



TIME4CS

SUPPORTING SUSTAINABLE
INSTITUTIONAL CHANGES
TO PROMOTE CITIZEN SCIENCE IN
SCIENCE AND TECHNOLOGY

Train-the-Trainer

for the TIME4CS Training Program



TIME4CS Train-the-Trainer

Training Program

Training Module TTT 1.1: Stakeholders and Audiences

- Training Module TTT 1.1.1: Stakeholder analysis and audience mapping
- Training Module TTT 1.1.2: Interactive session: Stakeholder analysis

Training Module TTT 1.2: Training Design

- Training Module TTT 1.2.1: Training design using the Logic Model framework
- Training Module TTT 1.2.2: Interactive session: Design your own training

Training Module TTT 1.3: Challenges & Solutions to Implementing and Embedding Training

- Training Module TTT 1.3.1: SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis of the implementation and embedding of training programs
- Training Module TTT 1.1.2: Interactive session: Identify challenges & solutions

TIME4CS Train-the-Trainer

Learning objectives

- conduct a stakeholder analysis for training design purposes
- understand the available TIME4CS training modules that can be used for training and how to design their training based on those modules
- plan and design customised training sessions for their institutions based on the TIME4CS training modules, taking into account their stakeholders, learning styles and listening, and audiences' needs/demands/experiences
- customise learning objectives, content, exercises, and assessment
- identify and mitigate challenges to implementing their training

Stakeholders & Audiences

Training module TTT 1.1



TIME4CS

SUPPORTING SUSTAINABLE
INSTITUTIONAL CHANGES
TO PROMOTE CITIZEN SCIENCE IN
SCIENCE AND TECHNOLOGY



Stakeholder analysis and audiences mapping

Training module TTT 1.1.1



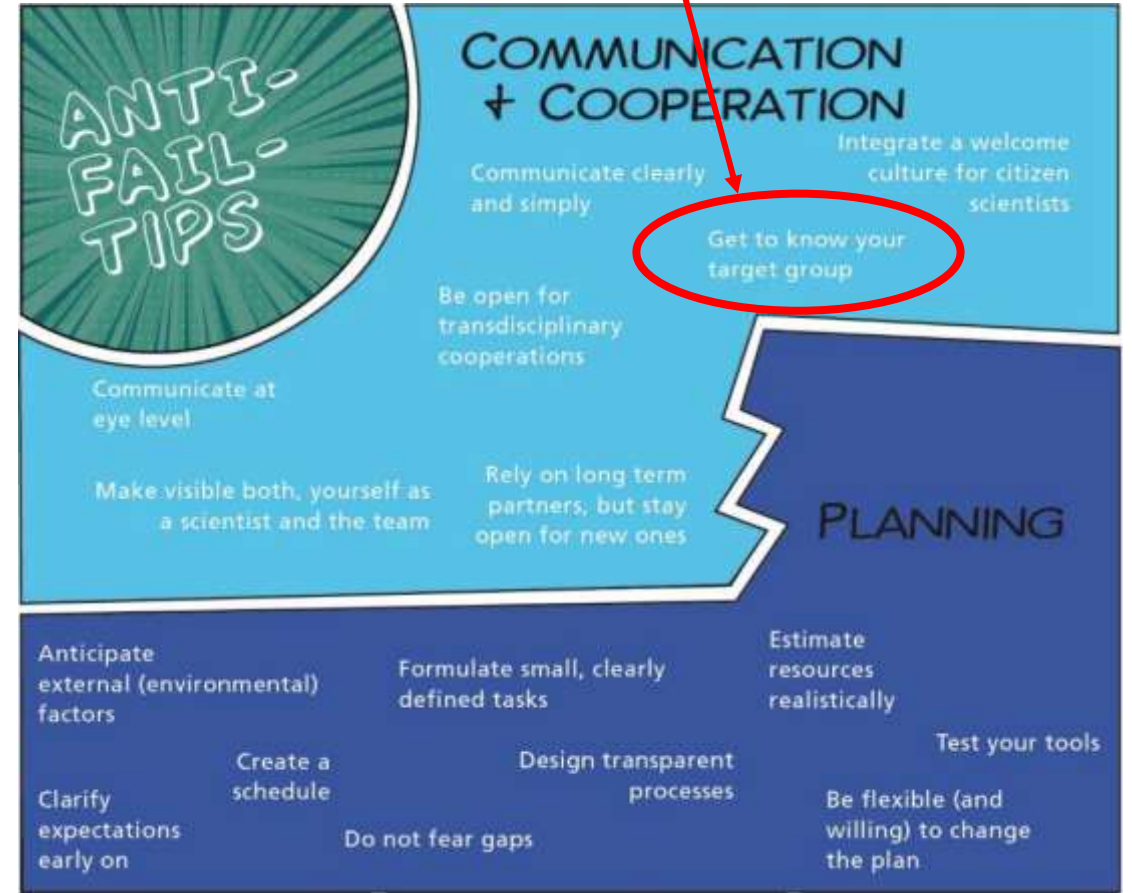
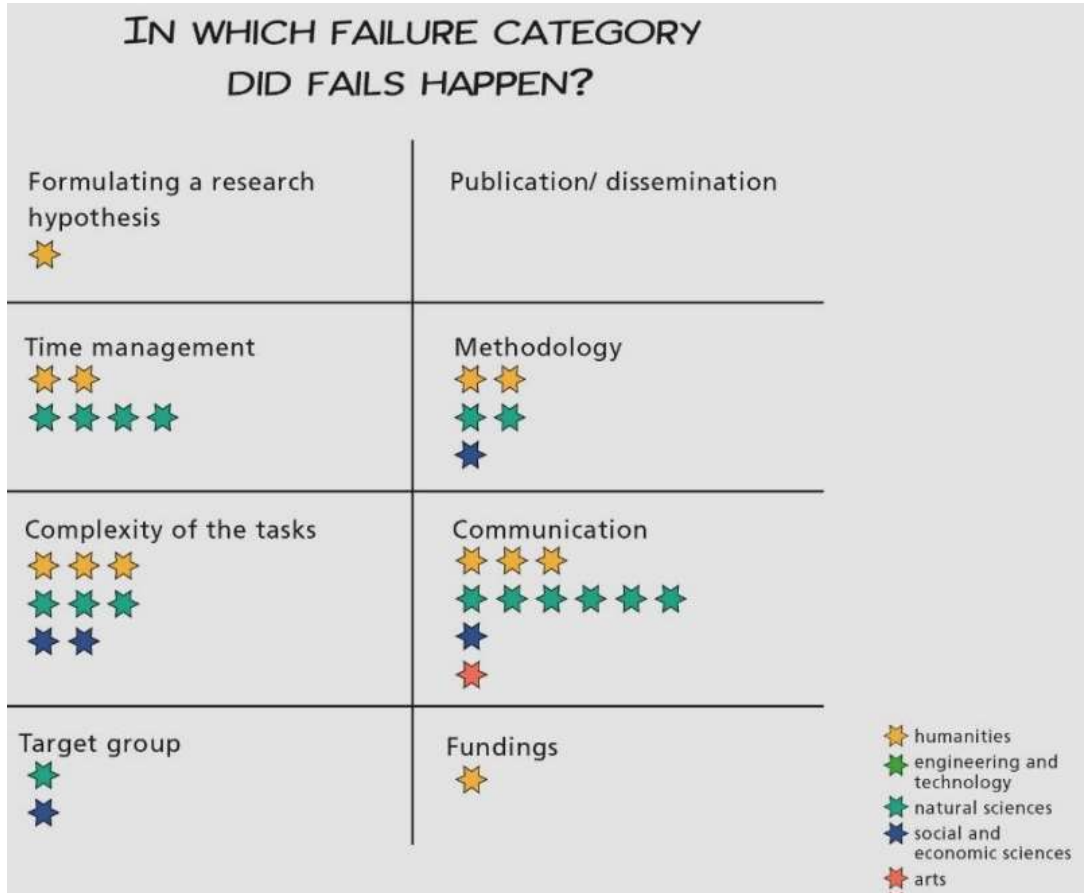
TIME4CS

