

MOST

Meaningful Open Schooling Connects
Schools To Communities

Manual to plan and perform SCP

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Executive Summary

The Open Schooling approach leads to a sustainable networking system between schools and their communities. Open Schooling asks private individuals, schools - students and teachers alike - companies, non-profit organisation as well as associations and professional and nonprofessional networks to work in peer to peer collaboration. The goal is to develop strategies jointly and to overcome current environmental and social challenges. This collaborative work is supposed to drive social change and help students acquire skills and abilities to participate actively in a 21st century knowledge society.

This document is for educators, teaching in formal and non-formal educational settings, who are willing to engage in Open Schooling projects together with their students. The manual has been developed within the framework of the EU-funded project MOST -**M**eaningful **O**pen **S**chooling **C**onnects **S**chools to **C**ommunities - and has been tested by a number of [international partners](#). One of the main attributes of Open Schooling projects is the collaboration between schools and communities; this is why single projects are named School-Community Projects (SCP). The manual describes important stages of a developmental process SCP leaders should consider while carrying out a SCP. It introduces a framework and offers ideas for whom to include, and how to co-create an appealing, socially relevant approach that will affect the regional community itself. In addition, you will find recommendations how to put ideas into practice, communicate them and find out whether or not your project is successful. *The manual relates to the [‘Pedagogical guidelines and exemplary science materials’](#) produced by the Norwegian partners in WP4 of the MOST project. It might also be interesting to have a look at the [‘Most Fair’](#) report collided by Maltesian Partners in WP5.*

The objective of this document is to provide an insight into the overall design of school community projects. The INCREASE-Trail Map (fig. 1) explains the different sequence of stages – this framework has already proven to be successful in other Open Schooling projects. To illustrate single steps, the manual mentions best practice examples from Open Schooling projects conducted in course of the EU MOST initiative.

Firstly, the manual provides a two-page summary on the next pages.

Secondly, the document provides a more detailed description of each INCREASE Phase and presents real life examples acquired in the EU funded initiative “Meaningful Open Schooling Connects Schools to Communities” (MOST). For a better visibility, these examples are marked with an “example” flag.

To get a better insight into the various cultural approaches to open schooling and to write this manual as practically and authentically as possible consortium partners, the authors carried out interviews with the project partners. Lucas Weinberg and Suzanne Kapelari work at the Department of Science and Math Education at the University of Innsbruck, Austria.

In a nutshell - A short guide for Open Schooling projects for teachers

Teaching is often stressful; there is a lot to do, class preparation, exams, administration work and much more. To convince you to take on additional but most rewarding tasks, we have summarized the content of the manual "to plan and perform SCP" on two pages. Further explanation on the different stages open schooling initiatives pursue as well as best practice examples can be found in the main part of this document (The INCREASE -Trail Map for School Community Projects).

Why Open Schooling?

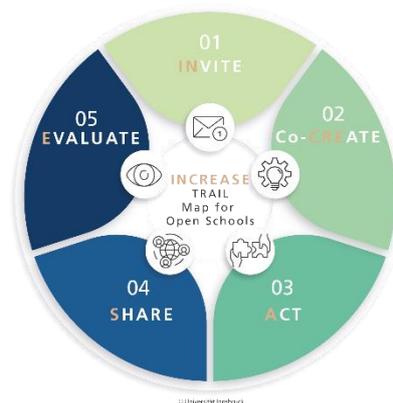
Open Schooling (OS) is about "breaking down the barrier between the school and what takes place in the real world." (SCP leader from Norway). The Open Schooling approach invites students to work on current environmental issues together with stakeholders introducing hands on experience and research-based knowledge. The core of School-Community projects (SCP) is the collaboration between schools and communities.

Setting the scene

Before you will get started, it is crucial to have a talk with your headmaster and your to-be-involved students about your plans to carry out an Open Schooling project. Further, it is helpful to define an appropriate timeframe of the SCP. As SCPs follow a bottom up approach, projects are more creative, innovative and successful, if the students and the community members experience an active role in the decision-making process and are able to shape the course of the project actively. There are always possibility to connect the SCP to curriculum goals in particular when it comes to students' acquisition of future skills. The INCREASE-Trail map provides further information how to facilitate your SCPs successfully.

INCREASE -5-steps to success

The path a successful SCP will take is hardly ever a straight one; rather it will meander through the various phases of a participatory project. Going back and forth is very common. In order to be able to monitor the process successfully, we recommend keeping an eye on these 5 phases a participatory project is expected to pass through.



(Fig. 1: Kapelari 2022: INCREASE-Trail Map, Universität Innsbruck)



INVITE

After you and your students have decided, which challenge your SCP will address the search for potential experts and stakeholders begins. Students may become responsible to invite future project partners. You may want to support them by providing contact details (phone numbers, emails, and addresses for visits). Invite any community members or individual people you and your students consider relevant to your topic. To get in contact, it has proven helpful to make phone calls first. Thus, students are able to explain their ideas more easily and more emotionally than via a written invitation. Try to approach people you may already know or have a personal interest in your school or your students first (e.g. relatives, parents, friends, formers students etc.). Invite as much interested stakeholders as possible to bundle common interests. If the students need help in starting a conversation, it is recommendable to provide support via particular training offers.



CO-CREATE

Co-creation enables specialists and experts to **cooperate** with other groups with whom an exchange usually does not take place. Co-creation processes help to find goals the future SCP members will share. Similar **interests** and participants individual expertise will become visible. The project will grow on this fertile ground. The Co-creation Navigator (<https://ccn.waag.org>) offers a selection of methodological approaches to facilitate these co-creation workshops.



ACT

This step marks the start of the visible part of a SCP and makes it clear to what extent the previous steps were successful. It is recommended to implement the following steps to reach the objectives of the project and generate success. The MOST project provides best practice examples [here](#).

<p>Define the objectives:</p> <p>What are you aiming for with the project?</p>	<p>Responsibility:</p> <p>Share responsibilities by assigning individual members of the project team a role that suits them</p>	<p>Keep in touch:</p> <p>Regular project meetings support the exchange</p>	<p>Timeframe:</p> <p>Set a timeline – a list of milestones helps the students to orientate themselves in the project</p>	<p>Risks and mitigation:</p> <p>Talk about obstacles and how to overcome these</p>
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SHARE

Since this is a school community project, whose results reach out into the neighborhood and will be interesting for a broad community, it is advisable to present milestones reached and the outcomes to the community. Various formats such as Science fairs, organized by the students, presentations via posters in the school area, using internal communication channels in school, provide videos on social media platforms or working together with local newspaper/radio station etc. are reliable to disseminate the results of the SCP.



EVALUATE

Since Evaluation is a part of every scientific as well as participatory process, it is indispensable to evaluate the SCP based on success indicators the members of the group have selected jointly. For future projects, it is useful to learn more about which factors contributed to success whether the project has approached its goals smoothly or if this approach needs some adjustments. Further, it is helpful to receive feedback about the students learning process and the experience of the participation of the community members. Easy to do evaluation is possible through a short feedback talk with SCP members in general and students in particular. Questions should be

formulated precisely but open so that the participants will answer without constraint and will share their experiences in the project.

1. Introduction

Open Schooling (OS) provides great opportunities to break down barriers between school life and the “real world”. It offers an opportunity to start activities, realising the opportunity to work on an equal footing with different stakeholders of the community in the field of socio-scientific issues. This manual aims to support head teachers, teachers, and non-formal educators in carrying out innovative activities that bring schools and society closer together.

It will give an overview of the implementation of the Open Schooling approach suggesting necessary steps schools and SCP leaders will need to take into account while implementing school community projects (SCP) together with stakeholders in their area and to come up with regionally feasible solutions. SCP leader, advisor and teacher from the MOST project (2020-2023) were asked to answer the question: “What is Open Schooling for you?” Below, you can see some quotes:



What is a SCP?

