Lessons For Transformations Organizations from the Pathways Network: A Transformations Community Dialogue

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Keywords: Transformation organization, Pathways Network, transformation, Transformation Community

Abstract

Addressing the global challenges highlighted by the UN's Sustainable Development Goals will require a transformation of systems that created the problems in the first place. Purposefully transforming our societies is difficult, complex, and messy. Innovative change strategies often fail, and there are no general solutions. Even when we have developed promising possibilities, they may falter when we try to scale them upward and outward. The Transformations Community, a global community of action researchers and reflective practitioners, organized a dialogue session on developing transformations support structures which intertwine action and learning, such as Transformation Labs, Co-Labs, Bright Spots, and Learning Networks. In this paper, we present key insights from a dialogue session with some individuals who spent years developing and leading the 'Pathways' Transformative Knowledge Network (TKN), an international group working on sustainability challenges in various contexts.

Introduction

The sponsor of this dialogue was the Transformation Community (TC), a global community of action-oriented researchers and reflective practitioners. The TC supports transformations to a sustainable, just, and regenerative future by rapidly co-creating and amplifying knowledge, capacities, learning, and action. Transformation organizations (T-Orgs) are initiatives that support their members' efforts to create and scale innovation for systems change. Gathering and sharing such insights are important because effective T-Orgs are a critical support system and accelerator for transformative change. Yet, they are not well-understood, and the world's overall capacity to lead and support them is low because:

- The systems we seek to change are highly complex, so our pathways to success require a shift in leadership to build capacity capable of navigating complexity.
- The skills and capacities needed to support T-Orgs are scattered across institutions, disciplines, and professions. Hence, the field lacks cohesion, a collective voice, and the recognition associated with political influence and financial support.
- T-Orgs are a relatively young field, so our approaches and methods are untested and underdeveloped. Many time-tested organizational methods and practices are unsuitable because they are short-term, input-output, and project-based.
- T-Orgs are attempting to change entrenched systems while relying on incumbent actors for resources and opportunities. Their goals are often so ambitious that they may take immense effort and generations to complete.

When T-Orgs operate well, the processes can disrupt old regimes and foster new collaborative relationships, reinforcing participants' shared ties and purpose while providing the freedom and flexibility to experiment with innovation (Goldstein et al. 2017). By creating 'safe' experimentation spaces, these structures enable change agents to engage in radical action and learning and reshape higher-order systemic relationships. However, the features that provide T-Orgs with their transformative potential can make them difficult to organize and maintain (Goldstein et al. 2017). They are voluntary, require a high level of commitment, and operate in turbulent institutional environments where change opportunities can be fleeting (Pelling 2010). Despite the need to sustain commitment through multiple learning-action cycles, they are often lightly resourced and reliant on support from external sponsors that often require rigid outcomes to be achieved. We organized the dialogue session to learn from the experiences of those working within the Pathways Network.

The 'Pathways' Transformative Knowledge Network (TKN) is an international group of six regional hubs working on sustainability challenges within their own local or national contexts. The Pathways TKN was one of three major international research projects funded by the Transformations to Sustainability (T2S) programme. T2S was financed by the Swedish International Development Cooperation Agency (Sida) and launched by ISC in 2014 to empower social scientists to take the lead in North-South interdisciplinary and transdisciplinary research addressing the challenges of global environmental change and sustainability.

Since 2015, it has been co-led by Adrian Ely, a Reader in Technology and Sustainability at SPRU and the STEPS Centre, University of Sussex, UK, and Anabel Marin, previously based at the Centre for Research on Transformations (CENIT, Argentina) and at the time of writing affiliated with the Institute of Development Studies/ STEPS Centre, University of Sussex, UK. Key funders include the UK Economic and Social Research Council (STEPS Centre funders) and the Transformations to Sustainability Programme, which was coordinated by the International Science Council (previously the International Social Science Council) and funded by the Swedish International Development Cooperation Agency. The National Research Foundation of South Africa is an implementing partner.

The six hubs in the network focused on 'transformation laboratory' (T-lab) processes within the following substantive areas: sustainable agriculture and food systems for healthy livelihoods, with a focus on sustainable agri-food systems in the UK and open-source seeds in Argentina; low-carbon energy and industrial transformations, focusing on mobile-enabled solar home systems in Kenya and social aspects of the green transformation in China; and water and waste for sustainable cities, looking at Xochimilco wetland in Mexico and Gurgaon in India. The Pathways Network paired hubs that were working on similar issues.

Process and structure of the dialogue

Organized by the Transformations Community, a global community of action researchers and reflective practitioners, this dialogue session focused on developing transformation organizations that intertwine action and learning, such as Transformation Labs, Co-Labs, Bright Spots, and Learning Networks. The session was held at the Sustainability Research and Innovation (SRI) meeting in 2022. We designed the dialogue session to learn from the groundbreaking work resulting from the Pathways Network.

