A practical guide to using **reflexive monitoring for nature-based solutions**

Connecting Nature

Bringing Cities to Life,
Bringing Life into Cities

A practical guide to using **reflexive monitoring for nature-based solutions**

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CONTENTS

Ready-to-use materials

Throughout this guidebook, at the end of every chapter, a list of ready-to-use materials is supplied. These materials can be exercise templates, presentations or question lists, in PowerPoint, Word or Excel format.

You can find all these materials online by scanning this QR code.

INTRODUCTION

Nature-based solutions have many benefits

The European Commission defines nature-based solutions to societal change as solutions that are:

> ***"inspired and supported by nature, which are cost-effective, simultaneously provide environmental, social and economic benefits and help build resilience. Such solutions bring more, and more diverse, nature and natural features and processes into cities, landscapes and seascapes, through locally adapted, resource-efficient and systemic interventions."***

Nature-based Solutions help address the complex challenges that cities face today, like climate change, pollution and mental health, while creating more livable and resilient cities. They bring innovative urban development methods to cities, including new technological/market solutions, new practices and new relations between people and nature. These solutions are therefore transformative: they require novel approaches to governance that bring together multiple actors – think policymakers, planners, entrepreneurs, citizens and scientists. This leads these actors and their organisations better equipped to handle other challenges too.

But how? Classic monitoring and evaluation doesn’t work for nature-based solutions

Conventional governance, policymaking, planning and project management approaches aim to optimize existing processes. Often, a problem or solution is first identified, for which a monitoring and evaluation process is then designed by selecting suitable methods. For example, while designing an urban park, indicators are picked to measure its effectiveness, such as the number of visitors a day or the activities organised there. Experts are in change of the design and execution of monitoring and evaluation and other actors do not participate much. Or, in other cases, no formal monitoring or evaluation structure is in place and it is added abruptly in the middle or the end of the process.

Neither of these approaches will do when you’re trying to implement transformative urban solutions like large-scale nature-based solutions. They:

- require co-production of different actors;
- create benefits and co-benefits;
- ask for a new type of urban planning process;
- and demand time for reflection to create room for collaborative learning, experimentation and adapting!

… so we need reflexive monitoring

We wouldn’t start this guidebook describing a challenge if we didn’t also have a solution – and that is reflexive monitoring.

Reflexive monitoring is a method developed to monitor and evaluate transformative solutions. It is based on transition theory[1] and helps you to navigate the complex and unpredictable nature of non-linear and multi-actor processes. It will prove very useful for the implementation of large-scale nature-based solutions. It will help you to break through barriers that you encounter, split up your work into manageable actions, and stay connected to the long-term goals of your project.

1 Roorda, C., Wittmayer, J., Henneman, P., Steenbergen, F. van, Frantzeskaki, N. and Loorbach, D. (2014) *Transition Management in the Urban Context.* Guidance Manual, Drift, Erasmus University Rotterdam, Rotterdam

https://drift.eur.nl/publications/transition-management-urban-context-guidance-manual/

What does this guidebook offer? Tools and…?

This guidebook offers a practical approach and tool-box for setting-up and applying reflexive monitoring. It will help practitioners to deepen their understanding of reflexive monitoring's methodology. Think of it like a cookbook that offers the ingredients, illustrations and steps needed to get a great result, but instead of whipping up a tasty meal, you're designing your very own reflexive monitoring process.

And like with any cookbook, you can and should tweak the instructions to your own needs. Mastering reflexive monitoring is about more than just finding the right tools. The tools help you develop an attitude, but you will always have to tailor the tools to your local context. Below are some questions that help you to do this. We also made this an integral part of the step-by-step process we designed and are presenting in this guidebook:

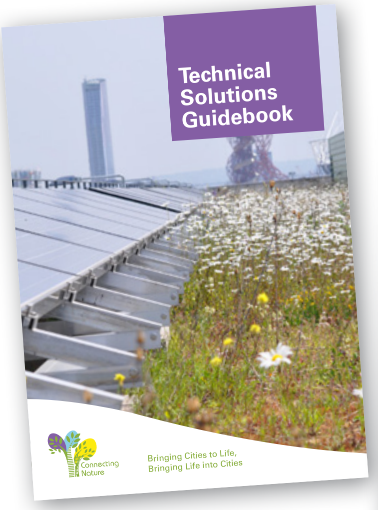
- What does my project look like?
- Which properties of the context are relevant?
- What type of innovations does the project need?
- Which tools are appropriate for the project?
- How much leverage (institutional backing, resources) do I have to apply this?
- What competencies do I need?

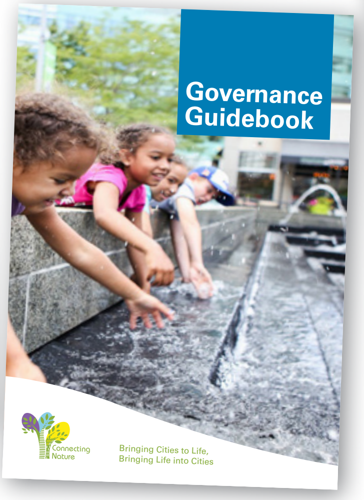
The guidebook is written to support urban planners and policymakers, but also interesting for others interested in urban co-production processes that aim to support the implementation of nature-based solutions. For example, NGOs that are involved in the scaling of nature-based solutions can use this manual to set up a reflexive monitoring process.

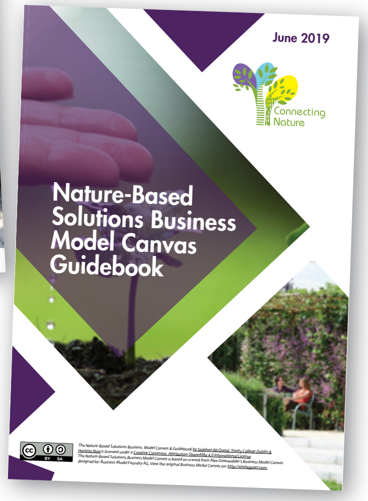
The guidebook is a product of a co-production process itself between researchers and practitioners of the cities in the Connecting Nature project (**www.connectingnature.eu**). So it includes many practical, boots-on-the-ground examples to illustrate the process, but also draws from state-of-the art scientific literature applied to mixed science-practice settings.

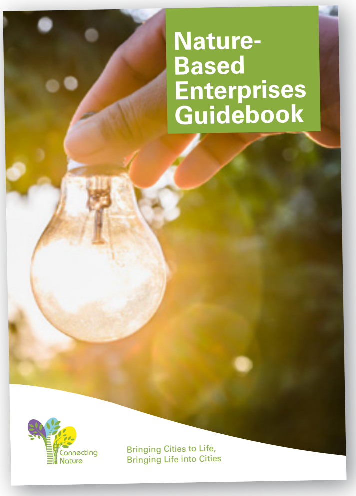
The iterative nature of co-production processes requires on-going learning processes that allow navigating barriers and opportunities through process adaptations on the go. These guidebooks can be found on: **www.connectingnature.eu/guidebooks**.

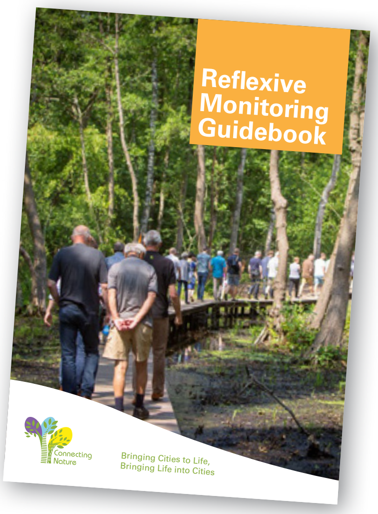
Connecting Nature consortium and/or other guidebooks

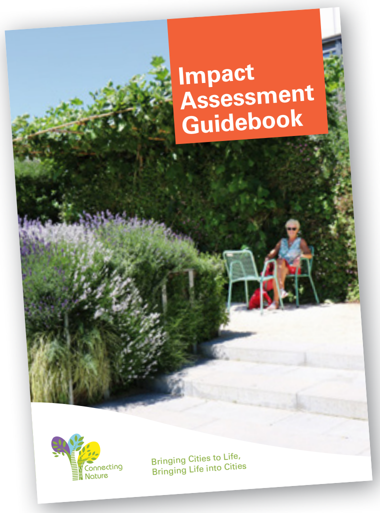












Beyond Reflexive Monitoring, the Connecting Nature Framework is also here to help

Designing and implementing Nature-Based Solutions on a large scale is complex, with many different issues to consider.

Many questions arise and need answers.

Even identifying where to start can often be a challenge!

In response to this uncertainty, Connecting Nature has developed a tool to help cities and other organisations navigate the path towards implementation of nature-based solutions on a large scale: the Connecting Nature Framework.

- TECHNICAL SOLUTIONS
- GOVERNANCE
- FINANCING AND BUSINESS MODELS
- NATURE-BASED ENTERPRISES
- CO-PRODUCTION
- REFLEXIVE MONITORING
- IMPACT ASSESSMENT

The Framework identifies **three distinct phases of development** for a nature-based solution: **planning, delivery and stewardship.**

Throughout each phase there are seven separate elements that cities and other entities need to consider when shaping their individual nature-based solution: **technical solutions**, **governance**, **impact assessment**, **finance**, **entrepreneurship**, **co-production** and **reflexive monitoring**.

Cities may choose to start with any element of the Framework process and consider the others in the order that suits their context. What emerges from the Framework process is a comprehensive 360° overview of each stage of development of the nature-based solution. To learn more, please view our guidebook on this framework on **www.connectingnature.eu/guidebooks**. Now, on to why we need one of the framework's elements in particular. **youtu.be/bM3ds_ZdYfc**.

Reflexive monitoring can be used in each phase of the Connecting Nature Framework: from planning to delivery and stewardship.

Working with reflexive monitoring in the **planning phase** will give you an overview of the most important learning questions you and your team will need to work on. This helps to identify what actors to involve, prioritise actions and explain the added value of your nature-based solution to others.

In the **delivery phase,** you'll find you need to involve a more diverse set of actors.

Reflexive monitoring can help you to track all the different activities of your team. It will allow you time to reflect on the different collaborations and make sure the short-term actions are aligned with the long-term goals of your project.

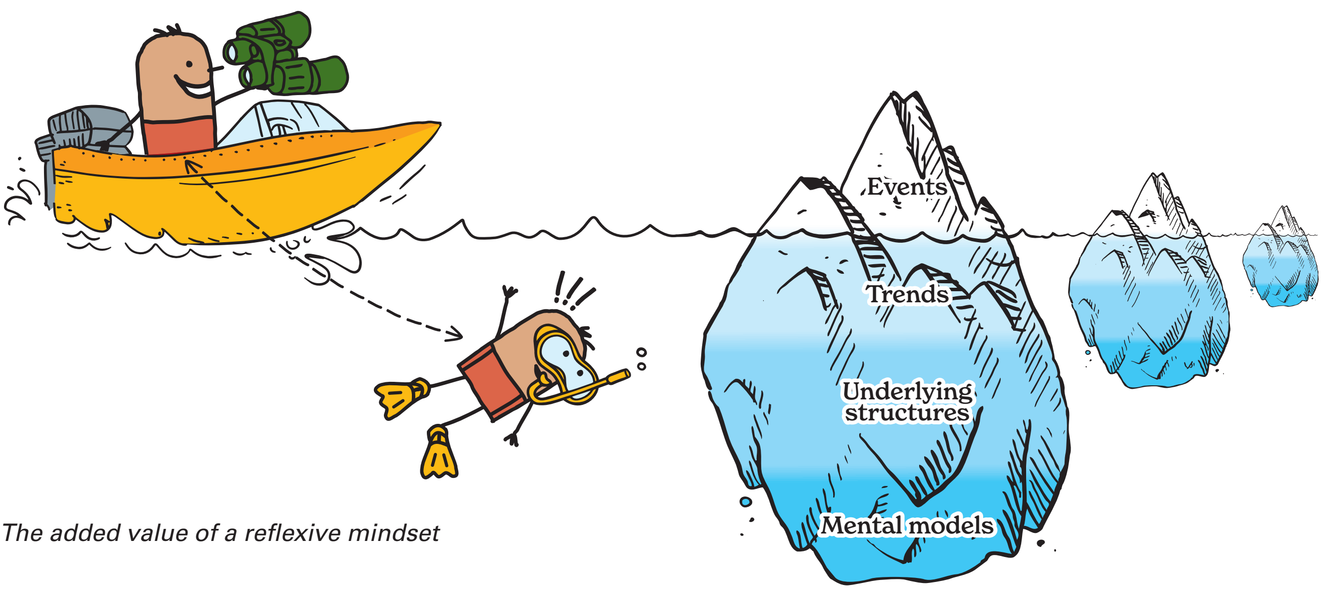
During the **stewardship phase,** you and your team will hand over some activities to other organisations. Reflexive monitoring will help you stay connected to those actors and follow their learning journey. Recording the shared learning journey will help you to explain the benefits and co-benefits of your nature-based solution.

REFLEXIVE MONITORING

The challenge: **How to turn barriers into opportunities**

Addressing complex challenges requires different perspectives and types of knowledge along with a spirit of collaboration. As a city maker, reflexive monitoring allows you to draw together these different elements in a process that helps identify barriers and translate them into opportunities. That's how you can address these complex challenges.

A learning process is **reflexive** when participants are self-critical and reflect on the nature of how they build knowledge, including their own assumptions guiding them. This requires a process of learning-by-doing and doing-by-learning in terms of goal achievement, applying lessons learned to new or existing structures, strategies or practices and identifying needs for adaptation [2]. To support this process, Barbara van Mierlo and others co-developed reflexive monitoring as a method with specific tools developed for practitioners, but there are other ways to increase the reflexivity of a learning process.



The added value of a reflexive mindset

2 Beers & van Mierlo, 2017; Dentoni, Bitzer, & Pascucci, 2016; Frantzeskaki, Kabisch, & McPhearson, 2016

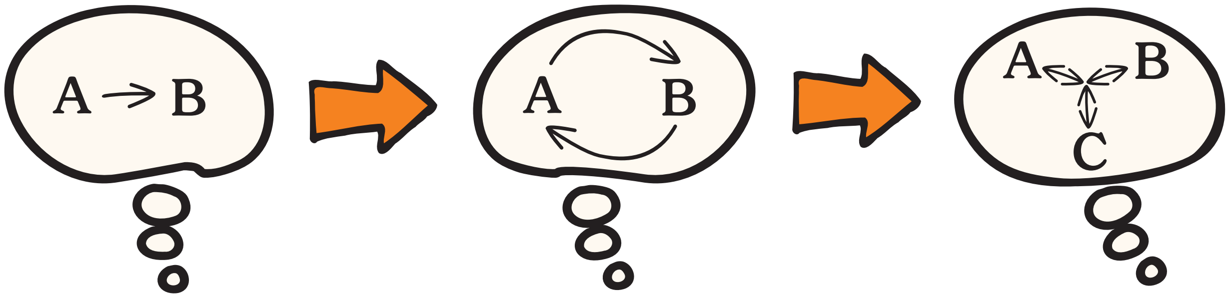
What is reflexivity? And why is it important?

Reflexivity is the ability to change and interact with the context in which you operate. It gives you the ability to develop new ways of dealing with issues, which can also change the context of the transformative solutions. Working in a reflexive manner, for example, may cause the people you interact with to relate to you differently, or result in the project that you are working on being talked about with different words.

The solution: **Real-time monitoring of transformative solutions**

Reflexive monitoring supports practitioners to identify and reflect on the challenges and opportunities they encounter throughout the process itself. By identifying barriers and opportunities, practitioners can better navigate them as well as react to how they change over time.