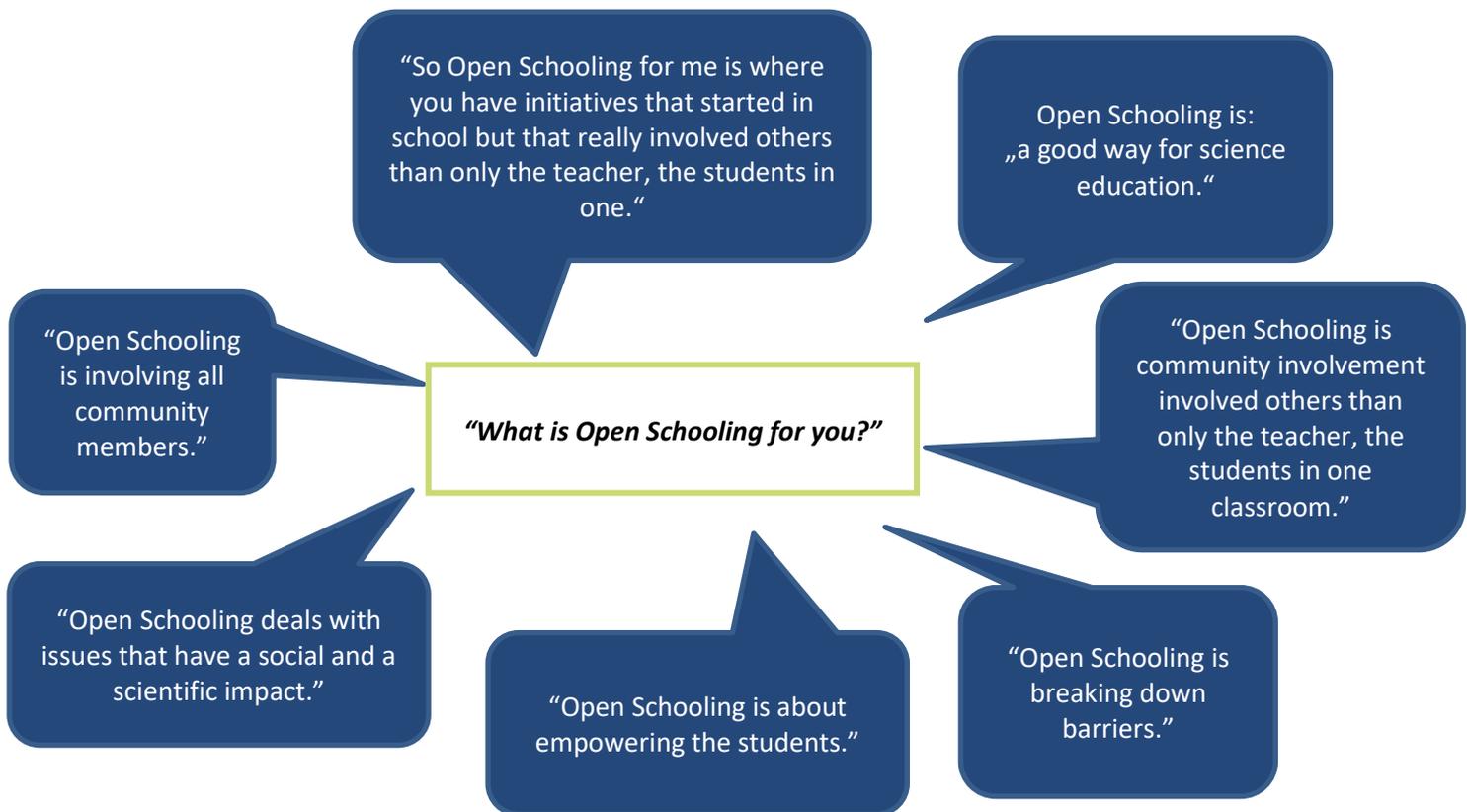


Fig.2: “What is Open Schooling for you?” An election of answers from the MOST Consortium

Working together based on a bottom-up approach and in peer-to-peer collaborations leads to sustainable networking of schools and communities. Innovative approaches suggest developing strategies to address current socio-environmental challenges together as a joint venture of private individuals, companies, and associations. The expectation is, that the collaborative work leads to a broader understanding of scientific, social, and economic processes and intendeds to promote the

scientific knowledge and transversal skills of society in the end. In this way, the EU aims to remain competitive worldwide in the competition for jobs in science and to face global challenges more successfully. Especially in areas that have an impact on the everyday life of society, a space in which exchange and inclusion takes place is extremely beneficial. One promising approach that brings scientific processes and procedures closer to society is Open Schooling:

“Open Science Schooling is finding real science in the community through students’ involvement into local practical activities outside school and bringing the acquired knowledge back to school. Through this, students get a better understanding of how science is applied in real life.”
(<https://openscienceschooling.eu/about/>)

By opening up school education and involving society in scientific processes and innovations, a link is created that considers people's needs and ambitions. In the long run, Open Schooling processes and school community projects should ensure that Europe remains competitive in technological competition. A large number of European countries already have a shortage of skilled workers. What is also striking is the proportion of female skilled workers, which is just 15%. To use the social and ecological opportunities that result from an equal distribution of the sexes profitably, the project has the task to increase the quota significantly.

As all participants contribute their knowledge and skills to the project, they don't learn just from and about each other but also expand their (natural) scientific knowledge and transversal skills (teamwork, strategic and innovative thinking, time management, etc.). The aim is to arouse interest in the natural sciences and scientific work in all participants. In the long term, this will lead to more students in Europe embarking on a scientific career in the future - a goal that, given the advancing technical developments and global environmental challenges are of great concern to the EU and all member states.

(c.f. <https://icse.ph-freiburg.de/freiburgprotectstheplanet/ueber-das-projekt-most/>, 04.02.21)

The Open Schooling approach covers a 5-step process aiming to engage stakeholders in co-creation activities and to design and implement joint projects. To building a network of open schools in the region, schools share their knowledge and experience to the community. Evaluation of the activities is to improve knowledge and skills for future engagement.

2. The INCREASE -Trail Map for School Community Projects

2.1. Why do School Community Projects (SCP) increase the quality of teaching and learning?

In various debates on current topics, it is visible that science and society have drifted apart. There are several reasons for this; the most striking is a lack of understanding what scientists do and what socially relevant statements science can make. Society must negotiate research-generated knowledge in order to contribute to a prosperous development. The core of the problem is that people have difficulties relating the processes and innovations of scientists to their everyday lives.

Facing considerable global challenges, humanity need to enforce solutions now. Current and future generations will need to propose innovative solutions for problems, created in the past and in some cases are still created in the present. To address these challenges and to change traditional ways of thinking and acting, innovative and collaborative strategies are required. Individuals, single institutions, or single governments cannot address these challenges alone. They demand collaborative action amongst stakeholders and long-term transversal partnerships as well as interdisciplinary

cooperation's between brave citizens who are willing to tackle the challenges of the 21st century. To overcome these challenges Open Schooling provides much needed opportunities to develop transversal and social competences. The opportunities to learn from and with each other seem to be a possible key to social transformation. To realize this, schools need to be transformed to local hubs of learning, from which innovative and cooperative processes arise and which create learning environments that inspire young people to exploit their full potential.

Responsible research and innovation (RRI)¹ implies that societal actors (researchers, citizens, policymakers, business, third sector organizations, etc.) work together during the whole research and innovation process to better align both; the process and its outcomes with the values, needs, and expectations of society. School Community projects integrate actions to foster the uptake of the RRI approach and provide a learning space for all stakeholders involved.

An intensive insight into research and science during school education is beneficial for all students, not only those interested in STEM subjects in general. Thus, school community projects are an ambitious opportunity to start a long-lasting dialogue between schools and the community including researchers and scientists.