We asked questions about the organizational structure of the Pathways Network and what we learned from it that is useful to support other transformation initiatives. We also asked about how we can better support learning and how to better prepare people for transformation. The Transformation Community aims to bring practitioners into a fruitful conversation about the potential and limits of transformative support structures. Accordingly, this panel focuses on the design, facilitation, and leadership of the Pathways Network rather than on the specifics of each T-Lab project.

Participants in the dialogue session included:

1. David Manuel-Navarrete: Associate Professor at Arizona State University. David has conducted sustainability research and assessments in Argentina, Brazil, Central America, and Mexico.
2. Adrian Ely: Co-leader of the Pathways Network and former Deputy Director & Head of Impact and Engagement of the STEPS Centre.
3. Marina Apgar: Research fellow at the Institute of Development Studies at the University of Sussex. Marina's research focuses on evaluating action-oriented and participatory research in the context of international development.
4. Laura Pereira: Associate Professor at the University of the Witwatersrand. Laura co-leads the Future Ecosystems for Africa Programme and sits on the IPBES task force on scenarios and models. She is also affiliated with the Stockholm Resilience Center.

Insights

Participants described how each of the hubs within the Pathways Network aimed to promote co-learning and convene T-labs to develop innovative responses to specific social-ecological

problems by exploring people's visions, values, and ideas for transformation. Four significant insights surfaced during the discussion. First, an appropriate balance between structure and flexibility is critical if transformation is to occur. This balance can be achieved through the use of theoretical and methodological anchors. Second, coherence and autonomy are important elements of a network. Third, relationships are an important, often overlooked, piece of an effective network. Fourth, transformation is iterative and requires several rounds of interaction. Each of these themes is explored in further detail below.

Key Insight #1: Using theoretical and methodological 'anchors' helped provide an overarching structure while providing enough flexibility for each hub to work according to its local needs.

A primary challenge within the network was to enable as much flexibility as possible while maintaining a process through which decisions on theory, method, and approach used within each hub could be compared systematically to support learning. This led to the adoption of what they termed 'anchors,' which provide a common language or approach without putting too much constraint on the creativity and freedom of each hub (Ely et al. 2020). Using these anchors allows for the flexibility necessary for transdisciplinary work by providing a structure for cross-comparison and learning but ensuring that the structure is not so rigid that the approach can't be co-designed and implemented appropriately given the local context.

We've devised this idea of using theoretical and methodological anchors. The T-labs are the methodological anchors which provided each hub with some consistency but enough flexibility to adapt to their specific contexts. The theoretical anchors were developed by the STEPS Centre. The anchors provided the structure to reflect and learn from each other. (Adrian Ely)

A leading anchor across the hubs was the Pathways to Sustainability approach, devised by the STEPS Center to understand dynamic systems and address their governance to promote pathways to sustainability that meet the perspectives and priorities of poorer and marginalized groups (Leach, M., Scoones, I., & Stirling, A. 2007). Pathways to Sustainability: an overview of the STEPS Centre approach.). However, each hub implemented the Pathways approach according to the specific contexts in which T-labs were implemented. For example, in the case of Mexico, the governance challenge was to build alliances between informal settlers and local actors invested in wetland conservation and traditional urban agriculture. In the case of India, the governance challenge was instead about mobilizing diverse urban stakeholders to build an integrated water management system to address water scarcity and flooding.

Across the hubs, there was an element of familiarity with each anchor, which allowed for a common starting point for knowledge exchange and theoretically informed learning. Similar to the theoretical anchors, the methodological anchors (T-Labs) are flexible enough to allow specific methods to be selected based on the local context rather than standardized across all the hubs. Using these anchors, the network can compare and engage in learning across contexts.

Key Insight #2: A network should have coherence and autonomy. The idea is to create dynamic tension between these two dimensions.

Actions within a network should be coherent, meaning these actions should be logical and consistently work towards a common goal. A primary outcome was holding a continuous dialogue and comparing the paired hubs as each designed and implemented its respective T-labs. Each hub was able to observe and reflect, in real-time, on the other hub's decisions to contextualize and adapt their T-lab methodology and the lessons learned. The network should also be autonomous, meaning each hub in the network is empowered to make its own decisions and identify its own challenges and how to best address them. One of the techniques the network used to create these dimensions was to pair the hubs working on similar issues.

Hubs paired to work on agri-food transformations:

- UK – Towards a more sustainable food system in Brighton and Hove.
- Argentina – Bioleft: A collaborative, open-source seed breeding initiative for sustainable agriculture.