SUPPORTING SUSTAINABLE
INSTITUTIONAL CHANGES
TO PROMOTE CITIZEN SCIENCE IN
SCIENCE AND TECHNOLOGY



TIME4CS Why do some citizen science projects fail?

Because they don't know their target group / audience which is also important for training providers



Westreicher et al., 2021

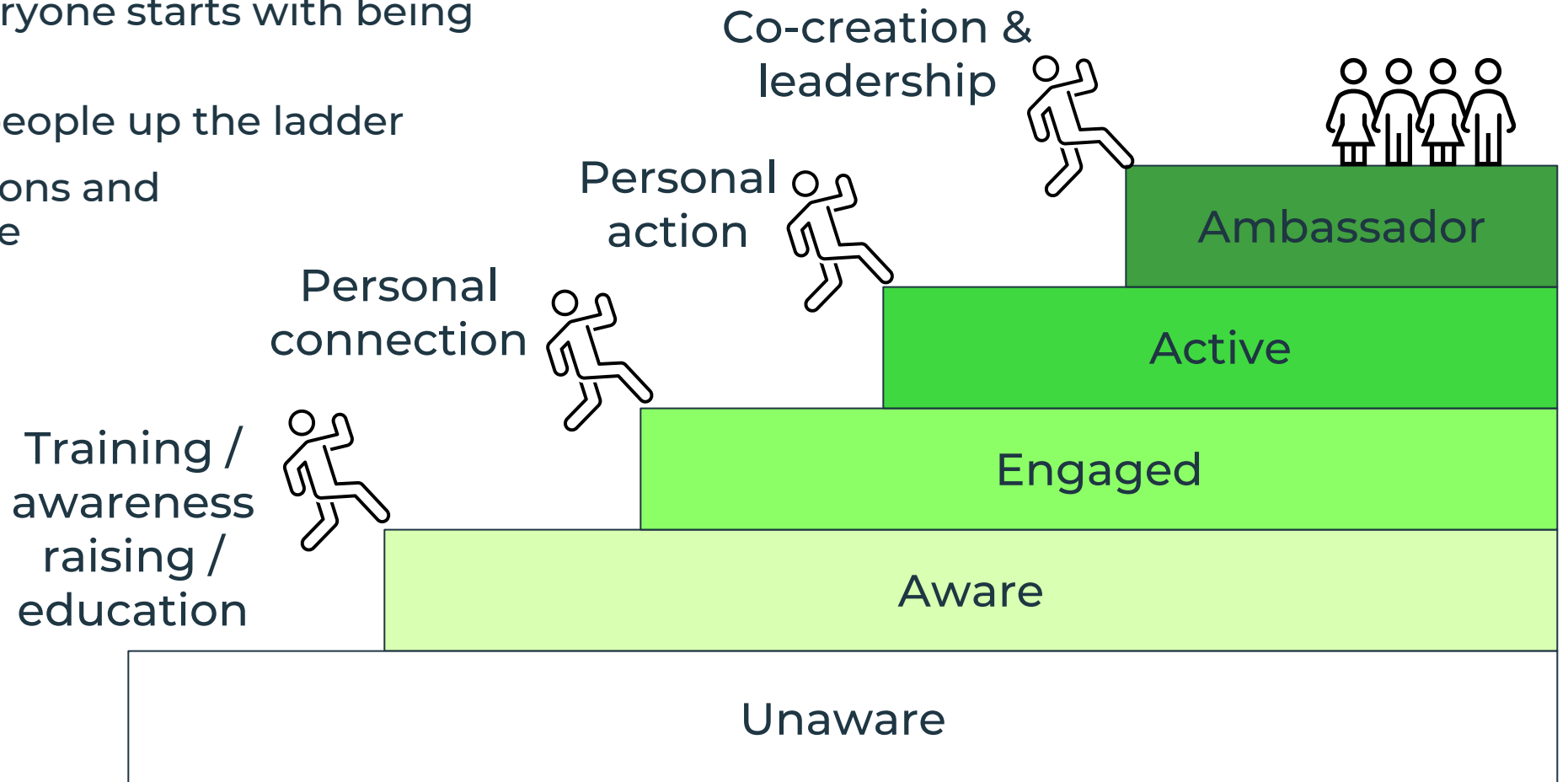
The TIME4CS project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006201



TIME4CS Ladder of Participation for participants

AND researchers and other staff!

