Good Practice Guideline: Successfully implementing environmental projects at primary schools

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Foreword

This good practice guide and collection of good examples was created as part of the "Clean Air Now for a Sharp Future" (CLEANSURE) project. The aim of this project is to raise awareness of environmental protection and the fight against climate change in schools. Over a period of 36 months (01/09/2022 - 31/08/2025), schools and organisations from Spain, Portugal, Italy and Germany are working together to promote sustainable change in the education sector.

This guide is intended to provide assistance for schools that would also like to start planning and implementing their own environmental projects. Based on the experience of the project partners, it contains best practices that provide a clear framework for the implementation of environmental projects. It aims to provide recommendations and standardise processes in order to facilitate the path from planning to successful implementation of projects.

In addition, the guide is enriched by a collection of practical examples developed by the CLEANSURE project partners during the course of the project. These examples provide inspiration and practical solutions for the challenges that schools face when implementing environmental projects.

The authors of this guide hope that the standards and action steps presented will provide valuable support and contribute to the sustainable and effective organisation of environmental projects in schools.

1. Putting together a well-organised project team

A well-structured and organised project team is crucial to the success of any project. Especially in larger teams, it makes sense to distribute management tasks among several people. For example, one person could be responsible for external communication, while another is responsible for liaising with external partners. This clear distribution of responsibilities prevents the team leader from being overloaded and at the same time increases efficiency, as several people work closely together and support each other.

Team leaders play a key role in the project. In addition to a passion for the task, they should have excellent organisational skills, to motivate the team, plan tasks efficiently and ensure that all project steps are seamlessly coordinated. Good organisational skills enable them to maintain an overview, set priorities and react flexibly to unforeseen challenges.

Another key element of successful project management is the binding definition of tasks and deadlines. If it is clearly defined who will complete which task by when, this contributes significantly to the progress of the project. This transparency makes it easier to maintain an overview of the schedule and make any necessary adjustments in good time.

It is equally important to deploy team members according to their resources, such as time, interests and skills. This ensures that the potential of each individual is optimally utilised and that the commitment of team members is encouraged. Team members should be able to contribute their strengths, which not only increases the quality of work, but also has a positive impact on team dynamics and ensures a fair distribution of the workload.

Another key to the success of a project team is a respectful and supportive working atmosphere. Clear agreements on how to deal with each other in the team help to avoid conflicts or resolve them constructively. This creates an atmosphere of trust and co-operation in which everyone involved can work towards a common goal.

Practical examples

The principle of role allocation is particularly easy to implement for primary schools. Pupils can take on age-appropriate roles in the team, such as "water conservation officer" or "waste police", in order to take responsibility and actively participate in the project. In this model, the teachers take on the role of moderators who not only impart knowledge but also support the pupils in organising and implementing the project.

2. Selection of topics and definition of objectives

Choosing a suitable topic and clearly defining objectives are fundamental steps in the realisation of school projects. They not only create clarity and focus, but also a common basis for all those involved. Defining what the project is about and what results are being sought ensures that all team members are working towards a common goal. This prevents misunderstandings and ensures that resources such as time and materials are utilised efficiently.

Setting clear objectives motivates participants and encourages their commitment. If the goals are understandable and achievable, the participants know exactly what they are working towards and are better able to track their progress and celebrate successes. Setting goals early on also helps to identify potential challenges at an early stage and include suitable measures in the planning. This minimises the risk of unexpected problems and increases the project's chances of success.

Defining topics and goals also makes it possible to objectively measure and evaluate the success of the project. Without clear objectives, it is difficult to track progress and ensure that the project stays on track.

Project success through SMART goals

To ensure the success of a project, objectives should be formulated according to the SMART principle:

Specific: The goal should be clearly and precisely defined, e.g. "We collect 100 plastic bottles per week."
Measurable: Specific criteria should be defined, e.g. "How much waste was collected?"
Attractive: The goal should be meaningful and motivating for the participants, e.g. "Clean school environment, less plastic in nature."
Realistic: The goal should be feasible and adapted to the resources and abilities of the participants, e.g. "Each class plants a bed."
Deadline-related: A clear time frame should be set, e.g. "The goal will be achieved within two months."