Open schools are places where people meet, where experts share their knowledge, where individuals act jointly and reach a shared goal. "OS [...] is where you have initiatives that started in school but that really involved others than only the teacher and their students in one classroom." (MOST advisor from the Netherlands). Such a learning environment supports students as well as teachers to engage in real-life activities that are relevant for the local community, the city, or the region. Students will experience that their work impacts societal development, teachers will become change agents, and schools will transform into platforms for inspiration and change.

In general, the school community project idea is predicated on four assumptions:

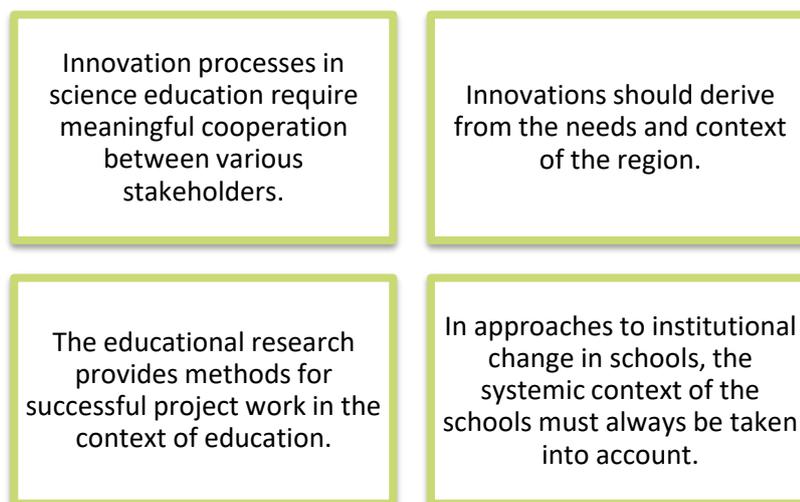


Fig.3: Four assumptions of the school community project- idea

2.2. INCREASE: 5-steps to success

The INCREASE-Trail Map for school community projects is a guide for school leaders, teachers and other educators and offers an overview, which stages a school community project should go through to become successful. Participatory projects hardly ever follow such a linear approach but go back and forth amongst these phases. However, it is most likely that effective project will cover all these stages.

¹ <https://ec.europa.eu/programmes/horizon2020/en/h2020-section/responsible-research-innovation>

INCREASE stands for the five trail phases **INVITE**, **CO-CREATE**, **ACT**, **SHARE**, and **EVALUATE**. The trail map metaphor shows that the path taken might not always be predictable. It takes detours and loops. Inviting stakeholders to accompany a school project has a great potential to explore unexpected sights, set new goals, and finally arrive somewhere else. A school community project will always be rewarding for everyone participating.

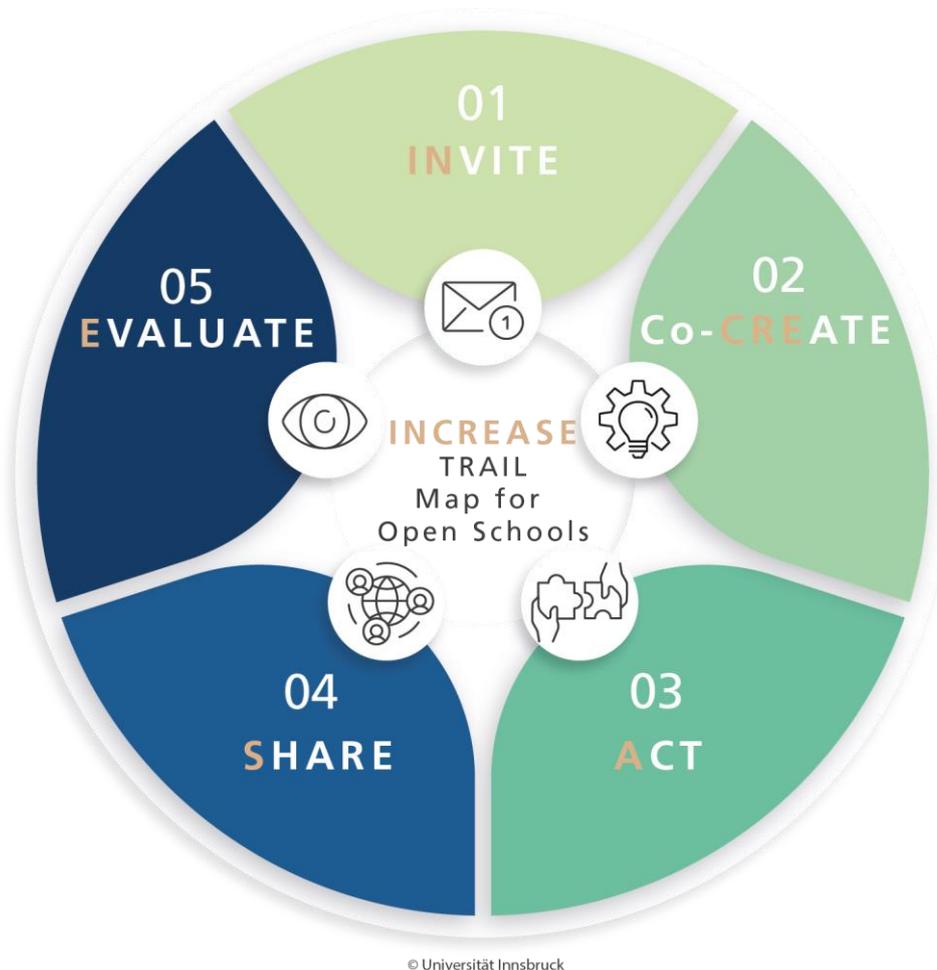


Fig.4: The INCREASE-Trail Map for School-Community Projects

The INCREASE-Trail Map is a systematic guide that intends to serve as an orientation for SCP leaders. This 5-step plan helps to work on every phase on one after the other. It explains each phase a school community project passes through, how it looks like and what needs to be accomplished to become successful. Schools have much to gain by fostering connections between formal and informal learning, NGOs, the local government, researchers, committed lay people, young people, and senior citizens.

The [MOST](#) initiative (2020-2023) took place in 10 different countries all over Europe. It laid the ground for the development of a European Open Schooling culture considering various socio-cultural environments. Lessons learned during two rounds of putting SCPs into practice led to a broad pool of exemplary SCPs, which makes it possible to add hands-on information to conceptualize the 5 INCREASE phases. This report is providing best practice examples from all over Europe. Participating schools

focused on environmental school community projects addressing the topic areas of *waste management* and *energy*. Thus, trail sections use these fields of action as examples.

The suggestion is to use the INCREASE Trail Map in parallel with the *MOST Pedagogical guidelines and exemplary science materials*, produced by the Norwegian team in [Work Package 4](#). In addition, you will find a selection of best practice examples for MOST Science fairs via the second link beneath. The guidelines provide information on pedagogical and scientific materials usable as educational inspiration to run School Community Projects. It describes the underlying theoretical background and Project-Based Learning (PBL) and Inquiry-Based Learning (IBL) as teaching and learning approaches used in the context of SCP learning. In addition, it features most valued outcomes and ways of working and highlights SCP problems. It also follows the INCREASE trail map and provides steps that SCP leaders as pedagogical leaders need to take into account. Supplementary, the WP4 guidelines presents best practice exemplary science materials from the MOST consortium ([WP4 Pedagogical guidelines](#); [WP 5 Most Fairs](#)).

So let's get started:



INVITE

Anyone who has a certain level of interest in Responsible Research and Innovation (RRI) and actively advocates sustainable development can participate in an SCP. As the SCP leader, you should make sure that you schedule the dates for any meeting so that as many people from the community as possible can participate (e.g. pay attention to ordinary working hours). Further, it can be helpful to set up a rough timeline for the duration of the project, so that everyone who is involved can see if it is even possible to participate.

In actie voor een groene omgeving!

