such as plastic bottle caps, crisp packets and aluminium cans. Clean these items and arrange them by colour for the group, and ask them to create temperature sculptures with them, starting with today's temperature at the bottom.

You can also **ask your local community** for donations, or second-hand options you can purchase. For example, libraries often have books to give away which you could use for creating collages. You can use social media to ask the local community if they have any items to donate or lend to the school. Pages like Freecycle and local Facebook groups are useful for finding free items that would otherwise go to waste.



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Sustainable Materials

Finally, if you have tried all these steps and you still need to buy new things, **do your research**. Try to **shop locally**, avoiding big companies like Amazon who sell mass-produced items which are often produced in ways that damage the environment. Look for goods that are reusable or can be repurposed. If your items can be reused, make sure you take care of them to ensure they can be used again.

Here are some key things to think about when buying new materials:

- Where is the item being shipped from?
- Has it been made from recycled materials?
- Can I find this in a local shop?
- Is it recyclable or biodegradable?
- Could I repurpose this for something else when I am finished using it?
- Will these materials be useful for other classes or projects?
- Where does this company source their materials from?



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Sustainable Materials

Students and teachers of course need access to stationary and standard classroom materials. You can often find sustainably made versions of these items, here are some examples you can look for in your local area:

- Pens and pencils made from recycled paper or reused wood
- Recycled paper exercise books
- Scissors, rulers, holepunches and staplers made from recycled plastic
- Resusable water bottles, cups and crockery in the cafeteria
- Plant-based glue and sticky tape

Taking these steps can help make a real difference in your school, and will show students that it is possible to make sustainable choices.

Remember that every time you to make a sustainable choice, you are making a difference!



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Further Resources

[Earth Nullschool](#)

- Use this website to investigate changes in temperature, pollution and weather patterns.

[Seasonal Food Guide](#)

- Use this website to research seasonal food in your local area.

[How can I reduce my carbon footprint?](#)

- Use these ideas to start conversations with staff and students.

[Why bees are climate heroes; How climate change affects pollinators](#)

- Use these articles to start conversations about planting pollinator-friendly flowers.

[Eco-Friendly School Run](#)

- Challenge your students to consider more sustainable ways of getting to school.

[Sustainability Tracker](#)

- You can use tools like this to research materials

[The Freecycle Network](#)

- Use websites like this to find free, second-hand materials in your local community.

[Schools Sustainability Guide](#)

- Read this guide to find more interesting ideas.

[Digital Sustainable Schools Toolkit for Teachers](#)

- Discover more activities and tips in this toolkit.



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