Practical examples: Topic selection for primary schools

When choosing a topic for primary school pupils, it is important to choose one that is easy to understand and fascinating.

Suitable topics could be

- "How does a tree grow?": Here, pupils learn by planting trees and observing their growth over the course of the school year.
- "Our waste - where does it go?": The topic of waste separation or plastic reduction is particularly suitable for familiarising pupils with illustrative and practical environmental topics.
- "Where does the water come from?": Projects on water supply or waste can be illustrated with simple experiments such as filtering water.

Defining goals for primary school pupils

Goals should be formulated in such a way that they are understandable and achievable for primary school pupils. Examples could be

"We're planting 20 flowers in the school garden."
"We separate the rubbish properly in class."

"We save water every day by turning off the taps properly."

Choosing suitable topics and clear, achievable goals ensures that the project is structured, targeted and successful.

3. Planning and organisation

Well thought-out and well-structured planning lays the foundation for the smooth running and success of school projects, especially in primary schools. As younger pupils need clear and simple structures, project planning should be easy to understand and divided into manageable steps.

Project structure

Dividing the project into smaller, easy-to-understand stages helps pupils to familiarise themselves with the topic step by step. For example, the pupils could first learn how to separate waste properly before starting a larger waste collection campaign. This step-by-step approach ensures that the pupils understand the tasks better and feel more confident.

Timetable with milestones

A clear timetable with defined milestones gives the pupils guidance and enables them to regularly check their progress. Weekly checks, such as documenting the rubbish collected, create transparency and encourage the pupils' motivation.

Regular inspection and documentation
Regular monitoring of the project's progress is crucial to its success. In primary schools, this could take the form of a weekly "environmental check-in" where pupils keep a simple "rubbish diary". This encourages a sense of responsibility and enables pupils to record their successes.

Feedback rounds

Weekly feedback sessions offer students the opportunity to reflect on what is working well and where improvements are needed. Such meetings help to actively steer the project and ensure that everyone involved has the opportunity to contribute.

Plan for risks and adjustments in the course of the project

Planning for risks and adjustments during the course of a project is of great importance to ensure the success of a school project. Especially in primary schools, where unforeseen events can occur more frequently, it is essential to remain flexible and be able to react quickly to changes. The ability to recognise potential challenges early on and develop suitable solutions increases the likelihood of the project running smoothly and achieving the set goals.

Why is it important to plan for risks?

Unpredictable factors: Projects that take place outdoors, such as gardening or rubbish collection, are particularly susceptible to weather-related interruptions. If rain or cold weather cancels the original plan, a flexible alternative should be available so as not to jeopardise the progress of the project.

Pupils' needs: In a primary school, pupils may respond differently to tasks. Some may be overwhelmed more quickly, while others may need more challenge. If this is not taken into account, it could delay the project or lead to frustration. A plan that offers alternative tasks for different learning speeds can help here.

Resource problems: It can happen that important materials or financial resources are not available as planned. Without alternatives or creative solutions, the project can come to a standstill. If it is planned from the outset how to deal with a lack of resources, the project can still be successfully continued.

Examples of risks and possible adjustments:

Weather-related cancellations: If, for example, a planned waste collection activity is cancelled due to rain, the activity could be moved indoors. Instead, the pupils could do a craft activity with recycled materials or watch films or read books about environmental issues. This type of alternative plan ensures the project progresses and keeps the topic present.

Different ability levels: If some pupils have difficulties with a particular task, differentiated tasks can be offered. For example, when creating a school garden, some pupils could take on simple tasks such as watering, while others do the planting or planning of the garden beds.

Lack of materials: If the required materials are not available in time, alternative, easily obtainable resources could be used. For example, if no seedlings are available for the school garden, the pupils could grow their own seeds in advance and thus plan for a longer project phase.