Energiezuiniger leven, minder afval produceren, afval scheiden en hergebruiken. Wordt duurzamer leven de nieuwe standaard? En wat weten we al over herbruikbare plastics en hernieuwbare energie?

Hoe?
In dit project gaan leerlingen vanuit school met andere belanghebbenden uit de buurt aan de slag met een praktische uitdaging op school, in de omgeving of bij de leerlingen thuis.

- Hoe beperken we zwerfafval in en rondom onze school?
- Hoe kunnen we energie op school en/of thuis zuiniger gebruiken?
- Hoe sorteren we ons afval zo goed mogelijk in deze wijk?

De leerlingen bepalen met belanghebbenden en buurtgenoten hun vraag en voeren een onderzoek uit of werken toe naar een plan, advies, of zelfs een implementatie op basis van de bevindingen. Ter afsluiting delen de leerlingen de resultaten met de *community* met een tentoonstelling op school, in de bibliotheek of het gemeentehuis.
Op deze manier leveren jullie met dit project een concrete bijdrage aan het duurzaamheidsvraagstuk vanuit school en de directe omgeving.

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Fig. 5: Example from the Netherlands (left) and from Turkey (right) of an invitation to participate at the MOST project

Students and teachers

To start successfully, students should be keen to make a difference and to give something back to the community. Student's motivation to participate plays a fundamental role, as the students need to be willing to work hard, listen to others, be open to change their opinions, dig deep into the subjects and follow their interests autonomously and cooperatively.

Since the recommendation for SCPs is to address socially relevant topics such as waste/garbage or energy management to reach a broad community, a successful implementation can lead to an increase in life quality for everyone.

The suggestion to hold an introductory lesson in class addressing key issues of the topic and highlight sustainability and environmental issues. The teacher can carry out this introduction, experts in the field or the SCP leaders. Inviting experts to workshops will increase the attentiveness of the students and will put emphasis on the social relevance of the topic.

It is also helpful if the participating teacher has a certain level of environmental awareness and interest in the topic and prefers student-centered teaching approaches. Students and teachers alike should value working with people, which have acquired expertise in different areas as well as recognize their own expertise they will contribute to the team.

Experience gained in two rounds of SCP during the MOST project shows, that it is advisable to dedicate enough time to this stage of the process and make sure to meet students' needs and value their ideas.

Hint: We recommend to always inviting another teacher who is willing to support the project idea! It is not required that he or she is a STEM teacher. Transdisciplinary can be very fruitful in carrying out SCPs

We suggest, to also inviting interested teachers, the administration and the principal so the whole school knows about the project idea and learns about the advantages of an Open Schooling approach. The more teachers from the school are involved into developing the project ideas, the better the implementation of the project will be. In addition, more teacher will lead to transdisciplinary learning. It can be also very fruitful to extend the frame of the project by inviting additional teacher from different schools. Therefore you can use existing networks or social media channels, shows an example from the Czech Republic, where Facebook groups supported the creation of an Open Schooling network during the MOST project. As soon as the school team is ready, community members are welcome to join a 'Launch Workshop'.

Stakeholders

At the beginning of a school community project, we recommend searching for possible partners from the local community. Experiences from different countries showed that it is very helpful to inform local politicians or representatives from the regional municipality about the project or even better invite them to participate. A success-story from Germany, Freiburg, shows how fruitful such a cooperation can be:

In Freiburg, a network of schools had the possibility to work together with an ambassador of the city. This helped them to approach a large network of possible stakeholders and companies who were interested in working on such projects, as well as provided contact to NGOs who were interested in the work with schools. An additional advantage was the amount of communication channels, the projects could address, which they also used for the dissemination of their results.

EXAMPLE

In general, when looking for potential stakeholders, it is helpful to design an attractive but short written invitation (pdf file) that contains the most information about your project-idea. It is also advisable to contact potential participants by phone for the first time. This raises the chances to get to know each other and to better explain where this cooperation may lead to. Another option is to use

online conference tools to create a more official setting where you and your project team can present your ideas in more detail. Different approaches can work for different settings, so chose which option might work best for you:

Checklist for SCP leaders.

- Search for similar projects in your region
- Use the notice board in your school
- Search for interested teacher
- Contact the church parish
- Talk to your personal contacts
- Integrate the family and friends of the students
- Contact (waste) companies who are interesting for the SCP
- Make use of social media channels
- Look up established associations
- Connect the project to national events (world earth day, national math competition, solar car race, clean up days ...)
- Search for local NGO’s engaging in the same or similar challenges
- Contact public relation offices established at Universities or other research institutions to find the scientist you need
- Approach local politicians including different policy views
- Search for lay experts
- Contact your regional school board /education ministry and find out whether a SCP network has been established in your area already and whether you may get financial support for your activity

A well-thought-through search for associations and companies that already have expertise in carrying out sustainability projects will influence the course of your project. At the beginning, it is better to invite as many people as possible. Common interests can be bundled in a co-creation workshop, which will primarily support the students at a later point in time.

The question of who will take part reveals during the initial meeting with possible stakeholders. A so-called “Launch Workshop”. Consequently, at a certain point, the students’ project ideas regulate the participation. In an exchange between the students and the stakeholders, it becomes clear which community members are interested to engage with the students in a particular project. This leads to a kick-off meeting, of which is described in the co-creation stage. Excerpts from an example from Lithuania will give an insight into how to go through a Launch Workshop:



Date of the Launch Workshop(s):	3 rd February, 2023
Number of Participants:	24
Online or in person?	In person
Short description of the procedure:	The meeting was organized in person. The aim of the meeting was [...] to encouraged teachers to participate in the future project. To ask them to

	continue to implement school community projects in context of ecology and saving energy. The discussion about possibilities what SCPs could be continued or implemented new in the future make place as well. The participants discussed in small groups and shared their ideas how to motivate teachers to participate, how attract community members, how to disseminate SCPs for larger number of citizens.
Whom did you invite?	Teachers, community members and RST members
How did you present the pedagogical/scientific guidelines (WP4) and the manual (WP3)?	Slides, translated documents and examples of SCPs. We made presentation of the international MOST results of the first round and the regional results of the second round.. The participant may discuss and suggest themes of the future SCPs and the possibilities of the implementation. They suggested, how their project can be expanded. The teachers were asked to vote for the best SCP of the second round.
How did you announced the Launch workshop? Have you announced any specific topics?	In the Vilnius municipality website, than personally by emails.
Learnings from the two rounds of Launch workshops and ideas for improvement.	<ol style="list-style-type: none"> 1)The active teachers implemented constructive projects and invited more community members. 2) Teachers who were personally invited were much more active. Only a few teachers responded to the common invitations on website or social media. 3) The community members were active and wanted participated when they were asked. Changing teachers' attitudes that community members would not agree to participate was the strongest challenge

Fig.6: Exemplary Lunch Workshop from Lithuania

The MOST initiative puts a focus on projects addressing STEM- and environmental education and they were supposed to foster a RRI approach. However, the project team should ensure that the stakeholders invited are not from the science, technology and research sector only but include laypeople and representatives from NGOs as well. In addition, numerous companies and institutions are pursuing an educational mandate, which a project like MOST can cover. In this Launch Workshop, students or teachers will explain the goals Open Schooling is aiming for in general and what the school planning to achieve.

MOST experience shows that it is possible to integrate such a ‘Launch Workshop’ easily in a teacher training to inform further teachers about the idea of Open Schooling and widen the Open Schooling network. A Launch Workshop may also be organized as an online meeting. This will save time for those who simply want to learn about the project and it may offer a low-threshold entry.

