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> PARTNERSHIPS FOR PATHWAYS TO HIGHER EDUCATION AND SCIENCE ENGAGEMENT IN REGIONAL CLUSTERS OF OPEN SCHOOLING

Implementation Toolkit

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Preliminary Remarks

This Toolkit was created in the framework of Horizon 2020 Project "PHERECLOS – Partnerships for Pathways to Higher Education and Science Engagement in Regional Clusters of Open Schooling". Both schools and universities are challenged by the discussion about the societal relevance of their achievements and their level of interaction with society. For example, classroom-centred teaching and learning is often disconnected from day-to-day life of the community.

Within PHERECLOS so called "Local Education Clusters" (LECs) were established, bringing together schools and further relevant actors in the educational ecosystem of diverse pilot regions in Austria, Columbia, Finland, Italy, Poland, and Portugal. In this pilot regions, relevant actors were universities, governmental and non-governmental organisations, companies, museums, and libraries. The LECs were initiated by Children's Universities: The concept of Children's Universities stands for non-formal university-based science engagement programs for children and young people as unconventional and non-traditional recipients of the academia. Their role was to be "incubators" for enabling dialogue and for setting-up joint activities between these organisations at the overlapping edges of formal and non-formal education.

To support the establishment of the LECs, a team of researchers from the University of Vienna (Faculty of Psychology) with expertise in Implementation Science offered workshops and individual consultations focussing on "Implementation."

The Toolkit: Content, purpose, and target group

This Toolkit includes the content, main topics and tools used during our implementation support. It was important to us to make the knowledge and materials available even after the project – not only for the project partners, but also for all other people who want to implement an intervention or program in complex systems. For example, this could be people who are responsible for implementing an evidence-based practice or innovation in organizations or organizational consultants/developers interested in science-based knowledge on how to best implement programs or innovations in complex systems.

As a reader, you may find some aspects familiar (e.g., from project management). This may be because in Implementation Science knowledge from different scientific disciplines and the implementation practice comes together.

However, keep in mind: Implementation Science is not about implementing any project; the focus is on the implementation of evidence-based practices. These are for example interventions that have already been evaluated many times. Its primary aim is to implement these interventions in other contexts without losing effectiveness while considering the specificity of the new contexts.



1. Introduction to Implementation Science and Practice

1.1. What is Implementation Science about? What is Implementation Practice about?

Implementation Science and Practice focuses on the implementation of evidence-based practices. Here, **implementation** can be defined as...

... "the process of putting to use or integrating evidence-based interventions" into practice (Rabin et al., 2008)

... "a specified set of activities designed to put into practice an activity or program of known dimensions" (Fixsen et al., 2005, p.5).

Evidence-based practices are programs, interventions, therapies or pills, guidelines, principles, practice standards, procedures or policies that have been shown to be effective (e.g., to improve educational outcomes, behaviors, related environments) by systematic research studies.

Implementation Science is the "study of all mechanisms of behavior change and successful implementation and the factors that affect implementation" (Moore & Khan, 2021, p. 4). As a result, **Implementation Practice** is the "act of using strategies to change people's behavior and the environment in which they are working. The practice of implementation should be informed by the science of implementation" (Moore & Khan, 2021, p.4).

Implementation –from a scientific perspective– is most effective if it is guided by evidence, theories/models/frameworks, as well as using proved tools. It is supposed to be the (often) missing link between research and practice: We know from Implementation Science that evidence-based practices that are poorly implemented (or not implemented at all) do not produce the expected benefits or get lost over time.

1.1.1. What is the research field of Implementation Science? What might be the benefit of using Implementation Science knowledge in practice?

As mentioned above: "Implementation science is the scientific study of methods to promote the systematic uptake of research findings and other evidence-based practices into routine practice, and, hence, to improve the quality and effectiveness" of services (Eccles et al., 2011). It relies on methods and strategies that facilitate the uptake of an evidence-based practice into regular use. The models and strategies are as universal as possible, i.e., it does not matter whether a practice is to be implemented in the health system or in the educational sector.

Implementation Science is different from intervention research. Intervention research includes studies pilot testing interventions and studies focussing on an intervention's effectiveness or efficacy. Implementation Science comes later (see Figure 1) and addresses the adoption of evidence-based practices to new contexts, deals with factors influencing an evidence-based practice's sustainability and scaling up. Therefore, the focus is not on the effectiveness of an evidence-based practice anymore. The settings "in the real word" are not anymore idealized and controllable - adoptions are necessary.

As you might have noticed as well: Implementation is different to dissemination which aims to increase people's knowledge and awareness of something (Moore & Khan, 2021, p.4).





Figure 1. Typical Implementation Phases

The use of knowledge and tools from Implementation Science can be very helpful to make your planned implementations as successful as possible. What does successful mean in this context?

Short answer: Reaching the intended goals!

The longer answer: The starting point of implementations are changes that one wants to achieve in specific contexts to reach a certain goal (e.g., more offers should be set for families with children/adolescents with behavioral problems in children's outpatient clinics, because scientific research shows that with family-based programs better and more sustainable training effects are achieved in the whole family). Thus, the individuals and/or organizations involved should do something different to achieve this goal. In the example mentioned, this could include clearer communication behavior that is essential for good functioning families. There are numerous research findings or programs that have been proven to effect change in communication behavior. Knowledge and tools from Implementation Science can now help to ensure that the training effects proven in research can also become evident in other settings in the "real world" and that one can achieve one's goal (in our example: clearer communication behavior between family members to reduce behavioral problems of children/adolescents).

1.1.2. How can Implementation Science be applied in practice?

Implementing an evidence-based practice should be done systematically – always considering the feedback and knowledge from main stakeholders and being tailored to the needs of the specific context.

The starting point of any implementation process is that you want to change/improve something to achieve better outcomes. You formulate a **goal** (e.g., you want to promote STEAM engagement among school children; you want to improve family care in a paediatric outpatient clinic). To achieve this goal, various existing **evidence-based practices** (or at least evidence-informed practices) might be available. Decisions are made about what specific evidence-based practice to implement and what might be good **strategies** for doing so. In addition, it is important to consider specifics of the **implementation context**: does that evidence-based practice fit to the implementation context? How can or can at all



the context be supported so that the evidence-based practice can be implemented in the best way and tailored to the needs of the context without compromising its effectiveness? This requires the use of monitoring tools that keep track of the **implementation quality**, because the evidence-based practice needs to be implemented with high quality to reach the expected goals and outcomes. This is essentially a question of fidelity (= degree to which an evidence-based practice is delivered as intended).

According to the National Implementation Research Network (NIRN)¹, the **formula for successfully implementation** (see also Figure 2) involves defining:

- what needs to be done,
- *how* to establish what needs to be done in practice and *who* will do the work to accomplish positive outcomes, and
- *where* the effective practice and effective implementation will thrive.

The multiplicative formula indicates that each element must be at least somewhat developed – and fidelity must be given - to achieve the expected outcome.



Figure 2. Active Implementation Formula (slightly adapted from Metz et al., 2017, p. 92).

That means whenever the idea comes up to implement a new practice in a new context, one should ask oneself the following **questions**:

- What is my/our concrete aim? Why do I/we want to implement something new?
- How can I/we reach this aim? Are there existing useable, evidence-based, or at least evidence-informed practices? Which ones are the best for my purpose? Why?
- What could be good implementation strategies? Who should be involved?
- How can the context be described and supported to enable the implementation of the practice?
- How can implementation fidelity be ensured?

¹<u>https://nirn.fpg.unc.edu/</u>



After that, it is helpful to develop plans:

- A plan for the **Effective Practice**: What is our concrete plan for the new practice? Why do we need this practice?
- A plan for the **Implementation**: Which strategies or methods a good of putting a new practice into place? Who should be in our implementation team?
- A plan for **Research**: How can we grasp that the implementation is going well enough? How can we check whether we are achieving our goal?

1.2. Why can knowledge from Implementation Science be useful for Open Schooling projects?

"Open learning and open schooling are broad terms which describe learning which is 'open' in terms of timing, location, teaching roles, instructional methods, modes of access, and any other factors related to learning processes." (Halligan, n.d.)

The term "open schooling" refers to the idea that schools must become flexible structures, open to society and able to make a difference in the world. Distal aims of open schooling are manifold (support 21st century skills, STEAM engagement, improve science capital etc.). Overall, open schooling is about creating a more differentiated education to support all children's learning, their well-being and community well-being.

There are already various (evaluated) practices in many countries that have adopted the open schooling (OS) approach: Schools have been "opened" to the surrounding community and are working with external learning environments. There is no hard evidence that OS works better than other learning approaches, but there is sufficient research that opening schools in the sense of problem-based learning improves learning outcomes. However, evaluated OS projects cannot be transferred 1:1 from one school or even one country to another, as they are context specific. Nevertheless, to maintain the basic ideas of these projects, they must be implemented as intended and properly adapted to new contexts. Therefore, the approach of Implementation Science can be helpful.

In Implementation Science three components always must be considered:

- The **practice** itself (esp., is there evidence that it makes sense to implement this program/project/strategy?)
- The specifics of the **context** (esp., what are main characteristics of the context where the program should be implemented and what could be facilitators and barriers for implementing that program?)
- The **people** involved (what are the needs and worries of the people involved?)

If you want to start OS projects in schools you should consider the above mentioned three core components that should be considered when implementing a project, namely *practice, context*, *people*. If you start an OS project that have already been implemented elsewhere and have shown very good effects, it is important in a first step to take a close look at these initiatives/programs (e.g., what are the core elements of these projects? To what extent could these core elements be implemented in the schools?). In a further step, it is crucial to analyze the system in which the program should be implemented in more detail – ideally, the analysis should be carried out together with representatives of the different groups that will be involved in the implementation of the program.