For example, a problem that was initially framed as: *"How can we engage engineers in co-production activities",* might evolve to *"How can we facilitate co-production between engineers and citizens?"* and then to *"How can we integrate co-production in the design process of the infrastructure department when working on the planning and delivery of nature-based solutions?"* over the course of the project.



Reflexive monitoring…

- **Encourages proactive problem solving –** by solving the problem in real time, not retrospectively.
- **Takes context into account –** by revealing the complexities of the problem and breaking it down into learning questions – which leads to better solutions.
- **Turns lessons into actions when they're needed –** by focusing on learning, you get to address barriers and structural changes (changes that require participants to rethink the way they act, organise and approach a topic) and translate these into actions and learning outcomes.

It has a role in…

- supporting the planning of the project
- evaluating daily activities, decisions and progress
- aligning daily activities with long-term ambitions and impact
- facilitating reflection on problems and solutions, allowing for the adapting of activities
- identifying actions to address (institutional) barriers
- coming up with creative solutions because existing procedures and structures are questioned
- embedding learning in daily activities
- capturing lessons useful for external communication
- engaging with (knowledge) experts in a novel way
- offering insights and clarity in complex processes
- comprehending how to influence the wider system, to be more transformative and have more systemic impact.

What do cities take away from reflexive monitoring?

Reflexive monitoring helps to bring clarity in complexity. The co-production of nature-based solutions is a complex process which deals with actors on multiple levels (from leaders of local community initiatives to national governmental agencies). In order to be able to govern this, you need to be able to distil key process dynamics, barriers and opportunities.

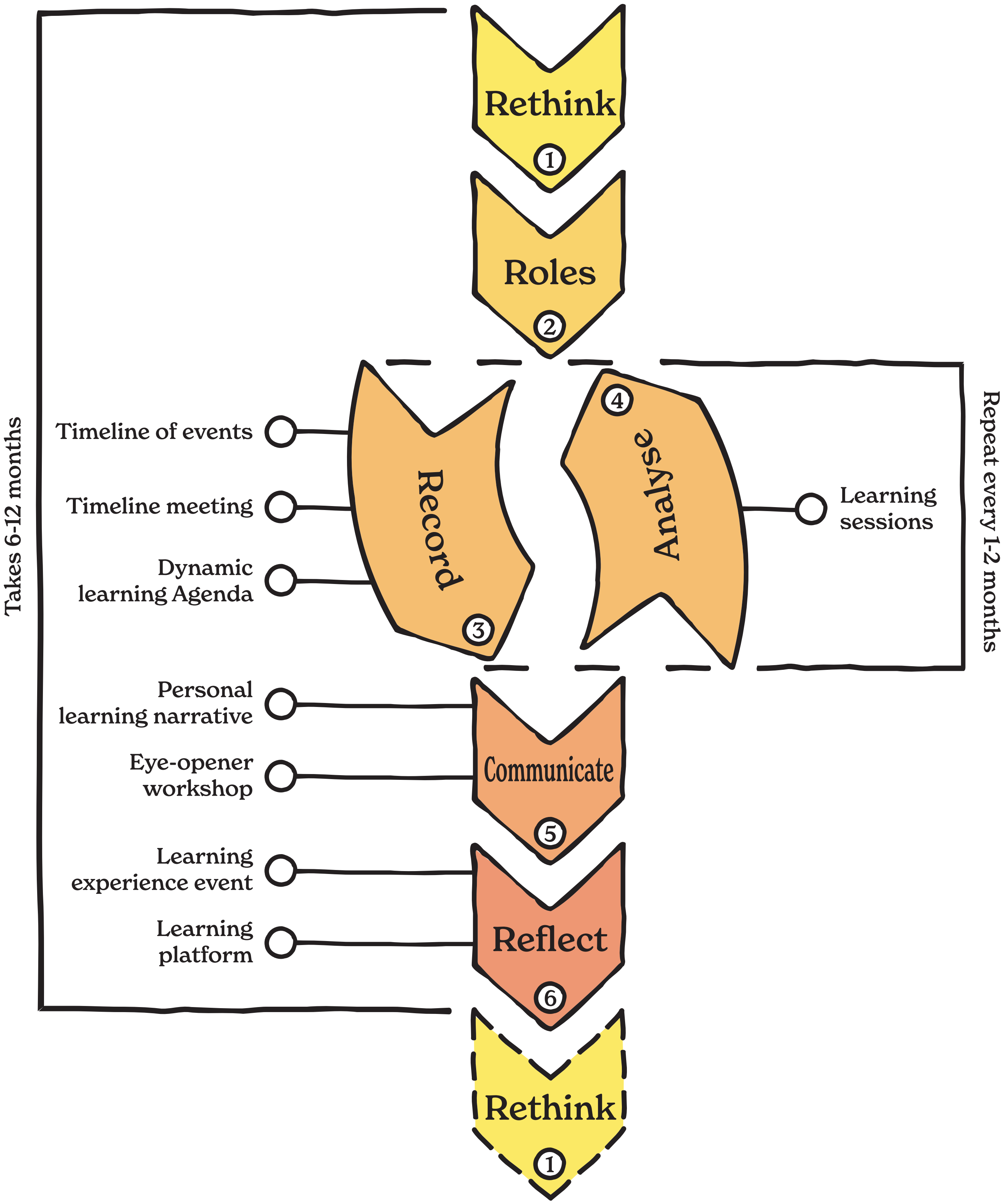
The various city teams in the Connecting Nature project recognise that reflexive monitoring encourages them to reflect on what they are doing, how they are doing things and why. They stress that next to analysing their process, the methodology also helps to see how to influence the wider system and to be more transformative, more interconnected and generate more impact.

“Reflexive monitoring helps us to zoom out by asking: **“What are we actually doing?”**, **“How do we influence the processes that are hindering our work?”** and **“Are we doing what we need to do?”**. With reflexive monitoring we try to explicitly integrate reflection in the implementation process. We do this to achieve better processes and faster results. It also helps us to not get lost in complexity.”

– **Peter Vos, Reflexive Monitor, Stiemer Valley programme, Genk.**

“Reflexive monitoring helps us to reflect on the context in which we are implementing nature-based solutions.”

– **Natalia Madajczyk, Reflexive Monitor, Connecting Nature Team, Poznań.**



Takes 6-12 months
Rethink
1
Roles
2
Timeline of events
Timeline meeting
Dynamic learning Agenda
Record
3
Analyse
4
Learning sessions
Repeat every 1-2 months
Personal learning narrative
Eye-opener workshop
Communicate
5
Learning experience event
Learning platform
Reflect
6
Rethink
1

THE 6 STEPS OF REFLEXIVE MONITORING

The challenge: **How does reflexive monitoring work, exactly?**

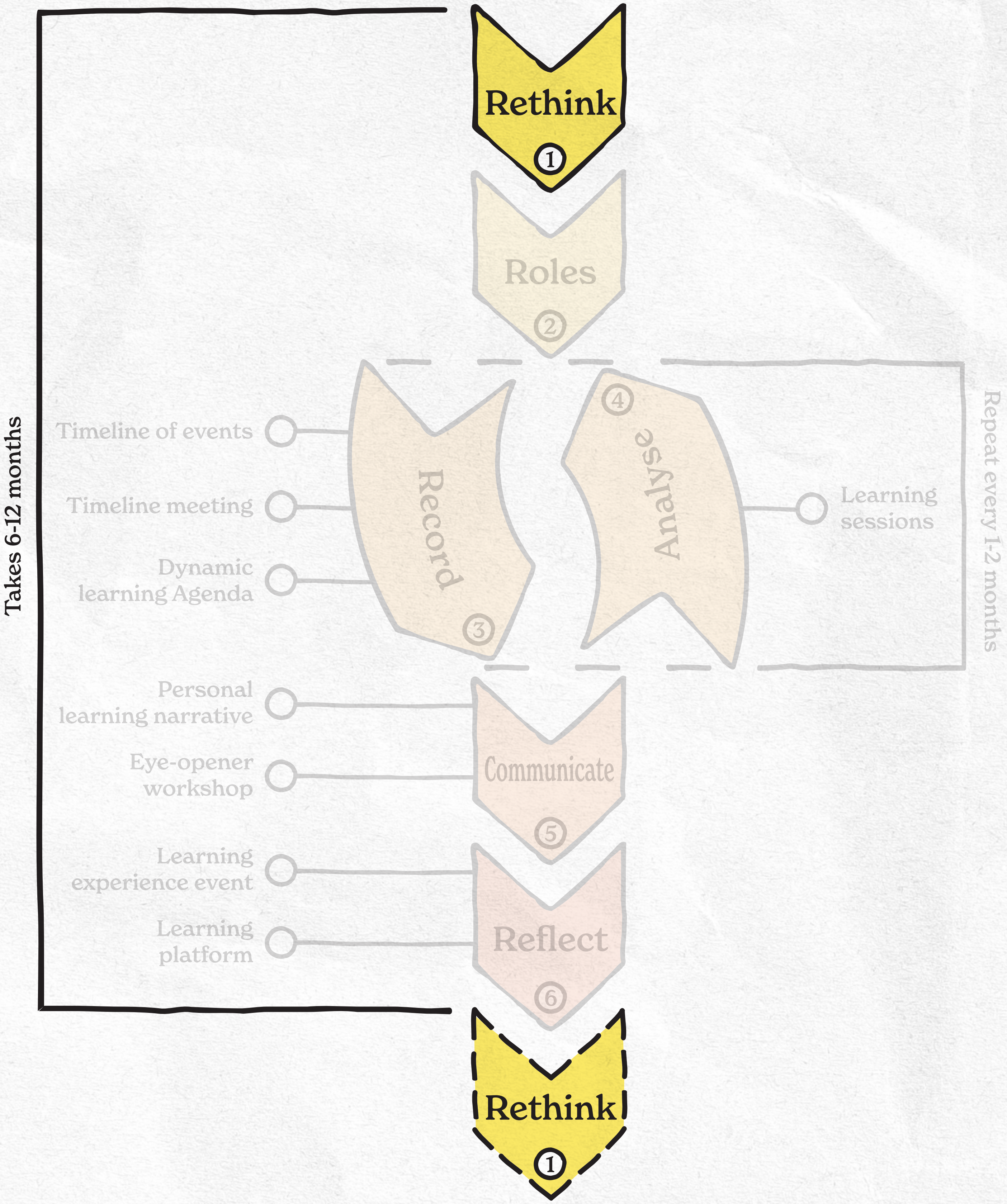
Implementing nature-based solutions can be complex because of conflicting priorities and challenges. Before you start to apply reflexive monitoring, it is useful to have experience of nature-based solutions and co-production processes. This will help you to differentiate between what is truly innovative and what is 'business as usual'.

The solution: **Follow these six steps**

Mastering reflexive monitoring requires an attitude of experimentation. At first, the process might be quite messy because you will be experimenting with different steps. Soon enough, reflexive monitoring will allow you to organise ongoing processes and to translate what you learn into actions. The cities of Genk (Belgium), Glasgow (Scotland) and Poznań (Poland) – all intimately involved in Connecting Nature and whose experiences laid the foundation for this guidebook – recommend you reserve space and time to become familiar with the steps and the tools before you start using them.

Once the reflexive monitoring process is aligned with your daily activities, you will be able to identify the benefits and act on what you learn.

…so you want to start working with reflexive monitoring in your context, first up,…



STEP 1

RETHINK YOUR GOALS

The challenge: **What are your goals and what do you need to learn to be able to achieve them?**

Implementing large scale nature-based solutions requires new ways of working, thinking and organising. This requires you to learn how you can best change your old habits. It can be challenging to create time for reflection, but it is crucial – without reflection, you can't verify whether you and your team are still working on the right things in the right way. Making the time to collectively reflect on your changing context will increase your reflexivity.

The solution: **Rethink your learning objectives**

At the start of the process, write down the goals and what you need to learn to achieve them. For example, if a goal is to reduce silos (disconnected departments or groups of teams) in local government, you may have to learn how to collaborate with colleagues from other departments. This will help you achieve the goals you set. This process should be repeated throughout the planning, delivery and stewardship phases of the Connecting Nature Framework. Important topics to reflect on are:

- who is involved and who isn't
- who benefits and who doesn't
- How well can you adapt to new insights, demands and needs.

The right tool(s): **map it out!**

When you start to work on this step for the first time, why not map out what needs to change and happen for your nature-based solution to become a success, when compared to your regular planning process. And then write down what you and your team need to learn to achieve this.

Barriers and challenges expected	**Actors that need to be involved**
Me and my team need to learn:	Me and my team need to learn:
How to create a learning environment	**Where to find time/resources**
Me and my team need to learn:	Me and my team need to learn:

Make sure that you return to this step on a regular basis.
This can be every six months or every year depending on your context.

Got any tips?

- Start small when reflexive monitoring is new to you and your team.
- Break down the goals into small steps. This will simplify your learning objectives and create results early in the process that are connected to the more complex goals.

How Genk did it

Reflexive monitoring can be seen as a way to switch between the strategic level and the operational level, between thinking and doing. It forces you to switch between these levels almost constantly in the process. We have found that this constant switching after a while can lead to a lack of sharpness.

Sometimes we needed to zoom out for longer to consider the strategy more thoroughly. To this end, we have an off-site meeting that we call 'conclave' every 6 months within the Stiemer programme: one in the winter and one in the summer. During this meeting we focus with the Stiemer team on the Stiemer programme full time for two days. We determine the agenda in advance.

During this time, we elaborate on a number of fundamental aspects of the Stiemer programme that we feel need specific attention. For example: the implementation strategy, the Stiemer deals and the goals of the programme all originated from one of the Stiemer conclaves. In that sense, the conclave can be seen as a milestone, during which the strategy is refocused for a period of six months.

We noticed that this format of a two-day conclave is very effective and efficient. So far, we have succeeded in making substantial progress at every conclave in a number of crucial areas, which has always given new energy and courage.

Ready-to-use materials

- **STEP 1 –** Indicator sheet Reflexivity – time for reflection (PPG17)
- **STEP 1 –** Template to define goals
- **STEP 1 –** Template to define learning questions

My Reflexive Monitoring Journey...