It has the potential to work, as an example from Turkey shows: *The Most Team invited 13 participants from local and national education administration as well as education staff and teacher via posters on social media and via existing networks to participate. In the frame of the meeting, the MOST advisor presented the pedagogical guidelines as well as the draft version of the manual.*

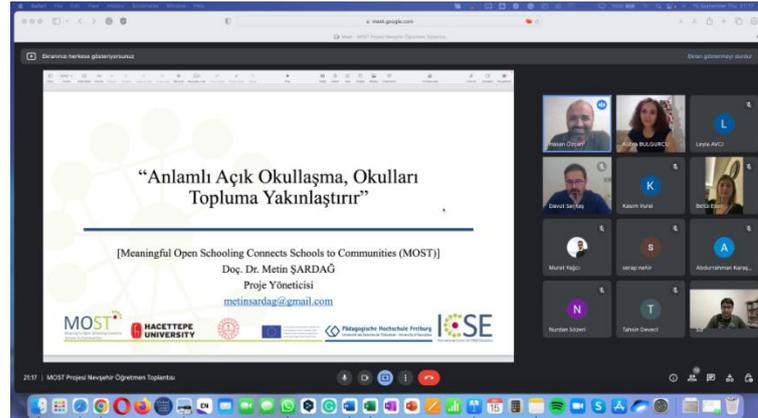


Fig. 7: Online Launch Workshop in Turkey



Furthermore, it helps to invited stakeholders and community members willing to collaborate with all sorts of people. Community members can be experts in a specific field but also interested persons and neighbors, parents, family, and friends, business partners, researchers or policymakers. It is important to ensure that these experts can talk about their area of expertise in appropriate language understandable for laypeople and students. All people interested should be able to follow their explanations.

It is also helpful to invite representatives from local universities. Usually, universities have substantial networks, which may come in handy for pursuing tasks of the project. Additionally, universities often bundle their ongoing projects and initiatives in the context of sustainability in so-called green offices (example from Innsbruck, Austria: <https://www.uibk.ac.at/de/projects/green-office/>) or pubic relation offices. Counting on their expertise will enlarge the possibilities of the students’ project.

Invitations at three levels:

○*Principal:* The headmaster of a school can use his channels and network to woo participants and interested parties. The headmaster’s network is practical to find participants and interested parties in the first part of the application.

○*Class level and teacher:* At the class level, the students can share the project ideas with family and friends and other class associations. In addition, the teachers can use their networks to get other interested parties to the project idea.

○*Individuals:* Specific topics and thus specifically interested stakeholders can be acquired through individual students. The level of the individual also promotes cooperation, this way people can be won for the project who are specifically pursuing the same ideas.

Incentives to join

Formulate your invitations in a way that the main goals are easy to grasp. The invitation should also explain why participation in an Open Schooling project is beneficial and rewarding for oneself and the community. Moreover, use the invitations to convince people to participate in an Open Schooling project. In addition, certain incentives might increase the motivation to participate. Strengthen the incitement by explaining explicitly how the emerging project intend to address the needs and challenges of the region.

Hint: Use formulations like, “use the rare opportunity to work on eye height with students and people from different parts of society”, to reach for stakeholders.

Incentives can also be created by trying something new, for example, project work with an app (e.g. Litterati app; <https://litterati.org/>, Example from the Netherlands). In this way, the aspect of gamification comes to the fore, which can serve as an incentive as well. Gamification appeals to curiosity, engages students and stakeholders to participate, and has the ability to increase the digital competence, which can be seen as a key competence for lifelong learning.

Checklist for SCP leaders:

- Search for possible partners in the region
- Create incentives to participate
- Formulate an explicit invitation
- Make phone calls to get into a conversation
- Invite as many people as possible and bundle common interests
- Support conversations between students and stakeholders
- Make sure that you invite people from different areas

CO-CREATE



In the INVITE Phase, the SCP-Team selects community partners invites them to join a Kick-off meeting. The next phase is to engage them in a co-creation process. In an ideal SCP setting, co-creation starts from the scratch and the group designs a project jointly including the area of action.

02

Co-CREATE

Co-creation is an innovative and participatory process that aims to bring together stakeholders from different parts of society. Co-creation enables specialists and experts to cooperate with other groups with whom an exchange normally does not take place. The positive consequence of the dialogue is learning from one another besides developing cooperation between different groups in a society. The appreciable output arises when people from different areas and with heterogeneous cultural and social backgrounds come together. Experience from the MOST project has shown that it is successful to hold co-creation workshops when the project reaches a stage where innovative ideas begin to sprout. A SCP is in terms of knowledge and competence development of the student will be successful, if students have the possibility to take action in the project. Don't worry if the start of the co-creation process will be a bit chaotic. This “productive chaos” (German MOST advisor) is part of the process and often leads to promising ideas. In addition, we observed success as soon as the Launch Workshop has already set a flexible framework. This led to a couple of small projects at the end. In some cases, it will be advisable for the teacher to support students to speak up as well as to remind stakeholder politely to stick to the idea of co-creation.

"To facilitate co-creation, you need to understand the process; you need to have a good sense of the steps to take to be co-creative in the entire undertaking. On top of it is useful to have plenty of tools and methods in your back pocket that can help you host that process" (WAAG Society).



Fig. 8: Launch Workshop with co-creation aspects "Community Garden"

When choosing a topic for a school community project, we recommend using a co-creation approach. For the successful completion of an SCP, it is most important that all partners fully support the project. Usually, this happens if individuals and organizational needs are covered, and each participant (including students) can recognize an advantage for themselves and the community. You can find a selection of methodological approaches to facilitate the process via the Co-creation Navigator (www.ccn.waag.org). As a tool, like shown in figure 8 above, the environment or surrounding can be useful as well, as the following example shows. In this case, the school garden environment of the University of Innsbruck worked as a source to inspire the co-creation process and find challenges to address around the overarching theme of food waste reduction. Here is a short list of projects that originate from this workshop:

EXAMPLE

Checklist for SCP leaders

- Food waste reduction
- Worms generating compost
- Community Garden
- Meatless Menu – Fungi Garden
- Learning with fungi
- Transdisciplinary Work with raised beds

Co-creation leads to success as this Open Schooling project from Spain shows:

As a part of a big SCP, the school organized a launch workshop, which led to a co-creation workshop as well. As a first activity, the participants met in front of the school and started collecting the rubbish in the schoolyard. In this way students and stakeholder from the community, started talking to each other and a first connection evolved. Working together led to various ideas on how to tackle the waste problem. As a result, every class who participated approaching the waste problem from a different direction and carried out unique projects.

EXAMPLE

During every co-creation process, the role of the teacher is to encourage students and stakeholder to follow the idea of co-creation. A particular aspect of co-creation processes is working together on an equal footing. To realize this setting, consider the following aspects:

- Introduce everyone equally – not only those invited but individual students, and teachers alike
- Name everyone the same, first name or last name
- Integrate an ice-breaker action (Here you can find a list of activities: <https://blog.hubspot.com/marketing/ice-breaker-games>)
- If it is possible, the whole class who is participating in the project should be involved
- The role of the facilitator is essential. It is his/her responsibility that everyone involved can raise their opinions and contribute to the dialogue. The facilitator has to keep an eye on the time and cut off people that destroy the discussion by monologues. Here is a helpful phrase to cut off people during a monologue: *“Thank you very much. You have statute your opinion that you would like to do I would like to hear the opinion of... now.”*

On the search for a topic:

In principle, every topic with **social relevance** counts as a good topic for a school community project. However, it is helpful. If the topic is based on everyday life in a diverse society and is relevant to the people.

Television, social media, or newspaper is a recommendation and a source of information on currently discussed topics. Controversial topics are always a sign of enthralling themes (e.g. climate change, sustainability, energy, waste management, food waste, urban gardening, use of plastic, solar energy, electricity, reduce & reuse ...).