To sum up: Successful implementation of educational innovations requires *evidence-based practices* and *contexts* to be ready for implementation. Moreover, there must be a clear vision of the *aims* and *activities* planned in the implementation process as well as *clear responsibilities and communication structures* (Schober et al., 2019).

The three components mentioned above should be kept in mind not only during the selection and planning of the OS projects, but also during its implementation. Adaptations will be necessary, and evaluations can help to find appropriate starting points. So called "Implementation teams" should be established who focus on implementation efforts. In addition, Implementation Science can contribute to ensuring sustainability of OS projects (Tommeraas & Ogden, 2017).

2. Implementing Evidence-Based Practices

This chapter describes in more detail how to best implement evidence-based practices from a scientific perspective.

First, we will briefly describe how an implementation process could work - for this purpose, various frameworks are composed from the Implementation Science. We have chosen the *Quality Implementation Framework* for you because it seemed to us to be the most practical.

The next chapters are based on the above mentioned "Active Implementation Formula" of Successful Implementations: We first address what considerations should be made to decide which practice should be implemented in the first place. In subchapter three, we elaborate on how to plan for effective implementation and what strategic considerations are important here. The fourth subchapter deals with the context, namely what can be supportive for an optimal implementation of evidence-based practices. The fifth and final subchapter addresses the question of measuring outcomes - because in the end, the goal of implementing evidence-based practices is to improve something (e.g., increase STEAM engagement in schools, improve patient safety in hospitals). The extent to which this intended goal(s) is (are) on a good track to be achieved should be evaluated. Accompanying (formative) evaluation is helpful to guide implementation so that the goal(s) can be achieved.

All four components of the "Active Implementation Formula of Success" will be illustrated with a practice-inspired case study: An OS project on peace is to be launched in a school. One of the aims of this project is to achieve peaceful coexistence in everyday school life.

Each chapter also includes concrete suggestions for practice as well as a reflection exercise for people who are currently facing the challenge of implementing an evidence-based practice.

2.1. How should an implementation process look like?

Before we will elaborate more in detail the formula of successful implementation, it might be helpful to get a vague picture of how the process of an implementation of an evidence-based practice should look like.

There are lots of frameworks/models in Implementation Science that cover the aspect "how to" and that distinguish different phases/steps when implementing a THING. We decided to introduce to you the "Quality Implementation Framework (QIF)" (Meyer et al., 2015), as it is synthesis of 25 other implementation frameworks/models, and it appeared to us to be very practice oriented.



14 critical steps were identified and were incorporated into the QIF. These steps comprise four phases (see Figure 3. The Quality Implementation Framework developed from Meyers et al. (2015)Figure 3): (1) Initial considerations regarding the host setting, (2) creating a structure for implementation, (3) ongoing structure once implementation begins, and (4) improving future applications. Most of the steps (namely, step 10 of the 14) should be addressed before implementation begins: A lot of investment must be made in planning and creating readiness for the implementation (e.g., by preparing the participating organizations, preparing the staff, providing supervision structures). Experiences from Implementation Science shows that about 80% of the work is needed for *Creating Readiness for Implementation* and about 20% for *Assuring the Implementation* (see Fixsen et al., 2019).

Meyer and colleagues (2015) mentioned: "[...] quality implementation is best achieved through a combination of multiple activities that include assessment, negotiation and collaboration, organized planning and structuring, and, finally, personal reflection and critical analysis." Therefore, the main elements of Implementation Practice should be "assessments/data collections", "collaboration in teams" resp. "including stakeholders", "using tools/frameworks that supports a structured way" and "establishing opportunities for reflection and learning".





Remark: The numbers in brackets belong to the number of the identified steps.

Now that we have briefly demonstrated what an optimal implementation process can look like, we would like to return to the "Active Formula of successful implementations". We would like to use this to explain in more detail what is specifically understood by the components that lead to a successful implementation and what can thus be done specifically for a successful implementation.



2.2. Effective Practice: Assessing and Selecting "WHAT" should be implemented to reach desired outcomes

An implementation should always start with the end in mind, namely the WHY: Why should something change? What/who exactly should change? Which outcomes should be improved and for whom? [An Example of a WHY: You want to improve students' critical thinking competences, because studies (and observations in your class) shows their importance for lifelong learning.]

Then one must decide "WHAT" should be implemented. This can be practices (interventions, programs, practice standards, etc.) or strategies which are supported by evidence, are feasible to implement, fit the needs of the context, and are well defined. The WHAT should include what *exactly* should people (or organizations) do differently. Therefore, it also specifies on a very concrete level who needs to change and what changes they would need to make (Moore & Khan, 2021).

Summing up: After having a concrete idea about what the specific goal is that you want to achieve (e.g., encouraging your ninth-grade students to engage with science as a tool to contribute to the solution of local problems), the next step should be to conduct a search to find whether there are any evidence-based (or at least evaluated) practices that have the same or a similar goal. If you find such evidence-based practices, you must assess them and select one.

2.2.1. How to choose between different evidence-based practices?

Evidence-based practices that are ready to implement in other settings should be usable (learnable, doable) for the persons who implement this practice. Many evidence-based practices have been tested in different settings by the developers but are not described well enough to transfer them. Dean Fixsen and Karen Blase specified **four criteria for "usable evidence-based practices"** (Blase et al., 2018; Active Implementation Research Network, 2022):

- First, there must be a **clear description** of the evidence-based practices regarding its philosophy, the values, and principles behind the practice as well as inclusion and exclusion criteria that define the population for which the practice is intended. This information helps potential users to decide whether the program fits the goals and needs of the target group.
- Second, clear **essential functions** or **core components** of the evidence-based practices that need to exist in <u>any</u> given context must be defined. Information about essential functions also enables persons who want to implement the evidence-based practices to know which components *can* be adapted to suit local conditions.
- Third, the core components of an evidence-based practice must be described well enough and clear indicators that help to identify whether this core component is present during planning and implementing that evidence-based practice must be given. Such "operational definitions of core components" promote the consistency of implementation across classrooms, schools, districts, and countries, and allow for replications and scaling-up.
- But how do implementers know that the evidence-based practice is really working, and goals are achieved? A **practical performance assessment** should provide evidence that the evidence-based practice is effective when used as intended. It should be practical and ideally, formative and include different perspectives. However, only 5% of evidence-based practices have a useful performance assessment available. In most cases, implementers must create an assessment themselves.



Most evidence-based practices do not meet all these criteria - but scaling up for population benefits would require such usable evidence-based practices.

Case Study "Open Schooling Project on Peace"

An elementary school in Austria wanted to do an OS project on the topic of peace, as this topic is of current relevance for both the pupils and the teachers. The teachers first researched on the internet what programs and materials are available and who could be invited from outside the school or which institution could be visited that deals with the topic. The teachers decided that there should be a "Peace Day" in the school, to which a speaker from a regional peace education network will be invited. Subsequently, it is planned that each class will then vote together on how the topic could be pursued.

After that event, many pupils and teachers recognized that it is important to deal with each other peacefully daily and to resolve conflicts without violence. They noticed that in some classes there is no peaceful atmosphere, and that some children suffer from bullying. The school social worker remembered hearing about evidence-based programs for schools and a nation-wide initiative called "Weiße Feder" (engl.: White Feather)". She finds out that there is a regional network of the "Weiße Feder" and called the contact person. Various opportunities for schools to deal with the topic were available. Since it has been scientifically proven to be most effective against bullying to have a "zero tolerance against violence" climate in the entire school, the schoolteachers and school head decided to implement the VISC program (Strohmeier et al., 2012; VISC, 2018) that helps schools to achieve that goal: In a first step, teachers are familiarized with the topic of bullying in the context of a school-internal training course and they develop for the whole school appropriate strategies how to deal with bullying. Furthermore, the teachers get to know the contents and materials of the so called "VISC classroom project", that should take place in each classroom over a couple of weeks (8-13 weeks, 2 hours a week).

The VISC program is an evidence-based program that proved to be effective against bullying in many different schools and countries (e.g., Austria, Turkey, Cypres, Rumania). The school decided to take this program because of several reasons: A clear need was identified (from pupils, teachers, parents), teachers and school receive support by VISC trainers (trained by the program developers) and there is a well-written manual about the program, so that teachers who could not attend the training can read and implement the program as well - supervised by teachers who received the training. A further argument was that also other schools in the region decided to implement that program and a shared approach on how to deal with that topic in schools in general was recommended from the state school board. Schools who implement that program get a certificate from the "Weiße Feder".

2.2.2. What to do if none of the found evidence-based (or at least evaluated) practices meet (at least most) of these usability criteria?

Check whether any of the evidence-based practice would have the potential to be implemented anyway. For example, contact the program developers. Maybe they can give additional information or are even interested participating in your project.

2.2.3. What can be done if you do not find any evidence-based (or at least evaluated) practice?

Start working on creating a usable evidence-based practice accompanied with a pilot study:

- Describe your evidence-based practice as good as possible.
- Define core components of your evidence-based practice (based on theory).



- Define indicators for measuring whether these core components are implemented.
- Implement and document your piloting of the evidence-based practice.
- Most important: Evaluate your pilot. Conduct a formative and summative evaluation and document the results.

2.2.4. Does it make sense to implement an already evaluated or evidence-based practice in the same way in a different context?

Implementing effective practices with a good base of evidence is not enough. Research shows that one must ensure a good fit with needs of the target group(s), a good quality of implementation and care for sustainability from the beginning on (see Metz et al., 2017). Furthermore, the evidence-based practices must be well-aligned with the organization, community, and system – the local implementation context. If there is a mismatch between the local implementation context and the chosen evidence-based practice, the likelihood that the evidence-based practice will not be implemented with quality, will not achieve the desired outcomes, and will not sustain is very high (Fixsen et al., 2010).