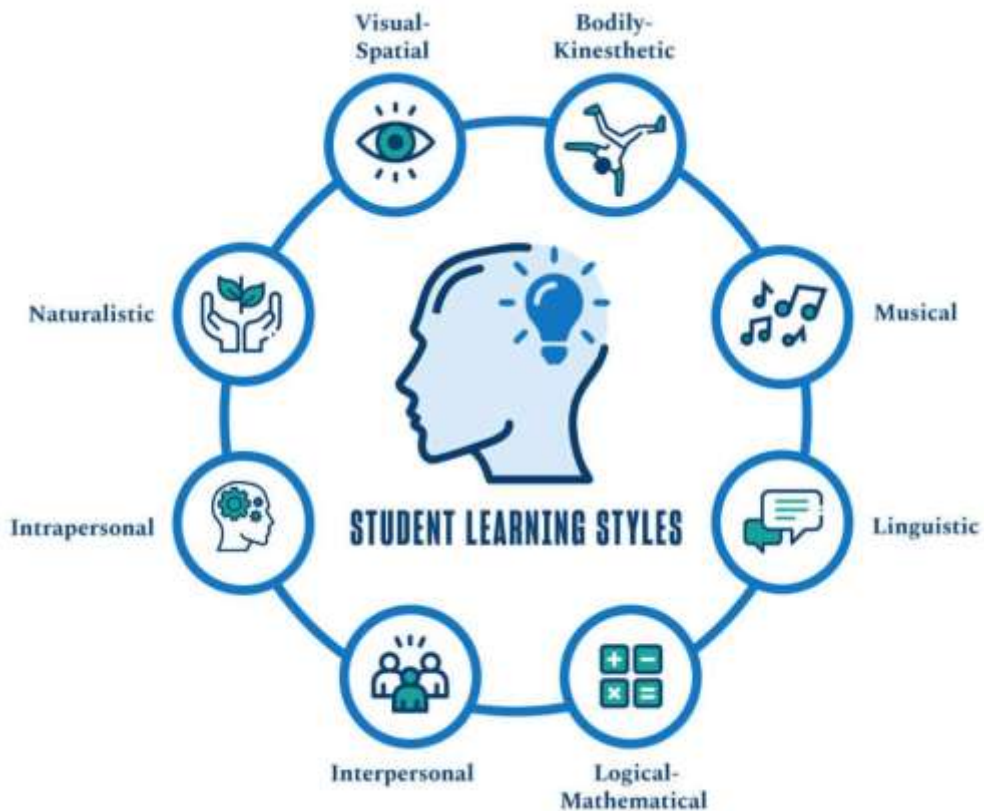
- Be aware that everyone starts with being 'Unaware'
- Training can get people up the ladder
- Personal connections and personal action are important to get people further up the ladder
- Ensure hands-on activities and interactive sessions in your training



TIME4CS Learning & Teaching/Training Styles

Consider learning styles

and teaching styles



University of San Diego

There are lots! Consider being the:

Facilitator

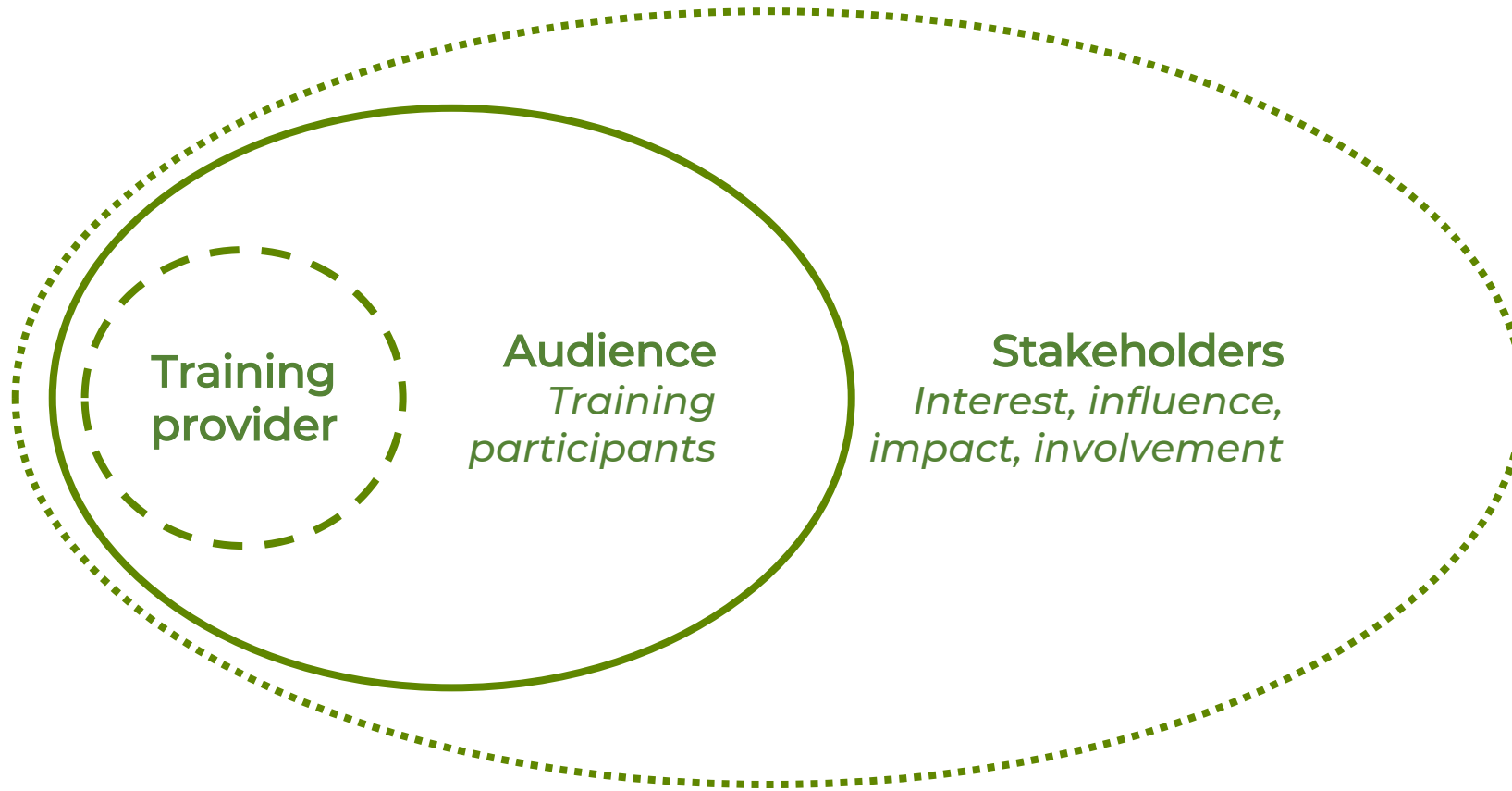
The facilitator's job is to support everyone to do their best thinking.

To do this, the facilitator encourages full participation, promotes mutual understanding and cultivates shared responsibility.