Sometimes, teacher have a limited choice because of their responsibility to cover the t curriculum. The MOST projects have shown it helps to embed the SCPs into the everyday school life and the curriculum. A teacher from Norway experienced the following: *“There are different possibilities to connect the topic of the SCPs with topics of the curriculum”*. However, the teacher participating in this project finally found ways to integrate it in the curriculum by connecting it to topics like energy. In addition, the school offered had practical oriented units, which become part of the Open Schooling project.

Hint: Ask your students to read the local newspaper or talk to community members to see what concern is up to date!

If it is not possible, that all students take part in the co-creation process, we recommend inviting students’ representatives to participate in co-creation sessions with community partners. In such a case at least, those students will get insight into this phase of the SCP and are able to communicate student’s ideas to community members and in return share their experience with their colleagues. This approach supports students’ ideas to find their way into the flows into the topic selection process. Project ideas that pursue similar topics can be bundled, and students and community members start working together.

Themes and Topics

The focus of the projects should have a benefit for the community and address the needs of the region. Because school community projects have the power to become transformative agents for society. Starting from the school level it is possible to take action on social relevant problems like climate change.

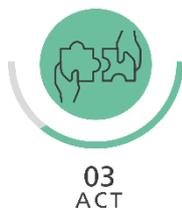
Besides, all members of the SCP should jointly decide on a topic of the SCP to create ownership. The topic should be socially relevant and require scientific or technological solutions. The decision on a socially significant headline concerning the region increases the interest and participation of the

community members. An example that addresses the regional interests is carried out in Malta, where the question arise: *“What to do with all the olive? How can we use them in sustainable way?”* Pursuing a common goal that serves community needs will develop not only shared ownership of possible solutions among project participants but also raises the acceptance of outcomes. Sometimes the best project develop from the simplest ideas. So go for the *“low hanging fruits and start with recycled toilet paper, soap bars, bags for bread (instead of paper bags)...” if you want to reduce your ecological footprint.*

Running through a co-creation process one must be aware that previous ideas may change, are adapted and most of the time evolve into something better. Even if the students may have the feeling, their ideas are the best ever, they will learn that a co-creation possess ads new perspectives and provides valuable options. This will improve their thinking.

During co-creation phase, the students should be included in the decision-making process and experience how societal decision-making takes place.

At the level of the headmaster, attention can already be drawn to the issues addressed, for example by initiating a project week or actions such as an energy week (e.g. the school as a whole unit tries to save energy) or a waste avoidance week.



ACT

After the SCP group decided on a topic and on the participants of the SCP team. It is advisable to set up a project plan. Therefore, it can be helpful to hold a strategy meeting. During this meeting, one can discuss timelines and possible and realistic milestones. The group will decide which objectives they want to achieve and how they will determine their success a. Experts may provide an insight into not so obvious scientific and societal connections and all team members acquire basic knowledge about the overarching theme as well as gain basic knowledge about project management.

Hint: Remind them to the idea of the SCP and support your students with additional information they need (e.g. additional contacts)

Define the goals

The success of an SCP project, regardless of the context in which it takes place, is measured by achieving the goals set. However, objectives also provide a framework for orientation within the project.

Hint: Create a list of milestones to document the progress of the project!

It is indispensable that the school-community project team at the beginning defines the objectives. However, these goals may change in course of the project but they will not become arbitrary. They offer guidance and safety for the team to feel self-effective. Goals can be achievable in the short term (e.g. reduce the weekly amount of waste) or feasible in the long run (e.g. people's shopping behavior is influenced over the long term). Objectives need to be measurable to recognize whether they have been achieved or not. On the way to the higher-level project goal, interpose further steps for control reasons. A list of **milestones** that build on one another is helpful here.

An exemplary goal can be to make the school’s power system more eco-friendly (project from Germany) or the use of given resources like in Malta:



(Fig.9: Left picture: Students are working on the objective to make the school's power system more eco-friendly, SCP from Germany. The picture on the right hand side shows students from Malta working on a sustainable solution for the olive trees close to the school)

Share responsibilities

Assign roles as early as possible that participants know their role and their tasks. This supports every team member to take over responsibility for the project. Finding your own role in this endeavor is motivating and supports ambitions to drive the project forward successfully. Presentations of the fulfilled tasks and achieved objectives of the sub-groups during regular meetings are helpful to achieve the overarching objectives. A regular exchange between the groups is necessary because the tasks that groups or individuals take on are usually very closely linked. To get an overview over the roles needed, one can look on the stages of the INCREASE –Trail Map. Figure 10 shows some ideas which roles may to defined and what responsibilities are assigned to these roles

Hint: In order to be able to look up what the team discussed, it makes sense to keep minutes from the talks of each meeting!

Exemplary SCP from Austria: Community Garden project		
Role	Responsible for...	Garden Project
Strategy Group	Work out a strategy for your project. Make sure you define goals and keep in touch with what is going on in the other groups. It is also part of the Strategy's Group Job to set up a timetable in agreement with the teacher.	The Group talked to the principal and asked for allowance, before they defined a timetable together with their teacher. They also discussed a rough topic and how it can be carried out
Acquisition Group	Go through the steps mentioned in the IN voke stage. Set up invitations for teachers & students; invite the principal of your school make phone calls. Make sure, to inform the rest of the project team about whom you invite for a first meeting.	Several strategies emerged from a first internal meeting. Invitations were printed and distributed in the neighborhood and the school. In addition, the group contacted local companies and the local University.
Co-Creation Group	As soon as you know who is going to participate in a first meeting, set up a plan for the co-creation process. Read the co- CRE ation part of this manual attentive – it supports you with rich information	With support of the University, the school set up a Launch workshop and a co-creation event. Everyone who was

		interested received an invitation to the meeting.
ACT-Group (involve everyone)	A ct describes the main part of the project. Make sure that a topic and goals are set and think of how to achieve the objectives.	After defining goals, the main work on the project can begin.
Dissemination and Media Group	Document the single steps. Make sure to inform the community about what you have achieved in the SCP. S hare the results of your SCP via different channels.	The group used the school internal social media channel to document the single steps. In addition, a local newspaper reported about the SCP.
Evaluation Group	Make sure, the whole SCP is E valuated. This can inform you about the achievement of your subjects and provides positive and negative feedback, which leads to a learning for the next project.	Internal evaluation made clear that the project was successful but the team detected potential for improvement.

Fig. 10: Exemplary SCP from Universität Innsbruck, Austria

Talk to each other.

As in many areas of society - while carrying out teamwork, regular consultations are helpful to clarify questions or unclear points. To inform all partners about positive developments, arising obstacles or anticipated turns. To arrange a fruitful consolation setting amongst project group members, we suggest the following guide:

Guide to successful project management discussions	
Rule Number one	During discussions and negotiations all participants should be equal
Theme	In the run-up to the conversation, frame or structure the topic you want to talk about.
Agenda items	A guide or a list of the items on the agenda will help you to get a structured conversation. In addition, the dots will help you organize yourself, in case you will lose the thread.
Invitations	Invite all people for the project. Inform anyone who participates in the project about the conversation.
Minutes	Recapitulate individual comments afterward it's helpful to appoint a person to take the minutes.
Conversation rules	Follow the rules of conversation: <ul style="list-style-type: none"> • Opinions and ideas can be freely expressed • Express your expectations and wishes • Let other members speak • Accept feedback and constructive, work-related criticism
Distractions	Make sure that your project meeting is free from distractions; get rid of everything that may distract group members so that you can work purposefully.
Talking environment	Create an environment where participants feel comfortable. It is helpful to offer drinks and snacks. Everyone should be able to hear

	and see each other well. Provide a comfortable room temperature and adequate space.
Feedback	Mutual feedback promotes the culture of dialogue and active exchange processes among themselves.

Fig. 11: Guide for successful project management discussions

Meet on a regular basis

If the duration of the project expands over a longer period, it is helpful to arrange regular project meetings well ahead. Especially in times when project partners do not meet each other regularly, it makes sense to arrange a “jour fixe”. Regular meetings at weekly intervals help to create a productive working atmosphere and promote fruitful exchange. Plan them thoughtfully, because too many meetings may increase the workload for each member of the group.