A tool that can help you in gathering profound information according to the **fit between the evidencebased practice and the context** is the **Hexagon Tool** (Blase et al., 2013). It is widely used by communities and organizations to understand how a new or existing program or practice fits into existing work context at an implementing site. It can be used at any phase of an implementation to assess fit and feasibility, but is most commonly during the exploration phase, when an implementing site is identifying and selecting new practices. The hexagon tool helps in assessing innovation and system indicators, which are seen as prerequisite for successful implementation.

Indicators of the Innovation/Practice:

- How about the **usability** of the effective practice?
- Is there **support** to implement the practice fully and effectively?
- What is the strength of the evidence of this practice?

Indicators of the **System**, in which the effective practice should be implemented:

- What are the **needs** of your target populations?
- Which practices are a good fit for your community?
- What capacity exists to support the new way of working?

If one or even more of these factors are not sufficiently pronounced, implementation makes little sense; unless there are realistic possibilities to create better conditions during the preparation phase.

A description of the relevant innovation and system indicators can be found in Figure 4. This figure can be used as a basis for discussion. (Detailed information about how to use the Hexagon Model for group discussions / interviews can be found in the Appendix.)





Figure 4. The Hexagon Tool (Metz and Louison, 2018).

Ideally, the reflection about the fit between the local implementation context and the chosen practice as well as the connected decision-making process should be done together with representatives of the groups who will be involved in the implementation process. These groups include implementers (e.g., the museum, the companies that should be involved in the OS project), supporters (e.g., school head) and "users" of the evidence-based practice (e.g., pupils, student teachers).

Furthermore, by including diverse perspectives of multiple stakeholders already in this preparation phase, the implementation has a better chance for a good start; commitment can be generated, or resistance/barriers become visible, and can be readily addressed. Capacity building strategies can be developed to support the implementation context. Nevertheless, it can also be a good decision not at all to implement the program. The decision-making process itself should be deliberative, and consensus based.

It may already become evident that **adaptations** of the evidence-based practice are necessary due to the new implementation context during the phase "assessment & selection of an appropriate evidence-based practice". On the one hand, it is important that the core components of a practice are implemented in any case (otherwise the desired outcomes cannot be achieved). On the other hand, the adaptations, and the reasons for them should be noted. A formative evaluation (see 2.5.3) helps to keep an eye on whether you are on a good path to achieving the goal!

Adaptations will also be necessary during implementation). Carried out adaptions should also be noted thoroughly to know more about the fit or actual adaptability of the practice to other contexts. This knowledge can be helpful for future implementations.



Activity "Effective practice" – Reflection on the Hexagon Tool:

- Look at the "Hexagon Model" (Figure 3) and rate the evidence-based practices (maximum 3) you
 want to implement according to the different dimensions. (If you have a practice that is currently
 implemented you can use this tool as well to find out possible starting points to increase the
 success of the implementation.)
- Are there areas that are already very *well covered*?
- Are there any areas where there would be/is still work to be done?
- Are there any areas where there is still a lot to be done/ everything is missing?
- Do you still lack information on an area to be able to evaluate it? Where could you get this information?

Dimension	Your Comment	Result of the group discussion
Usability		
Support		
Evidence		
Fit		
Capacity		
Need		

2) Write down your findings in the column labeled "Your Comment".

- 3) Now look at your notes: what do you notice?
- 4) Share with others (stakeholders, implementation team, etc.): Discuss each dimension and come up with a common picture.

Discuss afterwards: What does this mean for the implementation of the practice? Is the implementation promising - or should we not implement that practice (at least now)? Are there any points that can be changed so that the implementation can be successful? What exactly might that look like?

Adapted from NIRN²

² <u>https://nirn.fpg.unc.edu/sites/nirn.fpg.unc.edu/files/resources/HeadStart-HexagonDiscussionandAnalysisTool.pdf</u>



2.3. Effective Implementation: Developing an Implementation Plan and Implementation Strategies

In chapter 2.1 we presented the QIF framework which illustrates an ideal implementation process. You may remember that the QIF shows the high relevance of good planning and of creating a fruitful structure for implementation: Implementation Science has proven that it is very helpful to create an implementation plan in the very beginning that provides a structure for your implementation. You should also think about implementation strategies right in the beginning. It is very likely that both the implementation plan and the strategies will be adapted over the implementation process. Nevertheless, it makes sense to think about this in detail at the beginning – especially to make sustainable implementation more likely.

2.3.1. What is an Implementation Plan? Why is it important to have one?

An implementation plan includes goals, target groups, and stakeholders as well as a description of the planned evidence-based practice and its context. Furthermore, it contains considerations how the goals can be achieved. It has the function of a step-by-step guide to making changes in practice – it should be realistic, feasible, concrete. Ideally, it is developed with all stakeholders and updated as needed. Initial considerations for implementation strategies and evaluation approaches should already be included as well. An implementation plan should not be mistaken as a plan for conducting the evidence-based practice itself. Thus, the focus of the implementation plan is not on the activities of the practice (e.g., conducting a training session to promote social skills), but the focus is on what is needed so that the practice can be implemented at all (e.g., for making teachers feel addressed by this training meaningful information materials must be created). To develop a good implementation plan, it is necessary to answer some important questions.

- What do we want to achieve? Who is important for this? Whom do we need?
- What are main characteristics of the target groups?
- What are the main characteristics of the evidence-based practice that should be implemented?
- What are characteristics of the context?
- How to implement the evidence-based practice? Which implementation strategies can be helpful?
- How to reach the target group(s)? How to enable the context?
- How to determine goal achievement?

(More details about implementation planning can be found in the Appendix.)

2.3.2. What are Implementation Strategies?

After you have decided WHAT should be implemented, you must think about HOW it should be implemented. You need an **intentional and visible infrastructure** to support the implementation of the effective practice. During the planning phase, consideration must be given to what needs to be done and who will do the work to accomplish the expected positive outcomes.

In Implementation Science, several actions that are relevant to building, improving, and sustaining the infrastructure needed for implementation have been identified. These actions are referred to as strategies (Powell et al., 2015), factors (Aarons & Palinkas, 2007), or drivers (Fixsen et al., 2005). Although the concepts of implementation strategies, factors, and drivers differ somewhat from one another, the core issue is always how to achieve high-quality implementation of the evidence-based practice. In PHERECLOS, we chose to use the concept of implementation strategies.



Which implementation strategies are there? Implementation strategies are "Methods or techniques used to enhance the adoption, implementation, and sustainability" of evidence-based practices (Powell et al., 2015). They can target individual determinants (like knowledge), interpersonal determinants (like networks and communication), determinants of the involved organization (like implementation climate) or determinants outside the organization (like external policies, peer pressure) (University of Washington, 2022). Table 1 shows examples of implementation strategies.

Implementation Strategies	Examples				
	Developing educational material				
Educational strategies	 Providing training / educational meetings 				
	 Providing ongoing consultation 				
	 Producing (and disseminating) promotional/ informative 				
Informative strategies	material				
informative strategies	 Informing via social media 				
	Publishing in magazines/journals				
Motivational and	 Engaging key figures, opinion leaders, champions, pioneers 				
supportive strategies	 Developing supervisory groups 				
	Organizing dialogues to aid consensus				
	 Design and/or implement new working process 				
Organizational strategies	 Organizing and/or deploying data management 				
	Assess and redesign workflow				
	 Providing local assistance 				
Facilitating strategies	Organizing dialogues				
	 Acquiring Project Management and Improvement skills 				
Strategies to develop	 Promoting Network Weaving 				
stakeholder	 Capturing and sharing local knowledge 				
interrelationships	Organizing Implementation Teams and Team Meetings				
Strategies to engage	 Involving consumers (participants etc.) 				
consumers	 Preparing consumers to be active participants 				
	 Measuring and using feedback from consumers 				
	 Giving relevant stakeholders an active role 				
Collaboration on	• Identifying and involving key figures, opinion leaders, champions,				
promotional strategies	best practices, or pioneers				
	Set up and equip a council				
Market-oriented / financial	 Obtaining quality/certification mark 				
strategies	 Developing financial incentives 				
	 Investing in additional (follow-up) funding 				
	 Assessing for readiness and identify barriers and facilitators 				
Evaluative and iterative	 Developing and implementing tools for Quality Monitoring 				
strategies	 Obtaining and using consumers' feedback 				
	Audit and Feedback				

Table 1. Overview of Possible	Implementation Strategies
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Adapted from ZonMw³

https://www.zonmw.nl/fileadmin/zonmw/documenten/Maatschappelijke_impact/Table_examples_activities_projectlevel.pdf



Example: Case Study "OS Project on Peace"

Let's come back to our case study: The elementary school that set the goal of achieving a peaceful atmosphere in the school and decided to use the evidence based VISC program for this purpose.

The overall implementation strategy of the program is primarily based on educational strategies - i.e., on the one hand teachers participate in trainings and receive supervision, but on the other hand pupils are provided with knowledge on the subject. In addition, information about the program should be provided to parents via information letters.

Our elementary school aims at implementing the program sustainably in their school. Therefore, school principal, the social workers and a teacher take the time to think about which of their projects have managed to remain sustainable and which have not and why. They conclude that it has always been a helpful strategy to have spokespersons for a project who have been involved in the planning from the beginning, or who have known about the project and have advocated for it. Therefore, they plan to create an implementation team with key persons involved (parent representatives, pupils' representatives). Furthermore, they want to contact important stakeholders from the community and gain their support for the project.

They also discussed about networking with the other elementary schools that used, have used, or will use this program or work on the topic "Peace" as an OS project, because they noticed that an exchange across schools was also often helpful for sustainable implementations. But the effort seems too high for them in this case, so they discard this strategy at this point.

