TD Lab for Learning and Research Proceedings of the Pre-launch Workshop

Exploring Transdisciplinarity - What does it mean for you and your research?

The workshop took place on 29 February 2024 from 15:30 – 17:00 in Room 0.2 of the Teaching Lab at TU Delft. It was attended by 15 people with a further 11 people indicating deep interest, but existing commitments. This document provides an overview of the proceedings by means of photographs and brief descriptions of the process followed and the outcomes per agenda item.

1. Welcome: "Why a TD Lab at TPM?"

Jill Slinger opened the workshop by welcoming everyone. She explained that the TD Lab for Learning and Research is currently in the Incubation Phase and is building up to a full launch in November to coincide with the International Transdisciplinarity Conference in Utrecht. Regarding the issue of why a TD Lab at TPM and in the MAS department in particular, she explained that it can be seen as a natural extension of TPM's actor and systems interdisciplinary research and teaching. The faculty's roots lie in the interdisciplinary interface between the system sciences and policy analysis on the one hand and the social sciences and process design on the other. The next step is to thoughtfully engage across disciplines in locally relevant contexts with all types of knowledge, reflectively learning and integrating these experiences. This means bringing the whole person as a scientist into the TD space.

It is this idea of the whole person and the richness in this that enables us to engage in societally and educationally impactful activities. But this also means that the base rules are different in a TD workshop or activity. Each person must feel safe to be themselves, so we are respectful towards one another and differences of opinion and we do not reveal anything told within a group session to others outside the workshop. Personal confidences are safe. We do share overarching outcomes or findings, in a way that is not harmful to participants and with their consent.

Fig 1: Opening of the workshop

2. What can TD be?

BinBin Pearce then provided a thought-provoking introduction to TD in terms of: (i) setting, (ii) mindsets, (iii) processes and practices, and (iv) outputs. The presentation (Appendix 1) served to clarify the discussions that followed, and provided information on key literature sources.
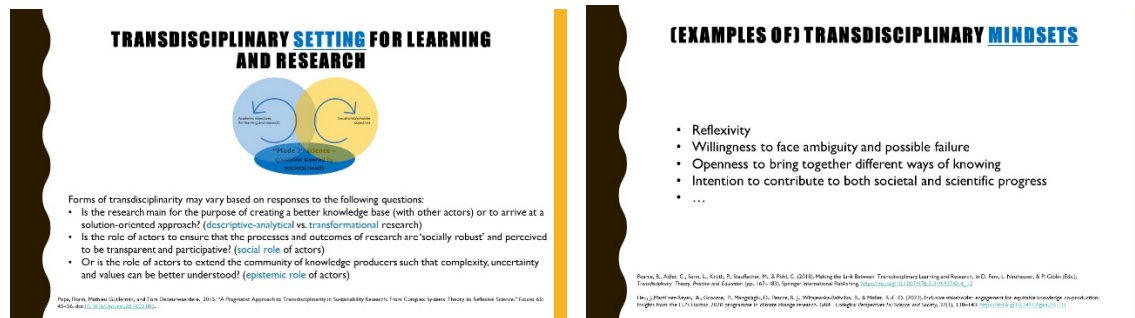

Fig 2: Examples of slides on 'setting' and 'mindsets'from the presentation.

3. How do you relate to TD?

After checking that a high proportion of the participants had some experience with TD, 3 small groups each with 4 members were then formed. Each group was asked to discuss "How do you relate to TD?" in the next 20 min. They were provided with felt tip pens, post-its and a sheet of flipchart paper. The groups generated inputs that they wrote onto post-its (Fig 3).

Fig 3: The outputs generated in the small groups in the two discussion rounds. Note that some post-its were moved onto the whiteboards during plenary discussions.