Time management: Projects often do not follow a strict schedule, especially when unexpected events occur. If students do not finish a task on time, the time frame could be adjusted by bringing other tasks forward or catching up later. Flexible time planning ensures that progress on the project does not come to a standstill.

Customisations increase the quality of the project

Continuously reviewing and adapting the course of the project not only minimises risks, but also improves the quality of the work. This flexibility makes it possible to recognise problems at an early stage and react to them before they become major challenges. At the same time, it ensures that students retain a sense of continuity and progress despite the adjustments.

Projects that are flexible enough to respond to challenges also have a greater chance of having a lasting effect. They teach students that there are always solutions and that challenges are part of the learning process. By learning to respond flexibly to problems, students develop important problem-solving skills that will serve them well beyond the project.

Planning for risks and adjustments not only promotes the smooth running of a project, but also strengthens the resilience and flexibility of the students. With suitable alternatives, unforeseen events can also be used as a learning opportunity, which ultimately enriches the project and it a positive experience for everyone involved

Indispensable: Ceremonial conclusion and presentation of the results:

A celebratory finale, at which the results are presented, rewards the pupils for their commitment and makes their achievements visible. An exhibition of the collected and recycled materials or a "vegetable festival" with the produce from the school garden are examples of how the pupils can proudly present their results.

Well-structured and flexible planning, regular reviews and creative final presentations ensure the successful implementation of school projects in primary schools.

4. Actively involve pupils and teachers

Involving pupils and teachers in school projects is a key success factor as it offers numerous advantages. One of the most important reasons for this is that the active involvement of both groups creates a strong sense of identification and responsibility for the project. When students and teachers are involved in project planning and realisation from the very beginning, they feel like an integral part of the team. This strengthens their commitment and motivation, as their opinions and ideas are valued and taken seriously.

In addition, the involvement of teachers and students leads to a better customisation of the project to the needs of the school community. Teachers bring valuable pedagogical experience and organisational skills, while students often bring fresh, creative ideas and new perspectives. This collaboration ensures that the project remains practical and realistic , which is particularly important in a school context. Projects that are developed and implemented jointly by teachers and students are better tailored to the actual needs of the school and therefore have a greater chance of success.

Another advantage of the collaboration is the improved working atmosphere and the strengthened "sense of unity" within the project team. This emotional bond promotes closer collaboration, so that the team sticks together even in challenging phases and finds solutions together. The distribution of tasks within the team, which is based on the individual skills and strengths of those involved, also increases efficiency and ensures that every task is optimally fulfilled.

Student engagement: Transferring responsibility in an age-appropriate manner

Young pupils can also take on responsibility if they are assigned age-appropriate tasks. This not only promotes their skills, but also strengthens their self-confidence and their identification with the project. Examples of possible tasks could be

- Daily sorting of rubbish in the classroom.
- Carry out simple experiments to observe how plants grow or to recognise the difference between clean and polluted water.
- Participate in role-playing games in which they learn how to save water (e.g. by using water stopwatches when brushing their teeth).

Teachers as mentors: support and guidance

Teachers play a crucial role as mentors by not only supporting pupils but also acting as role models. They help pupils to develop a deeper understanding of environmental issues and use creative, practical methods to do so. Examples of this could be

- Reading aloud stories that deal with environmental issues, such as books about endangered animals or the protection of forests.
- Organising interactive nature experiences such as forest walks or excursions to farms to bring pupils closer to nature and raise their awareness of environmental protection.

The combination of active student engagement and the supportive role of teachers as mentors creates a dynamic, effective team that works together towards the success of the project.

Practical examples:

- Pupils as environmental officers: In many classes, pupils can take on special roles that actively involve them in the project. One example is the appointment of "environmental officers" who make sure that the lights are switched off when they leave the room or that the windows are closed. These age-appropriate tasks promote a sense of responsibility and offer pupils the opportunity to make a visible contribution to environmental protection.

