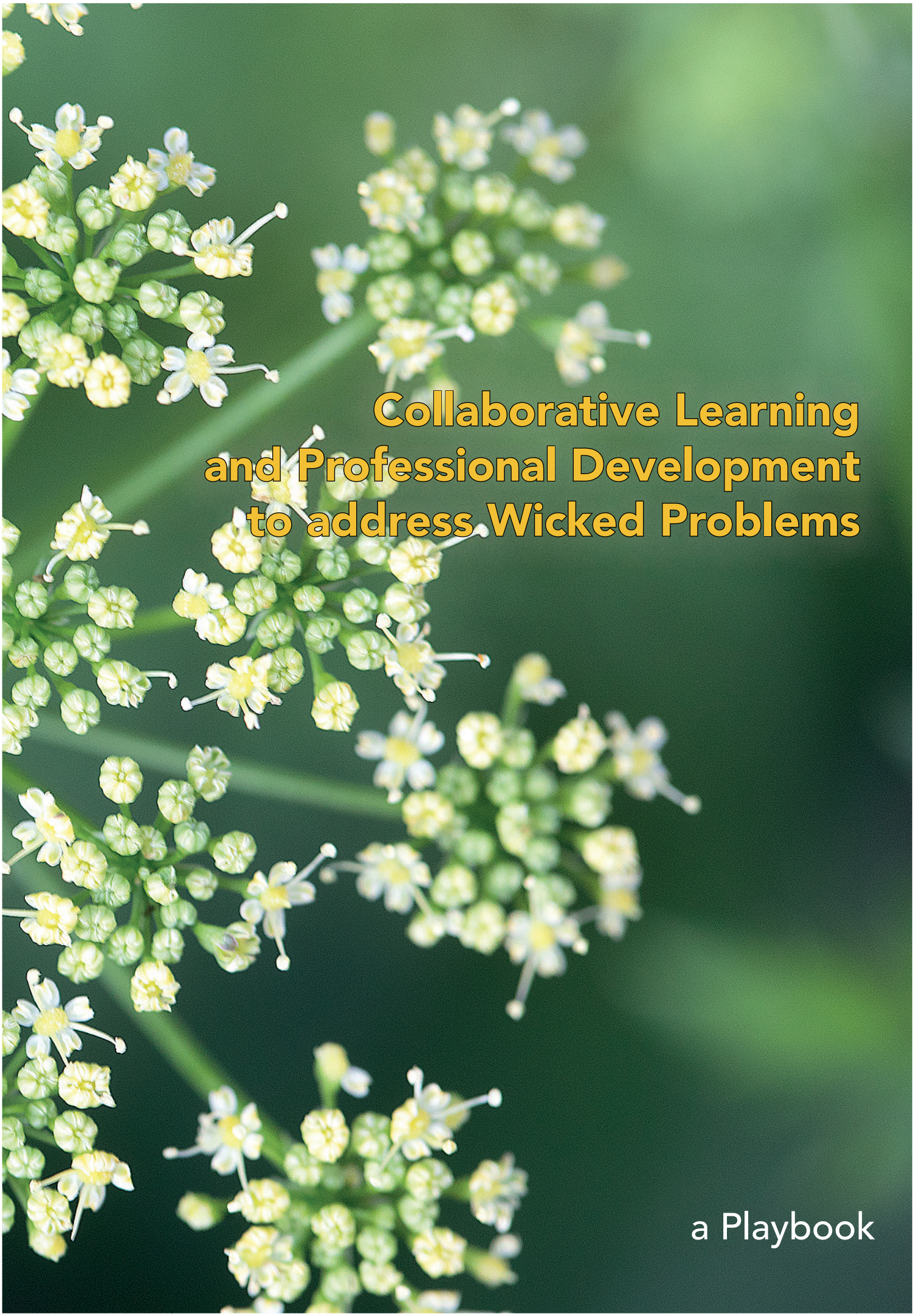
Collaborative Learning
and Professional Development
to address Wicked Problems
a Playbook

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to address Wicked Problems

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Preface

This playbook is the outcome of a Nordplus Adult project carried out over two years in collaboration between partners from Finland, Sweden, and Denmark. Together, the partners mapped and examined existing experiences with two established Nordic learning models— Learning Circles and Change Laboratories. The exploration provided a foundation for understanding how these models might be adapted to address the complex challenges welfare professionals face in their daily practice.