Hubs paired to work on transformation in the energy industry:

- Kenya – Making mobile solar energy inclusive.
- China – The economic shock of a green transition in Hebei.

Hubs paired to work on transformation in urban and peri-urban spaces:

- Mexico – Wetlands under pressure: The experience of the Xochimilco T-Lab.
- India – Enabling transformations to sustainability: Rethinking urban water management in Gurgaon, India.

Despite being paired, the network recognized the diversity within each hub. "You were dealing with much diversity; different contexts, histories, and power dynamics." (Laura Pereira)

Due to the diversity throughout the network, members emphasized the importance of providing a degree of autonomy to each hub while ensuring that all the hubs shared a guiding structure. This is critical because issues and concerns are context-specific, and T-labs are dynamic processes that need to respond to the participants' needs as they arise. At the same time, to ensure learning and overall project coherence, some level of commonality is needed between the different case studies. This was ensured through the hub pairings, but more through regular project meetings online, as well as three chances for all groups to meet in person and share what they had been doing, their challenges, and successes so that all could learn and reflect as the project progressed.

It was about making sure we had a collective idea but that each hub knew they had the freedom to experiment. It was about finding the balance between providing sufficient flexibility, ownership, and agency under the banner of a coherent project. (Laura Pereira)

Maintaining tensions allowed for deep reflection on the actual state of play in the case studies, where real people facing real challenges were the core. No complex challenge will be overcome in a simple way, so recognizing and appreciating tension and conflict was essential to keep a reality check on the process and everyone's expectations. Further, by addressing seemingly intractable tensions – the horns of the dilemma – truly transformative innovation can sometimes occur (Pereira et al. 2018).

Key Insight #3: In a transformation organization, there needs to be a focus on relationships alongside achieving specific outcomes.

The networks (e.g., Bioleft or the Gurgaon Water Forum) and relationships that developed throughout the network were the most important outcome, rather than traditional academic outputs. The Pathways Network brought together relatively powerful actors (like governmental officials and landowners) who had not worked or collaborated before, which helped foster the types of relationships in systems necessary for transformational change. By providing space and guidance for these actors to collaborate, they formed deeper relationships and developed more innovative solutions. For example, in the case of the development of Bioleft in Argentina, the facilitation team took time to intentionally connect beyond the core team of social scientists to form alliances and a more comprehensive network of support. This required a focus on relationships with individuals and groups alongside a practical demonstration of ideas. Transformative actions often require longer-term perspectives and occur through changes on the ground. This is often different from the typical outputs desired by funding agencies.

It is fundamental for the network to generate action. Transformative actions might require longer-term perspectives that might not be considered part of traditional outcomes. These types of changes have to do with keeping the relationships in place. (David Manuel-Navarrete)

For instance, the T-labs in Mexico applied "technologies of the self" through which participants became aware of everyone else's self-perceived positionality and "powers" within the social-ecological system (Manuel-Navarrete, et al. 2021). Two novel participatory tools were created to guide this self-reflective collective process: ego-nets and Avatars (Eakin et al. 2021). The positionalities and powers identified and shared through these tools facilitated collective action. They became pointers, signaling where participants could find needed resources, which may include lobbying powers, practical skills, or financial resources, to mention a few, within the T-lab group.

You can make the relationship piece part of the important outcomes so that you can focus your energy on working collectively. (Marina Apgar)

Focusing on the relationships that a facilitated transdisciplinary process such as T-Labs builds often contradicts the top-down push for outputs and measurable impact within a funded project timeframe. Moreover, relationships take time and effort to develop and sustain. The experiences across the hubs show that investing this time in relationships potentially contributes to altering systems structures in ways that enable the collective agency to continue pushing for innovative solutions into the future. The Bioleft network has continued to grow beyond the project's lifetime and is an active community of open-source seed exchange with new experiments in participatory plant breeding still emerging.

Key Insight #4: Transformation is an iterative process and benefits from repeated rounds of reflection and learning.

The Pathways Network supported learning and knowledge exchange throughout the research process by promoting iterative engagement and learning activities across the entire network.

When thinking about transformations, you must consider the long-term and keep the systemic processes in mind. You can't just have one workshop and call it a T-lab. (Laura Pereira)

At the beginning of the process, each hub was asked to undertake a 'participatory impact pathways analysis' (PIPA) to map out stakeholders that would participate throughout the project. The hubs also discussed their degree of power over transformation and their degree of alignment on the framing of the sustainability challenges (Pathways Network, 2021, pg. 22). The results from these hub-specific processes were shared across the network and were revisited in follow-up surveys and structured reporting on the T-labs, to foster cross-learning.