- Environmental working groups and project weeks: An internal school environmental club (working group) can take place regularly and lead projects to promote environmental awareness. Older pupils could supervise younger classmates and help them to take on tasks such as planting a school garden. A project week in which all classes in the school dedicate themselves to a common environmental theme is also a good way of involving pupils in a creative way. Examples of this could be collecting rubbish in the school environment or making artworks from recycled materials.

- Pupils present their findings: Students could work in small groups to create presentations or posters on environmental topics such as plastic recycling, climate change or the water cycle and present them in class or at a school-wide event. This not only promotes their communication skills, but also raises awareness of the topics discussed among their classmates.

- Teachers as nature educators: Teachers could introduce regular 'nature days' where they take pupils outside to explore the local flora and fauna. Such excursions into nature, such as walks in the woods or bird watching, help pupils to develop a deeper connection with nature and better understand

environmental issues. Accompanied by educational explanations, these experiences become important learning moments.

- Environmental sponsorships: Teachers and pupils could jointly take on sponsorships for certain school projects, such as maintaining the school garden or an insect hotel. Under the guidance of the teachers, the pupils take on the regular care of the plants or the observation of insects, while the teachers support them as mentors and provide the necessary information.

- Pupils as project leaders: Older pupils can take on the role of project leaders by guiding younger pupils in specific tasks. For example, they could organise workshops on recycling or show the younger pupils how to separate waste correctly. Teachers in this case would act as background supporters and help the students develop their leadership skills.

These practical examples show how the involvement of pupils and teachers not only strengthens motivation, but also creates sustainable cooperation based on trust, responsibility and common goals.

5. Seeking partnerships and support

Seeking partnerships and external support is another crucial factor for the success of school projects. External partners, such as local companies, associations or parents' initiatives, contribute valuable resources, expertise and sometimes also financial means that the school is often unable to raise on its own. These partnerships expand the possibilities for making projects not only more comprehensive, but also more sustainable.

Particularly in the planning phase of a project, it is important to check whether the required resources such as time, money and personnel are sufficiently available. By involving partners, these resources can be specifically increased and optimally utilised. External partners can help to broaden the project from the outset and contribute innovative ideas. They often offer fresh perspectives and valuable insights that are extremely useful for project development.

Another advantage of partnerships is the long-term sustainability of the project. Projects that are implemented in collaboration with external stakeholders usually have a greater reach and better chances of success, even beyond the actual project duration. External support can help to ensure that a project is integrated into everyday school life in the long term or can be continued.

Partnerships also promote networking between the school and the local community. Closer co-operation with external partners strengthens social cohesion and contributes to the positive perception of the school in society. Pupils learn that co-operation and teamwork are not only important within the school, but also in a wider context.

Practical examples:

1. **Involve external partners from the local area:** Primary schools could develop partnerships with local farms, zoos or nature parks to give children first-hand experience of nature. These partnerships could, for example, lead to

   o A gardener or forester is invited to the school to show the children how plants grow or how trees are cared for.

   o A local waste disposal company works with the school to explain the recycling process to pupils and provide hands-on experience.

2. **Involve parents and the community:** Parents and community members can actively participate in projects to help strengthen the school community. Possible approaches could be:

   o Parents create a school garden together with the pupils or organise a rubbish collection campaign in the neighbourhood.

   o Planting days, where parents and children work together to plant flowers, shrubs or small trees in the school grounds. This not only promotes environmental protection, but also co-operation between parents, pupils and teachers.

Partnerships and external support therefore not only provide additional resources, but also promote the sustainability and networking of projects. They show students the value of collaboration and help the school to organise its projects more successfully and comprehensively.

6. Pedagogical integration

The integration of school projects into everyday teaching is an essential building block for their sustainable success. By integrating projects into various subjects, they become more relevant and promote pupils' understanding of complex

interrelationships. This integration enables pupils to put theoretical knowledge into a practical context and thus build a bridge between school learning and real-life applications.