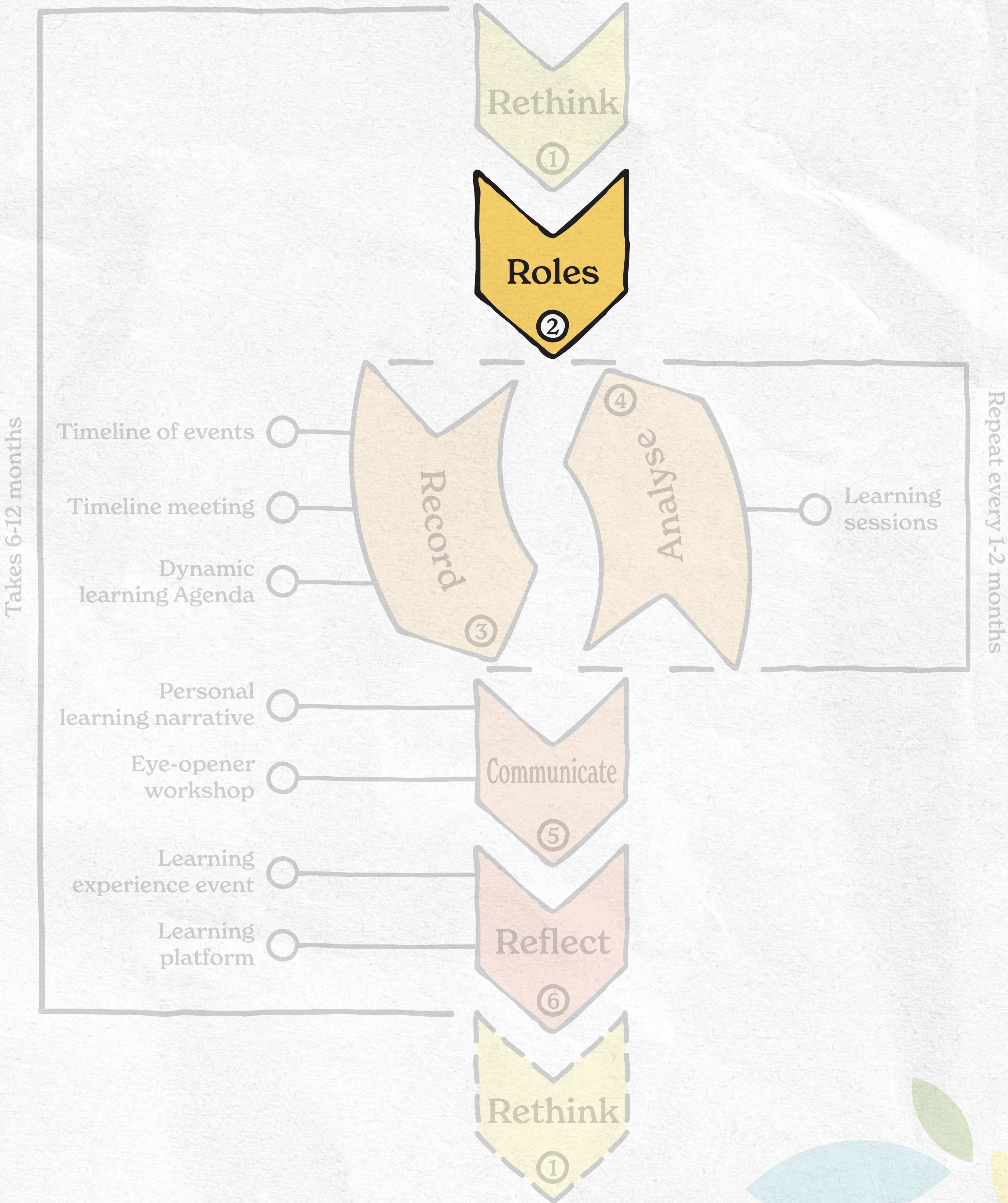
What are the goals of your nature-based solution?

What are the main learning questions that need to be addressed to achieve these goals?

Who has a role in this process and how can you engage them to help answer your learning questions?

How can you create a learning environment and time for reflection?

…so you're done with rethinking your goals (step 1).
Now it is time to…



STEP 2

DEFINE THE ROLES WITHIN THE PROCESS

The challenge: **Who will be involved?**

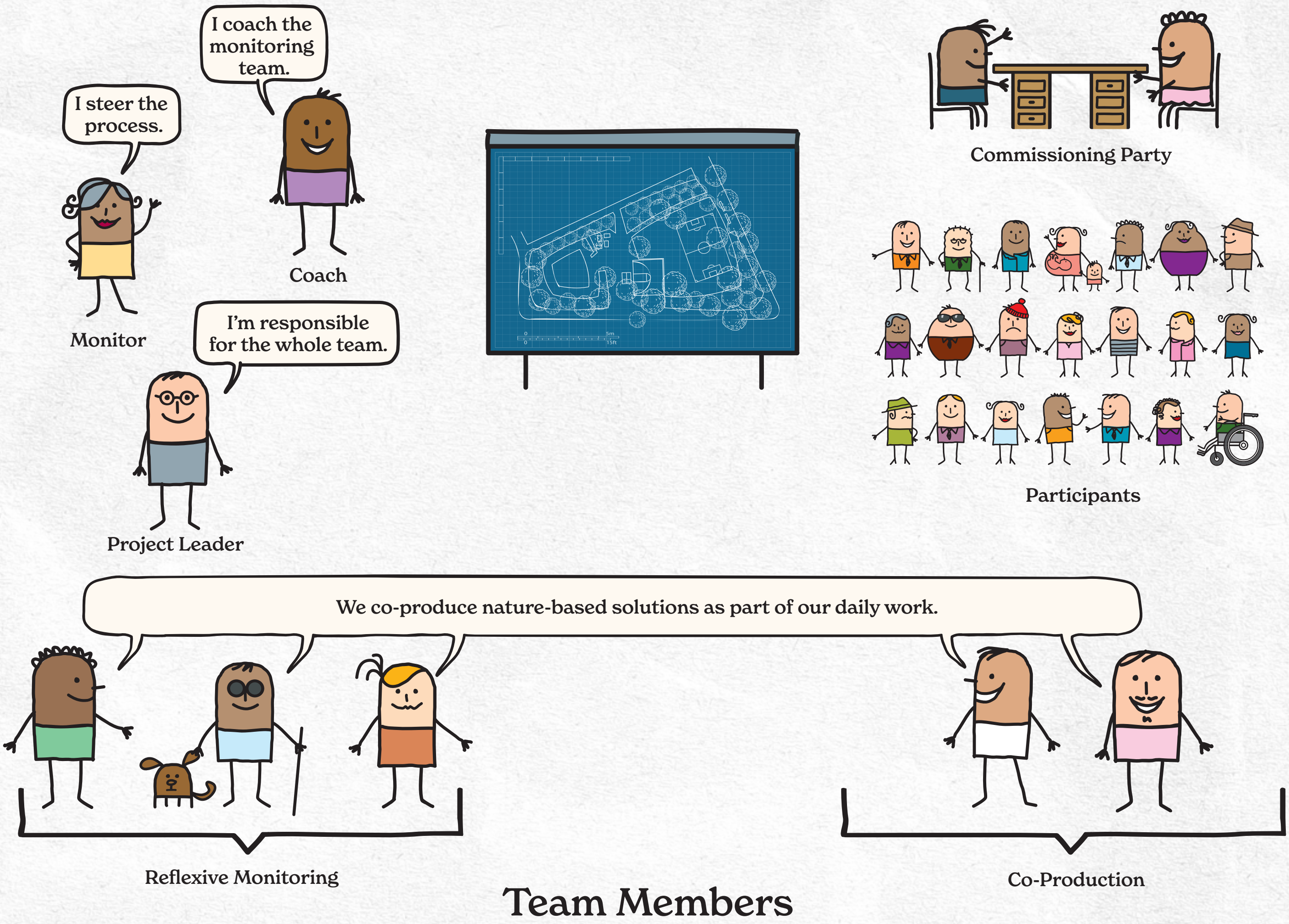
Working with nature-based solutions requires different city departments to collaborate and to relate to many 'regular' urban development processes. This can be challenging! When using reflexive monitoring, we're not just concerned with **what** needs to happen, but also **how** things happen and **why**. Because of the co-productive approach, you need to reflect and closely monitor this cross-departmental collaboration. Clearly defined roles can help here: a reflexive monitor, for example, can ask: "What are we actually doing?", "How do we influence the processes that are hindering our work?" and "Are we doing what we need to do?".

The solution: **Clearly define roles**

Reflexive monitoring should be happening during all the phases of nature-based solution development, from the planning phase, right through delivery and stewardship. From the very outset of the nature-based solution, it should be made clear that each actor has a role in reflexive monitoring and that exercising this role will involve collaborating closely and meeting regularly. The level of involvement of each participant differs per step in the process. Some of the reflexive monitoring roles require specific skills.

The right tool(s):

We predefined the most important roles in the process. Depending on your context and the capacities or your team you can take one or more roles per team member or have multiple team member take up parts of the responsibility of one of the roles.



1. The reflexive monitor

This may not come as a surprise, as this role has the same name as this guidebook, but… this is the most important role. They are responsible for steering the learning process of the monitoring team. Performing this role is a balancing act: a reflexive monitor needs to both think constructively with the participants in reflexive monitoring sessions *and* be able to step back to ask themselves and the participants to be critical and analytical.

2. Reflexive monitoring coach

If reflexive monitoring is new for the members of your team, it is wise to involve an expert who can coach the reflexive monitor. This helps you to apply the tools, practice with the different facilitation techniques and attitudes, and teach the skills the team needs to remain in a reflexive mindset during the process.

3. Other participants in the reflexive monitoring process

We recommend that the following actors participate in the **reflexive monitoring team:**

- The project leader, who is responsible for the overall project
- The project team members, one or two other collaborators that are working daily on implementing the nature-based solution

We recommend that the following actors participate in the reflexive monitoring **activities** the team is organising:

- Other collaborators who are working daily on implementing the nature-based solution
- Participants in the co-production process of the nature-based solution, such as knowledge institutes, expert groups, citizens and NGOs
- The client who is commissioning the nature-based solution

Got any tips?

- It takes a big time commitment to get the most out of the reflexive monitoring process. So it's smart to inventorise at the start who has enough time to fulfil key reflexive monitoring roles.
- Start with a small team and complete the six-step process at least once together. Help each other to improve until you feel secure about it and then start reaching out to other actors.
- The role of reflexive monitor can be very challenging in the beginning. So set aside enough time to prepare for the first meetings; over time you will get faster. And it helps to prep meetings together with a team member.

How Glasgow did it

“Time and resources are always limited in a local municipality. This made the introduction of this new reflexive monitoring process rather complicated. Particularly because initially we found the process very ‘academic’ and we thought it might deter those practitioners we would wish and need to attend to our reflexive monitoring meetings.

We therefore switched to a simplified process and a more typical meeting style when we invite our colleagues. We have found it easier to persuade those from other council services to attend our regular reflexive meeting this way.

We are still at an early stage with the adapted process but so far this has resulted in wider representation of services coming together to discuss our shared objectives. Therefore, teams are working less in isolation (in silos) and new effective relationships are being formed that might not have been as meaningful without the reflexive process.

We divided the role of reflexive monitoring between the project manager and another team member. During the above-mentioned meetings with our colleagues, we take our traditional roles in the project team. After each meeting we reflect upon the discussions together as reflexive monitors. We add new topics by translating them into learning questions and the other items on our Dynamic Learning Agenda (see step 3).”

Ready-to-use materials

- **STEP 2 –** Reflexive Monitoring Roles Matrix Workshop template
- **STEP 2 –** Reflexive Monitoring Roles Matrix Workshop PPT

My Reflexive Monitoring Journey...

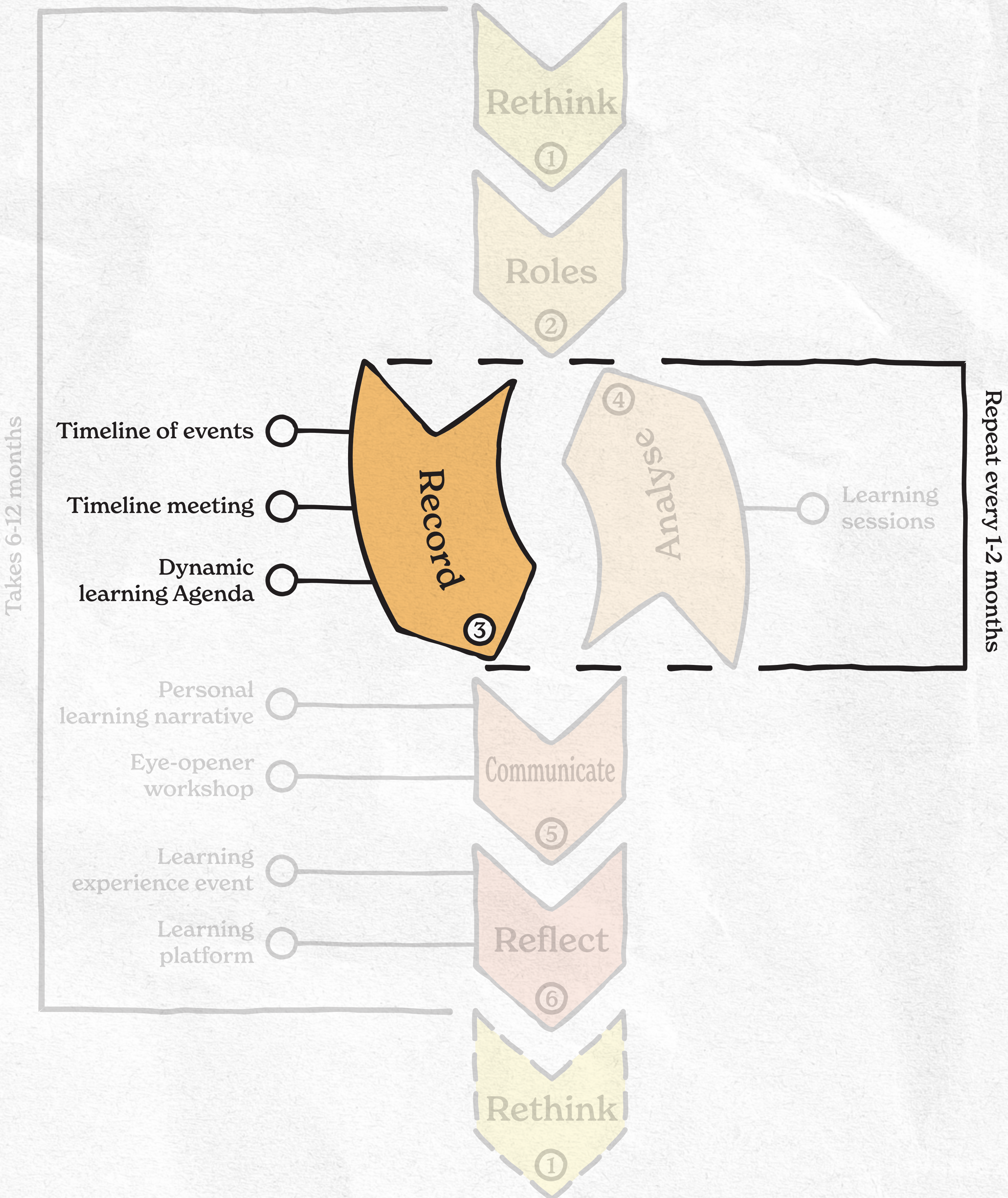
Who do you want to involve in the reflexive monitoring process?

Which roles are relevant in your context? How can you assign these roles within your team?

In case the project manager is also reflexive monitor:
How can they avoid conflict between these two roles?

How can you ensure there's enough space and time
to become familiar with these roles and what they require?

...so you're done with rethinking your goals (step 1) and defining the roles (step 2). That means it's now time for...



STEP 3

RECORDING YOUR LEARNINGS

The challenge: **When you learn a lot in a short time, how do you keep track of it so that it benefits your solution?**

Co-producing nature-based solutions means learning a lot in a short time. Because what you're working on is not yet part of standard procedure, might be a mystery to colleagues and stakeholders, and requires new collaborations.

The solution: **Record your learnings**

Your lessons learnt are valuable to others, but you might struggle with recording them properly. By keeping track of your learnings, you can gain insight into how to deal with barriers, find out how effective you are, and keep an eye out for potential collaborators!

The right tool(s): **The holy trinity of event timeline, timeline meeting, and dynamic learning agenda.**

There's a three-part process to help you record your learning journey. Start with creating **A) a timeline of events,** followed by **B) a timeline meeting** to discuss the timeline with your team and finally create a **C) dynamic learning agenda** with the most important events, turning points, follow-up actions and learning question.

A: Timeline of events

What's this then?

The first tool for recording your learning journey helps you to get an overview. For one or two months, record all main events that occur. The goal is to trace important moments, insights or events that influence the nature-based solution process, like that positive phone call with your director, or that successful event you organised to inspire your neighbours to think about redesigning the public green in your street.

How, exactly?

There is no strict formula but there are four choices you can make depending on the preference of your team. First, pick when you track your learnings: in real-time or in retrospect. Second, you can decide a frequency to record that suits your project and capacity. Third, does each team member record individually or will the reflexive monitor create the timeline for the team? Fourth, there are different ways to structure and present your timeline graphically.

Step-by-step

Real-time: Have your timeline always within reach so that every time an important event happens you can write it down.

Retrospect: Look at your calendar at the end of every week or month and write down the most important moments on your timeline.