The network held numerous workshops to enable reflection, lesson sharing, and brainstorming to improve the process within each locality. The workshops took place both during and at the end of the project.

We collected reflections and insights through surveys by asking questions like: Why did you use a particular method? What went wrong? What went right? What would you like to bring to the discussion? And all of that fed into the subsequent work that we did afterward." (Adrian Ely)

The structured reporting from the T-labs took place over two cycles, usually after workshops that marked significant points in the T-Lab processes. After these workshops, each hub produced a report which included information on decision-making, methods used, observable changes, findings, and lessons learned. These were shared with the other hubs in the network.

Specific learning activities and knowledge exchange included using co-learning blogs incorporated into the project's design as a prompt to encourage the paired hubs to think together and produce collaborative work. These co-learning blogs encouraged collaborative writing without the challenges of formal academic outputs (e.g., co-authoring peer-review articles). The

network utilized SharePoint as a repository for the information collected throughout the project, allowing for exchanging ideas and experiences between hubs.

From an organizational learning perspective, the approach used by the Pathways Network "provided opportunities for single-loop learning (instrumental learning through theoretically informed action) and double-loop learning (questioning the underlying theories to improve them)" (Pathways Network, 2021, pg. 25). Within each hub, there was a process of learning about what activities or approaches were effective or not (single-loop learning). The project was also designed to foster triple-loop learning through reflection on the processes of cross-hub interaction (learning about learning and collaborative process), so the insights gained could inform future transdisciplinary research projects (Pathways Network, 2021, pgs. 25-26).

You can achieve double-loop learning if you articulate your best guess or ideas about how you think a T-lab might work and then come back and reflect critically on the underlying assumptions. The Pathways Network did this using the participatory impact pathway analysis methodology to develop theories of change to map out how the different hubs would create shifts in knowledge, attitudes, practices, and systems dynamics around the specific challenges and people they were working with. The Network also reflected on their theories of transformation. Together, these two approaches enabled the impact orientation." (Marina Apgar)

Conclusion

This dialogue session provided insights into the Pathways Network and how T-Orgs can be better supported to help navigate complex transformations. One key takeaway is finding a balance between structure and flexibility. The participants noted that this balance was achieved in the Pathways Network through theoretical and methodological anchors. Networks should also be autonomous to ensure that they are flexible enough to respond to needs as they arise and coherent so that there is a common objective around sharing and learning. It must be emphasized that this aspect of networks for transformations often becomes quite messy and complex; the key learning is to work with this messiness and uncertainty rather than against it. Participants also emphasized the importance of building and maintaining relationships. Building solid and high-quality relationships, or "scaling deep" (Omann et al., 2020), can be a crucial infrastructure for collective agency and innovation. They provide the safe space and supporting structure of trust and solidarity needed to navigate the uncertainty and risks of transformative pathways. A final takeaway is that this is an iterative process that requires multiple rounds of interaction for learning and reflection. Providing opportunities for single-, double-, triple-loop learning is essential. While the three forms of knowledge are important, triple-loop learning ("learning about learning") became a central strategic goal both within some hubs and across the Pathways TKN (Ely et al. 2021). A value-added of funding networks like the TKN is that double and triple-loop learning is more likely to emerge than funding individual place-based projects.

This dialogue is part of a broader effort by the Transformations Community to increase the reach and effectiveness of T-Orgs by engaging leaders of some of the most innovative and effective T-

Orgs with practitioners, theorists, and researchers within the TC. We believe that T-Orgs could be more effective in creating and scaling innovation if the Transformations Community could enable researchers and practitioners to share innovative ideas and support one another.

The project will also enhance the effectiveness of weavers of individual transformations organizations by:

- Forming a community and making connections with other weavers
- Connecting transformations practitioners with action researchers who can spread their insights and provide advice, guidance, and expertise
- Developing rich case examples of other T-Orgs and stories about their struggles and successes
- Providing access to templates, techniques, and practices for weavers of T-Orgs

Over the next few years, we will draw on dialogues like this with the Pathways Network to develop a practitioner-oriented searchable online database of T-Org materials and prepare synthesis materials oriented toward action researchers. We will also engage TC dialogue and exchange members, especially during our sixth international conference, July 11-14, 2023 in Sydney, Australia and online.

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Additional Links & Resources

Steps Centre - Case Studies - Pathways Network

Yarning as Protected Space: Principles and Protocols

Yarning With Country: An Indigenist Research Methodology

The Infinite Game

T-Labs practical guide here, and this paper appeared in a special issue of the journal Sustainability on collaboration. Beyond that, the various network members published pieces on individual hubs, two of which appeared in this special issue edited by Laura and others and which informed this integrative paper.

The SRI Conference is now open access.

Transcript

Video

Prep doc