Integration into the curriculum

When a project is integrated into the regular curriculum, pupils do not see it as an isolated task, but as a natural part of their educational journey. This makes it easier for teachers to continuously monitor pupils' progress and provide targeted support where necessary. Cross-curricular projects also offer the opportunity for pupils to develop their skills in different areas at the same time, which contributes to a holistic approach to education.

Interdisciplinary work

In addition, interdisciplinary work promotes cooperation between teachers. The exchange of ideas and teaching methods between different subject areas creates synergies that enrich the project and offer the pupils a more varied learning environment. In this way, not only is the pupils' specialist education strengthened, but cooperation within the teaching staff is also deepened.

Practical examples:

- Curriculum integration into science lessons: An environmental project can be ideally integrated into science lessons. For example, pupils can observe how plant growth changes under different conditions, such as water supply. This gives them a basic understanding of ecological processes.

- Art lessons: In art lessons, pupils can use recycled materials to create collages or works of art. This not only teaches them creative techniques, but also the importance of conserving resources and recycling.

- Maths: In an energy project, pupils can measure the school's electricity consumption and represent this in diagrams. In doing so, they not only learn maths skills, but also understand how resources can be saved through the conscious use of energy.

This form of pedagogical integration makes the project an integral part of the lessons, promotes practical learning and creates a deep understanding of the topics covered.

7. Plan sufficient practical and visible activities

Practical and visible activities play a key role in making school projects successful and tangible. They allow students to put theoretical knowledge into practice, which not only deepens understanding but also creates a direct application of what they have learnt. In this way, learning becomes more lively and relevant as pupils experience the impact of their work directly.

Visible activities also strengthen the identification of the entire school community with the project. When progress and results are recognisable to everyone, commitment is increased and the motivation to actively participate is enhanced. These tangible results also provide opportunities to celebrate successes, which strengthens the team spirit and satisfaction of those involved.

In addition, such activities offer the opportunity to regularly review and adjust progress. Through continuous reflection, possible obstacles can be recognised and overcome at an early stage, which contributes to the quality assurance of the project and ensures that the set goals are achieved.

Practical examples:

Create a school garden: Pupils can plant flowers, vegetables or herbs in the school garden and take care of them. This direct work with nature promotes environmental awareness as well as a sense of responsibility and patience.

Rubbish collection campaigns: Activities such as collecting rubbish on the school grounds or in the neighbourhood offer pupils the opportunity to actively contribute to environmental protection. A subsequent installation of a waste sorting station in the school would further consolidate the project.

Recycling competitions: A competition between classes to see who can separate the most rubbish correctly is a fun way to promote environmental protection and raise pupils' ambition while they learn important recycling concepts.

Long-term sustainability:

The introduction of "environmental watchdogs", who regularly ensure that energy and water are not wasted unnecessarily, strengthens pupils' environmental awareness and ensures that sustainable behaviour is embedded in everyday school life in the long term. Weekly rotations give many pupils the opportunity to take on responsibility and actively contribute to the school community.

8. Internal school communication and public relations

One example of how school communication and public relations work can enrich a project is the introduction of an "environmental diary" in which the pupils regularly record what they have learnt about environmental protection or what progress they have made in the project. This diary not only promotes dialogue within the school community, but also encourages reflection and a conscious awareness of one's own contribution to the project.

Internal school communication

Internal school communication is a decisive factor for the success of projects, as it ensures that all those involved - pupils, teachers and school management - are well informed and actively involved. A clear flow of information promotes transparency and ensures that misunderstandings are avoided and responsibilities are clearly defined. Regular meetings and progress reports help to recognise any problems at an early stage and make adjustments so that the project runs smoothly and successfully.

Public relations

In addition to internal communication, public relations also play a key role in making the project visible and gaining support from external partners or the community. An environmental project that is publicised can achieve a wider reach and be more appreciated. Publicity work, such as an exhibition or a school festival where the results of the project are presented, increases interest and participation from outside. This can provide additional resources or partnerships for the project and strengthen the school's reputation.