2.3.3. What is important to consider when determining an overall Implementation Strategy?

When you develop an implementation strategy, it should always be targeted to the implementation context. For example, it makes no sense to provide a program to transfer knowledge (e.g., a training for teachers on problem-based learning) if the knowledge already exists in that specific context. It might be more important to have a discussion meeting at school about how an entire school day could be designed so that problem-based learning can take place, or what or who from the local community could be involved to support problem-based learning. A precise context analysis is therefore important (see also chapter 2.4).

Furthermore: When developing an implementation strategy, there are different possibilities: You can focus on a single strategy (e.g., information campaign, training, organize dialogues to aid consensus) or tie up a bundle of strategies to address multiple implementation barriers (e.g., provide educational material and provide training to improve knowledge and skills). Or you can use mixed strategies (e.g., provide training for knowledge acquisition on the individual level and engage opinion leaders within the organization to foster organizational determinants).

To develop a comprehensive implementation strategy, the implementation team should

- 1) select implementation strategies that address best the context and setting especially regarding barriers to implementation and/or facilitators to implementation.
- 2) engage stakeholders in selection and tailoring of implementation strategies.
- select implementation strategies based on ratings of importance and feasibility. (e.g., Most important strategy "Identify barriers and facilitators"; Least important strategy "get support from politics"; Most feasible strategy "Developing educational materials"; Least feasible strategy ""get support from politics".) (King's Improvement Science, 2018, p. 26)



It's important to keep in mind that an implementation strategy should never be viewed as fixed; the implementation team should constantly discuss the effectiveness of each implementation strategy and whether modifications could enhance the implementation success.

Activity "Effective Implementation"

Look at the implementation strategies presented in Table 1 and select 3-5 strategies that could be relevant in the implementation of your evidence-based practice. Then rate these strategies regarding their importance and feasibility.

2.4. Enabling Contexts: The importance of analysing the Implementation Context and establishing Implementation Teams

Besides considering how to best implement an evidence-based practice, it is important to have respectively create conditions that are supportive of new practices. As you can see in the "Active formula of successful implementation" in chapter 1.1.2, not only the WHAT and the HOW matter for achieving significant implementation results, but also an enabling context: When you implement an evidence-based practice, you implement it someWHERE – namely in a specific context. It is important to keep in mind, that this context exists outside of the evidence-based practice and existed before! It has several characteristics that affect the success of the implementation (e.g., Do people work well together? Is leadership on board?) (see Moore & Khan, 2021)

In Implementation Science, there are several frameworks that help to capture the context in more detail. A very well-known framework is the *Consolidated Framework for Implementation Research* (CFIR). This framework addresses many factors at different levels that influence the success of an implementation (see Figure 5):

- The **people** involved (e.g., What is their level of prior knowledge in the field? To what extent do they feel confident in implementing evidence-based practice?)
- The **internal setting** in which the evidence-based practice is implemented: Mostly, implementations take place in organization. It is helpful to try to get a good picture how they can be characterized [e.g., What are their structural characteristics (a ministry functions according to a different logic than a start up)? What priority is given to the implementation of this evidence-based practice in contrast to other important issues of the organization?].
- The **external setting** (e.g., user needs, peer pressure, legal/policy requirements).

Of course, the evidence-based practice itself has its own characteristics that needs to be considered (e.g., How is the usability of this practice? What is the evidence base? Is it easy to implement or does it require a lot of effort? Are there any strategies formulated how the evidence-based practice should be implemented?).⁴

⁴ For more information on the CFIR, see: https://cfirguide.org/





Figure 5. Adapted Version of the "Consolidated Framework for Implementation Research" (CFIR).

A detailed analysis of the context - e.g., using the CFIR – during the planning phase of the implementation can help to identify barriers and support factors. This can provide information on how supportive the context currently is and what implementation strategies might be helpful to create context, that supports the implementation of the evidence-based practice.

Initial information of the context's readiness (=Is this specific context ready for this specific intervention?) can also be obtained. Besides using the CFIR: You already know one tool, that helps to assess readiness and to help people select the best intervention for their setting: The Hexagon Tool that is described in chapter 2.2.4.⁵

Implementation Research has shown that it is important to create a good infrastructure so that evidence-based practice can thrive. Above all good collaboration is needed for successfully implementing innovations. This is best achieved through team structures, communication and feedback loops, and the ongoing collection of data that shows whether implementation is successful, or adaptations are needed. Successful implementation requires organized "expert" support, which is gathered in an implementation team. Implementation Science has identified implementation teams as a key factor for facilitating the intended change.

2.4.1. What is an Implementation Team? Why is it important?

"An implementation team is a group of stakeholders that oversees, attends to, and is accountable for facilitating key activities in selection, implementation, and continuous improvement of an intervention." (Metz et al, 2020). They are a group with a common goal, high interdependence, and autonomy. The Implementation Team's main tasks are to 1) select, adapt, and tailor the evidence-based practice, and support the implementation through (2) improvement cycles, through (3) developing a good infrastructure for the evidence-based practice and through (4) taking care about the different systems that are involved. They are also responsible for the selection of appropriate implementation frameworks to use. Ideally, an Implementation Team should consist of individuals who have expertise in the evidence-based practice itself, represent all groups affected by the practice, and

⁵ There are two other that can be recommended: (1) Ready, Set, Change! is designed to help you pick a quantitative, valid and reliable readiness assessment; see: <u>http://readiness.knowledgetranslation.ca/</u> (2) The Readiness Thinking Tool is more qualitative and is designed to guide conversations around different aspects of readiness; see: <u>https://www.wandersmancenter.org/blog/readiness-thinking-tool</u>



have knowledge about implementing innovations and organizational change processes. They should work simultaneously at multiple levels of the involved systems to assure that the evidence-based practice is implemented as intended and to good effect. They do not have to do the whole work (all for themselves but facilitate the completion of such activities (e.g., identify qualified trainers, tell quality managers which data they need and ask for analyzing them). Implementation Teams are different to Advisory Boards or Technical Working Groups who are involved from time to time and for a limited time spam: Implementation Teams are active facilitators for the implementation and are involved throughout the whole implementation process. Their members are taking over specific responsibilities for ensuring the success of the evidence-based practice.

Why are Implementation Teams Important?

Research showed that an investment in developing implementation teams as well as supporting their competence and capacity can lead to sustained use and dramatically improved outcomes. As you might remember from the formula of successful implementation: Implementation Quality is important for reaching the expected outcomes when implementing an evidence-based practice. Fixsen and his colleagues (2001) found that over 80% of attempted implementation sites used practices with fidelity when competent implementation teams are in place; while without effective and efficient implementation teams, only 30% met fidelity criteria.

"Without teams, an implementation effort ends up relying on individual leaders who, without a team, are unable to influence multiple stakeholders. This "solo hero" model of implementation has been demonstrated to fall short on key issues related to successful implementation such as stakeholder buyin, integration and alignment of the new practice within the system, and sustainability to achieve population outcomes" (Metz et al., 2017, p.35).

2.4.2. What does an Implementation Team take care of?

According to NIRN⁶ key functions of Implementation Teams are the following:

1) Ensure successful implementation:

- Continuously assess leadership buy-in and readiness: The implementation team gathers and communicates information about the reasons for adopting evidence-based practice or the need for change; they provide implementation support and seek to develop or strengthen commitment among leaders to initiate system changes they can influence that facilitate implementation of evidence-based practice. Thus, the implementation team supports the process of leadership buyin and addresses the readiness of an implementation system.
- Determining and adapting implementation strategies: Implementation team members must determine the roles and responsibilities they have in implementation, execution, and adaptation. They need to address implementation strategies. (Implementation strategies are important for implementing an evidence-based practice as intended in a new system/context; see chapter 2.3.2.) They should be established at the beginning but need to be reflected on for effectiveness as implementation progresses and adapted as and when required.
- Monitor implementation fidelity of evidence-based practice: An assessment of implementation fidelity provides valuable information that the implementation team can use to plan activities and make decisions.

⁶ <u>https://nirn.fpg.unc.edu/module-3/topic-2</u>



- Planning activities: The implementation team is responsible for purposeful planning of activities around the implementation process. Regular meetings are held to guide key implementation steps based on data on the one hand. On the other hand, they must try to ensure that sufficient support is available to guarantee high implementation fidelity and to plan appropriate corrective measures here if necessary. Here, it is important to identify teams or individuals who could be helpful in solving problems as they arise.
- Problem solving and building sustainability: An infrastructure must be established and maintained to support a sustainable implementation of evidence-based practices. Feedback loops are established between involved groups of people to: (1) share information about factors that facilitate successful implementation, (2) identify and address barriers to successful implementation, (3) routinely communicate directly with policy makers and administrators who may be able to address barriers and develop solutions to implementation problems.

2) Stakeholder Engagement:

An important role and function of any implementation team is to engage stakeholders. Meaningful stakeholder engagement provides an opportunity to share information, address concerns, leverage the knowledge they bring, and gain support for decisions.

3) Create a supportive Implementation Climate:

Another function of the implementation team is to actively create a good implementation climate, ensuring that the new evidence-based practice can thrive. Each stakeholder has areas that he/she can influence; areas that he/she can improve to create a more supportive environment for implementation. Other areas are beyond the sphere of influence. Yet, they must be addressed. This means that the implementation team needs to communicate systematically and transparently with other stakeholders who can change relevant policy, legal, and financial contexts within their sphere of influence in ways that are helpful to the implementation of evidence-based practice.

In short:

An Implementation Team should periodically address the following questions (see Metz et al., 2017):

- Are the participants of the evidence-based practice (still) engaged?
- Is the practice defined well enough? Are guiding documents available / well-written and accessible enough?
- Is there (still) a good fit of the evidence-based practice with the context and setting?
- Are implementation supports in place and do they work?
- Which data do we need for decision making and for continuous quality improvement? Do we have these data?
- Is fidelity of the implementation measured and does fidelity improve?
- Is the achievement of outcomes on a good way?
- Is sustainability ensured?
- Does our communication and cooperation work well (enough)? Is everyone still on board?