Digression digital communication:

Through the Covid19 year, we have all become experts in digital communication; the list in the appendix (p.12) should be a first aid kit to support your reciprocity within the project. The link list should also help in advance to query prior knowledge and interests to find project groups.

Set a timeline

Decisions concerning the duration of an SCP are probably the ones that have the most lasting effect on the framework of the project. Because according to the time available, the scope of the project is determined. School community projects can run for several weeks or months but could end after one or two weeks, too. It is important, that the basic idea of learning together and from one another can establish itself among the participants (e.g. experts, researchers, practitioners, etc.) and will endure. It would be nice if open schools will exist for a long time.

In addition, keep in mind that the project planning and management not only the implementation takes time. Every single phase requires a few hours of administrative work from the participants.

The duration also depends on whether it is possible to embed the project in the curriculum. SCPs do not have to run outside the curriculum if it is possible to embed it in everyday school life and the curriculum. An Interdisciplinary and cross curriculum approach is possible.

If projects already exist, try to integrate them into the Open Schooling approach and you may receive support from the MOST project. It is also possible to do projects again. In this way, students can deal with a project topic at different levels in a sustainable and long-term manner. In this way, knowledge and insights can be sustainably secured.

However, the project idea is also subject to a sustainable implementation because the project goals may have no expiry date and can therefore continue and represent a sustainable benefit for the local community. As already mentioned in Section ‘share responsibilities’, a continuous and regular exchange between the project partners is necessary to develop learning processes and to promote the development of scientific knowledge and transversal competencies for all participants.

The experience of the MOST project showed, that every SCP is different from another. It depends on the context, the age of the participating students, the time provided for the project and the topic. Therefore, the following list gives an overview on reasons for a given duration of MOST SCPs:

- Project on the topics of biodiversity and local history in Czech Republic: Because of the cooperation with a local NGO called SEVER; it was possible that the project lasts over 2 months. This was possible because of the strong network of the NGO.
- The MOST team Germany connected the projects directly to the school year on elective subjects or working groups. These groups meet every week in the afternoon and more and more climate- and sustainable-oriented groups arise. That gives the students the possibility to work on the topics on a weekly basis.
- For some projects, there was a need to prepare materials a few months before the actual start, especially when they are connected to national events. For example supporting students with research questions.
- From the Netherland there are also examples of successful SCPs, which lasted only one day. You can find examples here: <https://elbd.sites.uu.nl/2020/03/13/most/>
- In Norway, teachers connected the project to the course because a team project is part of their exams. In this way, they had the chance to work on the project for ten weeks. There are different possibilities to connect the topic of the SCPs with topics of the curriculum.
- Because of the pandemic, it was also possible to carry out projects online or in a hybrid form.
- A successful story from Sweden is the strong connection to the local waste company which made SCPs successful
- Little assemblages and weekly meetings of the project team, in which especially families were integrated lead to success

Exemplary SCP:

As part of their math class, an 8th grade teamed up with a salesperson from the local organic shop, an employee of the regional waste management, an environmental consultant, and a freelance journalist. The topic is the question of how garbage from private households can be reduced in their city.

After a joint brainstorming session, small groups take on different tasks: One group, for example, analyzes the needs of residents and interviews passers-by about their shopping behavior. Others collect household rubbish over a while and compare it to the amount of rubbish created by more conscious shopping.

The seller gives valuable advice on this. The result is extrapolated to the garbage consumption of the entire city. Finally, the participants draw up a list of tips on how waste can be reduced in their city and what effects this has. The results are appropriately prepared for an exhibition in the school and the local shopping center, and the local press reports.



SHARE

Science Fair:

As soon as the SCPs have reached suitable intermediate results or has been completed, all sub-projects can be presented at a **Science Fair**, e.g. at the end of the school year.

If a project has addressed issues and challenges relevant to the community, it is advisable to share the results with this as well. One successful format is a Science Fair, where the school invites the neighborhood and local companies to present and discuss their findings.

Hint: We recommend connecting the Science fair to a special day like World earth day (22.04).

MOST advisors from Spain described the Science fair as a “keystone component” of the project, because students and community members recognized, that they have done something, which really matters.



The fair is as a starting point for synergy effects supporting the community and the region. Here, the students and project partners get the opportunity to present their projects to a wider audience. All interested parties, as well as community members, should be invited to this festival to reach a broad public.

SCP presentation via:

- posters
- Video (<https://icse.ph-freiburg.de/weprotecttheplanet/>)
- slide presentation
- hands-on activities
- theater play/role play
- young researchers conference
- etc.

MOST FAIR

The European MOST project has established a format for sharing outcomes for Open schooling projects. A work package was dedicated to collect the variety of approaches partner organizations created to implement these fairs. For more details please have a look at <https://icse.eu/wp-content/uploads/2023/07/Guidelines-for-the-organisation-of-MOST-fairs-May2023-.pdf>

The MOST Fair is intended to provide the framework for all those involved (students, teachers, community members ...), to meet again and to promote cooperation and networking at the regional level.

Presenting the results publicly is a various exciting side effect for the students, as this offers them visibility and approval for their work. It generates motivation to become active yourself. In addition, the students strengthen their social skills because they communicate with visitors who have various backgrounds. At the MOST fair, there is also the possibility to talk to representatives from other SCP initiatives and to exchange experiences.

The Fairs can also create synergies between the individual schools and various stakeholders and community members, which can be beneficial for future projects and work (e.g. exchange of experiences, work materials, etc.).

Public Relation Strategy

A well-planned and comprehensive public relations strategy should be part of the project design. Public relations work addresses different target groups:

- the local community in the SCP environment (e.g., municipalities also have “notice boards” or billboards)
- Stakeholders, the government, and the population in the region (e.g., via the school website, social media posts, local and regional newspapers, etc.)
- The national and international society (e.g., school website postings translated into English, the international MOST website, etc.)

To reach those goals, schools can use different channels to communicate their projects:

- [MOST project website](#)
- school website
- video formats (e.g., YouTube channel hosted by the city or community members)
- local newspaper
- social media channels (as long as the school runs some)
- podcast
- bulletin board of the school
- use the MOST fair
- local radio or television broadcasts

The more people and policymakers will learn about successful Open Schooling Projects, the more people will be inspired to become change agents themselves and to support the Open School movement.

Open Schooling project in TV and radio

Universities can be a useful supporter of your Open Schooling project as this example from Sweden shows. Universities are big institutions and often have their own communication office. The MOST advisor asked his media and communication office for writing a press invite and a few days later, TV and radio called for more information and created a report on this Open Schooling project.



Bike Fair in Austria

Because of having several community garden projects, the organization team of the MOST fair in Innsbruck decided to carry out a so-called “bike fair”. Interested community members met at a starting point and cycled from garden to garden, where the SCP leader presented the beds and raised beds. The event ended in an opening ceremony for a city park, where the discussion and talks endured.



EVALUATE

It is advisable to evaluate your Open Schooling project for the class and the school itself to find out to what extent your school community project was successful. Evaluate each SCP as an individual to learn what to do differently or improve in future projects with a similar approach. Further, evaluation is a part of any scientific process, so it should be included in the SCPs, to give students an understanding of how scientific processes work.

On the individual school level, the evaluation process relates to the project carried out by the school and serves as a source of information for the SCP leader and the school itself.

Various methods like questionnaires, checklists, or internal feedback talks are useful. For an evaluation within the school, we recommend a five consecutive step strategy to implement a successful evaluation:

1-Pre-evaluation:

What are the goals of our project and how can we observe the development towards our objectives to find out whether we have achieved them? Helpful to answer this question at a rather early stage of the project and needs to be open for revision.