Frequency: Decide on recording important events on a daily, weekly, monthly or bi-monthly basis. When you start with this method, we advise to do it regularly to get used to it. Once you are more experienced you can lower the frequency.

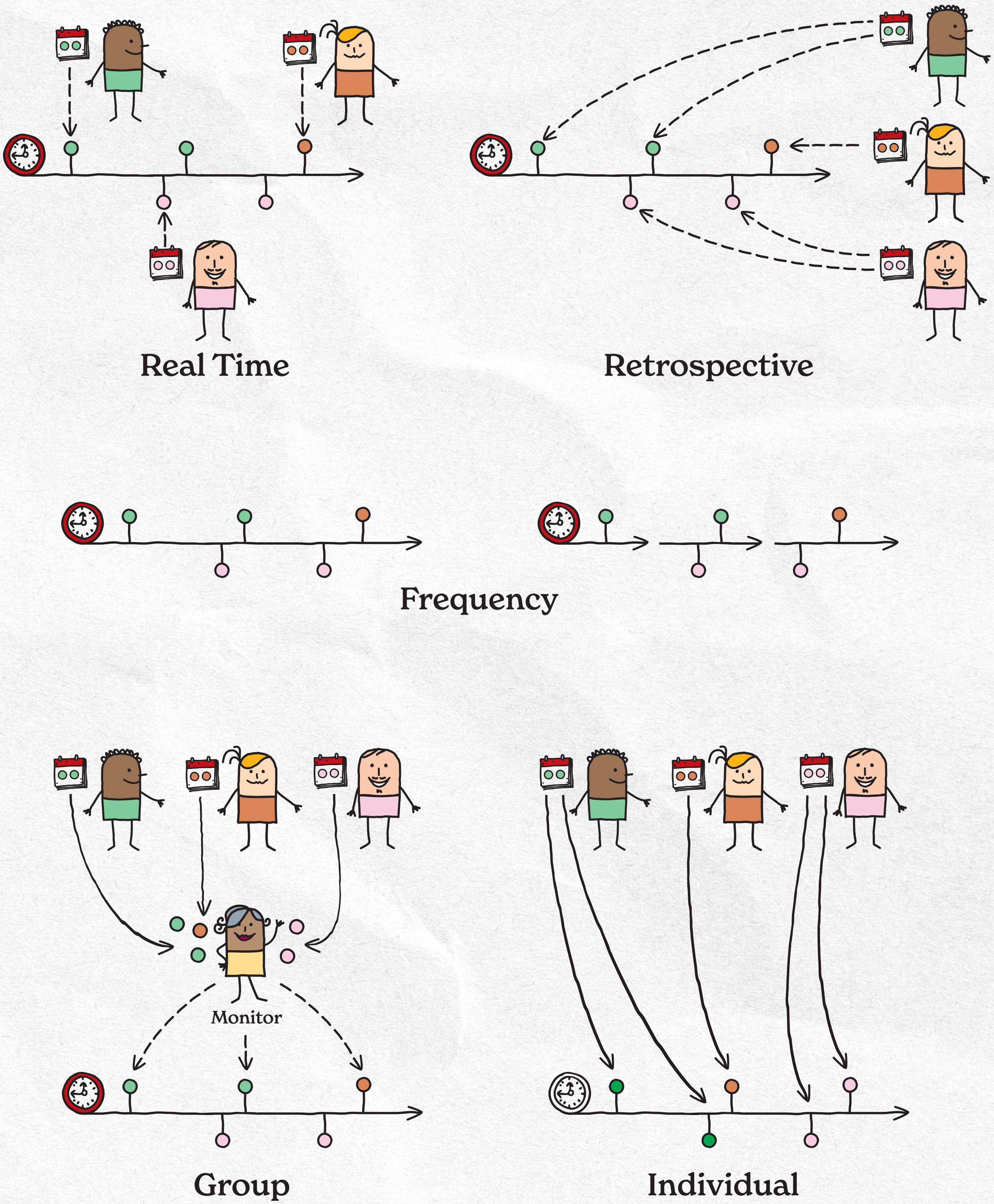
Individual: You record your important events for yourself only.

Group: You, the reflexive monitor, records important events for your team. This will mean that you need to have access to your team members calendars or you need to schedule meetings with them on a regular basis to interview them on the important events that happened the past week, month etc.

Graphical representation: You can decide to go for different looks & visual structures. You can, for example, use icons or colours for the type of events: phone call, email, public event, meeting, team activity, etc.

Your timeline can be presented in different ways. You can have a list in chronological order, a line that represents the time with events on it, a calendar overview per week or month. Get creative!

Figure 3.2: Different teams prefer different ways to make a timeline of events



Events timeline: How Genk did it

Genk used a bullet journal sheets on their desk. Every time an important event happened, they wrote it on the monthly overview including an icon for the type of event. With a colour they highlighted the most important ones they wanted to discuss during their timeline meeting.

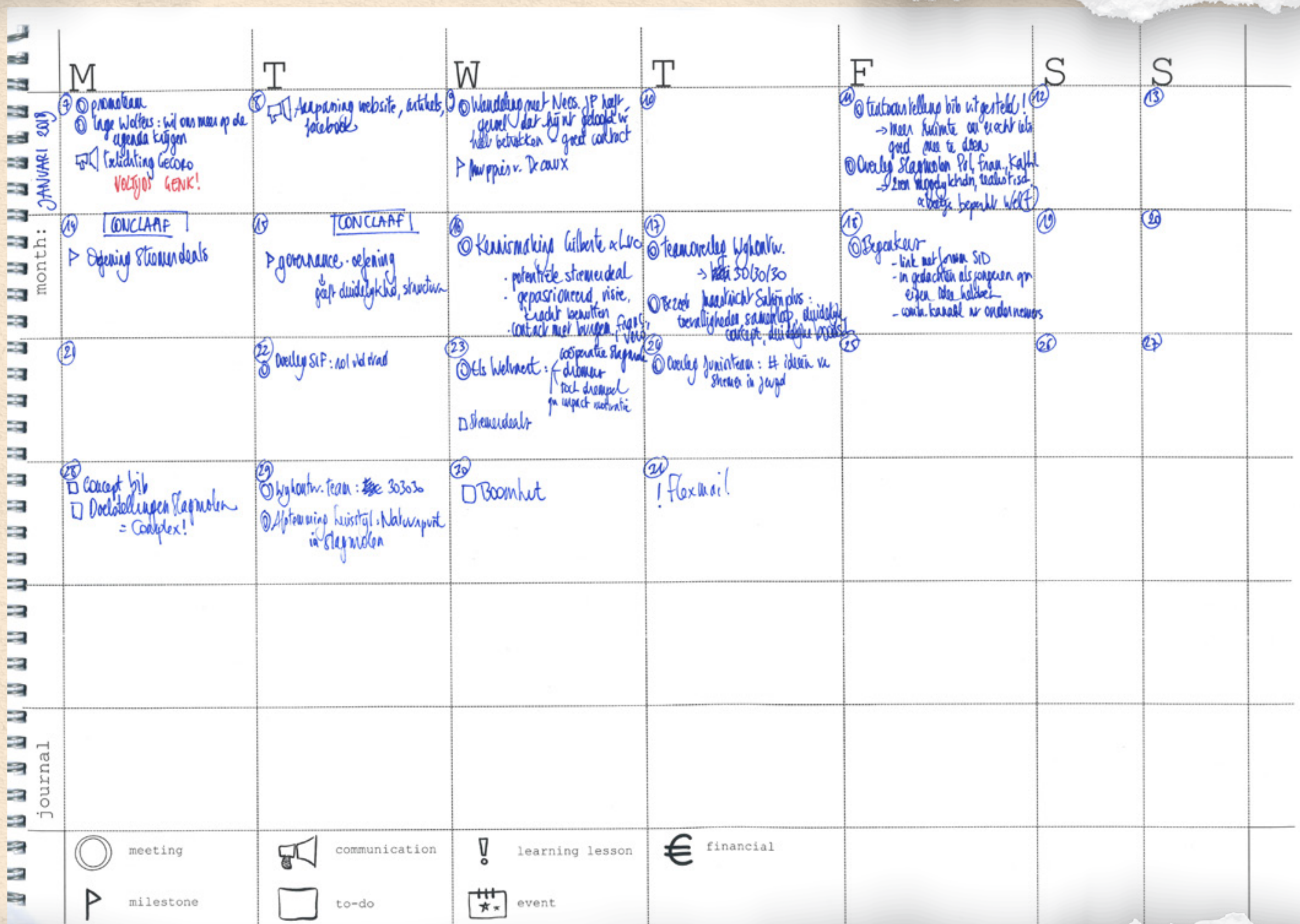


Figure 3.1: Timeline of events by one of the team members of the Genk reflexive monitoring team (Source: Genk reflexive monitoring team)

Got any tips?

- Like life, reflexive monitoring isn't all roses and sunshine. *Often people hesitate or simply fail to mention a project's tougher moments, so they don't end up in the timeline. Encourage your team to stay open-minded and transparent, and also include tricky or painful events. Everyone involved can learn a lot from those!*
- Do not wait too long with writing down your thoughts and reflections. The longer you wait, the higher the chance they fade.
- *Focus on recording events that have an underlying relevance you believe is worth sharing.*
- *Don't give up. Although it may seem weird to keep a diary, you get used to it after a while.*

B: Timeline meeting

What's this then?

A timeline meeting allows your reflexive monitoring team to discuss the timeline(s) of events we discussed on the previous pages. When all your timelines are combined, you can filter out which events are crucial for continuing your process. We call those crucial events **critical turning points:** important moments of change that helped or hindered the realisation of your nature-based solution. This really makes you think about learning experiences and helps to see challenges and successes.

How, exactly?

Schedule a monthly reflection meeting (or once every two months if your team is quite familiar with this process) with the team. The goal of these meetings is to discuss their timelines of events and reflect on what influenced, helped or hindered the short- and long-term objectives of their nature-based solution project. During these meetings, the team will analyse the events recorded in their timelines, formulate the outcomes of these events and agree on critical turning points.

Step-by-step

1. For every timeline, whoever created it (reflexive monitor or team member) explains every event on the timeline chronologically without explaining why they think it is important for the learning process yet. Clarifying questions are OK, but endless discussions need to be avoided.

2. Verify with all participants whether the timeline(s) of events is complete. Add missing events if needed.

3. All participants determine key moments, highs, lows and list the reasons in comments on post-its individually. Here you do touch on why this moment is important for the learning process.

4. Share individual interpretations by selecting your 2–4 most important comments from the post-its and discuss differences with each other.

5. Determine the critical turning points (changes in experience, hindrances, struggles and challenges) as a team and write these down. Questions that help to formulate critical turning points are:
   - What changed because of this event?
   - What challenge needed to be addressed?
   - How did it influence my work?
   - Was it a break-through or a barrier?

6. Use the insights for deciding follow-up actions, adjusting the dynamic learning agenda (see next tool on page 38), formulating personal learning narratives (see page 50) or as input for an eye-opener workshop (see page 52).

Timeline meeting: How Glasgow did it

Glasgow's Connecting Nature Team identified a critical turning point in relation to the successful Bellahouston Demonstration Garden.

Through a business model canvas workshop, the team identified the added value of the project. This was a turning point as it helped the team and colleagues from other departments to understand how to replicate the demonstration garden project in other parts of the city.

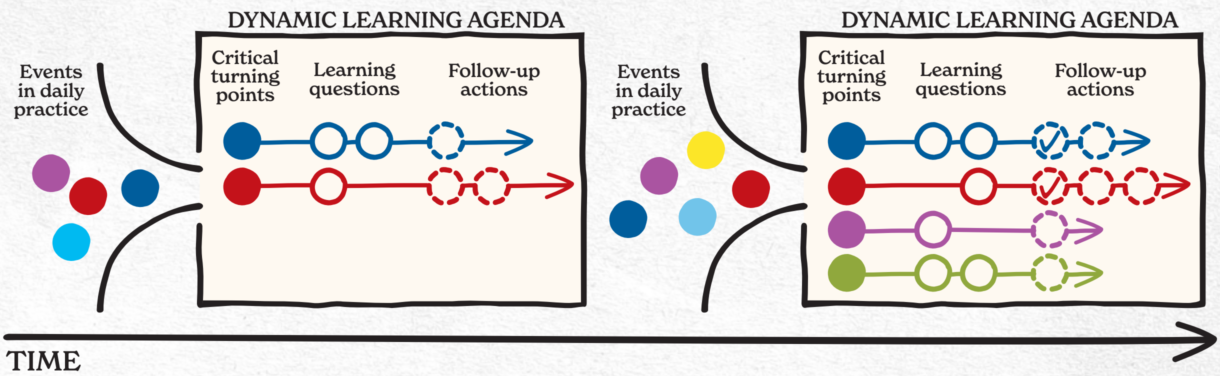
In addition, the workshop helped to find new funding streams and build new relationships that would make replicating the project elsewhere even easier!

Bellahouston Demonstration Garden *(Source: Glasgow City Council)*

Got any tips?

- It can be uncomfortable or awkward to discuss any low points that made it onto the timelines, especially recent ones. So encourage everyone in the meeting to be open or create more space to discuss these moments.
- It could be hard to involve the right actors (beyond the project team) in the process. But it's crucial when you decide on follow-up actions that you and your team cannot take yourself. You can use the outcomes of this meeting for discussing next steps in the process with the others. It can help to characterize these settings as 'catch-ups' or 'hijack' a regular meeting for them. This reduces the risk of the reflexive monitoring terminology scaring off potential attendees.

C: Dynamic Learning Agenda



What's this then?

The dynamic learning agenda captures the results of your timeline meeting. This is a tool to record and trace the reflexive learning process. The agenda presents the critical turning points and connects these to **learning questions** and **follow-up actions**. The goal of the dynamic learning agenda is to link the long-term goals of the nature-based solution to learning objectives and concrete short-term actions. Tracking the changes over time allows you to readjust.

How, exactly?

Formulating the learning questions for each turning point is best done together with the reflexive monitoring team, either directly after the timeline meeting or on a separate occasion.

Add follow-up actions to the agenda that describe the next steps in answering the learning question, by addressing barriers or seizing opportunities.

The agenda is dynamic because it changes in time: the critical turning points and learning questions can be reformulated, follow-up actions completed, and new learning questions or actions added.

Creating the dynamic learning agenda can be done together, or alone by the reflexive monitor, who is ultimately responsible for production and updates. However you do it, the different responsibilities and the planning needs to be clear for all involved to avoid frustration.

Step-by-step

1. Formulate second-order learning questions[3] based on the critical turning points.

2. Use the dynamic learning agenda to structure project meeting discussions. During the meeting you fill in the dynamic learning agenda with the topics that are discussed.

3. Consider persistent questions thoroughly and translate them into large/small-scale interventions: follow-up actions.

4. Reflect on the dynamic learning agenda and the results of activities and adapt the learning question when needed. Always place the latest version of the critical turning points with learning questions and follow-up actions above the older ones to maintain the history of the agenda.

5. Share the dynamic learning agenda after every workshop with the partners included in the reflexive monitoring process and discuss challenges/problems during learning sessions (see X) with those partners.