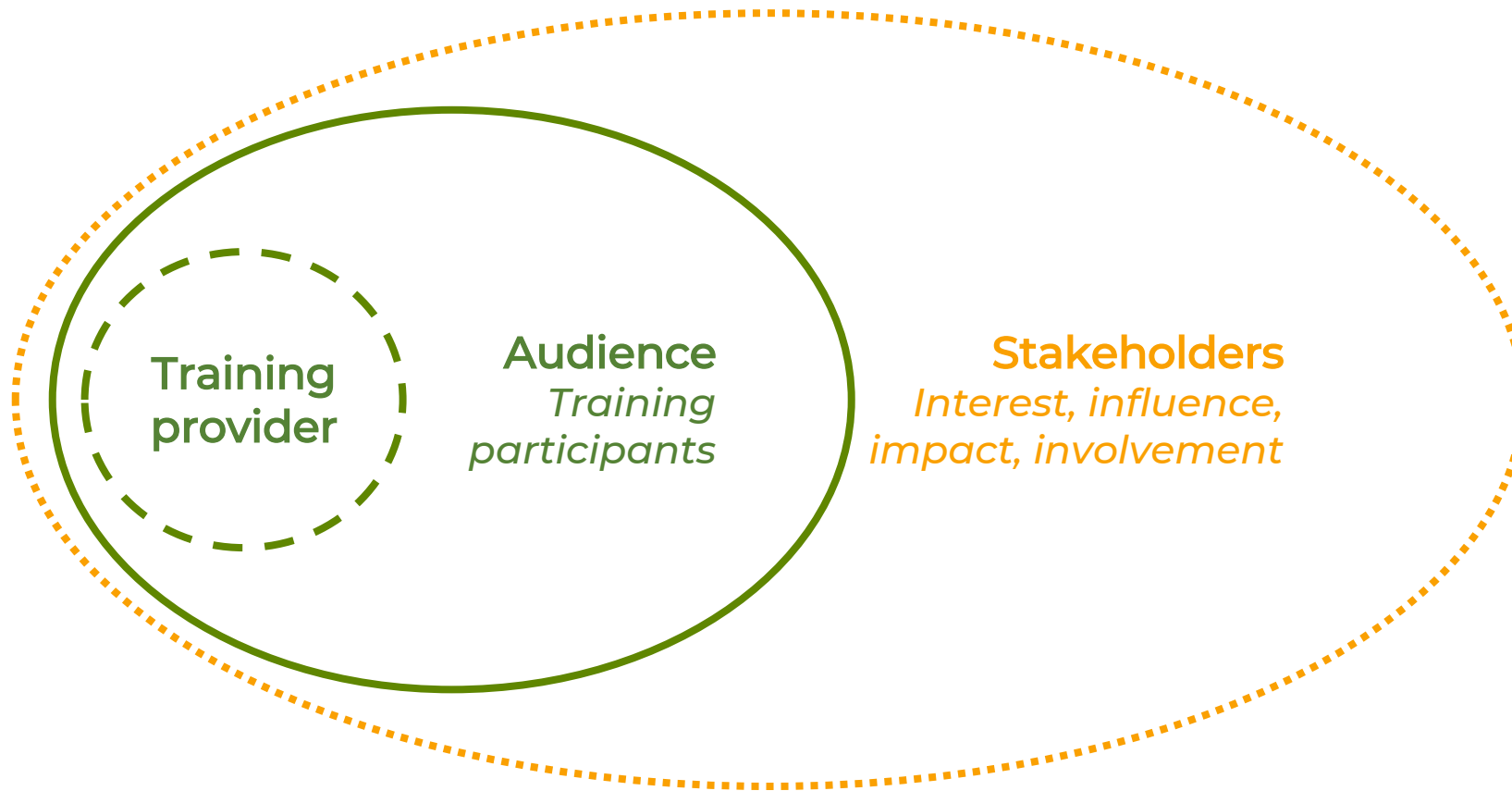
By supporting everyone to do their best thinking, a facilitator enables group members to search for inclusive solutions and build sustainable agreements.

Kaner & Berger, 1996

TIME4CS Training provider (you), Audience & Stakeholders for training



TIME4CS Stakeholders



TIME4CS Stakeholder Analysis

Who are your stakeholders? Some initial questions



- Who is/should be involved in making the training happen (approval, organising, execution, attendance, etc.)
- What & how do they contribute?
- What interests do the stakeholders have in the training?
- What influence can or do the stakeholders have on the training?
- How may stakeholders be affected or impacted by the training?
- Which stakeholders are essential to involve?
- At which stage do the stakeholders need to be involved?

- Several ways to identify stakeholders
- Several ways to think about their involvement: interest, influence, impact, roles, timing, etc.