Heleen Vreugdenhil then facilitated the group discussion based on these inputs. First, each group spokesperson presented their ideas in plenary. These inputs were summarized under the two categories of Themes and Questions on the whiteboard. Participants asked and provided clarification, indicated agreement or dissent and assisted in capturing the ideas appropriately on the boards. The final outcome is depicted in Figure 4.
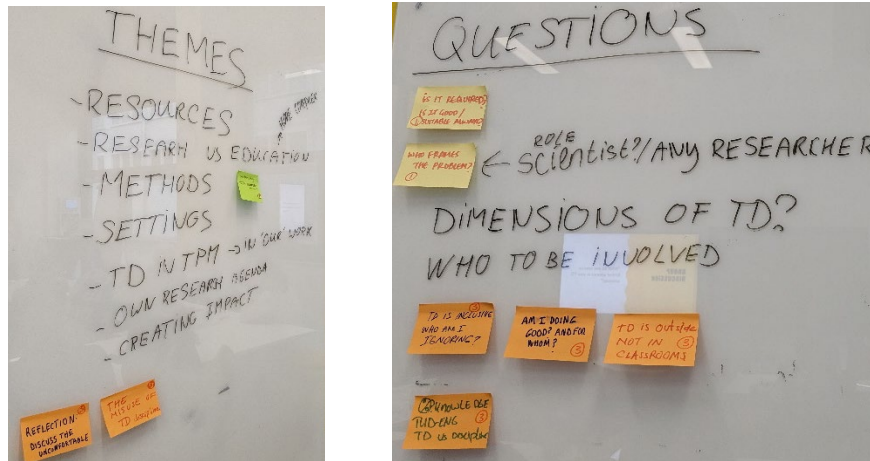

Fig 4: The summary of Themes and Questions generated in the small groups in the first discussion round. Note that some post-its were moved onto the whiteboards during plenary discussions

4. What do you need to advance further in your TD activities?

The second round of the workshop discussions focussed on what participants needed to advance their TD activities, and was facilitated by Heleen Vreugdenhil. This occurred in the same small groups. Within the allocated 10 minutes, the groups came up with suggestions. These were collected by asking the group that had contributed last in the first discussion round to explain their suggestion first. Each group was then asked in turn for a suggestion until all new suggestions were collected and placed on the whiteboard (see Figure 5).
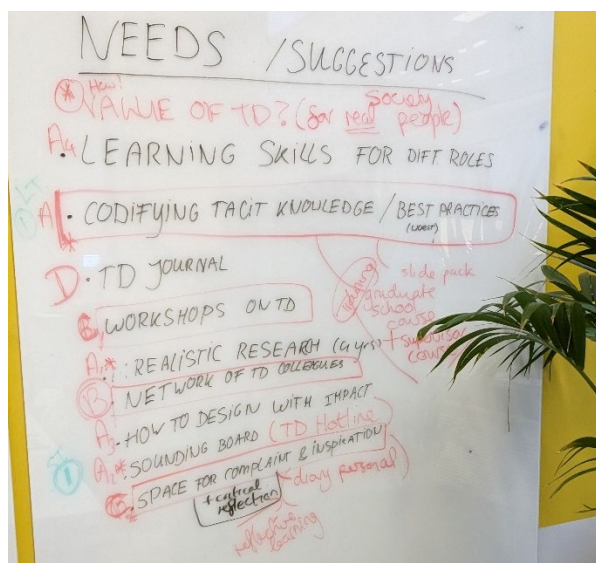

Fig 5: The summary of Needs generated in the small groups in the second discussion round. Note that the clustering

5. How may the TD Lab support you in doing this?

In this plenary discussion, participants suggested priorities or a clustering of needs that could be addressed as key activities by the TD Lab for Learning and Research. This resulted in a clustering under the letters A to D in Figure 5. However, this list must be considered as incomplete and the clustering as preliminary, because the ideas of all group members were not necessarily heard. Accordingly. it is viewed as input in this Incubation Phase.

6. Closing

Jill Slinger thanked the participants for attending and contributing their ideas. The desired frequency of meeting was set by the participants at 2 monthly with sessions varying from 1 hour to 2 hrs depending on the topic under discussion. The next workshop will focus on forming the "*Space for complaint, inspiration and critical reflection*" and will be led by BinBin Pearce and Tamara Metze. It will be scheduled in early March.

In the meantime the participants will be added to the MSTeams environment of the TD Lab for Learning and Research. The proceedings will be shared with all who have indicated interest and those who were unable to attend will be invited to join on MSTeams as well.

All are invited to the next workshop, and we remain open to newcomers.

The workshop was followed by drinks and snacks.