---

3 ***What are those?***

Second-order learning questions help your team to translate challenges into concrete questions and stimulate reflexive learning. “Second-order” means as much as that these questions are about changing the models, insights, values and convictions that drive our behaviour. They are different from first-order learning questions, which aim to improve or change things without rethinking our underlying ideas and assumptions. An example of a first-order learning question is: ***How to develop a masterplan for implementing nature-based solutions in our city?*** A second-order learning question would be: ***How can we reinvent traditional master planning for the effective implementation of nature-based solutions?***

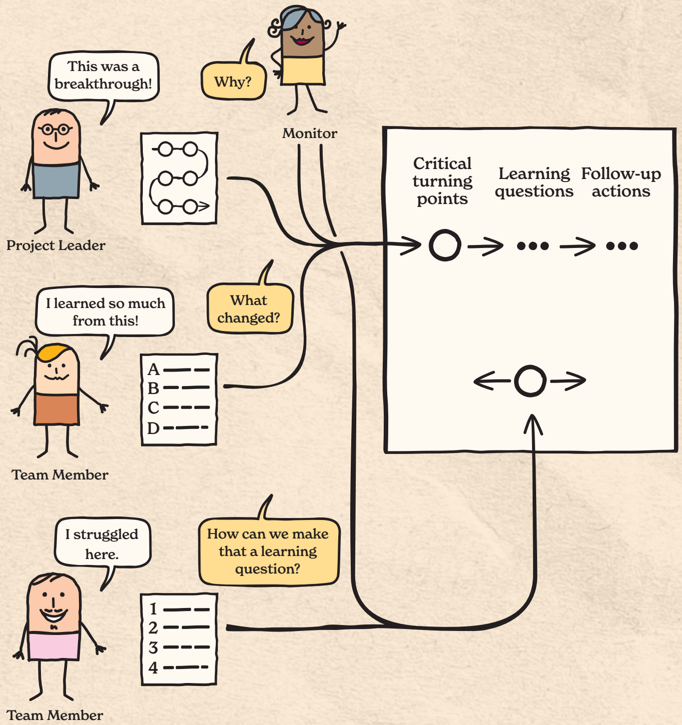
To get to second-order learning questions, organise a collective discussion on how to best address critical turning points. The facilitator of this discussion needs to stimulate the team to question what needs to be learned to address a barrier or opportunity to achieve the bigger project goals. Stimulate the participants to challenge each other over what questions really need to be asked to have the most transformative impact. That’s how you get to second-order learning questions.

The dynamic learning agenda:
How Poznan did it:

"In Poznan I adopted the role of reflexive monitor in close collaboration with my five colleagues from the Unit. Our team meets every week to discuss their progress and tasks. I am the only team member who works with the reflexive monitor tools but the insights gained from the dynamic learning agenda are discussed with the reflexive monitoring team and the larger team of colleagues once a week.

During our meetings, we discuss important project events, new opportunities and we analyse different approaches to their implementation (learning questions). I especially like the analytical step of translating events into Critical Turning Points as it shows these "moments" that enabled our team to develop our strategic actions and broaden the scope of our nature-based solution up-scaling activities.

We use the dynamic learning agenda to keep the overview of all activities of our colleagues. Mapping these activities and translating them into critical turning points and learning questions creates mental space and time for the monitor to reflect and rethink them."



Natalia Madajczyk
Reflexive monitor in Poznan

Ready-to-use materials

- **STEP 3 –** TOOL C1 – Dynamic Learning Agenda template extended version
- **STEP 3 –** TOOL C2 – Dynamic Learning Agenda template simple version
- **STEP 3 –** TOOL C3 – Dynamic Learning Agenda Workshop

Got any tips?

- If you think the idea of such an agenda may not be received enthusiastically by all project participants, feel free to change the wording and language to suit your project's context and vocabulary.
- "It's huge!" Having too many learning questions on the agenda might be demotivating and time-consuming. Make sure to keep it to relevant and necessary questions only.
- A lot of moving parts? There can be a lot of information to capture and track accurately depending on the nature of your nature-based solutions project. Don't be afraid to change the format to suit your organisation or team's working style. It might also be good to occasionally review how the process is working for your team.

My Reflexive Monitoring Journey...

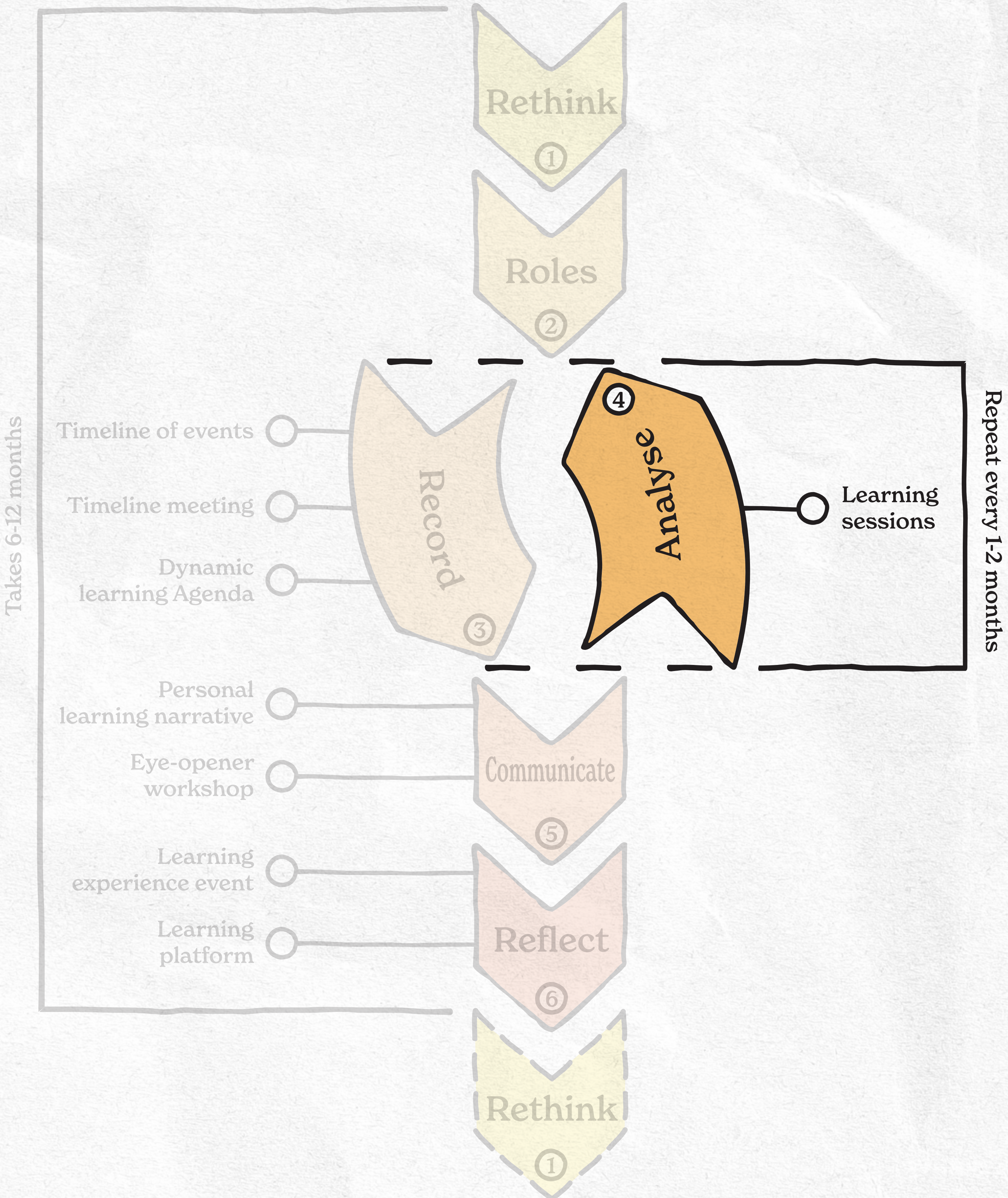
How do you track important events in time currently?

How do you want to do this in the future?

Who can you involve in your timeline creation, timeline meeting, and updating the dynamic learning agenda?

How can you keep track on the follow-up actions, especially those executed by colleagues who are not as closely involved in the reflexive monitoring process?

...so you're recording your learnings on a regular basis. Great!
Now, what to do with these records? How can you...



STEP 4

ANALYSE YOUR RECORDS TO IDENTIFY LEARNING OUTCOMES

The challenge: **How to make the impact of your learning process visible to project outsiders**

When you work with the reflexive monitoring tools on a regular basis, you'll see your Dynamic Learning Agenda change over time. Turning points are added, learning questions are answered and new questions are emerging. But what is the impact of this learning? And how to evaluate and report on the value of this learning process to project outsiders?

The solution: **Analyse to improve your learning process**

This step is about supporting the team to improve their learning process and analyse the learning outcomes. We found that this consists of two elements. Start by increasing your understanding of how to 'do' reflexive monitoring with your team and follow up by analysing learning outcomes.

The right tool(s): **Learning session**

To facilitate this, we recommend you organise learning sessions. We found these work most effectively when they are facilitated by an expert in reflexive monitoring theory with experience in how to apply the method in practice. We refer to this expert as the reflexive monitoring coach.

D: Learning session

What's this then?

A learning session helps your team to increase their understanding of how to 'do' reflexive monitoring (part I). Once the team is able to work with the tools from previous steps and is archiving lessons learned by answering learning questions through the follow-up questions, you can start to analyse the reflexivity of your learnings (part II). We call these **learning outcomes**: innovative ways the team handles the barriers or opportunities captured in the dynamic learning agenda.

We use the operationalisation of reflexive learning outcomes based on Beers & Van Mierlo (2017) that distinguish between categories:

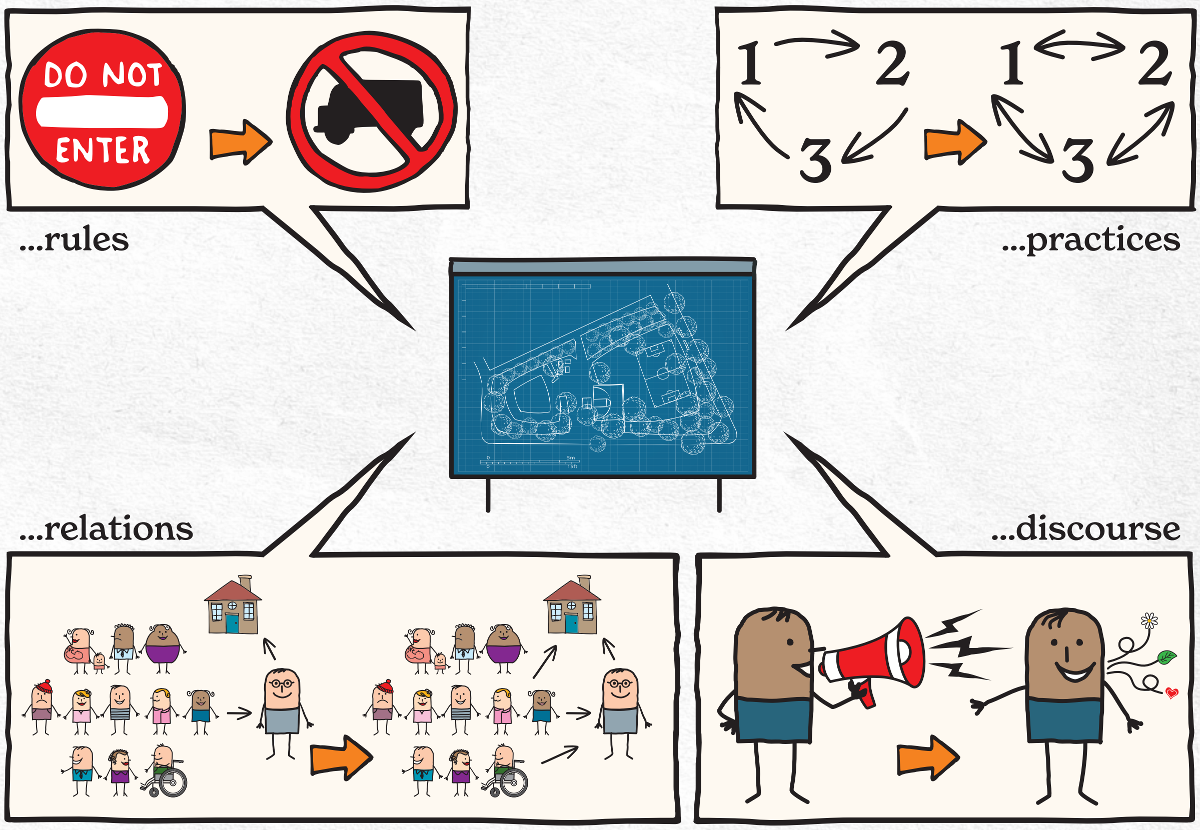
A. **Rules** guiding actors' practices, for example tendering procedures or the way a city department is organised.

B. **Relations** between actors and between the nature-based solution and its context, for example who is involved in the planning process.

C. **Practices** concerning common ways of working, for example how the team collaborates internally.

D. **Discourse** related to the future of the nature-based solutions, for example the way a mayor talks about the benefits of nature-based solutions for the city.

Four categories of learning outcomes – changes in...



How, exactly?

Part I: During the learning sessions, the team discuss each newly added item on the Dynamic Learning Agenda with the reflexive monitoring coach. Review the critical turning points and learning questions and, if needed, reformulate them to increase their reflexivity (see example on page 39). This is also the time to tackle questions on how to apply the tools and to make suggestions for additional follow-up actions.

Part II: After all items on the dynamic learning agenda have been discussed, the coach and team identify learning outcomes, with the coach making notes. To ensure the learning is reflexive, the coach will ask questions such as:

- **A.** (On **rules**) "Is this a novel way to organise your participatory process for you?"
- **B.** (On **relations**) "Do you always collaborate with this type of organisation to facilitate a public debate?"
- **C.** (On **practice**) "Is this how you always work in your team when preparing a presentation?"
- **D.** (On **discourse**) "Is this how the mayor always talked about the benefits of that park, or did it change?"

Afterwards the coach will verify the learning outcomes with the team per critical turning point and ensure which category of reflexivity applies.

Step-by-step

1. The reflexive monitor shortly describes every new critical turning point added to the Dynamic Learning Agenda and the accompanying learning questions plus follow-up actions.

Part I:

2. If needed, the reflexive monitoring coach helps reformulate critical turning point and learning questions to increase their reflexivity, and tools are discussed to help the team use them.

Part II:

3. The reflexive monitoring coach asks questions to verify if there is a learning outcome connected to the reformulated critical turning points and makes notes for later.

4. The learning outcomes are discussed and verified. Together you determine what categories of reflexivity these fall under.

How Genk did it: *"How the learning sessions and learning outcome analysis help to explain what you learned to project outsiders"*

The learning sessions somehow close the loop. Starting from turning points and learning questions, the learning process eventually led us to learning lessons. The learning sessions are used to reflect and discuss these outcomes.

A major learning question for our programme was "How to govern this complex Stiemer project." Supported by the learning process, we managed to develop a well-thought tailor-made governance model throughout the past years. Once the model was well-established, learning sessions helped us to identify what we actually learned in this process.

We, for example, learned that smartly decoupling the strategic level from the operational level while maintaining sufficient interlinking is an absolute prerequisite for complex projects to deliver the desired impact. These lessons have turned out very valuable, and now the governance of more and more strategic policy programmes beyond nature-based solutions are leveraging these insights.

Reflexive monitoring workshop in Genk.
(Source: Genk)

Ready-to-use materials

- **STEP 4 –** Indicator sheet: Reflexivity- identified learning outcomes (PPG7)
- **STEP 4 –** Workshop Learning Outcomes Template
- **STEP 4 –** Workshop Learning Outcomes Presentation

Got any tips?

- It requires practice to facilitate a learning session and analyse the learning outcomes at the same time. Start with part 1 only and when ready start adding part 2.
- You can ask another team member to make notes during the learning sessions. It can be a lot for the coach, or the reflexive monitor, to do this when they are formulating the learning outcomes.