TIME4CS Stakeholder Analysis example: Interest/Influence

Stakeholder mapping for citizen science training implementation

Intervention Area: Research

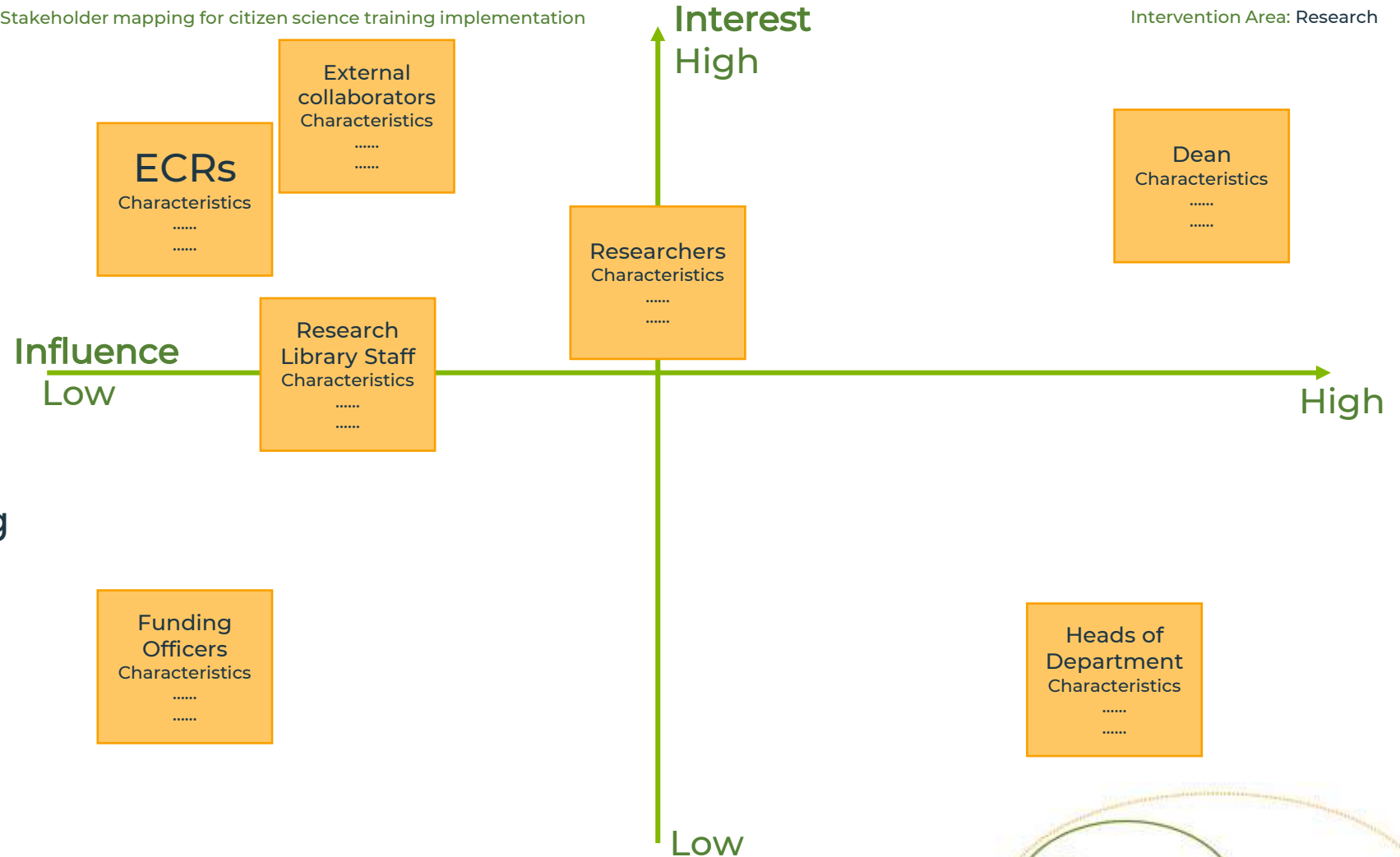
➤ Interest

- Who is interested?
- Who could you interest?
- Who should be interested?

➤ Influence

- Who influences whether your training will happen or not?
- Who is influenced by your training?

➤ Characteristics of stakeholders



Place your stakeholders according to their level of interest and influence



TIME4CS Stakeholder Analysis example: Timing/Stakeholders

Stakeholder mapping for citizen science training implementation

Intervention Area: Research

Stakeholders – any change agents?

Place your stakeholders according to when you need to involve them



Timing

Planning – Design – Coordination – Outreach – Execution – Evaluation – Follow-up

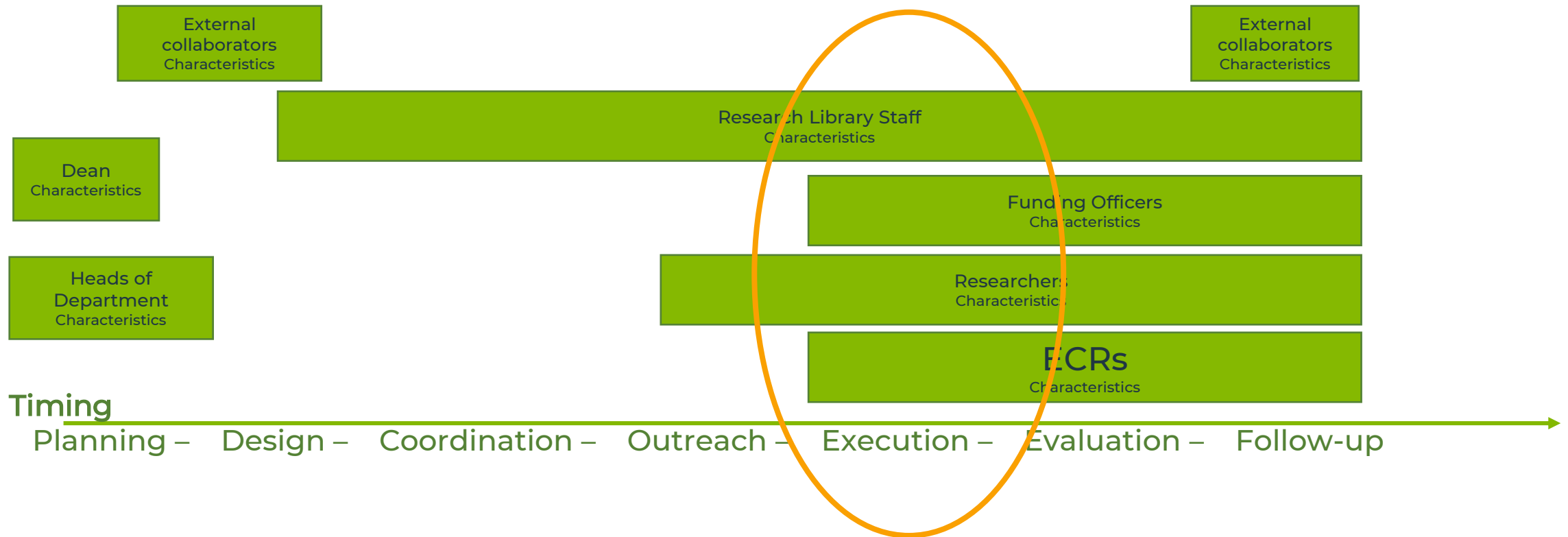
TIME4CS Stakeholder Analysis example: Audience