Prepared by:

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1 March 2024

Appendix 1: Presentation slides - Transdisciplinary Lab for learning and research @ TPM

QUESTIONS GUIDING US TODAY

- What experiences can we share about transdisciplinary learning and research (TdLR)?

- What might our needs be in relation to TdLR?

- How can we best support each other in our values and goals related to TdLR?

PLAN

15:30-15:40   Introduction to the TDLab for Learning and Research

15:40-15:50   Food for thought – What can transdisciplinarity be?

15:50-16:10   Group activity – How do you relate to TD?

16:10-16:20   Plenary discussion – Commonalities? Themes of interest? Questions?

16:20-16:30   Group activity – What do you need to advance further in your TD-related activities?

16:30-16:40   Plenary discussion – Cluster suggestions from each group

16:40-16:55   Brainstorm – How might the TDLab support you in your TD endeavors?

16:55-17:00   Closing

17:00-17:30   Borrel!

WHAT ARE WE TALKING ABOUT WHEN WE TALK ABOUT "TRANSDISCIPLINARITY"?
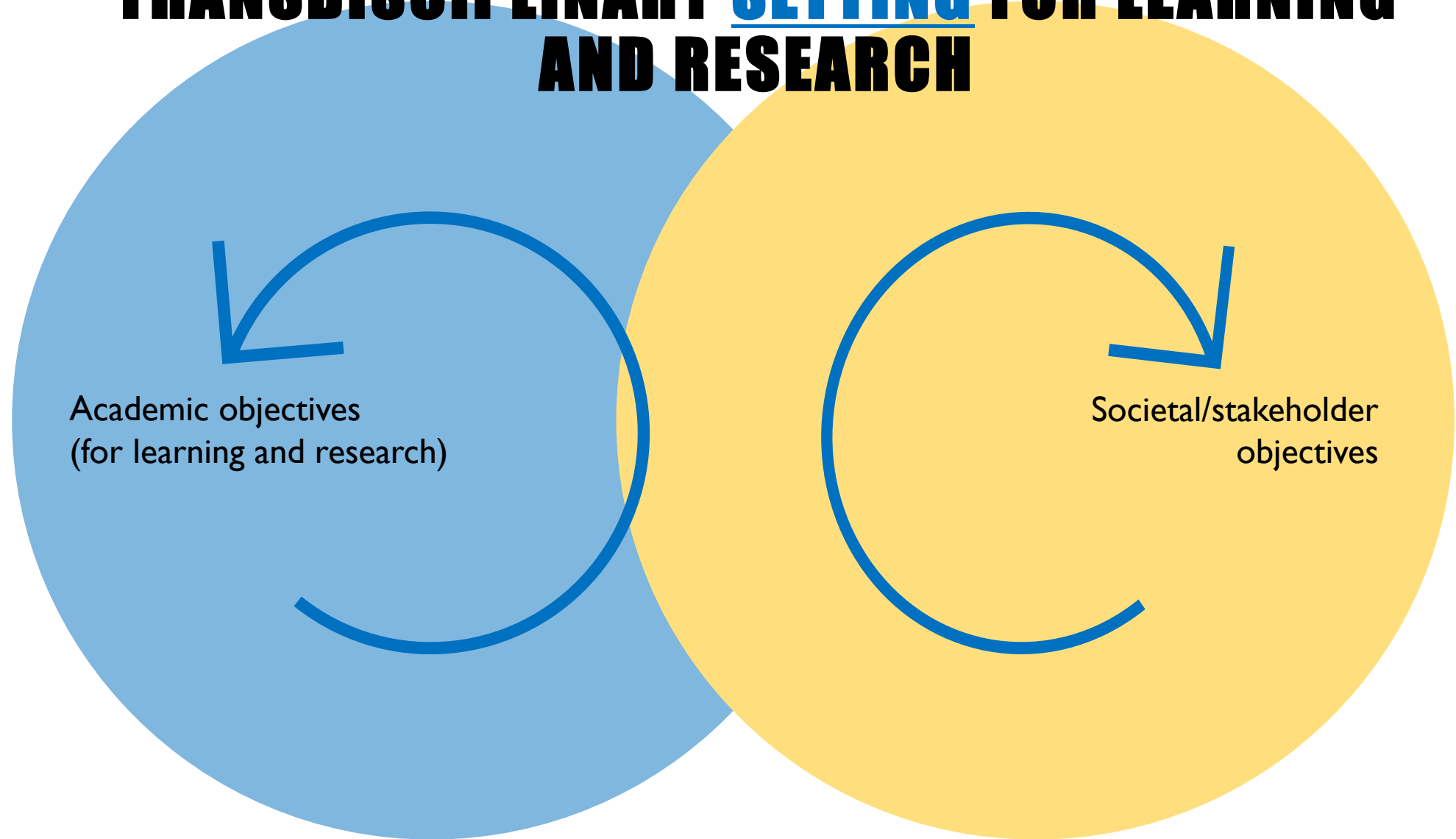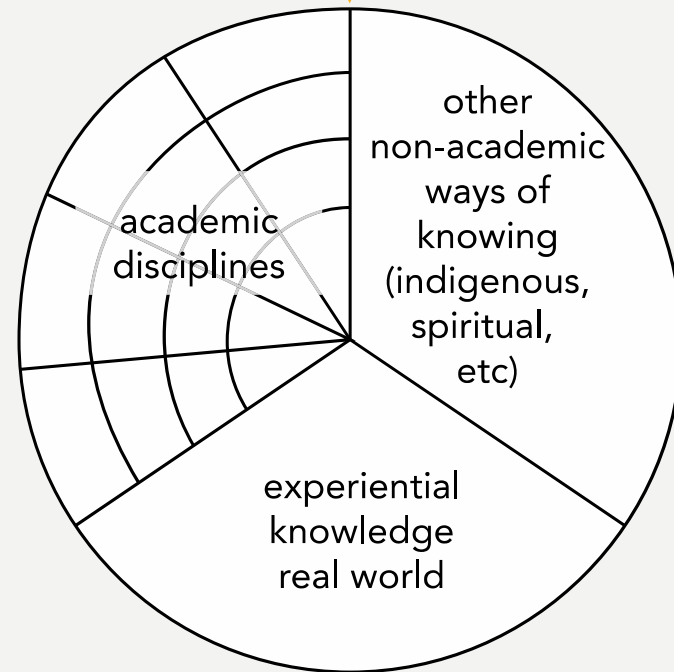
TRANSDISCIPLINARY...