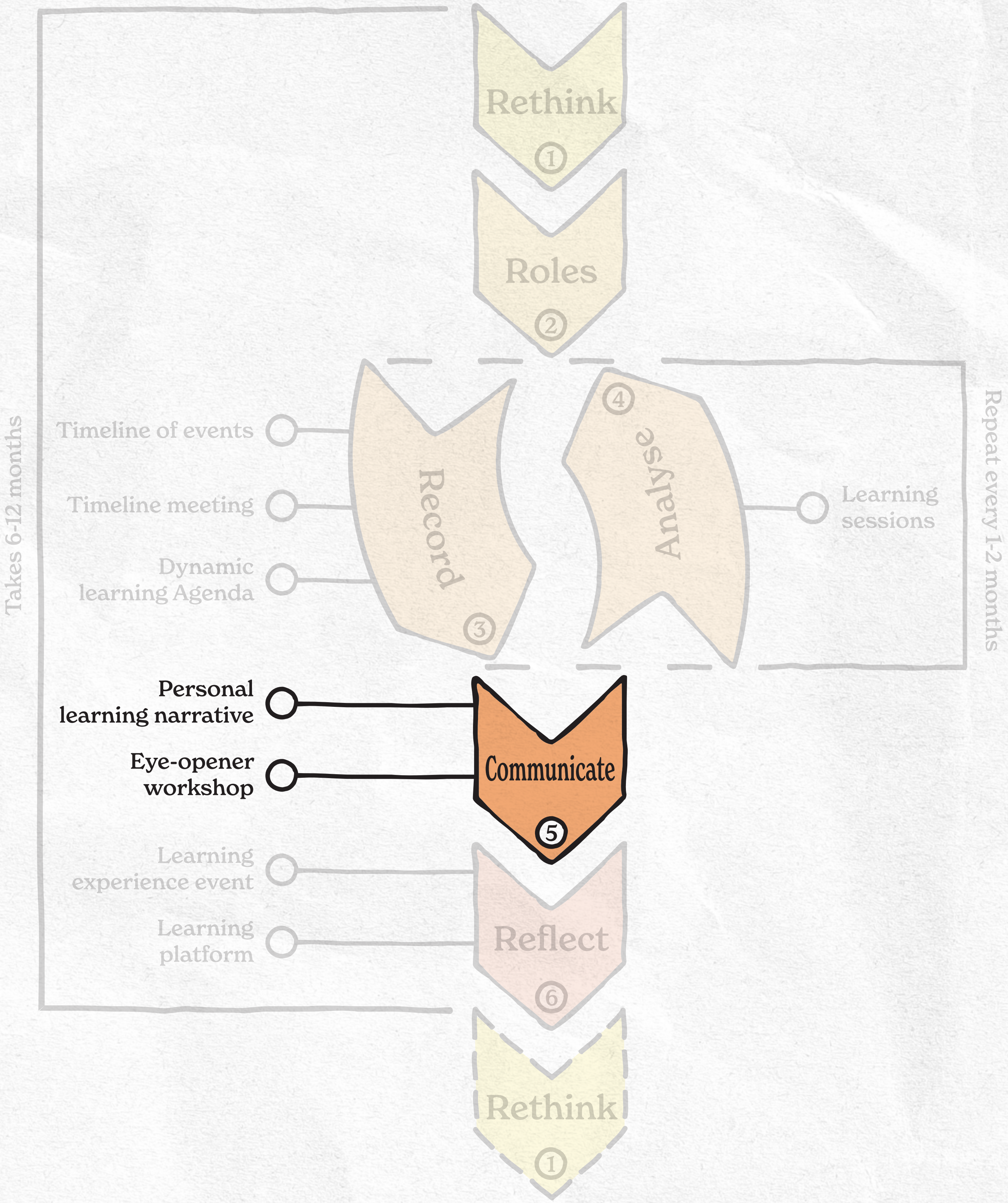
My Reflexive Monitoring Journey...

What are the main opportunities and barriers you experienced throughout your reflexive monitoring process (including working with the reflexive monitoring tools)?

How did you include the reflexive monitoring process into your daily activities?

What came up during the learning sessions that influenced or changed how you think about, work with or organise the planning, delivery and stewardship of your nature-based solution?

…so you've analysed your reflexive learning outcomes, but what to do next? It's time to…



STEP 5

SHARE YOUR FINDINGS WITH OTHERS

The challenge: **Your lessons learned aren't very valuable if your colleagues and other project partners don't know about them**

Reflexive monitoring is a novel governance process that can teach us all sorts of things. It is valuable to share these lessons, along with tips and tricks, with other actors inside and outside your organisation.

The solution: **Communicate about your experiences and how you dealt with them**

The reflexive monitoring process has helped you to identify challenges and barriers as well as opportunities. At this stage, you have recorded what you learned from your experiences and what actions succeeded in overcoming barriers and finding opportunities. Now it's time to communicate about these lessons to actors outside the project-team.

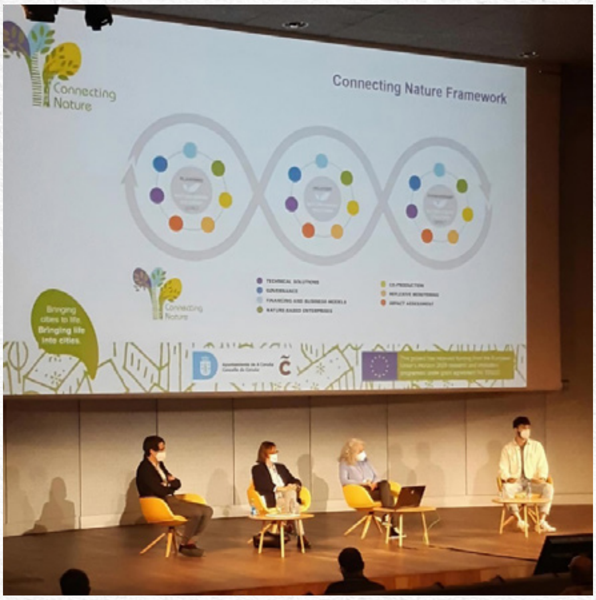
The right tool(s): **Eye-opener workshop and personal learning narratives**

The following two tools are selected to support this exchange:
E) personal learning narrative and **F) eye-opener workshop**.

E: Personal learning narratives

What's this then?

Personal learning narratives are stories that describe the learning journey of yourself or your team members throughout the process. They may revolve around an experience, a barrier, a struggle or a challenge. In the Connecting Nature Narrative guidebook we refer to these moments in time as transformation points. These personal stories can be shared in different ways, and you may find that they resonate very differently and are remembered really well. One of your team members could, for example, record a video about his or her own learning journey, and post it on social media or play it at an eye-opener workshop.



Narrative presentation in A Coruña.

*The A Coruña team also worked with the material from the Narratives Guidebook to develop their narrative

How, exactly?

When you start creating your personal narrative, it is important to know that you can decide the framing of the story yourself. Start by writing down the most important events that influenced your process. You and your team can select the most important critical turning points of your dynamic learning agenda together and discuss why these where important moments for you. The Narrative guidebook provides tools and templates to help you and your team develop your narrative.

So, you now have the topic of your narrative. Why not add visuals? They're very powerful communication tools. For the Connecting Nature project, we developed a template to support the narrative when working with the Connecting Nature Framework. For this, and more information and tips on how to create your own narrative, see the Connecting Nature Narrative guidebook.

Step-by-step

The outcomes of the timeline of events, dynamic learning agenda, and eye-opener workshop can all serve as input for defining the topic of these personal learning narratives. During a timeline meeting or a learning session, the team can decide what type of learning is a suitable topic and who will write the narrative. Here's how to write it:

1. Have a look at the Narratives guidebook and decide on the topic of your narrative.

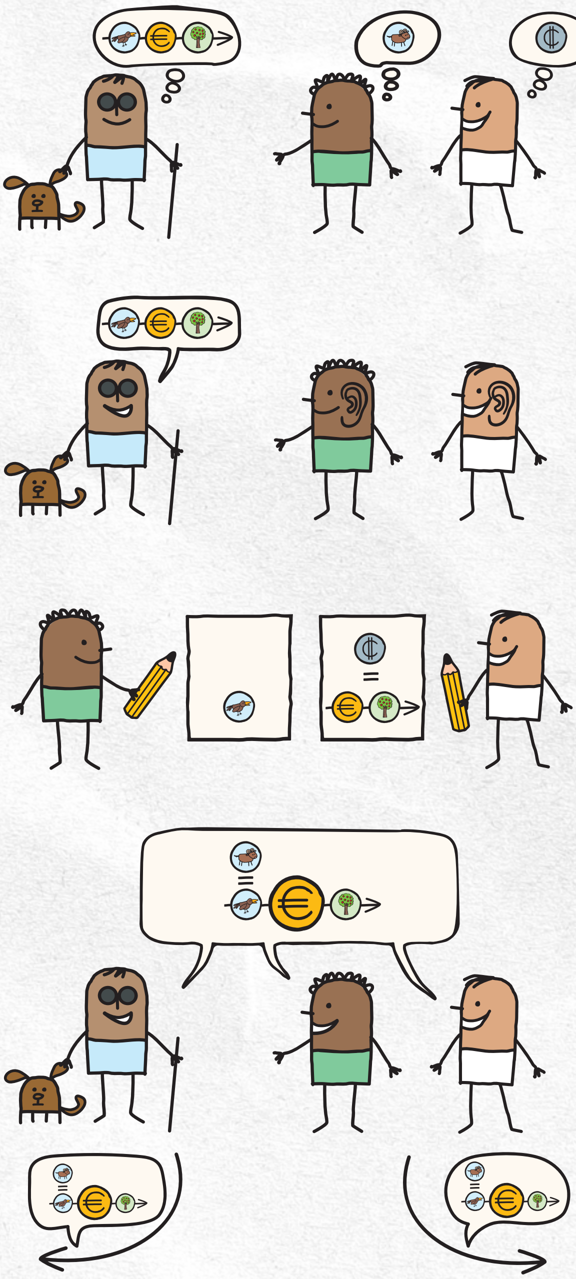
2. Write the first draft of the narrative focusing on what you learned from the experience.

3. Let other project team members read it and give feedback: Are your learnings recognisable? Does the story have a good flow? Is it easy to follow?

4. Edit the text based on their feedback but make sure the narrative stays short and based on one specific learning experience. Too many ideas? Why not create two separative narratives?

5. Decide on a format: video, audio, blog, or a presentation with visuals; and start producing.

6. Share the final version with all people involved and use it to communicate project learnings when needed.



F: Eye-opener workshop

What's this then?

The purpose of eye-opener workshops is to share what is learned from co-producing nature-based solutions with people who are not yet involved in your project. Your experiences might really benefit colleagues from other departments, people in the mayor's office or professionals working with co-production or nature-based solutions, for example.

This way, 'project outsiders' don't have to learn everything the hard way and it might give them learning objectives for their own context or projects.

For the project team, the workshop will result in new ways to communicate their lessons to those not yet involved in the project. You may get a great blog or website text out of it, for instance.

How, exactly?

The format for this workshop is based on the outcomes of the tools used in previous process steps. With the project team, you prepare the agenda for the workshop based on your experiences. Make sure to define the objectives of the workshop and discuss who you want to invite as participants. Then you can look at the step-by-step approach below and the template for the workshop and adapt it as you see fit. Also make sure that you have a strategy to follow up with the participants after the workshop to keep them engaged.

Step-by-step

The eye-opener workshop consists of the following 6-step process:

1. Produce a project narrative (e.g. based on your timeline of events): a narrative explaining the key points and main learning in the project progress in the past period. (see next tool).
2. Ask participants to state their learning objectives for the workshop and how familiar they are with the project.
3. Present the project narrative in words and hand it out on paper, and ask participants to write down associations, ideas, eye-openers, questions, feelings, etc. No questions yet!
4. Afterwards, ask participants to write down (in silence) reflections about your presentation in keywords/phrases/questions.
5. Ask participants to share the most important eye-openers. Then, formulate what is still missing and how this information can be obtained.
6. Ask why the eye-openers are important for the participants. Let them write this down as lessons for the future and ask every participant what they take home as a result of this workshop in terms of lessons and agendas.

How Poznań un-locked cross-department collaboration

We realised that the definition of nature-based solutions is little known among our City Hall colleagues- especially those who are working operationally that could benefit from them. After mapping these colleagues at all our departments, we invited them to informal workshops to introduce them to nature-based solutions as a concept but also show them how many of these are already implemented Poznań. We then discussed what more could be done to upscale them in our city based on their local knowledge. We used the eye-opener workshop format to organise one of the workshops in this series.

In this workshop we explained the definition and presented local examples of nature-based solutions. The participants emphasized that such workshops enabled them to discuss and exchange knowledge and identified the need to create a platform for further cooperation. This outcome was taken up by the unit who are now working on establishing the platform to keep the 'green agents' engaged and enthusiastic about working with nature-based solutions.

This contributes to upscaling because we identified potential partners who could promote and implement nature-based solutions in their own projects. To take one example: the Urban Regeneration Unit is responsible for the Programme "Change your backyard" that is addressed to citizens of Poznań. They participate in the process of designing their common backyards and receive a small budget to restore them. We were asked by our colleagues to advise the participants on some small-scale nature-based solutions that can be used in common backyards based on our other experience.

Got any tips?

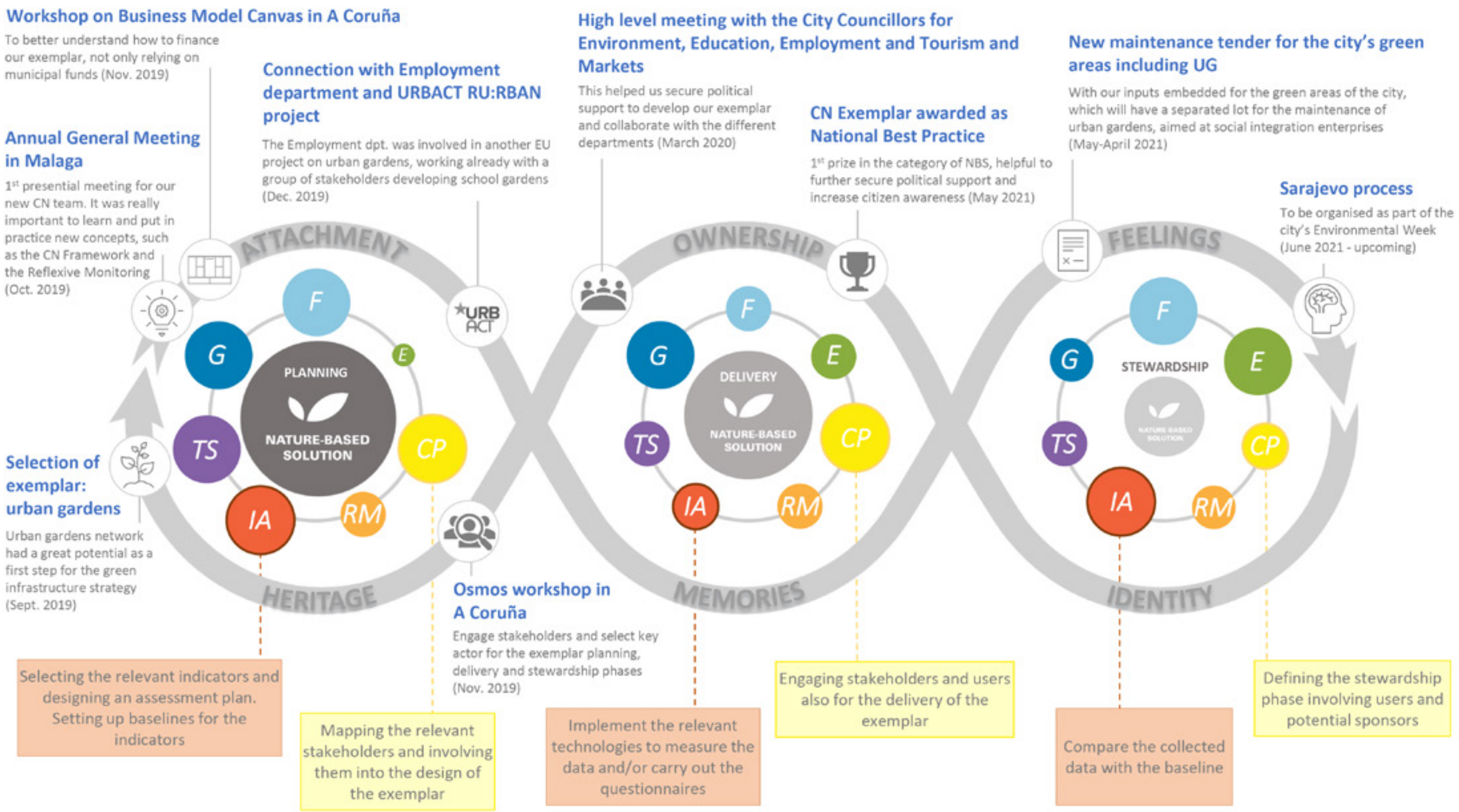
- Choosing the key points that are most relevant to your audience, capturing their interest and at the same time delivering your message can be tricky.
- To get a story that makes sense it is not only necessary to identify the key points of transformation but also the effects they produce on the development of your nature-based solution.
- Try to identify and add relevant concepts for your nature-based solution, your team and your city. For A Coruña those are: attachment, heritage, ownership, memories, feelings and identity.