Both models offer promising avenues for strengthening adult educators' ability to support welfare professionals in workplace learning. By mapping and analyzing these models, the project highlights their potential as flexible tools that can be tailored to diverse contexts and needs.

The project Adult learning for wicked problems: Mapping two Nordic models for learning and professional development 2024-2025 was founded by Nordplus Adult.

Partners

Denmark
Marie Aakjær; maaa@pha.dk — University College Absalon
Maja Marie Lotz; mmlo@pha.dk — University College Absalon

Sweden
Gunilla Avby; gunilla.avby@edu.su.se — Stockholm University
Aron Schoug; aron.schoug@edu.su.se — Stockholm University

Finland
Anu Kajamaa; anu.kajamaa@oulu.fi — University of Oulu
Sakari Hyrkkö; sakari.hyrkko@helsinki.fi — University of Helsinki

Content

Why a Playbook and for Whom?

Welfare professionals across the Nordic countries are increasingly confronted with challenges that resist simple solutions. These are often described as 'wicked problems', issues that are complex, interconnected, and constantly evolving. Unlike straightforward tasks, wicked problems rarely have a clear beginning or end. They are shaped by demographic changes, technological innovation, and shifting social expectations.

For professionals, this means that everyday work is less about finding 'the right answer' and more about navigating uncertainty, balancing competing needs, and adapting to change. Wicked problems demand collaboration across professions, creativity in practice, and a willingness to experiment with new approaches while learning from past experiences.

In this playbook, we define wickedness as the entanglement of multiple, historically shaped challenges that defy linear causality and resist resolution through conventional means (see Niskanen et al., 2021). The playbook is designed to support professionals in navigating such complexity by offering practical insights into collaborative learning and professional development that can be integrated into everyday work practices.

The playbook does not prescribe solutions; instead, it offers tools and perspectives that enable adult educators to work with established models and experiment with approaches suited to the realities of their practice. Our aim is not to provide detailed instructions on how to apply these models, but to present six design principles derived from analysis and insights across traditions. These principles serve as reflective didactical resources for designing learning and development initiatives. The playbook is intended to support two main professional groups:

- Vocational adult educators, those engaged in supporting the professional development of adult learners within formal and non-formal educational contexts.

- Learning and development (L&D) specialists in public sector organizations, professionals responsible for designing and implementing strategies for workplace learning and organizational development.

In addition to addressing the practical needs of these groups, the playbook situates the models within their historical origins and illustrates them with case examples for inspiration. The models presented are adaptable, reflecting Nordic principles of participation, equity, and lifelong learning. They are designed to be context-sensitive and transferable across diverse learning environments.

The playbook is divided into four main parts:

- Part 1 introduces the two collaborative learning models, Learning Circles and Change Laboratories, the origin of the Nordic experiences with collaborative learning and provides a more in-depth description of the historical background of Learning Circles and Change Laboratories.

- Part 2 provides real-world cases that demonstrate how these models have been applied in practice. These examples are designed to inspire readers and offer practical guidance for designing learning initiatives. In addition, we present key design principles derived from analysis of the two approaches, which support the development of initiatives that span professional and organizational boundaries.

- Part 3 builds on the analysis of the mapped cases and elaborates on the six design dimensions developed from this work. The design dimensions are intended as a practical tool that educators can adapt to design learning tailored to specific settings. Its purpose is to inspire practitioners, policymakers, and educators to examine their own systems and consider how collaborative learning can drive transformation in work life, organizational practices, and education.

- Part 4 provides a collection of resources for further reading. Here you will find more about the contextual, political, and historical foundation of the models in the Nordic countries.

Key Theoretical Concepts

The learning models presented in this playbook are grounded in a set of theoretical concepts. Becoming familiar with these ideas can enrich the way you apply the models to collaborative learning and professional development. For those interested in exploring the concepts more deeply, part 4 provides further information and references.

Cultural-historical activity theory
A framework for studying human practices as collective, constantly developing, socially and culturally mediated activities. Activity theory posits that human action must be analyzed within its real-world context and historical development. It emphasizes object-orientation (i.e., intention and purpose), contradictions and instrument-mediation.

Collaborative Learning
A process where participants learn together through dialogue, reflection, and co-creation of knowledge, tools, and practices. It involves jointly exploring questions and challenges and collectively constructing new ways of understanding and acting through cycles of questioning, modeling/experimentation, and transformation.