Stakeholder mapping for citizen science training implementation



Your training audience – *a particular subset of stakeholders*

Audience



Timing

Planning – Design – Coordination – Outreach – Execution – Evaluation – Follow-up

TIME4CS Training Audience / Participants

Map your target audience: characteristics

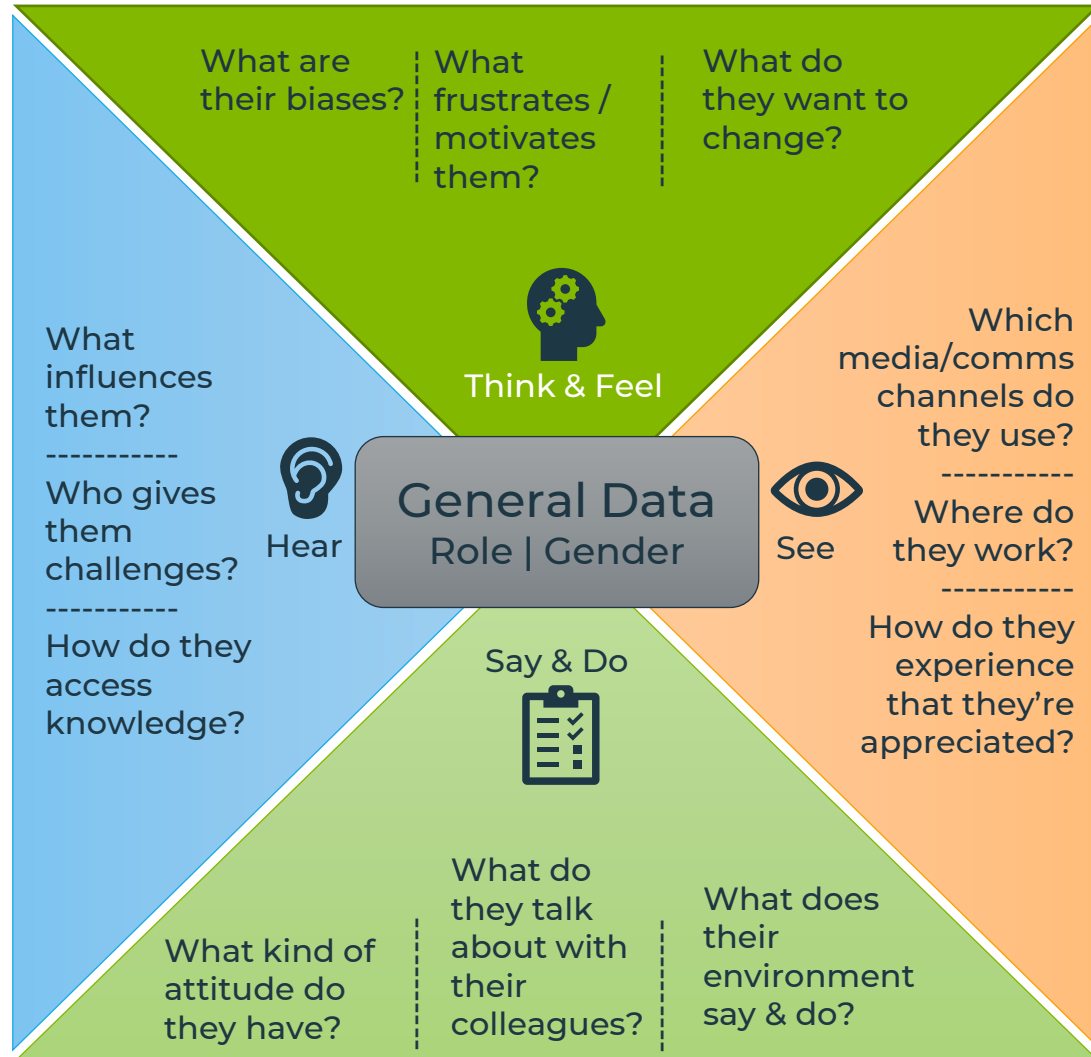


Gain

What does your target audience want to achieve?

What are their needs/demands?

How do they measure success?



Pain

What are the fears, frustrations, obstacles, challenges of your target audience?



Stakeholder analysis

Training module TTT 1.1.2:
Interactive session



TIME4CS

SUPPORTING SUSTAINABLE
INSTITUTIONAL CHANGES
TO PROMOTE CITIZEN SCIENCE IN
SCIENCE AND TECHNOLOGY



TIME4CS Interactive session: Conducting a stakeholder analysis and audience mapping

Program	Task
Group discussion	Participants conduct a stakeholder analysis (Interest/Influence and/or Timeline) in relation to a particular training opportunity and create an overview on a flip-chart (or Miro board). They are encouraged to share their training opportunity and identified relevant stakeholder groups.
From stakeholders to audience	Each participant or group identifies the target audience for their training opportunity.
Target audience characteristics	Participants discuss their audience's characteristics using the target audience mapping framework (Empathy Mapping) from Xplane, including identifying their audience's Gain and Pain, what they Say & Do, See, Hear, and Think & Feel. Insights are plotted on another flip-chart (or Miro board).
Presentation and feedback	Each group or individual presents their flip-charts, explaining their identified stakeholders and the characterization of their target audience. Presentations are followed by a feedback session, where peers and/or facilitators ask questions, provide constructive comments, alternative perspectives, and suggestions for improvement.
Conclusion and reflection	The session concludes with participants reflecting on their learning experience. They consider how the stakeholder analysis and audience mapping has influenced their understanding of how to develop and conduct their future training sessions.

Training Design

Training module TTT 1.2



TIME4CS

SUPPORTING SUSTAINABLE
INSTITUTIONAL CHANGES
TO PROMOTE CITIZEN SCIENCE IN
SCIENCE AND TECHNOLOGY



Training design using the Logic Model framework

Training module TTT 1.2.1



TIME4CS

SUPPORTING SUSTAINABLE
INSTITUTIONAL CHANGES
TO PROMOTE CITIZEN SCIENCE IN
SCIENCE AND TECHNOLOGY



TIME4CS Training Design

How to customize and implement training modules

Identifying and describing your stakeholders and intended audiences

- ✓ Done (previous module)

Defining your resources

- Participants and trainers, staff time, capacity and capability, budget, facilities, materials, resources, partnerships and more that are available

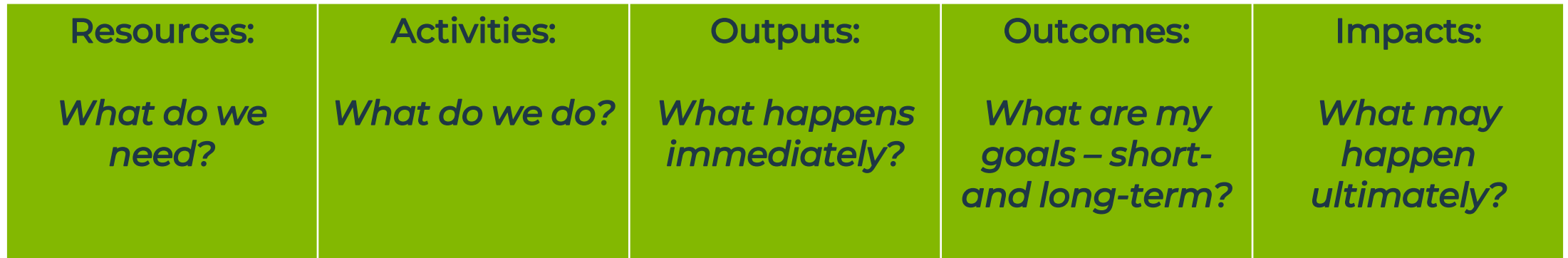
Planning activities

- Processes, tools, events, technology, and actions that are part of running the training