How A Coruña did it:
creating their narrative on the Urban Gardens

"Our narrative allows us to tell, in a short and simple way, how our exemplar nature-based solution is being built in our city as a model for the implementation of more nature-based solutions. It also shows the process of adapting the Connecting Nature Framework. Telling our story in an impactful way helps us to further secure political support and increase citizen awareness.

We recently used the narrative to explain our project in an event organised by A Coruña City Council in collaboration with the National Point of the URBACT Program. It was attended by decision makers, professionals from other municipal departments and stakeholders from various cities. With our narrative, we felt that we could convey our information in a more accessible way. It was useful as a starting point to make new contacts and network with different stakeholders.

By working on this narrative we learned that the selection of the key transformation points and how each of them affected the development of the exemplar was extremely useful to summarize how the process has been for our team and how the exemplar is working in our city."



Connecting Nature Framework Visual of A Coruña.
(Source: A Coruña)

Ready-to-use materials

- **STEP 5 –** TOOL E1 – Eye-opener workshop template agenda
- **STEP 5 –** TOOL E2 – Eye-opener workshop template summary
- **STEP 5 –** TOOL F1 – Personal learning narrative template
- **STEP 5 –** TOOL F2 – Workshop template CN Framework Narrative
- **STEP 5 –** TOOL F3 – Visual template for CN Framework Narrative
- **STEP 5 –** TOOL F4 – CN Framework – City narrative and figure Step-by-step instructions

My Reflexive Monitoring Journey...

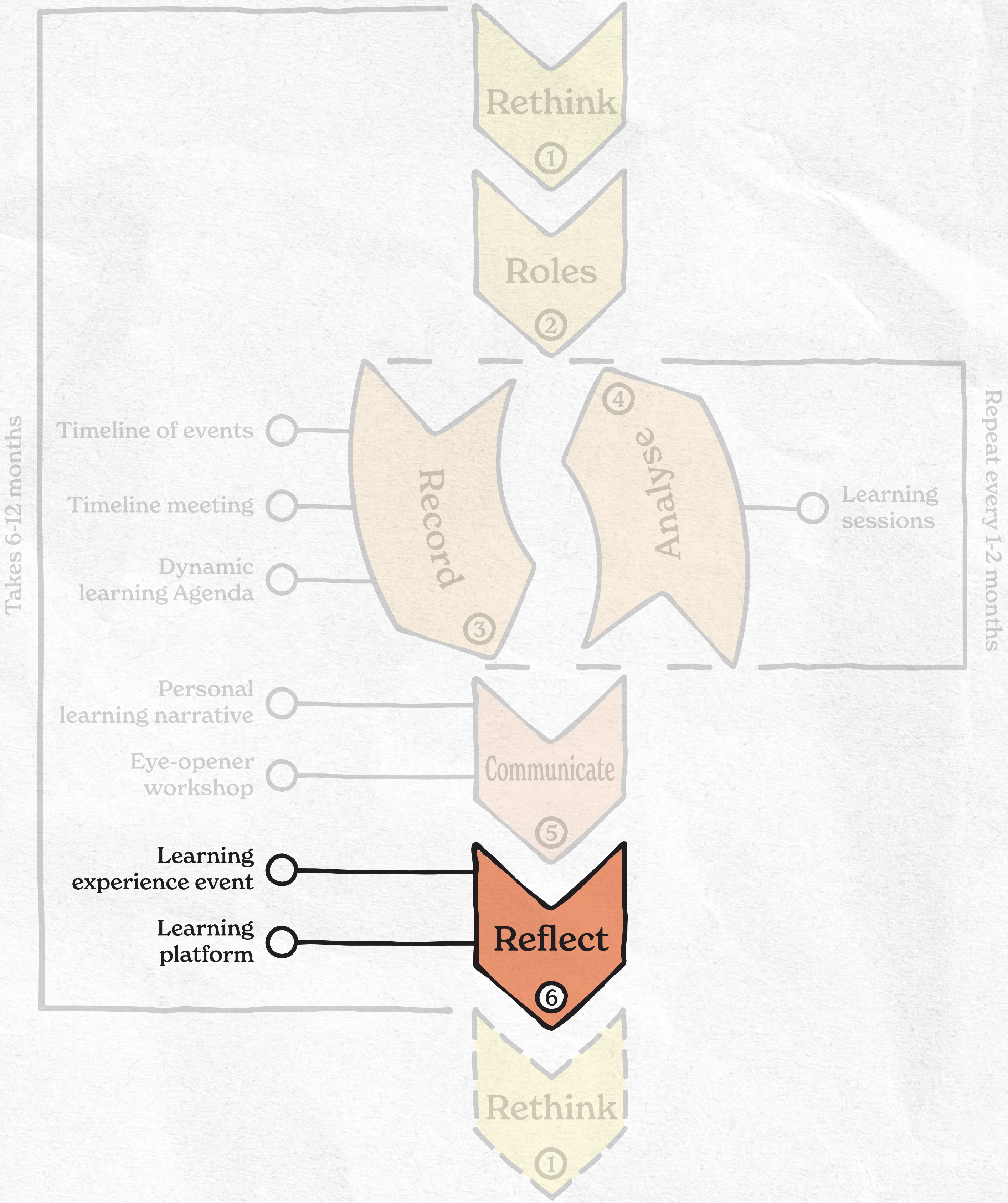
What lessons do you want to share with project outsiders?

Who do you want to engage in your project by sharing your lessons learnt and inviting them for an eye-opener workshop?

What topics do you find interesting to write a personal learning narrative on to share your lessons with others?

… so you've shared your lessons with others.

Finally you get to…



STEP 6

REFLECT WITH OTHER TEAMS

The challenge: **You are not the only one working on reflective monitoring. How to leverage what is being discovered across teams?**

When you have worked with the method for a while, you may feel the urge to reflect on the effectiveness of reflexive monitoring itself. You want to share your experience of working through the various steps and using the tools, and hear what others thought. It is always interesting to compare and contrast, right?

The solution: **Share best practices and learn from others**

Peer-to-peer learning events can be used to share and compare the experiences and learning outcomes between different teams. Consider organising sessions to experience how others dealt with similar challenges and barriers, share personal learning narratives, and celebrate innovations to inspire each other. Participating in peer-to-peer learning events helps you to reflect on your own learning process. So this step can be followed by an internal reflection meeting with your reflexive monitoring team to rethink your goals, roles and how you work with the process.

The right tool(s): **Learning Experience Events and Learning Platform**

We developed two types of tools to facilitate **peer-to-peer learning** for the Connecting Nature Cities: **G) Joining a Learning Experience Events** and **H) Learning Platform**.

G: Learning Experience Events

What's this then?

The purpose of a learning experience event is to facilitate sharing the experiences of different teams that work with the reflexive monitoring method and are supported by the same (group of) experts/researchers. The exchange focusses on: A) how the teams work with the reflexive monitoring method and B) how to reflect on their learning outcomes.

How, exactly?

The learning experience events are designed to deepen the understanding of the reflexive monitoring process. The reflexive monitoring coach prepares this event together with one or more reflexive monitors. For the first part, they select a tool they want to discuss and better understand. For the second part, the reflexive monitoring coach prepares a cross-case analysis of the learning outcomes of the different teams. This will be presented during the event to feed into a group discussion about the different innovations the teams have been developing.

Step-by-step

The learning experience event consists of the following steps:

1. The reflexive monitoring coach presents the theory: we deepen the understanding of a selected tool and how this can support the team to increase their reflexivity.
2. A team shares their experience working with the tool, how they personalised it to their context, what works well for them and what is a challenge.
3. Group discussion! The teams exchange experiences and best practices.
4. The reflexive monitoring coach presents the cross-case analysis of all the learning outcomes of all teams. These are clustered and the different categories of reflexivity (rules, relations, practices, discourses) are mapped.
5. Group discussion again: verify the interpretations of the learning outcomes and the way they are clustered. This clustering helps to recognise similar leaning outcomes around a similar theme or topic.
6. All teams will have a chance to present their own learning outcomes and how they experienced them and ask each other questions or give advice.

How Glasgow experienced 'light bulb moments' during the peer-to-peer learning sessions

"Our process of starting to work with reflexive monitoring was one of lots of bumps in the road and lightbulb moments. We started slowly with limited understanding of what we are doing and why. In Rotterdam, at the first Learning Experience Event, I realised what the value was and what I needed to do.

During one of the workshops, I had a 'lightbulb moment'. I realised we have a lot of ideas and reflections in our heads and we need to get them down. Starting to understand the difference between reflective and reflexive was also an important outcome of the event. Not only looking at our practice and why we do what we do, but also digging deeper into how we need new ways of thinking, doing and organising within our team, but also within the larger organisations and the environment we work in.

We decided to restart with our open space team. In January, we started working on step 3 together by constructing timelines and using the meetings to draft our dynamic learning agenda. We used reflexive monitoring to identify our priorities. We noticed reflexive monitoring helps us with framing conversations. It helps us to structure meetings and break through barriers. We now use it for other things as well."

Gillian Dick, Spatial Planning Manager – Research & Development, Glasgow City Council

Got any tips?

- Peer-to-peer learning events help you to learn how other reflexive monitoring teams are working. This helps you to reflect on how your team could improve their processes to increase the effectiveness of your work.

H: Learning Platform

What's this then?

The purpose of a learning platform is to facilitate exchange between organisations with different levels of reflexive monitoring experience that are working on similar topics, like nature-based solutions. The platform structure for Connecting Nature was specifically designed to facilitate learning between front-runner cities and fast-follower cities but can be used as a basis to facilitate other types of peer-to-peer learning.

How, exactly?

We differentiate between two parts here, in which the teams who work with the method themselves and the reflexive monitoring coaches (experts or researchers) both have a role. We will describe both roles in this guidebook.

Part I:

- **for the team:** Participate in a learning session
- **for the coach:** Take notes during the learning sessions

In preparation of the learning platform event meetings, a learning session is organised between two reflexive monitoring teams. The first team brings a more experienced reflexive monitor and team member(s). They will facilitate the learning session similar to the role of the coach in step 4. The second team just started working with the method and they prepared their DLA based on step 3. Together, they discuss the DLA as described in step 4: Analyse Tool D, part 1. When learning questions come up that the experienced team recognises, they can share with the less experienced team their innovations as inspiration for finding solutions to barriers. The coaches who organise the Learning Platform participate in this learning session as note takers.

Part II:

- **for the team:** Participate in the Learning Platform Event
- **for the coach:** Share the analysis of learning objectives

The notes of these learning sessions can be used by the reflexive monitoring coach to analyse the learning objectives of the teams that just started with the method and the learning outcomes of the experienced teams (see step 4, tool D part 2. This will be done after the learning session, so without direct verification. When all meeting notes of the different pairs of teams are analysed, they are presented and discussed with all teams during a learning platform event.

Step-by-step

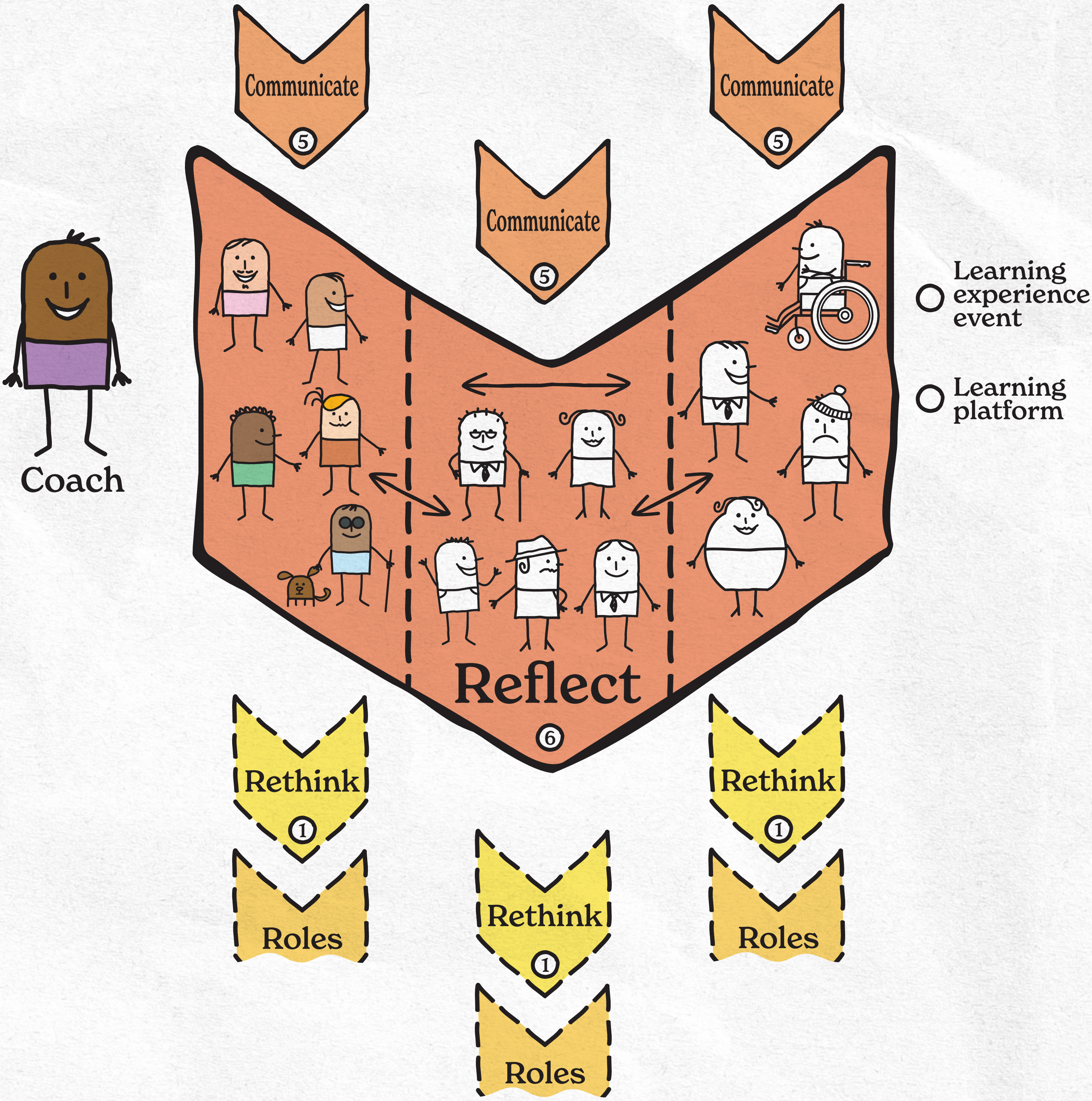
Part I of the learning platform consists of the following steps:

1. Create multiple couples of experienced and novel teams who work with the reflexive monitoring method.
2. Organise learning session that are recorded in notes so the teams can discuss the DLA of the team that just started working with the method.
3. Teams discuss best practices of working with the reflexive monitoring tools as well as the learning questions. The more experienced team can share examples of how they dealt with similar barriers/opportunities.
4. Repeat these meeting on a regular basis between four times and year and once a month.