2.4.3. How should the Implementation Team look like?

Allison Metz summarized important aspects of implementation teams, namely about the size and composition of implementation teams, about terms of references and leadership of these teams, as well as about which teams are suitable for complex implementations (Metz and Bartley, 2020).

Size and Composition: Implementation Teams should "be as small as possible, given the work to be accomplished" (Wageman et al., 2005, p. 4) – typically these are 6-10 people, whereas a minimum of 3 persons is recommended. But – as they work together for a longer time – there must be a tolerate turnover meaning that teams can work even when players come and go. Implementation Teams should include key personnel from all organizational levels (e.g., program administrators and practitioners, supervisors, persons from administrative leadership) and key stakeholders who offer diverse perspectives on what is needed to create the best conditions for implementing innovations into systems and organizations. The advantage of diverse teams is that the skills and knowledge of the members can complement each other to create a good implementation plan, better anticipate barriers, and achieve good diagnostics and solution finding when problems arise.

Case Study

As mentioned before, the VISC program has been implemented in many different schools and countries. In our case, the implementation took place in only one school. The implementation team consisted of the principal of the school, the secretary, the school social worker, a class teacher as well as – from time to time - a representative from the parents' union and a class representative.

If a nationwide implementation of this program is planned (e.g., by a regional school board), it would be important to have the following persons in the implementation team.

- Persons who are responsible for the implementation of such programs on site (e.g., school social workers, school psychologist,). They can provide information about what and who needs to be considered in their school when implementing the program. They know potential objections of teachers and parents.
- A person from the administration: This person is well familiar with the requirements of the school authorities and the school management.
- A person who helped develop the program: This person can provide information about the program itself and help establish criteria for fidelity.
- A person responsible for conducting the training: This person can provide information about what trainers need to know to run the program well.
- Persons who use the program (e.g., children, teachers): These persons can provide information about the likelihood that the program will be adopted by the target groups and meet their needs.
- Funders: They can provide information about what it takes for the program to have a chance of continuing to be funded.

Terms of Reference: After the team has been formed, it is helpful to create guidelines that include the purpose and goals of the team, the scope and tasks of the team, roles, and responsibilities as well as the communication and decision-making structure. It has proven useful to create a document in which all terms of reference are recorded. Without this, collaboration may quickly get derailed.

Leadership: Leadership is also important to talk about right at the beginning. On the one hand, implementation teams need the support of organizational leadership: Change processes need



resources or intervene in the allocation of resources, and this is not feasible without support from management. On the other hand, the team itself needs leadership. This is not about appointing a single leader but establishing co-leadership.

Linked Teams: If the evidence-based practice is very complex one may need several implementation teams. These teams may address different levels (e.g., state, regions, school-level) or different aspects of the implementation (e.g., training of practitioners, doing assessments / evaluations). But they should be linked in some way – e.g., if you have implementation teams for different aspects at least one person of each level (state, region, school-level) should be represented in each of this team. In any case, for complex evidence-based practices, there should be a core implementation team responsible for the day-to-day implementation (consisting of a limited number of people to be agile and productive).

2.4.4. What is essential for effective team processes?

Teams need to work together effectively to best achieve their goals. To make this possible, four central processes need to be addressed: Meetings, Communication, Data Reflection, and Member Engagement (Metz and Bartley, 2020).

1) Meeting Processes

Implementation teams should have regular meeting times and collaboratively develop the basic procedures for these meetings. The meetings should make it possible to use the time effectively to also achieve the planned goals.

2) Communication Process

One of the implementation team's main tasks is to keep communicating about what works, what doesn't work, and how they know that. Vertical and horizontal feedback loops are important to get a broad information base about the success of the implementation, see Figure 6.



Figure 6. Vertical and horizontal feedback loops.

There should also be clear guidelines on (1) which stakeholders to communicate with, (2) when to communication with whom and (3) about what, as well as (4) how to communicate with whom. If there are Linked Teams, a communication process must also be determined for them. Bidirectional communication should also be supported: Partners and stakeholders should be encouraged to share feedback that has been brought to them with the implementation team.



In sum, when developing a communication process for your implementation team you should address the following questions (Metz et al., 2017, p. 39):

- WHO should be communicating?
- About WHAT should we communicate?
- HOW OFTEN should we communicate?

3) Data Reflection Processes

The core task of the implementation team is to make data-based decisions and initiate continuous data-driven improvement processes. Shared learning should be a core value of any implementation setting. Therefore, an Implementation Team should be clear about which data they need for decision-making (e.g., tailoring/ adapting a program; reallocating resources), for feedback and for improving the implementation.

Usually, you need data that is relevant to the administration (e.g., enrollment, costs, staff), data about whether the evidence-based practice is implemented as intended (e.g., are structural aspects of the implementation in place, is compliance given) and data regarding the outcome that should be achieved (e.g., increased knowledge, improved skills). It is important to think about possible sources of data to use for answering the specific implementation question you have. Some examples:

- Collect (written or oral) information about the current state of the implementation as well as about barriers & opportunities to strengthen the implementation.
- Collect (written or oral) information which resources and supports are needed (training needs etc.)
- Do field observations to get an idea about the acceptance of the evidence-based practice.
- Provide a short test to assess current knowledge increase.

When the data are available	e, they can be discussed	using the following questions:
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What?	What do we notice in the data?
wildt:	What stands out?
	What patterns or trends do we see?
So what?	What does this mean for our implementation?
So what:	Why is this relevant?
	What conclusions can we draw?
Now what?	What actions make sense based on the data?

For the data reflection process, a clearly defined process for continuous quality improvement should be introduced in the Implementation Team, such as the "Plan-Do-Study-Act" Cycle known from project management

4) Member Engagement Processes

Research indicates that team members are more likely to participate when they can actively engage, learn, and develop themselves. This is particularly achievable when co-leadership, peer-to-peer coaching, task-related learning (Higgins et al., 2009) and possibilities for co-creation are facilitated.



Case Study

Meeting and Communication Process: In our case study, it was determined that the implementation team would meet twice for planning the project (Meeting 1: Constituting the team and initial discussion of the implementation plan, Meeting 2: Finalizing the implementation plan). For the implementation of the project three meetings were planned (Meeting 1: Experiences and consequences from the introductory workshops for the whole school; Meeting 2: Experiences and consequences from the VISC trainings for the teachers; Meeting 3: First experiences and consequences from the classes). At the end, a reflection meeting was planned. It was also decided to inform the mayor and the local media at the beginning of the project and to have a closing event at the end where they will be invited.

Date Reflection Process and Member Engagement Process: For the data-based discussion, it was agreed that each person involved will systematically gather impressions about facilitators and barriers from the perspective they represent (e.g., teacher perspective). These impressions may be gathered by interviewing others (e.g., in the teaching staff) or through observations (e.g., from classroom observations). Meetings were scheduled for 90 minutes each to allow sufficient time for in-depth discussions. In addition, the implementation team jointly planned the final event.

Activity "Forming an Implementation Team"

As you consider developing an Implementation Team, first think about the overall scope of work for that team (e.g., select, support, monitor the implementation of a specific practice). Then think about either "repurposing" an existing team or "starting fresh".

Some prompts will help you think about team formation:

- Given the tasks of the team, what core competencies will be needed?
- Who can bring those competencies to the table? (If possible: Name of the persons, current expertise, and rationale for inclusion)
- Given the work to be done, what is a functional number of members? Is there a need for linked teams?
- Which stakeholders need to be included?
- Are there potential gaps in team expertise/competencies? If so, how could you fill those gaps?
- How should leadership structure of the implementation team look like?
- Is the management supporting the implementation?

Adapted from NIRN⁷

⁷ <u>https://nirn.fpg.unc.edu/resources/activity-1-4-getting-started-implementation-teams</u>



2.5. Caring about Outcomes

During implementations, it is important to always keep the desired outcomes in mind. These outcomes can be related to the goals of the **evidence-based practice** concerning the users (e.g., increased social competencies of the students) or concerning the organizations involved (e.g., increased student-centeredness, more visibility) or to the **implementation** itself. Meta-analytic research shows that the level of implementation affects the outcomes obtained in promotion and prevention programs (Durlak and DuPre, 2008). Thus, if the expected outcomes of the evidence-based practice are not achieved, it is helpful to determine whether the failure is due to the practice (intervention) being ineffective, or due to implementation issues.

As mentioned in chapter 1.1.1: The focus of implementation science and intervention research is very different as they address different research questions. While intervention research mainly focuses on the question if and why interventions are successful, classic research questions from implementation science include (University of Washington, 2022b):

- What are the most effective approaches to disseminate evidence-based practices?
- What approaches are most effective for incorporating new knowledge and evidence-based practices into organizations?
- How do contextual factors influence the success or failure of implementation? How can these contextual factors be changed to increase the likelihood of successful implementation?
- What are the most effective approaches to removing practices that are no longer effective or were never effective?

2.5.1. What to measure: Implementation Outcomes or Outcomes of the evidence based practice?

If there is already good evidence for the effectiveness of the evidence-based practice, the focus of the data collection can be on implementation outcomes. However, the outcomes of the evidence-based practice (intervention) should also be measured, albeit to a lesser extent. If there is little evidence on the effectiveness of the intervention in different contexts, the focus should be on examining the effectiveness and efficiency of the intervention, but one should also keep an eye on implementation outcomes. In any case, the implementation team should determine which outcomes to measure and how best to measure them. In the best case, stakeholders should also take part in this decision as the involvement of stakeholders has an impact on the adoption, implementation, and sustainability of evidence-based practices (King's Improvement Science, 2018, p. 33).