setting
mindsets
processes and practices
outputs

TRANSDISCIPLINARY SETTING FOR LEARNING AND RESEARCH

Academic objectives
(for learning and research)

Societal/stakeholder objectives

Academic objectives
(for learning and research)

Societal/stakeholder
objectives

other
non-academic
ways of
knowing
(indigenous,
spiritual,
etc)

academic
disciplines

experiential
knowledge
real world
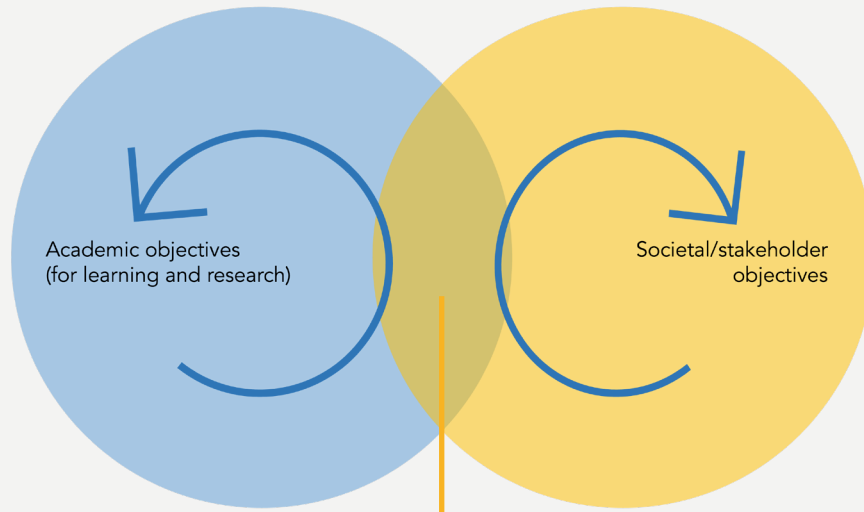
DIFFERENT WAYS OF KNOWING