Collective critical reflection
A dialogical and reflective process in which participants question assumptions, share experiences, and construct meaning together in order to understand and improve their practice.

Democratic Pedagogy
Educational approaches grounded in principles of equality, participation, and empowerment, supporting learners as co-creators of knowledge.

Learning at Work
Learning is situated in – and not separated from – everyday work practice. Knowledge is shaped through concrete activities and practices, embedded in social, cultural, and historical ways of doing things.

Inter-professional Collaboration
Cooperative work between professionals from different professional fields and organizations, aimed at improving shared outcomes through integrated perspectives and practices.

Participatory Methods
Approaches that actively involve participants' experiences, insights and ideas in all phases of inquiry and development, to enable ownership, engagement, and sense of agency.

Part 1

This playbook draws on two distinct yet complementary Nordic models, Learning Circles and Change Laboratory, each offering a pathway for supporting collaborative learning and professional development in work settings.

Two Nordic Models of Collaborative Learning

Learning Circles are typically referred to as a *participant-led learning method* that can foster co-creation and dialogue-based learning. However, Learning Circles are often led by an experienced educator or researcher. The circles are used to address real-world challenges through structured group reflection and exchange of experience.
Change Laboratory is an *intervention method*, rooted in developmental work research methodology and activity theory. Change Laboratories typically aim to support organizational transformation through collective analysis of deep-rooted problems of the activity and resolving them through jointly redesigning work practices.

Learning Circles

With its roots in the Nordic tradition of popular education (Folkbildung), the Learning Circle has proven to be a powerful and flexible method for democratic learning and development. Learning Circles create spaces where professionals come together to share experiences, reflect on practice, and generate new insights through dialogue. The facilitator's role is to support group dynamics and introduce research that mirrors and provokes, rather than leads participants toward predefined outcomes. The method is particularly effective in fostering professional reflection and development for everyday practice. It offers a flexible format adaptable to diverse professional and organizational contexts.
Learning Circles were originally developed as a tool for self-organized learning within Swedish popular movements during the late 19th and early 20th centuries. These movements struggled for democracy, sobriety, religious freedom, and workers' rights. Unlike traditional education at the time, the Learning Circles, or "study circles," as they were called, helped members learn democracy on a small scale so they could later participate in politics and public administration. Supported by the Swedish state from the 1910s onward, study circles became a cornerstone of liberal adult education, emphasizing dialogue, non-hierarchical learning, and the recognition of everyday knowledge. The pedagogical focus was not on transmission of content but on mutual inquiry and reflective discussion among peers.

Since the 1970s, the Study circle model has evolved into Learning Circles within professional and academic contexts, particularly in sectors like social work, healthcare, and education. These updated forms maintain the democratic ethos of the original circles while integrating research-based insights and structured reflection to support professional development and organizational learning. The migration from popular movements

to workplaces was originally assisted by labor unions as a form of worker co-determination. Today, this bottom-up, dialogic, and non-hierarchical approach aligns well with modern methods, such as Agile and self-directed teams, which are gaining foothold in exchange of more hierchical structures in complex environments.

Change Laboratory

Change Laboratory is a structured, research-based intervention method developed within Finnish activity theory. It aims to foster profound changes in organizational activities by engaging participants in an expansive learning process. In Change Laboratory interventions, participants work together, guided by trained researcher-facilitators, to analyze their work activity, identify contradictions, and co-create new models for practice. The process unfolds in defined phases using theoretical tools, such as the activity system model, to surface deep-rooted challenges and build transformative solutions. Change Laboratory is especially suited to contexts with a need for organizational redesign, long-term development, and a structured approach to learning and change.

The Change Laboratory model was developed in the 1990s by Yrjö Engeström and colleagues at the University of Helsinki as part of the methodological approach of Developmental Work Research. It builds on Cultural-Historical Activity Theory (CHAT) and the developmental concept of expansive learning, which sees contradictions within work activity systems as drivers for their transformation.

The intellectual roots of Change Laboratory trace back to Kurt Lewin's laboratory-based group dynamics work in the mid-20th century, which emphasized participatory learning in controlled environments. This lineage continued through Peter Senge's "Learning Laboratories" in the 1990s, designed for corporate systems thinking, although these were often detached from everyday practice. Engeström and colleagues' innovation was to re-anchor the laboratory metaphor in real work settings, turning it into a practical, theory-based intervention for organizational development and worker-led innovation.