2.5.2. What are possible Implementation Outcomes?

In the literature, eight conceptually distinct but interrelated implementation outcomes have been proposed (see Table 2; Proctor et al., 2011).

Implementation outcome and definition	Commonly used terms				
Acceptability: perception among implementation	Satisfaction with various aspects of the				
stakeholders that a given evidence-based practice	innovation (e.g., content, complexity,				
etc. is agreeable/ satisfactory	delivery, credibility)				
Adoption: intention, initial decision, or action to	Uptake; utilization; initial implementation;				
try or employ an innovation	intention to try				
Appropriateness: perceived fit, relevance, or	Perceived fit; relevance; compatibility;				
compatibility of the innovation for a given setting,	suitability; usefulness; practicability				

Table 2. Implementation Outcomes.

Implementation outcome and definition	Commonly used terms			
provider, or consumer; and/or perceived fit of the				
innovation to address a particular issue or problem				
Cost (incremental or implementation cost): cost	Marginal cost; cost-effectiveness; cost-			
impact of an implementation effort	benefit			
Feasibility: extent to which a new treatment, or an	Actual fit or utility; suitability for everyday			
innovation, can be successfully used or carried out	use; practicability			
within a given agency or setting				
Fidelity: degree to which an evidence-based	Delivered as intended; adherence; integrity;			
practice is implemented as originally intended by	quality of program delivery			
the program developers				
Penetration: integration of an innovation within a	Level of institutionalization; Spread; Service			
setting and its subsystems.	access			
Sustainability: extent to which a newly	Maintenance; continuation; durability;			
implemented evidence-based practice is	incorporation; integration;			
maintained or institutionalized within a setting's	institutionalization; sustained use;			
ongoing, stable operations.	routinization			

Based on Proctor et al, 2011; also see ImpRes -Tool (King's Improvement Science, 2018, p. 31)

Case Study

To achieve the best possible implementation of the program, it was decided to continuously capture the acceptance of the program among both the primary target group (pupils and teachers) and the secondary target group (parents). The acceptance of the program was assessed using feedback questionnaires. In addition, at the end of the program, the perceived fit of the program to the school as well as the actual relevance of the topic should be determined in a group discussion. It was also important to the implementation team to obtain data on the extent to which the program leads to less bullying and more cohesion. The school social worker pointed out that often shortly after implementation of violence prevention programs – because of the raised awareness – more bullying cases are observed or reported and only after a period the cases decrease. Therefore, suitable indicators must be found that prove the success of the program in the short term (e.g., that the pupils know better how to deal with aggressive behavior of others).

2.5.3. How to conduct an evaluation?

It is not only important to have a plan for implementation, but also one for capturing intervention and implementation outcomes. In some cases, there are enough resources available to do a sound scientific research study. But most of the time, there is a lack of money for this. Nevertheless, efforts should be made to capture, analyse, interpret, and discuss central (implementation and innovation) outcomes within the framework of an evaluation.

To develop a plan for your evaluation, it is helpful to visualize the **steps of an evaluation** and the questions that are important to clarify here (see Figure 7).





Figure 7. Evaluation Steps

We recommend that the Implementation Team think carefully about the **purpose**(s) of the evaluation already in the planning phase of the OS project. Furthermore, they should determine,

- ... which specific questions should be answered with the evaluation (e.g., is it more about the evaluation of the outcomes on pupils' level for example how their communication skills develop over time or more about how the partners worked together; what exactly is of your interest and helpful for you?),
- ... which **methods** should be used to answer the questions (questionnaires, tests, interviews, focus groups, observations, document analyses, etc.), and
- ... what are good measuring points? An evaluation could provide helpful information even before the actual implementation of the OS activities (e.g., how activities really fit to the needs of the pupils)! An accompanying (formative) evaluation of the process and/or a final evaluation certainly also provide valuable insights into the status of goal achievement. During the implementation phase data should not only be gathered and analyzed, but also discussed within your team, and communicated to relevant others.

Furthermore, a participatory (Guijt, 2014; Zukoski and Luluquisen, 2002) and utility-based approach (Patton and Campbell-Patton, 2021) has proven successful for the development of such an evaluation plan. This means that the inclusion of stakeholders (e.g., parents, important players in the community) is very beneficial to receive evaluation results that are regarded as useful. Furthermore, the stakeholders get more committed to your project – and will probably also support you best in conducting your evaluation. Therefore, a participatory and utility-based approach is recommended.

As you might have recognized: There are various types of evaluations, which differ on the one hand in *who* carries out the evaluation and on the other hand, in *when* they are conducted (Scriven, 1991):

- **Self-evaluation** is the process of systematically observing, analyzing, and improving one's own actions or results.
- Peer Review is an assessment by external experts or colleagues.
- **External evaluation** is conducted by persons who are outside the system or internal third parties (e.g., persons from quality management).



- Summative evaluation is the final assessment of the degree of goal attainment (e.g., improvement in team competencies or skills) after the implementation of your project. (Mnemonic: You summarize the results of your project.)
- Formative evaluation reduces risks during the development of your project or during the implementation. This kind of evaluation should bring you information about which modifications should be made and maximizes the likelihood that your project will succeed. (Mnemonic: You form the results of your project). Or said with the words of Robert Stakes, a famous evaluator: "When the cook tastes the soup, that's formative. When the guest tastes the soup, that's summative evaluation".

Many different evaluation frameworks might help in designing your evaluation. Three very practical ones are the

- **"CIPP" Model** developed by Stuffelbeam (2000, 2003) focussing on the *Context* of an evidencebased practice, the *Input* (= evidence-based practice itself), the *Process* of implementing the evidence-based practice and the *Product* (outputs, effectiveness, impact, sustainability)
- **"4-Level-Model"** developed by Kirkpatrick (2006) focussing on the *Reaction* to an evidencebased practice, the *Learning* (including attitudes) that took place and the *Behaviour* that might have changed as well as on the *Results* (impact) of an evidence-based practice.
- "RE-AIM Model" originally developed by Glasgow, Vogt & Boles (1999) that is often used in Implementation Science and combines implementation and intervention outcomes. It covers the *Reach, Effectiveness, Adoption, Implementation,* and *Maintenance* of the implementation of an evidence-based practice (see also: Holtrop et al, 2021).

Activity "Caring about Outcomes"

Think about the innovation you are planning: Which outcomes to you want to achieve – WHAT exactly should be evaluated during the formative resp. summative evaluation? WHO should be involved in the evaluation? HOW can you measure your Outcomes? WHEN should you measure them? To WHOM you should report the results and when?

Formative	Describe how and when you will evaluate during the process
What?	
Who?	
How?	
When?	
Reporting: to whom and when?	



Summative	Describe completed	how aı I.	nd whe	n you	will	evaluate	once	the	process	is
What?										
Who?										
How?										
When?										
Reporting: to whom and when?										

Adapted from ZonMW⁸

3. Planning for Sustainability

We described in chapter 2.3.2 sustainability as one possible implementation outcomes. But in many cases, implementation projects are treated as if they have a defined start and end - and not as something that is going to continue (Moore & Khan, 2021). Nevertheless, our intention is that the reached outcomes are sustained over time: Individuals should continue to do the WHAT. But sustained behavior change is dependent on organizational-level sustainability strategies.

Sustainability is not clearly defined – it could mean being able to continue the mission that one has pursued, to retain experienced people, to refine the program and to gain more credibility. The concrete meaning of sustainability is depending on...

...the program goals and core components (Which goals should be sustained? Which activities relate to them and should be sustained with which extent of fidelity?)

...the context (Should the program be institutionalized within the organization, or within the community, or within a network?)

...the timeframe (Should it maintain for a year, 3 years, 5 years, more?).

Current concepts do not conceptualize sustainability as "static" anymore, because this may impede adoption of more effective practices as the environment changes over time or new evidence emerges. If evidence-based programs are not sufficiently adapted to the context, it will be difficult to sustain

⁸https://publicaties.zonmw.nl/fileadmin/zonmw/documenten/Maatschappelijke_impact/ZonMw_implementat ieplan_invulbaar_EN.docx



them. Programs that manage to establish a good fit between the program and the needs of the context (inside and outside the organization where the program is implemented) are much more likely to be sustainable (Dearing, 2009; Racine, 2006; Shelton et al., 2020). Research shows that it is important to think about sustainability right at the beginning of a pilot project. Many tools for planning for sustainability can be found in the book "Survive and Thrive: Three Steps to Securing your Program's Sustainability" (Hutchinson, 2016). (More details for "Sustainability Planning" can be found in the Appendix). *A final remark*: The term "maintenance" is often used synonym to "sustainability". However, maintenance usually refers to a shorter period (e.g., 6 months after the program was delivered) and focuses primarily on the institutionalization of a program (e.g., made part of routine organizational practices and policies).

3.1.1. What are possible Sustainability Goals of a program?

As sustainability can mean different things it is important to set sustainability goals that fit your practice. To do so you should ask yourself in the first place what you like to sustain and what is reasonable to expect (regarding size, type, and design).

Then you can think of different scenarios you can head for in the long run:

- 1. The continuation of your successful program after funding is terminated, e.g., by renewing grants year after year or new funders each time. This scenario is familiar to most of us. But there is no guarantee that founders will re-fund on and on.
- 2. The transition of a program into a core program within a host agency, i.e., incorporates it into their operating budget and procedures. That scenario mostly happens if a program is very mature.
- 3. The sustainment of program benefits through the development of increased community capacity. That occurs when a program has been so successful that it's no longer needed. That is the most challenging type of sustainability one can head for.

Does everything have to be sustained? Of course not. Research Studies/ Evaluations can help you finding out what the most promising components of your program are. Having a clear sense of your sustainability goals will help as you move forward to develop sustainability strategies.