Part II of the learning platform consists of the following steps:

5. Record the learning sessions of part I in meeting notes/transcripts.
6. Analyse the notes and cluster the learning objectives and learning outcomes.
7. Present the analysis to all and discuss if the objectives are recognised by others.
8. Involve experts to offer advise and support on prioritised learning objectives.
9. This part can be repeated after every set of learning session.

How reflection across Reflexive Monitoring teams fits in everyone's own process



How Sarajevo experienced the Learning Platform structure

Working with the Dynamic Learning Agenda helped the Sarajevo team to determine the most important moments in the design and implementation of the nature-based solution. The City of Glasgow supported the team in solving barriers for specific issues and provided some opportunities for delivering the process.

The Sarajevo team exchanged experiences with City of Glasgow in peer-to-peer learning sessions. Here we discussed some issues related to the implementation of our nature-based solution.

This included the following topics:

- engagement of stakeholders
- cooperation with universities
- involvement of NGO dealing with environmental protection
- cooperation with architects

The approach worked very well. Glasgow advised us, as a starting point for stakeholder engagement, to define key stakeholders, determine their jurisdiction, models of cooperation and their ways of support in every phase of the process, and to create an engagement plan.

The learning platform webinars provided us with a clearer picture in which direction to go and gained new knowledge about specific topics other cities are working on (e.g. technical solutions).

Got any tips?

- **For the coaches:** Make the whole process user friendly in order to engage more actors from the teams. For example, by using less academic wording and focus more on exchanging experiences between practitioners.
- **For the teams:** Participating in the Learning Platform on a regular basis helps both the more and less experienced teams to deepen their understanding and insights in the method.

Where to find more

Van Mierlo, B. C., Regeer, B., van Amstel, M., Arkesteijn, M. C. M., Beekman, V., Bunders, J. F. G., ... & Leeuwis, C. (2010). Reflexive Monitoring in action. A guide for monitoring system innovation projects. Communication and Innovation Studies, WUR; Athena Institute, VU. https://www.wur.nl/en/Publication-details.htm?publicationId=publication-way-333935373332 page 92

Ready-to-use materials

- **STEP 6 –** TOOL G1 – Learning Experience Webinar Agenda
- **STEP 6 –** TOOL H1 – Peer-to-Peer learning sessions template

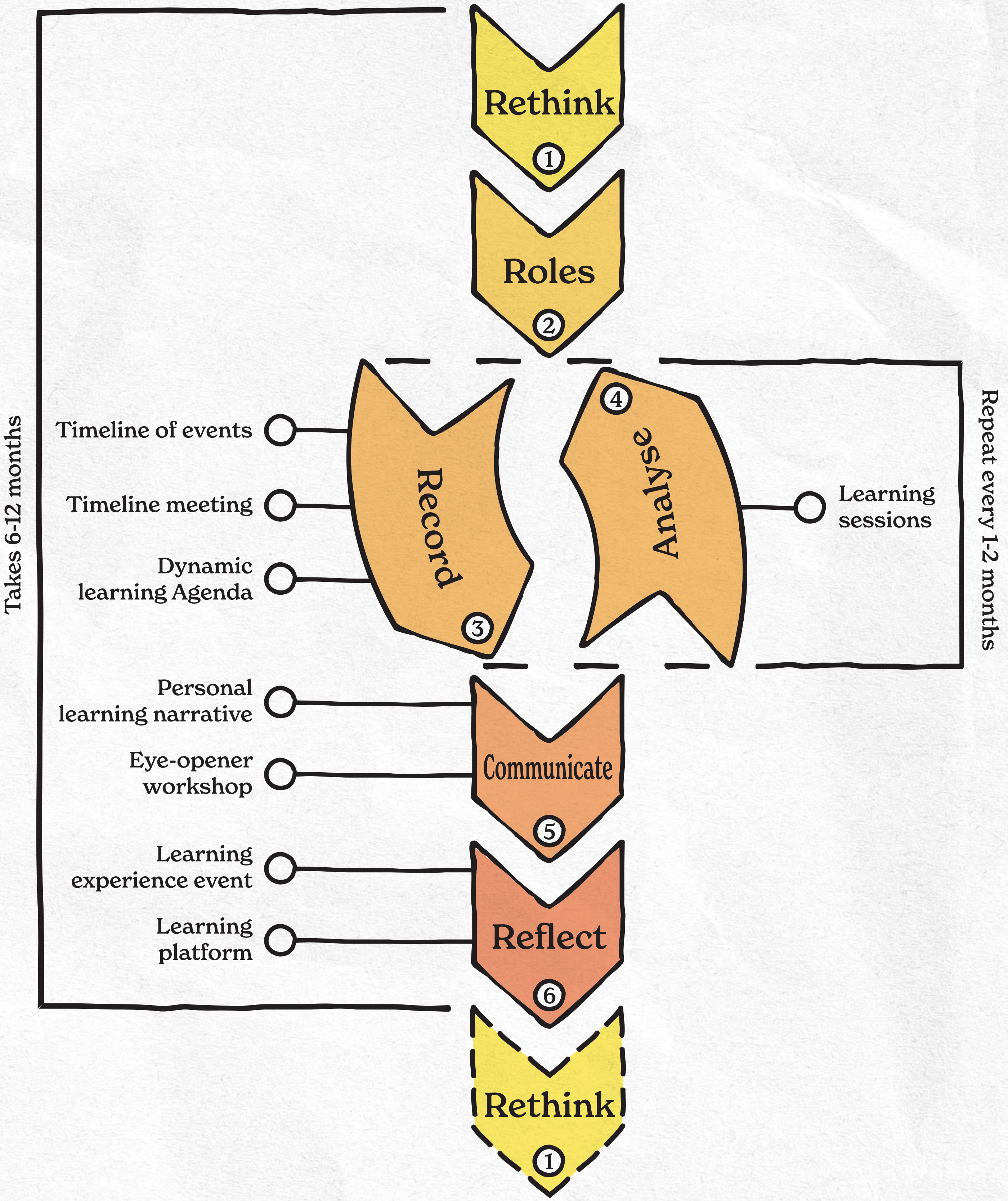
My Reflexive Monitoring Journey...

What lessons do you want to share with project outsiders?

Who do you want to engage in your project by sharing your lessons learnt by inviting them for an eye-opener workshop?

What topics do you find interesting to write a personal learning narrative on to share your lessons with others?

…so you completed all the steps of the process, lets…



RECAP

The reflexive monitoring process requires effort, but it's worth it: it boosts your knowledge, sharpens your skills, and can transform the way you and your network respond to complex challenges.

Five key things to remember about reflexive monitoring:

1. Plan reflexive monitoring as an integral part of the project from the start.

2. Make sure all actors involved in co-producing your nature-based solution(s) have a reflexive monitoring role. Everyone brings their own perspectives and experiences, so they should all take part in meetings/ activities to extract learning outcomes.

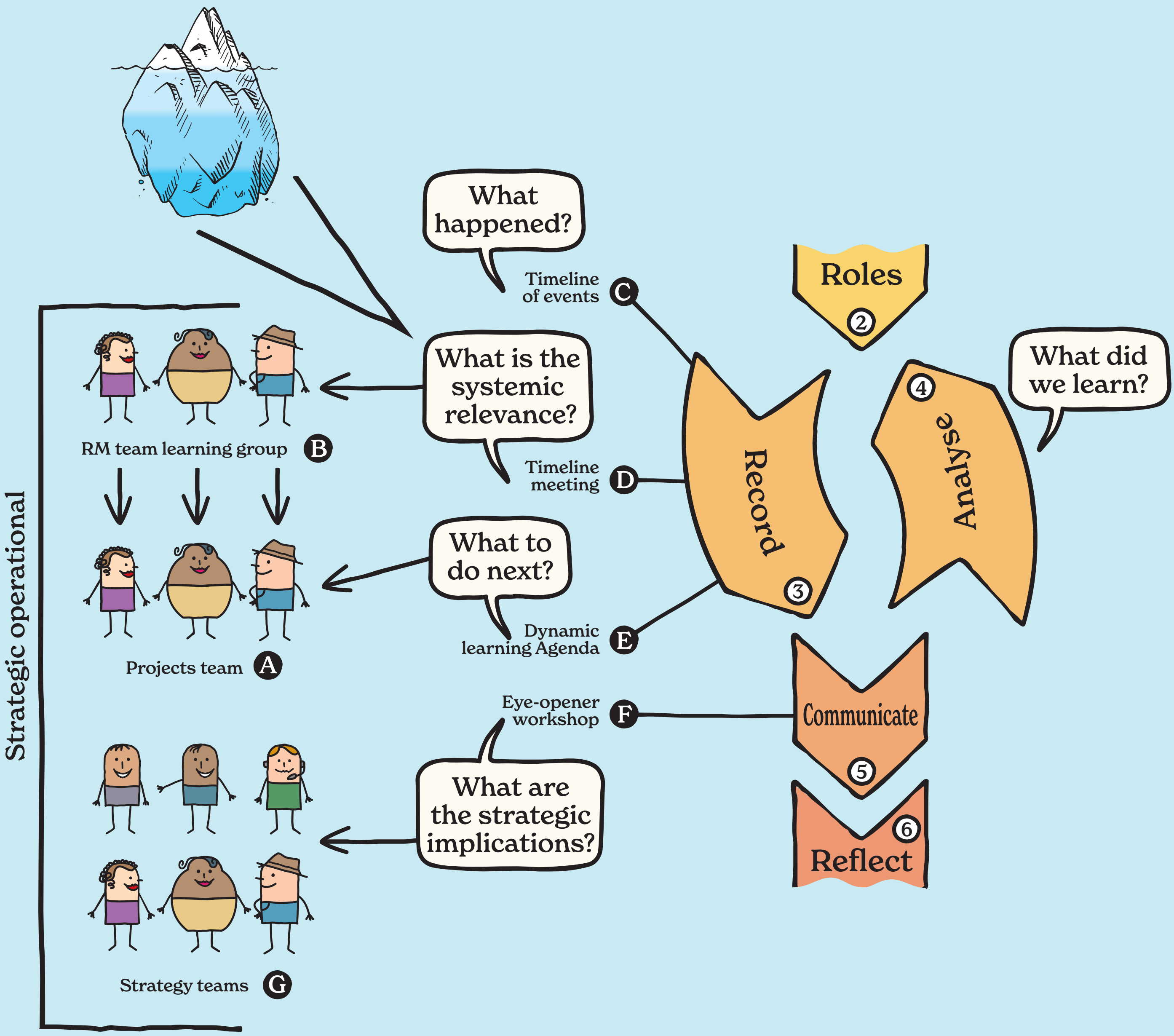
3. Assign the role of the reflexive monitor to someone who has experience with the method or who can be coached by someone who does. The main responsibility of the monitor is to steer the reflexive monitoring process. This is a challenging role as it requires specific skills, including the ability to balance details with the bigger picture, in order to facilitate meetings/ sessions, to synthesise large amounts of information and ask key ad hoc questions of those involved.

4. Evaluate the daily practices in your co-production journey using a timeline. This is done by regularly connecting the insights from the reflexive monitoring process with the delivery process. Identify critical turning points, formulate learning questions relating to them, and identify follow-up actions so that the reflection informs the day-to-day work involved in the nature-based solution.

5. Commit to the method and reserve time to learn and adapt your practice.

Reflexive Monitoring in Genk: the full picture

The reflexive monitoring process has been one of the main success factors for our Genk Stiemer Valley programme. We have put a lot of effort into integrating the learning process into the overall governance and implementation strategy of our nature-based solution. A key insight has been the realisation that reflexive monitoring is a process that runs parallel to the regular project management, but has to be sufficiently interlinked.



How Genk works with Reflexive monitoring

Within the Stiemer programme, we have two main governance structures. First, there is the Stiemer project team (A) consisting of three persons meeting every two weeks. This meeting and team follow project management approaches to strive for operational excellence in the implementation of the Stiemer programme. All three team members are project leaders for multiple subprojects within the programme, and the progress of all subprojects is monitored and discussed in this biweekly meeting.

The second governance structure is the learning group (B), consisting of the same three team members, getting together once every two months. Those meetings follow an entirely different approach, not revolving around project management but based upon reflexive monitoring. The idea is to rise above day-to-day issues by zooming out and reflecting on the general progress of the programme from a strategic and systemic point of view. Reflexive monitoring provides tools to assist in the preparation and structuring of these learning sessions. Within the Stiemer programme a lot starts with the Stiemer diary — what the Genkers call the timeline of events (C): all members of the learning group keep a diary in which they record events they consider noteworthy. This can include things that have a relevance beyond the here & now. The iceberg model provides a useful metaphor: if we encounter an iceberg coming by, we record it by describing its tip but with the objective to further explore what's beneath the surface.

We use timeline meetings (D) once every two months for this exploration: by sharing reflections, we explore the structural and / or cultural dimensions at the root of our observations.

We formulate this in terms of critical turning points: points where we — in hindsight — came across systemic barriers or opportunities. Based upon that, we try to identify learning questions that could help us to deal with these barriers/opportunities, always from a perspective of the strategic objectives of the Stiemer programme. Although these learning questions generally are strategic, we try to operationalise them by defining follow-up actions that help us to advance these questions, thereby also advancing the strategic agenda of the Stiemer programme. We record this in our dynamic learning agenda (E).

Linking operational and strategic levels

> **The Stiemer programme works at two levels: the project team can be seen as the structure striving for operational excellence, while the learning group is the structure striving for strategic excellence.**

Although they run largely in parallel, there is clear interlinkage between these processes, ensuring a suitable balance between strategic and operational excellence. First of all, there is (in our case a full) overlap between both teams. In addition, as the follow-up actions on the learning questions require operational follow-up, these actions are transferred to the project team, where they are properly managed and implemented. On the other hand, new observations will emerge during this implementation that give rise to new reflections for the learning group.

In addition, we have observed that many of the learning outcomes of the learning process (discussed in the learning sessions) have a relevance that exceeds our Stiemer programme. Often systemic barriers play at a level in which the Stiemer team has little direct influence. Many barriers sit at the organisational level of the municipality.

Because we believe that the Stiemer programme offers great opportunities for organisational learning, every six months we have an eye-opener workshop (F) with the mayor, deputy mayor and a few management team members of our municipality (G). We share the most relevant learning lessons, but also explore to which extent organisational strategies or other strategic agendas of the municipality could assist in overcoming persistent barriers or exploiting possible opportunities for the Stiemer programme. As such, these eye-opener workshops ensure a continuous alignment between the strategic agendas of the Stiemer programme and the municipality as a whole.

In sum, you could say that the learning process ensures that the right things are done while the project management ensures that things are done right. The Stiemer programme marks one of the first times for our urban transformation processes that we have succeeded to find the essential but very often missing link between the strategic ambitions of the city of Genk and the plethora of actions that are undertaken. For us, the key to bridge this gap lies in a strong learning process that exceeds the project level through its connections to the strategic level and the municipality as a whole. For the Stiemer programme, we have developed this structure based on the methodology of reflexive monitoring we co-produced with the other partners in the Connecting Nature project.

Peter Vos, Genk

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This guidebook is the result of a co-production process between research partners and European cities within the scope of the Connecting Nature project. Aims are to support the scaling of nature-based solutions in cities and to position Europe as a global leader in the innovation and implementation of those solutions by co-creating a toolkit for cities.

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- "The value of reflexive monitoring for nature-based solutions projects" by Marleen Lodder for UrbanByNature
  https://youtu.be/kviAZHtUMNA

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