The Change Laboratory has since been applied across sectors such as education, health care, postal services, and public administration, gaining recognition for its capacity to address deep-seated systemic challenges through collective inquiry and transformation.

Mapping of Similarities and Differences of the Two Models

Learning Circles and Change Laboratories share several foundational features. Both are grounded in Nordic traditions of democratic education, emphasize collaborative knowledge creation, and are designed to support situated, practice-based learning. They encourage participant engagement, aim to bridge theory and practice, and seek to enable change in professional practice and contexts.

Based on analysis of the two approaches, the playbook presents key principles for designing learning initiatives that span professional and organizational boundaries. It emphasizes cross-boundary collaboration, both within and between organizations, in which diverse knowledge and perspectives are integrated through structured yet dialogical learning environments.

However, there are also several differences. The table below highlights how the same overarching values are operationalized differently in each model, through variations in structure, facilitation, and intended outcomes, providing a tool for comparison for those looking to choose or combine elements of both approaches.

By examining the differences in Table 1, you can begin to identify which features are most relevant to your learning and development initiative. To offer further inspiration and help uncover important nuances, the next section presents concrete examples of how the models have been applied in practice and presents a condensed framework of six central design dimensions.

Aspect	Learning Circles	Change Laboratory
Origin	Swedish popular education; study circle tradition	Finnish activity theory; developmental work research
Main Purpose	Professional reflection and development; organisational development	Systemic organisational change; practice transformation
Context of use	Originally community settings, education, civic engagement; now often in , adult education, public sector	Originally workplaces. Now typically schools, health care, public sector
Epistemology	Pragmatic-dialogical / situated knowledge	Dialectical / historical
Knowledge types	Research-based knowledge and Practice-based knowledge	Theoretical concepts and models; practical experiences and analysis (practitioners); mirror data (facilitators)
Learning mechanisms	Reflection and inquiry	Double stimulation; ascending from the abstract to the concrete
Change drivers	Challenges pointed out and experienced by participants	Disturbances and systemic contradictions of the activity
Structure of process	Flexible and adaptive; participant-driven; following the development in conversations	Phased; instrument-mediated; ideally follows the cycle of expansive learning
Facilitation	Often by a leader/facilitator; evaluation by facilitators	Expert in the method and theory; research-assisted; CL space; facilitating double stimulation and agency
Participant and researcher roles	Fluid and negotiated; participants co-lead the process	Division of roles: researcher-facilitators clearly defined, participant role open-ended
Composition of participants	Participants from across professions, organizations and hierarchies; appointed	Participants represent different professional groups and hierarchical levels of an organization / cross-organizations
Problem framing	Combination of top-down and bottom-up in an organizational setting; participants' need to learn; organizational goals	Need state defined by practitioners (bottom-up); in practice also organizational needs (top-down)
Conception of learning process	Creative/developmental; experiential learning	Expansive learning
Outcomes	Professional learning; new practice; capacity building	Concepts and models (theoretical); tools and renewed practices (practical)

Table 1. Aspects of Learning Circles and Change Laboratories

Part 2

This second section provides real-world cases that demonstrate how Learning Circles and Change Laboratories have been applied in practice. The examples are meant to inspire and offer you practical guidance for designing learning initiatives.

In addition, we present six key design dimensions derived from analysis of the two approaches, to support the development of initiatives that span professional and organizational boundaries.

How did we select Examples?

The selection of cases for this playbook was guided by a set of criteria to ensure relevance, diversity, and analytical depth in exploring collaborative learning approaches for welfare professionals. Cases were chosen to reflect settings where welfare challenges exhibit the characteristics of "wicked problems", that is, complex, interdependent, and situated within public sector organisations or in multi-organizational networks. The selected cases needed to demonstrate practical applications of collaborative learning models that transcend organizational and professional boundaries.

The study is grounded in the Nordic context, which provided a coherent basis for strengthening the analytical framework and ensuring that the selected cases were directly relevant to practice. Importantly, it is within the Nordic context that methodologies such as Learning Circles and Change Laboratories are most strongly rooted, reflecting long-standing traditions of participatory and democratic approaches to adult learning. By prioritizing cases situated in this setting, the research team could draw on their prior experience with these models while generating insights that are both locally grounded and internationally significant.