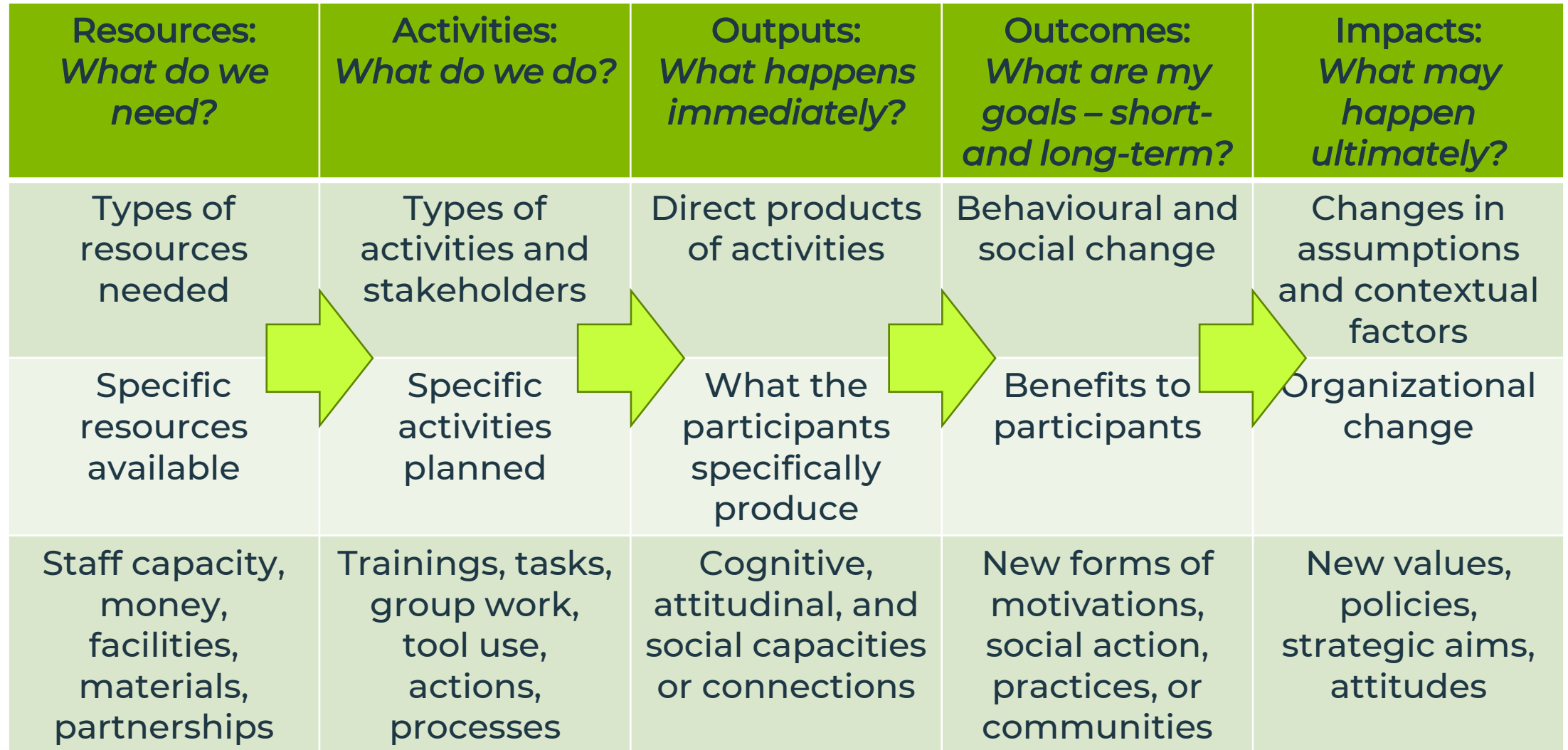
Anticipating results

- Outputs: Direct products of activities, i.e., what participants learn
- Outcomes: Changes in participants' behaviour, knowledge, skills, status, functions
- Impact: Important and relevant changes occurring in organizations or communities

TIME4CS The Logic Model (Theory of Change)



TIME4CS The Logic Model



TIME4CS The Logic Model

Customize the Logic Model



- For each of the 5 steps, carefully consider all aspects and note them down. Sometimes it is easier to work backwards, starting with considering the Impacts, then Outcomes, and so forth, to ensure your ultimate goal is reached
- Then consider the arrows in the diagramme: how to get from one step to the next? These arrows may intertwine and one aspect of one step may lead to one or more aspects in the next step
- Finally consider how you will evaluate the aspects in each step and the arrows leading to the next steps

Design your own training

Training module TTT 1.2.2:
Interactive session



TIME4CS

SUPPORTING SUSTAINABLE
INSTITUTIONAL CHANGES
TO PROMOTE CITIZEN SCIENCE IN
SCIENCE AND TECHNOLOGY



TIME4CS Interactive session: Design your own training

Program	Task
Training focus	Participants consider which TIME4CS training modules to work with for the training they are designing (or they may decide to design their own training modules)
Applying the Logic Model	<p>Each participant or group applies the Logic Model to their training opportunity, considering:</p> <ul style="list-style-type: none">• Impact: What should be the ultimate impacts (on the organization or participants)? What basic assumptions and values may change – and how? Who (other than participants) will be impacted by the training?• Outcomes: What are the intended benefits to participants? In what way (if any) will they have received an incentive to change their behaviour, attitude, thinking, or practice?• Outputs: What outputs will the participants produce during the training? What will they have gained (learned) immediately upon completing the training? Will they have expanded their social network? How?• Activities: Who are the participants? What will they do during the training? What kind of activities, tools or exercises will be useful? Which processes will you facilitate?• Resources: What do you need for this training? What is already available? What could be made available? How? Types of resources needed, specific resources available – and wanted• Links (arrows): How do you facilitate the effect on the next step, ensuring progress?
Presentation and feedback	Each group or individual presents their flip-charts, explaining the different aspects in each step of their particular training opportunity. Presentations are followed by a feedback session, where peers and/or facilitators ask questions, provide constructive comments, alternative perspectives, and suggestions for improvement.
Conclusion and reflection	The session concludes with participants reflecting on their learning experience. They consider how using the Logic Model to develop training sessions may facilitate training implementation and ensure training goals are met.

Challenges and solutions to implementing and embedding citizen science training


Training module TTT 1.3



TIME4CS

SUPPORTING SUSTAINABLE
INSTITUTIONAL CHANGES
TO PROMOTE CITIZEN SCIENCE IN
SCIENCE AND TECHNOLOGY





SWOT (Strengths, Weaknesses, Opportunities, Threats) **analysis of implementation of training programs**