Practical examples:

- Internal school communication: The pupils could keep an "environmental diary" in which they document the progress they have made in the project or the new insights they have gained on a weekly basis. This diary could be presented at regular meetings and provides a good basis for reflection and feedback.

- Public relations work: An exhibition in the school building showing the pupils' project work or a school festival at which the children present their results - such as a vegetable festival from the school garden - can involve the

school community and the local population. Such events encourage commitment and make the pupils proud of their successes.

A successful combination of internal school communication and public relations work not only contributes to the smooth running of the project, but also strengthens the sense of community and appreciation within and outside the school.

9. measure and evaluate results

Measuring and evaluating results is of fundamental importance in the implementation of school projects, as it ensures the success of the project and creates a basis for improvement. A clear measurement of success makes it possible to objectively assess whether the set goals have been achieved. By using measurable indicators, such as grade improvements or usage figures for digital platforms, progress can be assessed in concrete terms.

Internal evaluation

Evaluations are important in order to understand what worked well in the project and where there is room for improvement. This helps to make future projects more efficient and successful. Without a systematic review of the results and the process, there is a risk that errors or shortcomings will go unnoticed and reoccur in future projects. A thorough evaluation helps to ensure that there is a lasting learning effect and that both pupils and teachers learn from the project.

In addition, measuring results ensures transparency and responsibility. Everyone involved, including the school management and external partners, can understand the extent to which the project has achieved the desired goals. This not only strengthens confidence in the implementation of projects, but also helps to secure support for future initiatives.

External evaluation

External evaluations are particularly valuable as they provide an objective and unbiased view of the project. While internal evaluations are carried out by the project participants themselves and can therefore be influenced by subjective judgements, external evaluators offer an independent perspective. This enhances the quality of the feedback and provides deeper insights into the strengths and weaknesses of the project.

An example of this could be a school-based project to improve learning methods, where external educators or experts are invited to assess the impact of new methods such as learning diaries. While the teachers and students directly involved in the project may judge success purely on the basis of subjective impressions, external evaluators could use observations, surveys and structured tests to gain more objective insights into whether and to what extent the new methods have actually had an impact on learning.

Another example is a school development project that aims to improve co-operation between teachers. Here, external consultants specialising in team development could evaluate the progress of the project. These experts would be able to systematically recognise weaknesses in communication or work distribution that the project participants might not have noticed. As a result, targeted improvements can be suggested that might have been overlooked internally.

Such external evaluation processes ensure that the results are not based solely on internal perspectives, but are assessed from a broader, more neutral perspective. This helps to ensure the sustainability and transferability of project results and contributes to the continuous improvement of project work in schools.

Practical examples:

Monitor progress:

The results should be made simple and tangible for the children. Examples would be:
- How many flowers or trees they have planted.
- How many bags of rubbish they have collected or how much water they have saved.

Evaluation and adaptation:

At the end of the project, the pupils could create a simple "environmental report card" in which they describe what they have learnt and what they want to do better in the future.

Closing words

The realisation of environmental projects at primary schools not only offers a valuable opportunity to raise young pupils' environmental awareness, but also to develop their skills in teamwork, creativity and responsibility. This guide shows

how careful planning, clear objectives and the involvement of all those involved - pupils, teachers and external partners - can lead to the realisation of sustainable and successful projects.

The practical examples and proven methods presented in this guide are designed to support schools in designing and implementing their own environmental projects. From the project structure to the involvement of the school community and the evaluation of the results - every step is crucial to ensure success and enable positive learning experiences.

We hope that the approaches outlined here will serve as a source of inspiration and help schools to organise their projects in a practical and effective way. The world of tomorrow is in the hands of our students, and it is up to us to give them the tools to help shape a sustainable and environmentally conscious future. Let's seize this opportunity and work together to help protect our environment.