2- Develop an evaluation design:

- What do we want to learn from evaluation?
- Which questions shall we ask and when?
- Which methodology shall we choose?

3- Collect and analyze data

This phase is dedicated to collect and analyze data. It is important to plan when and in which context the data will be collected. A wide range of data collection tools are already available: e.g., for questionnaires: online survey platforms (LimeSurvey, SurveyMonkey, etc.), database systems or paper-pencil tests, audio/video graphs, photos, collections of artefacts produced during activities (e.g., students project ideas, participants expectations in the jointly produced poster during a meeting, etc.).

4- Reflect and review the lessons learned

As SCP team it is advisable, that you discuss the Evaluation results your team (students included) at the end of each SCP. This reflection process provides a space in which all members of the team can talk about their perception of the trail they have traveled together.

5- Improve and modify your SCP strategy

Experience gained while moving along the INCREASE trail and lessons learned from reflecting and reviewing evaluation findings will contribute to the improvement of the SCP strategy regardless of the context in which it will be applied. These lessons learned will inform future SCP activities, will improve the quality of science teaching and learning, and will contribute to the establishment of successful open school networks.

This evaluation plan helps to create an “in-school lesson learned”- list, which helps to improve SCPs. Furthermore, obstacles from school projects can be discussed on the international MOST website: <https://www.teach4life.eu/international-discussion-board/open-schooling>

3. Conclusions, Recommendation and lessons learned

This manual provides information and recommendations for the implementation of SCPs. The presented 5-phase model (INCREASE) describes the individual steps that an SCP leader should follow to be able to implement a project successfully. In addition to the description of the phases, there are recommendations for action for the actors involved, as well as implementation examples. The success of an SCP stands or falls with the interaction between everyone involved in the project, which is why we recommend regular and well-thought-out exchange and communication, which culminates in the jointly developed Science Fair.

The Open Schooling approach is in most European countries a quite new approach of learning and linking schools and their neighborhoods. It appears to be a challenge at the first sight. However, after 3 years of Open Schooling projects, we are happy about every lesson we learned. The list shows a few challenges and lessons learned, we faced over the past 3 years and how we managed it to overcome them.

Challenge	Solution
Pandemic situation	Unfortunately, we faced the pandemic situation for more than a year, which made it even more difficult to work together in projects. However, we managed to carry out many Open Schooling projects, using digital tools for the different stages of the INCREASE trail map. We used online meeting tools to present the idea of Open Schooling, had co-creation session using digital whiteboards and the teachers managed to let the students work in small groups. The participating stakeholder where also informed via digital media about the idea of the project. Several projects where carried out mostly outdoors and in small groups.
No participants found	Sometimes, schools had difficulties to find participants from the community. No one reacted on e-mails sent to existing networks. With changing the strategy, for example using social media or participating in neighbourhood meetings, interested community members where found.
Communication with local authorities	As suggested in the Invite stage, schools tried to contact local politicians. In many cases they didn't response to e-mails. Therefor we decided to not approach the authorities themselves but their offices, which worked out in many cases. In other cases, it was successful to let the students write a letter and ask for a meeting.
School internal conflicts	New approaches always find opponents. In addition, this happens to Open Schooling projects in some schools as well. The key to

	<p>success was to integrate as many other teacher as possible and counteract with successful Open Schooling projects to the criticism in the school.</p>
<p>Open Schooling approach</p>	<p>The Open Schooling approach is characterised by a bottom-up approach and the co-creation phase between students, educators and stakeholder. In some cases, stakeholder and even teacher did not adhere to treating their students as equal partners and pushed them back into their traditional role of being children who do not have to take responsibility. They tried to realise their own ideas. This challenge is a hard one to overcome because teachers are usually in charge to set the rules for communication. If you recognise a breach of the rules, you need to talk to the stakeholder. In nearly every case a calm communication and a refrying the rules led to success.</p>

Fig. 12: Lessons learned and solutions

4. Appendix

Appendix 1: Links to CO-CREATION and EVALUATION tools

Here are some links to activities/digital tools, which might be useful in meetings, online teaching, co-creation and evaluation.

Open Schooling EU-Projects

Link	Description	Information
https://www.openschools.eu/	A recently finished European Project offers a wide range of ideas and theoretical background	Ideas for teachers, school leaders, parents, student's policymakers, businesses
Open Science Schooling – Open Science Schooling https://www.phereclos.eu/	EU project finished Feb 2020 Currently running EU Project -Higher Education Institution engage in open school hubs	Idea for School guide online Will establish Local Education Clusters
https://icse.eu/eosnet/	Inspire, Connect and find Support: This is the aim of the European Open Schooling Network (EOSnet), an association of participants or people interested in participating in Open Schooling projects.	The EOS net offers the opportunity to connect with like-minded and exchange about experiences in Open Schooling projects.
https://www.teach4life.eu/international-discussion-board/open-schooling	International Discussion board for teacher.	Informative questions raised by other SCP leaders and also best practice examples.

CO-CREATE and ACT

Link	Description	Information
https://ccn.waag.org/navigator/	The website offers various thoughts and inputs on co-creation workshops. Many of these can also be implemented digitally, although tools such as those listed below are sometimes required for this.	Free! Works as a navigator on Co-creation processes.
https://www.mural.co/	Mural is a whiteboard tool, whiteboards can be prepared	Various templates are already activated in the free

	here before the meeting. Invitations are sent by email	version. Already offers templates for Icebreaker or collaborative methods.
https://miro.com/	Another Whiteboard tool	Free!
https://www.mentimeter.com/	Mentimeter loosens up longer meetings. Quizzes and opinion polls are possible. Participants can take part and vote via cell phone.	Free!
https://www.sli.do/	Any questions and answers that arise must be actively managed. Survey is possible in real-time.	Questions can be asked anonymously (via cell phone). A projector makes sense to make the question accessible to a wide audience.
https://www.mindmeister.com	Ideal for creating mind maps. The created mind maps can be designed intuitively, shared and edited together	Promotes co-creation and brainstorming processes - but subject to a charge as soon as more than 3 mind maps are designed.
https://www.wortwolken.com/	Can be used as a mood picture or opinion poll in meetings and conferences. Ideas are presented anonymously.	Limiting thought to 1-2 words. The project groups recognize possible similarities.
https://padlet.com/	Website that makes collaboration easier. Ability to create boards, documents and websites. Easy to use. Documents can also be stored on the platform.	Free!
https://answergarden.ch/	Tool to ask for opinions	Free!

Quiz, tests and online games for students

Link	Description	Information
https://kahoot.com/	Popular and well animated quiz duel. Answers can be saved in the form of an Excel file, so it makes sense to instruct students to use their correct name	Free! Good to check the students' knowledge
https://www.socrative.com/	Socrative is more used to test knowledge; the playful character is	Free!

	disappearing more and more compared to Kahoot. Results can be downloaded as PDF.	
https://de.actionbound.com/	Digital scavenger hunt. The action must be created via the browser, the app must be downloaded to play. The program allows audio, images, text, quizzes and more to be integrated.	Free! However, the app must be downloaded. Takes time to prepare the game.
https://www.suchsel.net/	The site allows moderators or teachers to create puzzles.	Can be mastered as a joint task and thus promote a cooperative work process. Schoolchildren and workshop participants get into a conversation.
https://quizizz.com/join	Another tool to check the knowledge of the students	Free!
https://www.xwordsgenerator.de/de	Crossword puzzle generator	Free!

EVALUATE

Link	Description	Information
https://blog.hubspot.com/service/survey-software	The 18 Best Survey Software and Questionnaire Tools applied in marketing campaigns in 2020	A ranking is provided
http://www.communityschools.org/resources/community_schools_evaluation_toolkit.aspx	Community Schools Evaluation Toolkit	Free!
https://www.informalscience.org/evaluation/evaluation-tools-instruments	Self-Evaluation tools and instruments for informal science	Free!