3.1.2. How to foster Sustainability?

There are several methodological hurdles when trying to find a scientific answer to the question of what makes a program sustainable: As mentioned before, there is lack of agreement on what sustainability even means. Furthermore, different sectors are investigated (e.g., health, education) often by using retrospective studies with obvious limitations. Overall, a combination of various factors seems to be responsible for the sustainability of programs. Although research does not have a solid answer to the question what influences program sustainability the most, there are a couple of factors that appear in many studies. When heading for sustainability, we should be aware of these factors. We can reflect on them related to our specific programs and develop a rational sustainability action plan.

The factors that were found most frequently in research articles into can be clustered in categories and used for sustainability planning (see Table 3). You may notice that this list contains some categories that we already presented to you at the very beginning of this Toolkit when introducing the hexagon model.



Cluster	Tips
Funding	It's good to have diverse sources of funding like individual donations, major gifts, fee for service/membership, in-kind contributions, charitable gaming, special events, corporate sponsorship, social enterprises
Strategic Planning	Develop a sustainability plan right in the beginning of your project.
Program Evaluation	Invest in evaluation and demonstrated the worth & value of your program through evaluation results.
Program Design (including Adaption)	Tip 1: Pick only programs for implementation where there is a clear need and ongoing demand for this.
	Tip 2: This program should be at least evidence informed (to justify the value of implementation) as well as being easily adaptable to the context.
Partners & Political Support	Tip 1: Invest in partners and let them really collaborate to reach a sense of shared ownership. This allows you better problem solving but also provides you more possibilities for getting the resources you need for sustaining your program.
	Tip 2: Look for program champions. These individuals are well-positioned advocates of the program – they use their connections, influence, prestige etc. to mobilizing people and resources, obtaining publicity, influencing policy, etc. They could be external or internal to your program but are usually not staff – ideally, they know how to do "politics".
Personnel	Programs that employ residents as program staff are associated with greater sustainability. The reason is that these people are usually better in reflecting the local values and culture of the local community. They foster greater community buy-in and take more ownership.
Host Agency / Organizational	The program should have a good fit to the goals, current strategic priorities, culture of the host agency.
Capacity	The capacity of the host agency should be large enough to cover the resources needed for the implementation of the program (including resources for evaluation, communication, and networking).
Community	The involvement of community members increases their ownership and long-term commitment to the program which has an impact on sustainability: "people support what they helped create".
Communications	Assure high visibility. People can only support you if they know who you are, what you do and what you have accomplished. A development of a communication plan right in the beginning is helpful.

Table 3. Factors Influencing Sustainability

Hutchison, 2016, p. 33 ff; see also Program Sustainability Assessment Tool (2022)⁹

Important: Consider, how each factor applies to your current situation / program. Not all factors will be relevant for each situation. Some factors might be more influential than others in your case. The earlier you focus on the relevant factors, the better you can position your program for greater sustainability.

⁹ https://sustaintool.org/psat/



Case Study

Even if no financial investment is necessary for the implementation of the VISC program, a time investment is necessary (e.g., until the teachers are trained, until the pupils have gone through the program). Some teachers or parents need to be convinced that promoting social skills is as valuable as promoting school performance.

The implementation team's experience in past similar projects is that it's important to have the parents' union on their side, but also the ministry. So, they involved parents early on and asked the ministry for their patronage. They also decided to keep parents informed about the project through a newsletter. Parents will also be invited to the final event, at which all classes that have participated will receive awards from the program developers.

Activity "Assess the Sustainability Capacity of your program"

Fill out the self-assessment tool PSAT to evaluate the current state for Sustainability Capacity: https://sustaintool.org/psat/

When you take the online assessment, you will receive a summary report of your overall sustainability. That can be helpful for your sustainability planning.

The assessment contains 40 questions, and you will rate your program across the above-mentioned sustainability clusters.

It takes about 10-15 minutes to finish.

You can also use the assessment as a group. You can invite up to 12 people for free. After everyone responded, the results will be combined. You will be able to view the combined group Sustainability Report, and everyone gets his/her own summary report.

Note: You also can download the assessment tool on the website. It is published in the book "Survive and Thrive: Three Steps to Securing your Program's Sustainability" written by Hutchison (2016) as well resp. in an article from Luke and colleagues (2014).



4. Implementing Implementation Science in PHERECLOS

In the Horizon 2020 project PHERECLOS, one main concern was to impart knowledge from Implementation Science to the persons who had the mandate to form Local Educational Clusters (LECs) and to strengthen them in their implementation skills. Therefore, we developed a consecutive series of implementation workshops and conducted them over a period of 1.5 years, guiding the LECs from the development of their (initial) work plans to the selection of strategies to enhance their longer-term sustainability. Due to the COVID-19 pandemic, all workshops and webinars were conducted online. In sum, two workshop series and three webinars were conducted.

A first **Implementation Workshop Series** was conducted during and after the Virtual Porto Consortium Meeting to **support the starting phase of the LECs**. A general introduction to the topic *implementation* and the *Hexagon Tool* was given and a discussion session was conducted during the Consortium Meeting. The follow-up online seminar covered *Further Details about Implementation Frameworks, Models, and Theories*.

In the following, three **webinars** were carried out, which covered the aspects of *effective implementation* (implementation climate), *enabling contexts* (implementation teams, data & communication) and *improved outcomes* (evaluation) to **support the LECs in implementing their workplans**:

- Implementation Climate and Implementation Teams
- Implementation Teams (Coordination & Communication) and Supervision
- Creating Evidence through Evaluation

A **second Implementation Workshop Series** was conducted during and after the Virtual Trieste Consortium Meeting **to support the LECs' sustainability planning.** An introduction to the concept of *sustainability* was provided as well as tools that helps to assess key factors of sustainability as well as developing a concrete plan for sustainability. The workshop was an introduction to sustainability and which aspects foster sustainability (*From Exploration to Sustainability*); the follow-up online seminar focused on *Planning for Sustainability*.

All workshops (duration: 3h) and webinars/online seminars (duration: 1,5h) were recoded for those who could not participate.



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8. Appendix

8.1. Decision making about the implementation of an evidence-based practice: Using the Hexagon Tool in a workshop / interview

A detailed description of the relevant innovation and system indicators of the Hexagon Tool can be found in figure A1. This figure can be used as a basis for discussion. Alternatively, an interview can be conducted to better capture each indicator in individual interviews with relevant stakeholders (see section below figure A1).

Ideally, the reflection about the fit between the local implementation context and the chosen practice as well as the connected decision-making process should be done with representatives of the groups who will be involved in the implementation process. These groups include implementers (e.g., the museum, the companies that should be involved in the OS project), supporters (e.g., school head) and "users" of the evidence-based practice (e.g., pupils, student teachers).

By including diverse perspectives of multiple stakeholders already in the preparation phase of your project, the implementation has a better chance for a good start: commitment can be generated, or resistance/barriers become visible, and can be readily addressed. Nevertheless, it can also be a good decision not to implement the program. The decision-making process itself should be deliberative, and consensus based.



Figure A1. The Hexagon Tool (Metz and Louison, 2018).



<u>Activity</u>

This activity is based on a document of Metz, A. & Louison, L. (2019) The Hexagon Tool: Exploring Context. Chapel Hill, NC: National Implementation Research Network, Frank Porter Graham Child Development Institute, University of North Carolina at Chapel Hill. Based on Kiser, Zabel, Zachik, & Smith (2007) and Blase, Kiser & Van Dyke (2013).

1) Quick Guide for users:

- First, identify an evidence-based practice that you (or others) think would be useful to implement.
- Then select a group of people with whom you will discuss the following questions in a meeting of about 1h (this could be a group meeting or an interview setting). Representation from a variety of perspectives (e.g., team members, representatives of the target population) should be represented.
- The group / individual person should review, discuss, and document the questions for each category of the Hexagon Tool (s. figure 1 above).
- You do not have to go through all the questions listed below. We listed them that you get a more detailed understanding of what is meant by each indicator of the Hexagon Tool.
- Take notes per category (e.g., Need, Fit, Capacity) during the discussion / interview.
- After discussing a category, the group / person should rate this category using the 5-point Likert scale.
- At the end of the session, look at your notes: What could be clarified in the meeting? Where do you need to do more details?
- Then decide (ideally, together with the group) how you want to proceed. For example: Who could gather missing information? How will these findings be collected? Does it make sense to meet again? Etc.

2) Caring out a group discussion or interview:

Welcome: Thank you for taking time. We are interested how our pre-selected practice can be described along different indicators that are proven to be essential when assessing the contextual fit and the feasibility of the practice. Your assessments are very valuable for the evaluation of this practice. This way we can get a more accurate picture of whether it makes sense to implement this practice or whether pre-preparations must be done before we can start with the implementation. Or whether we would be better off continuing to search for a suitable evidence practice now.

We have chosen the Hexagon Tool as a basis for our discussion/interview, in which different indicators are shown, which we would like to go through with you now. The indicators of the Hexagon Tool refer on the one hand to the evidence-based practice itself, and on the other hand to the system in which the practice is to be implemented.

Questions for assessing Innovation Indicators

In the first block, we want to capture the level of the so-called Innovation Indicators. Innovation indicators specify the extent to which the practice demonstrates usability across a range of contexts, support for implementation, and evidence.



First, let's take a closer look at the <u>usability</u> of the practice:

Usability: How well can the practice be used in a real-world setting?

- Is the practice clearly defined (e.g., what it is, for whom it is intended)?
- What about core features of the practice?
 - Are they identified, listed, named (e.g., key components of the evidence-based practice that are required to be effective)?
 - Are they well operationalized (e.g., staff know what to do and say, how to prepare, how to assess progress)?
- What about adaptation possibilities and fidelity:
 - $\circ\;$ Is there guidance on core features that can be modified or adapted to increase contextual fit?
 - Is there a fidelity assessment that measures practitioner behavior (i.e., assessment of whether staff use the practice as intended)?