TRANSDISCIPLINARY SETTING FOR LEARNING AND RESEARCH

Academic objectives
(for learning and research)

Societal/stakeholder objectives

"Mode 2" science – questions steered by societal needs

NOWOTNY, H., SCOTT, P., & GIBBONS, M. (2003). INTRODUCTION: "Mode 2" Revisited: The New Production of Knowledge. *Minerva*, *41*(3), 179–194. http://www.jstor.org/stable/4182I245
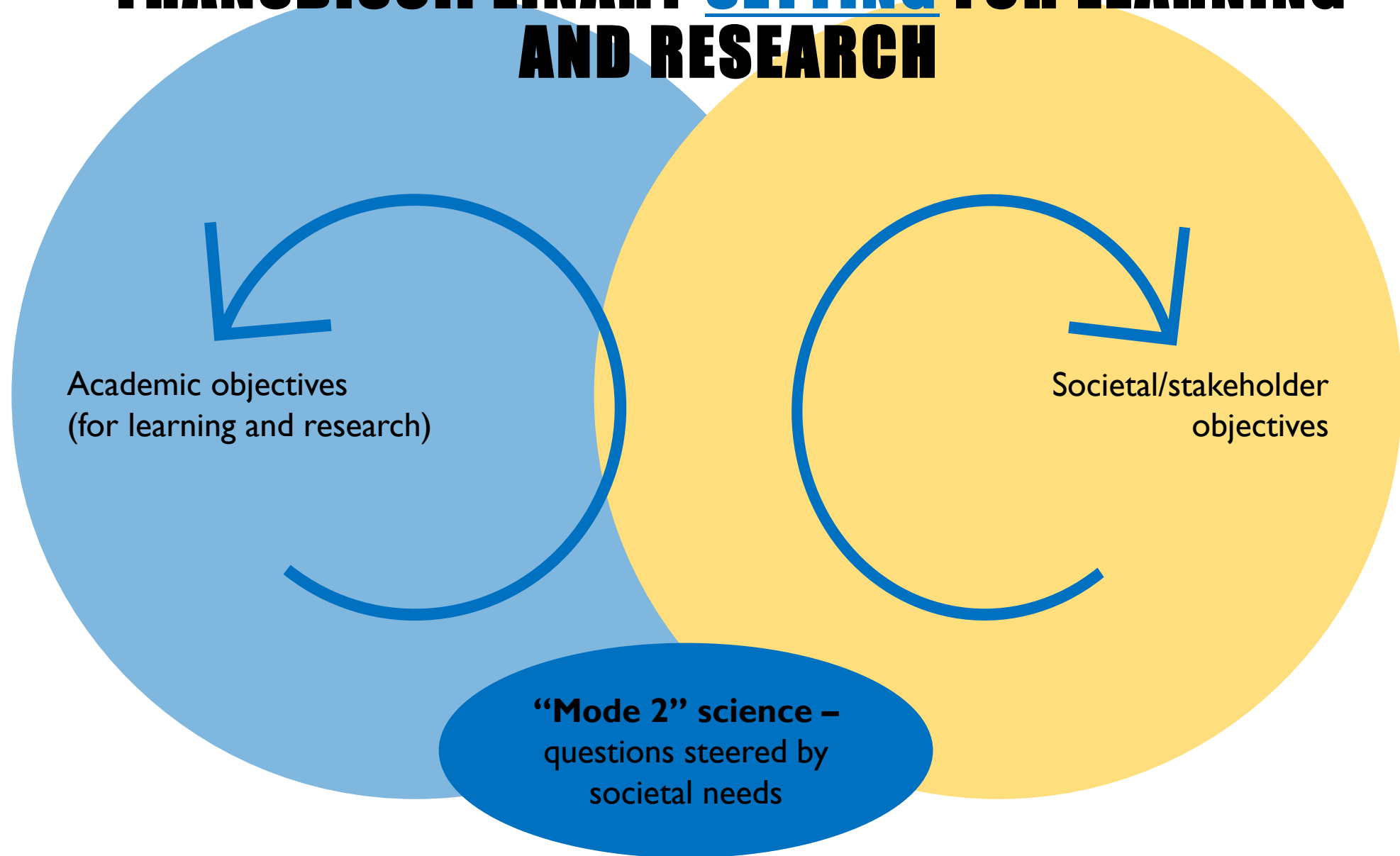
TRANSDISCIPLINARY SETTING FOR LEARNING AND RESEARCH
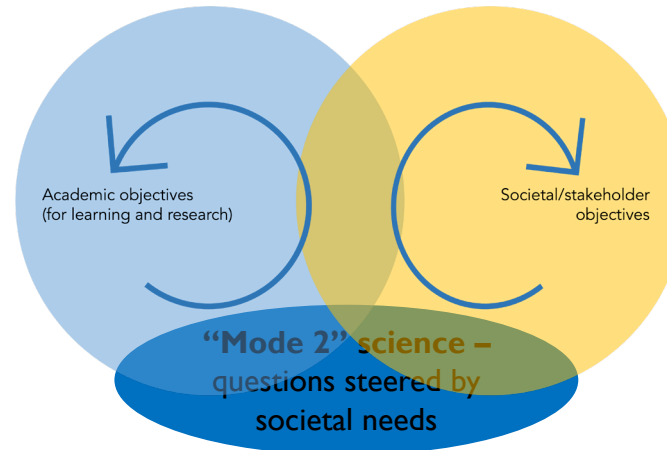
Forms of transdisciplinarity may vary based on responses to the following questions:

- Is the research main for the purpose of creating a better knowledge base (with other actors) or to arrive at a solution-oriented approach? (descriptive-analytical vs. transformational research)
- Is the role of actors to ensure that the processes and outcomes of research are 'socially robust' and perceived to be transparent and participative? (social role of actors)
- Or is the role of actors to extend the community of knowledge producers such that complexity, uncertainty and values can be better understood? (epistemic role of actors)

Popa, Florin, Mathieu Guillermin, and Tom Dedeurwaerdere. 2015. "A Pragmatist Approach to Transdisciplinarity in Sustainability Research: From Complex Systems Theory to Reflexive Science." *Futures* 65: 45–56. doi:10.1016/j.futures.2014.02.002.
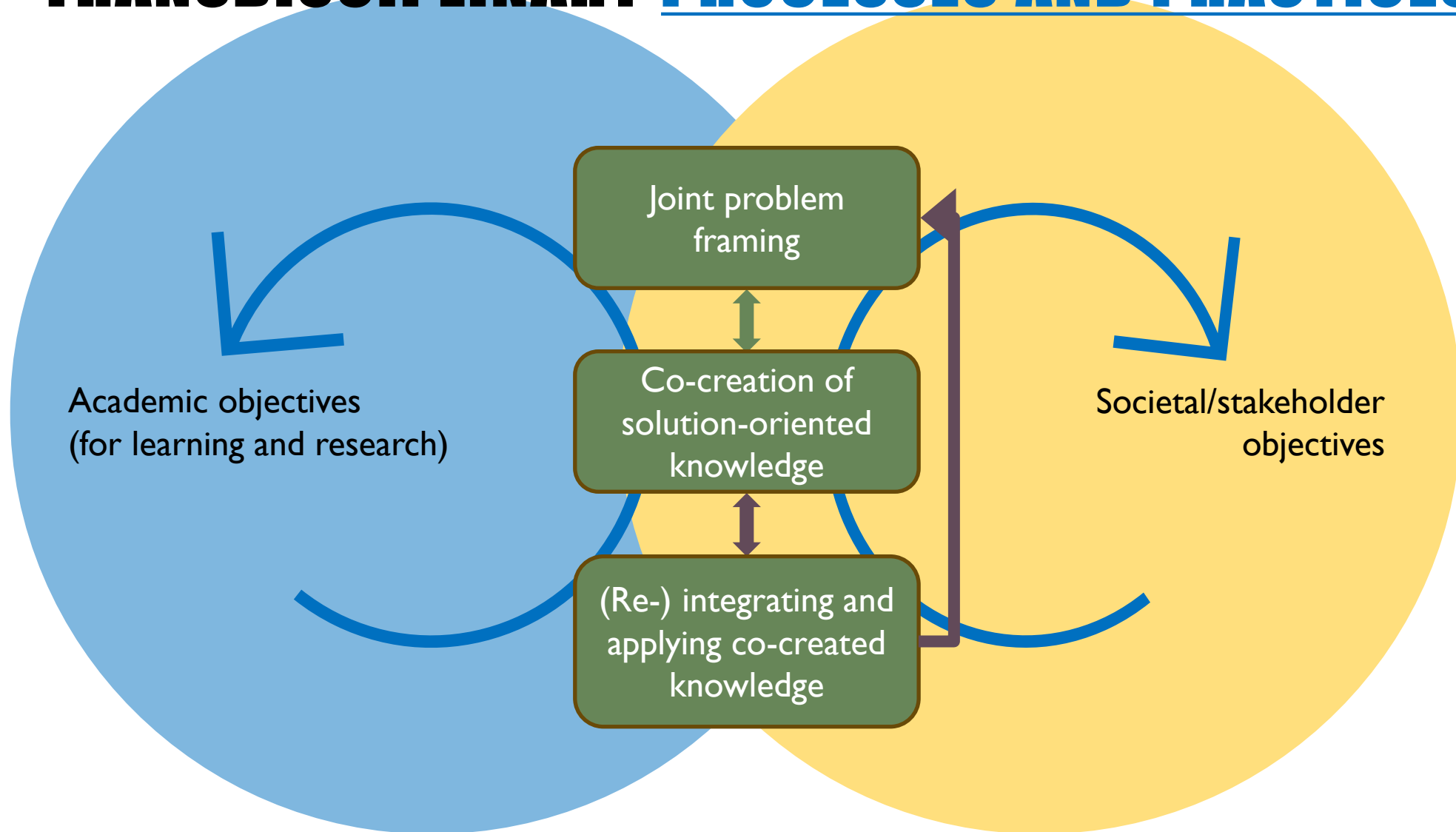
(EXAMPLES OF) TRANSDISCIPLINARY MINDSETS