Training module TTT 1.3.1

TIME4CS

SUPPORTING SUSTAINABLE
INSTITUTIONAL CHANGES
TO PROMOTE CITIZEN SCIENCE IN
SCIENCE AND TECHNOLOGY



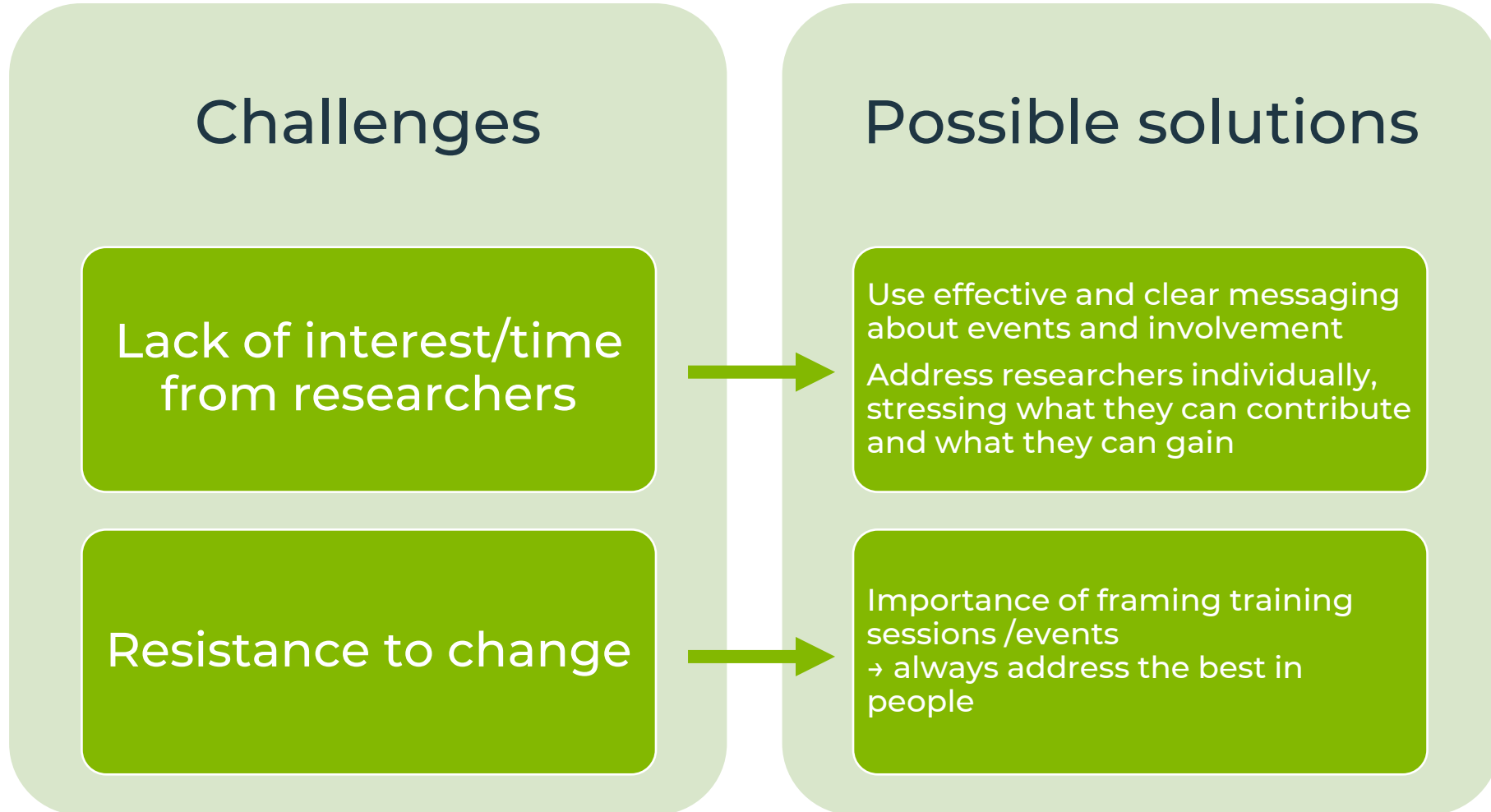
TIME4CS Challenges & Possible solutions

Challenges

Lack of interest/time
from researchers

Resistance to change

TIME4CS Challenges & Possible solutions



From ESF

TIME4CS SWOT for *implementing* training (before/during training)

Opportunities/solutions

Use effective and clear messaging about events and involvement

Address researchers individually, stressing what they can contribute and what they can gain

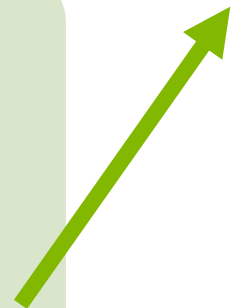
Importance of framing training sessions /events
→ always address the best in people

Threats

Lack of interest/time from researchers

Resistance to change

Challenges



TIME4CS SWOT for *implementing* training (before/during training)

Strengths

Central entity organizing capacity building for staff

Management backing

Weaknesses

No easy way to reach staff / target audience groups

No management backing

Opportunities/solutions

Use effective and clear messaging about events and involvement

Address researchers individually, stressing what they can contribute and what they can gain

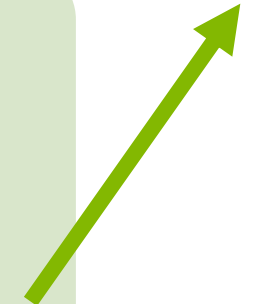
Importance of framing training sessions /events
→ always address the best in people

Threats

Lack of interest/time from researchers

Resistance to change

Challenges



Identifying challenges and solutions to implementing training

Training module TTT 1.3.2:
Interactive session



TIME4CS

SUPPORTING SUSTAINABLE
INSTITUTIONAL CHANGES
TO PROMOTE CITIZEN SCIENCE IN
SCIENCE AND TECHNOLOGY



TIME4CS Interactive session: Identifying challenges and solutions to implementing training

Program	Task
Group discussion: SWOT for training <i>implementation</i>	Participants discuss the possible Strengths, Weaknesses, Opportunities and Threats (SWOT) to their training <i>implementation</i> (before and during training) and note their findings on a flip-chart (or Miro board – template on next slide).
Group discussion: SWOT for <i>embedding</i> training	Participants discuss the possible Strengths, Weaknesses, Opportunities and Threats (SWOT) to <i>embedding</i> their training (after the training event), considering: <ul style="list-style-type: none"> • Will learnings be used? Why/why not? • What is likely to happen after the training event? • What could follow-ups look like / which follow-ups will be needed? Participants note their findings on a flip-chart (or Miro board).
Presentation and feedback	Participants or groups present their findings in a two-minute pitch, outlining main factors potentially influencing their implementation or embedding of the planned training. Presentations are followed by a feedback session, where peers and/or facilitators provide constructive comments, alternative perspectives, and possible new inputs.
Conclusion and reflection	The session concludes with participants reflecting on their learning experience. They consider how the SWOT could help them mitigate challenges (Weaknesses and Threats) through use of revealed solutions (Strengths and Opportunities).

TIME4CS SWOT for *implementing* training (before/during training)



TIME4CS SWOT for *embedding* training (after conducting training)





 www.time4cs.eu

 time4cs@apre.it

#TIME4CS



**Thank you
for your
attention !**