Now we would like to look at factors that <u>support</u> the implementation of practice in the implementation setting:

Support: What kinds of resources and support are available as support for implementing the practice?

- Is there a qualified "expert" (e.g., consultant, program developer, intermediary, technical assistance provider) who can help with implementation over time?
- Are there curricula, manuals, and other resources related to the practice readily available?
- Is training and professional development related to this practice readily available?
- Is coaching available for this practice?
- What about costs? (Please itemize).
 - Are there start-up costs for implementing the practice?
 - Are there costs for material, training or professional development, coaching?
 - Are there any other costs you should think about?

There are good reasons why we would want to introduce this evidence-based practice. [Name them.] Let's gather now what the <u>evidence base</u> is for the innovation that could be introduced.

Evidence: How strong is the evidence that this practice can improve outcomes for the target groups?

- What about proofs of evidence?
 - Are there research data available to demonstrate the effectiveness of the practice?
 - What is the strength of the evidence? Under what conditions was the evidence developed?
 - If research data are not available, are there evaluation data to indicate effectiveness (e.g., pre/post data, testing results, action research)?
- Outcomes:
 - What outcomes are expected when the practice is implemented as intended? How much change can be expected?
 - Is there a well-developed theory of change or logic model that demonstrates how the evidence-based practice is expected to contribute to short-term and long-term outcomes?
- Do the studies provide data specific to the setting in which it will be implemented (e.g., has practice been researched or evaluated in a similar context?)?



Questions for assessing System Indicators

The next block concerns so-called System Indicators. System indicators assess the extent to which a practice matches the Implementing Setting along the following domains: population need, fit, and capacity.

Let's start with the <u>Need</u> section.

Need: What need in the community does the practice want to address?

- Who is the identified population of concern?
- What are the identified needs of this population?
- How were these needs identified?
- If the practice is successfully implemented, what can potentially change for this population?
- Is there evidence that the practice addresses the specific area(s) of identified needs? If so, how was this evidence generated?

How does the practice now fit with our Implementation Setting?

Fit: How well would this practice fit in the Implementation Setting?

- How does the practice fit with the priorities of the Implementation Setting?
- Which other initiatives currently being implemented will intersect with practice?
- How does the practice fit with other existing initiatives?
- Will the other practices make it easier or more difficult to implement the proposed innovation and achieve the desired outcomes?

Finally, it is still important to clarify whether the necessary <u>capacity</u> exists to implement evidencebased practice.

Capacity: What kind of capacity does the Implementation Setting have to implement this practice?

- Staff:
 - What are the staffing requirements for the practice? (Number and qualification of staff, e.g., education, credentials, content knowledge)
 - Does the organization currently employ or have access to staff that meet these requirements?
- Leadership:
 - Is leadership of all participating organizations knowledgeable about and supportive of the evidence-based practice?
- Administration and Data Management:
 - What administrative practices must be developed or refined to support the use of this evidence-based practice?
 - Does the practice require use of or changes to the monitoring and reporting system?
 - Does the evidence-based practice require new hardware or software?
 - Do staff have the capacity to collect and use data to inform ongoing monitoring and improvement of the evidence-based practice?
- Typically, how much does it cost to run the evidence-based practice each year? Are there resources to support this cost? If the current budget cannot support this format, outline a resource development strategy.



8.2. Developing an Implementation Plan

Implementation Science has proven that it is very helpful to create an implementation plan in the very beginning of your project that provides a structure for your implementation. It is very likely that your plan must be adapted over the implementation process, but it makes much sense to think about this in detail at the beginning – especially to make sustainable implementation more likely.

Table A1 shows questions and steps that can be helpful for creating such an implementation plan.

Table A1. Questions and steps for creating an implementation plan

What do we want to achieve? Who is important for this? Whom do we need?

Step 1. Determine goals and target groups

What is our aim, what do we want to change? To whom is the change relevant? What should our target groups know/think/do afterwards (differently)?

Formulate SMART goals for each target group. This acronym stands for:

- Specificity: Describe a clear and concrete goal. It should be observable, such as a particular action or procedure. It is also recommended to define the magnitude by denoting the result with a number, amount, or percentage (e.g., 90% of the pupils should acquire XY).
- Measurable: The outcome of the goal should be measurable that allows you to ascertain to what extent the goal has been achieved.
- Achievable: The goal should be acceptable to the people who will have to set about achieving it.
- **R**ealistic: The goal should be realistic otherwise it won't motivate people. But be aware: a goal that is too easy will not challenge people. Therefore, it is best to set goals that are just above the level of the person or organization.
- Timebound efforts: A goal should have a clear starting date and finishing date.

What are main characteristics of the target groups?

Step 2. Analyze target groups

It is important to get a good picture of the characteristics and situation of the different target groups. What interest does the target group have? What does the target group know about the evidencebased practice? What does the target group think of the change? What motivations are involved? A stakeholder analysis might be helpful.

Choosing the right target group(s) for the practice as well as getting an overview of pioneers and waverer contribute to successful implementations.

Such an analysis can be helpful in ensuring that the goals and measures/ activities are well aligned with the target groups. Sometimes there will also be a need for "preliminary activities": For example, if your perception is that parents are skeptical of one specific OS activity, consider strategies to potentially address those concerns. Put that also in your "list of activities" - then you do not forget about this.

What are the main characteristics of the evidence-based practice that should be implemented?

Step 3. Analyze the evidence-based practice

What are the main components of this evidence-based practice, what activities are associated with it? What staff is required? Look at the practice critically. Consider in advance its strengths and weaknesses. This may vary depending on the target group.

The Hexagon Tool mentioned above may be helpful to answer this question.



What are characteristics of the context?

Step 4. Analyze the context

The context influences the implementation of the evidence-based practice and thus, the possible change. Determine the opportunities and risks in advance. Use them to your advantage, or get an idea know how to prevent or mitigate them.

Determine as concrete as possible what factors in the context will influence implementation. There may be circumstances that inhibit or facilitate/accelerate implementation. Pay attention to the social contexts and the relationships between individuals involved.

Consider the "logic" of the organization(s) in which you plan to implement the innovation. How do the decision-making processes work in this organization(s)? What leadership style is predominant? Also, consider the economic and financial factors.

How to implement the evidence-based practice? Which implementation strategies can be helpful?

Step 5. Choose suitable activities and implementation strategies

Determine your concrete measures / activities that need to be implemented to achieve your goals. List them for each goal. Then check again whether the implementation of all these measures/ activities is realistic or whether, perhaps, one or the other measure/activity or even a certain goal must be deleted.

Choose implementation strategies

To choose the right implementation strategies, you need the information from the previous steps. What is required for the evidence-based practice itself but also for a successful implementation? What are possible barriers? Are there any facilitators?

You should now know which strategy you use per target audience. For each strategy there are numerous possibilities and activities how this can look like (e.g., to inform about the evidence-based practice one can use mass media, organize an information event, distribute flyers). For each target group, state what activities and resources you will use. Be specific in naming them.

Know time, tasks, and costs

For each activity, determine when it will be done. Also consider who will make sure it happens. This is also a good time to check the feasibility of your plans. For example, check to see if the costs match the available budget. Check also whether the plans are feasible in terms of time. Adjust your plans if necessary.

How to reach the target group(s)? How to enable the context?

Step 6. Communicate, consider the context, and establish the implementation team

Summarize the results of your analysis in a few meaningful sentences - the core message. Do this for each target group. The message tells what you want to achieve, with whom and in what way. Writing down such a core message forces you to clearly articulate your plans. At the same time, consider how you can best convey this message. What messages and words might help to attract the target audience?

Look again at your analysis of the context. What can you do to support the context in the best possible way? What does this mean for the promotion of your innovation?

Who should be part of your implementation team (see chapter 2.3)? How can you go about recruiting these people as members of the implementation team? What could be convincing arguments?



How to determine goal achievement?

Step 7. Evaluate

To measure your outcomes and achieve your goals, you must evaluate, both in the interim and in the end. This will help you determine if the implementation is successful or if further adjustments are needed.

For the development of an evaluation plan, see chapter 2.4.

Based on a "step-by-step plan" provided by ZonMW¹⁰

8.3. Making an evidence-based practice sustainable

Research shows that it is important to think about sustainability right at the beginning of an implementation project. In many cases, implementation projects are treated as if they have a defined start and end - and not as something that is going to continue (Moore & Khan, 2021).

Moore and Khan (p. 36) provide steps that should be taken when planning for Sustainability:

- Who is respectively should be involved in sustainability planning and execution
- Define what you are sustaining
- Understand individual-level barriers and facilitators to sustainability and select individual sustainability strategies
- Understand organizational barriers and facilitators to sustainability and select organizational sustainability strategies
- Conduct an ongoing monitoring and evaluation plan for sustainability

They also mention that a large part of planning for sustainability involves making adaptations.

If you are heading for sustainability in your project, we can highly recommend the book "Survive and Thrive: Three Steps to Securing your Program's Sustainability" written by Kylie Hutchison (2016). A 1,5day workshop is described in this book that can easily be applied in practice. A three-step process is introduced that covers (1) Assessment (2) Planning and (3) Implementing the Sustainability Plan:

Step 1: Assess	Diagnose your current situation Identify areas for developing sustainability strategies Clarify your sustainability goals
Step 2: Plan	 Pinpoint future points of potential funding instabilities (= develop worst case scenarios) Prioritize which parts of the program you would save if funding was cut/reduced Specify concrete sustainability strategies
Step 3: Implement	Draft an action plan

Sustainability doesn't just happen - it requires time and effort!

¹⁰<u>https://publicaties.zonmw.nl/fileadmin/zonmw/documenten/Maatschappelijke_impact/ZonMw_implementa</u> <u>tieplan_invulbaar_EN.docx</u>