- Reflexivity
- Willingness to face ambiguity and possible failure
- Openness to bring together different ways of knowing
- Intention to contribute to both societal and scientific progress
- …

Pearce, B., Adler, C., Senn, L., Krütli, P., Stauffacher, M., & Pohl, C. (2018). Making the Link Between Transdisciplinary Learning and Research. In D. Fam, L. Neuhauser, & P. Gibbs (Eds.), *Transdisciplinary Theory, Practice and Education* (pp. 167–183). Springer International Publishing. https://doi.org/10.1007/978-3-319-93743-4_12

Lieu, J.,Marti´nez-Reyes, A., Groome, P., Mangalagiu, D., Pearce, B. J., Witajewska-Baltvilka, B., & Møller, R.-E. D. (2023). Inclusive stakeholder engagement for equitable knowledge co-production: Insights from the EU's *Horizon 2020* programme in climate change research. *GAIA - Ecological Perspectives for Science and Society*, 32(1), 138–143. https://doi.org/10.14512/gaia.32.1.11
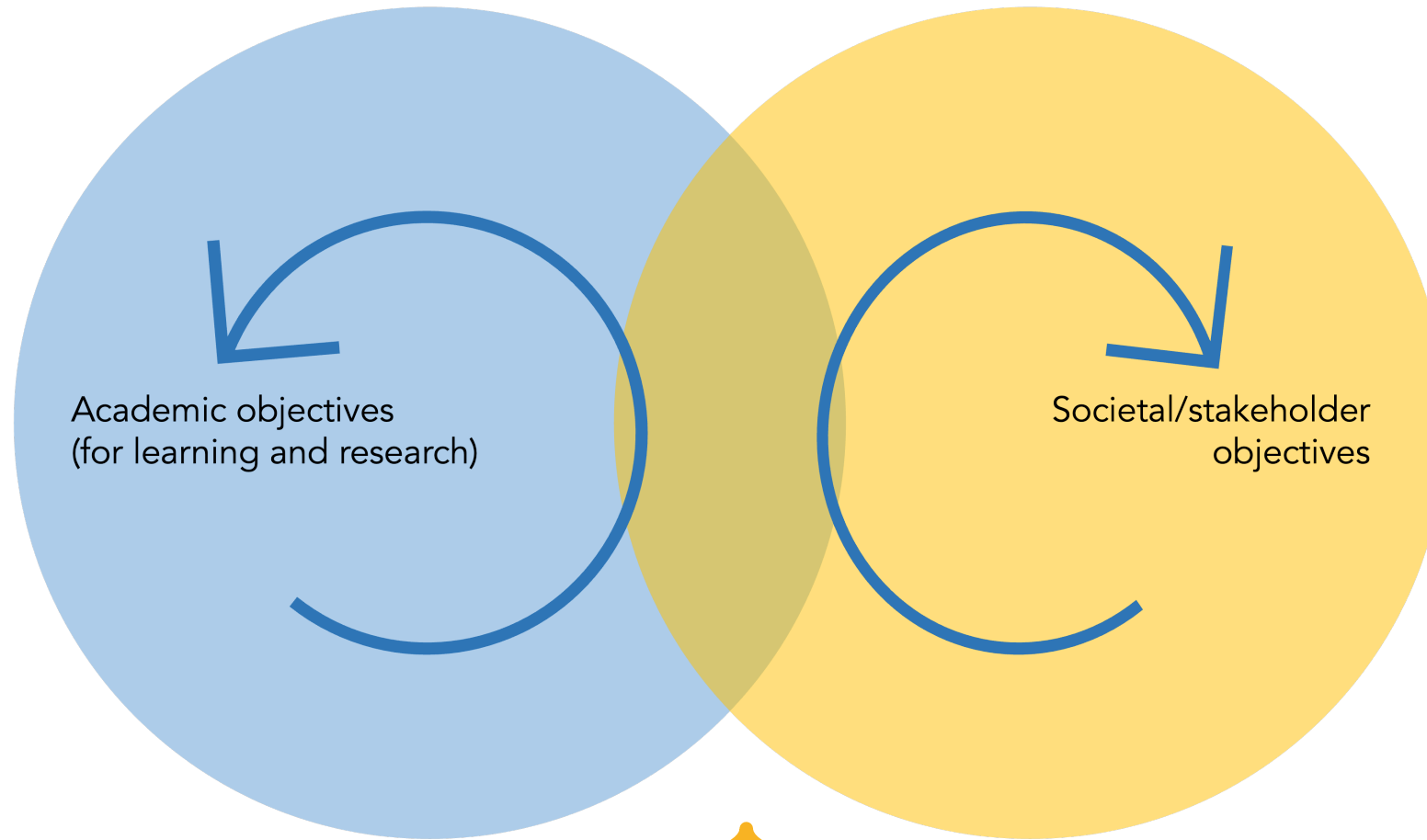
TRANSDISCIPLINARY PROCESSES AND PRACTICES

Academic objectives
(for learning and research)

Joint problem framing

Co-creation of solution-oriented knowledge

(Re-) integrating and applying co-created knowledge

Societal/stakeholder objectives

Lang, D. J., Wiek, A., Bergmann, M., Stauffacher, M., Martens, P., Moll, P., Swilling, M., & Thomas, C. J. (2012). Transdisciplinary research in sustainability science: Practice, principles, and challenges. *Sustainability Science*, *7*(S1), 25–43. https://doi.org/10.1007/s11625-011-0149-x

Pearce, B. J., & Ejderyan, O. (2020). Joint problem framing as reflexive practice: Honing a transdisciplinary skill. *Sustainability Science*, *15*(3), 683–698. https://doi.org/10.1007/s11625-019-00744-2

TRANSDISCIPLINARY OUTPUTS

Academic objectives
(for learning and research)

Societal/stakeholder
objectives

System knowledge
"What is?"

Target knowledge
"What should the goal be?"

Transformation knowledge
"How do we get there?"

GROUP DISCUSSION

"How do you relate to TD in your teaching and/or research?"

WHAT LEFT AN IMPRESSION IN YOUR DISCUSSIONS? WHAT DO WE NOTICE?

GROUP DISCUSSION

"What do you need to further advance in your TD activities?"

WHAT LEFT AN IMPRESSION IN YOUR DISCUSSIONS? WHAT DO WE NOTICE?

HOW MAY THE TDLAB SUPPORT YOU IN YOUR ENDEAVORS?

THANK YOU !

TO STAY UPDATED ON TDLAB DEVELOPMENTS, EMAIL
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TO MAKE SUGGESTIONS OR GIVE FEEDBACK, EMAIL

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