Additional criteria included intra- or interdisciplinary collaboration and active participant engagement in shaping the learning process. Diversity across sectors (e.g., health, social work, and education) and across national contexts (Finland, Sweden, Denmark) was also considered essential to capture the breadth of application of the models. Finally, cases were selected based on the availability of research-based documentation and reflective insight, allowing for a robust analysis of both process and impact.

Despite their rigor, the applied selection criteria inevitably introduced certain exclusions that shape the scope and interpretation of the playbook's findings. By focusing on a limited number of well-documented cases the project prioritized analytical depth over breadth. This narrow selection allowed for a detailed exploration but excluded a wider range of potential cases that might have showcased variations in implementation, context, or outcome.

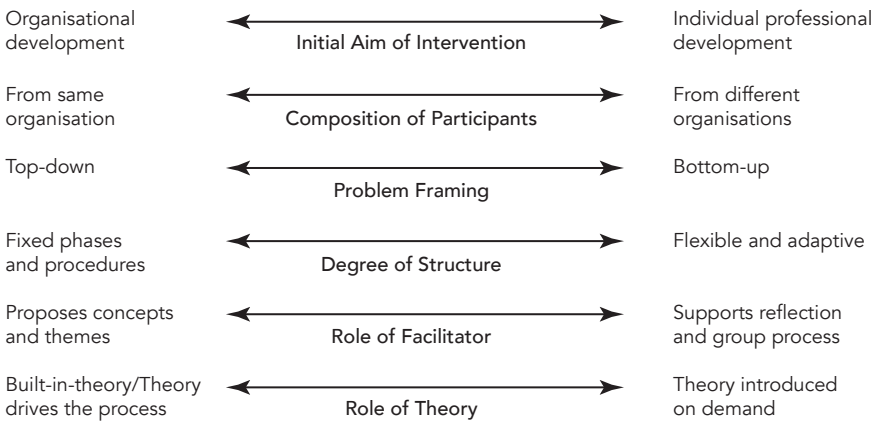
Six Design Dimensions – a Tool for Reflection

Initial to the cases, we present a figure of six design dimensions derived from analysis of the two models (Figure 1). The dimensions were identified based on the previous comparison of theoretical aspects of both methodologies (Part 1) and cases to be presented below. The six core design dimensions distinguish how collaborative learning and professional development initiatives are structured and experienced across the cases. Each dimension captures a recurring yet variable aspect of how the cases were designed, facilitated, and what they aimed to achieve.

Each of the six design dimensions is presented in more depth after the cases. In Part 3 the design dimensions are translated into reflection questions meant to assist you in working with the dimensions to adapt and combine elements from the models to suit the specific learning needs of your context.

Now we move on to present three exemplary cases of Learning Circles and three exemplary cases of Change Laboratories.

Figure 1. Core Design Dimensions



Three Examples of Learning Circles

Case 1 - Leadership Reflection Group

The first Learning Circle example, grounded in a Swedish region, brought together managers from three welfare sectors, education, social services, and healthcare, in a cross-sectoral initiative to enhance leadership capacity and foster reflective practice. Beyond strengthening individual leadership skills, the Learning Circle created a structured yet flexible arena where participants could engage in dialogue across professional boundaries. This process enabled managers to develop a deeper understanding of each other's sectors, including their distinct challenges, priorities, and organizational logics. Such cross-sectoral learning was critical in addressing the complex and interdependent nature of welfare provision, where effective collaboration depends not only on strong leadership but also on the ability to appreciate and integrate diverse perspectives. In this way, the Learning Circle served as both a professional development tool and the potential for building shared capacity to navigate "wicked problems".

Each sector nominated three participants, forming a group of nine managers. Importantly, participants were not self-selected but appointed by their superiors, a deliberate design choice that signaled strong leadership support. This endorsement gave participants both legitimacy and encouragement to engage fully in the process, helping to establish a reflective space that felt safe, purposeful, and anchored in organizational trust.

The group met monthly over a year, following a rhythm that balanced continuity with time for experimentation. Sessions were built around structured reflection: participants brought current leadership dilemmas from their daily practice into the group, where these were explored collaboratively. This peer dialogue created opportunities to reframe challenges, uncover assumptions, and consider alternative approaches.

A skilled external facilitator played a dual role, guiding the group process and introducing theoretical concepts in response to the themes that emerged organically. Theory was not delivered as fixed content

but used dynamically to deepen reflection and support sense-making. Between meetings, participants were encouraged to test new strategies in their own organizations and return with insights that enriched the collective learning, but also the process of expanding the shared repertoire of practices.

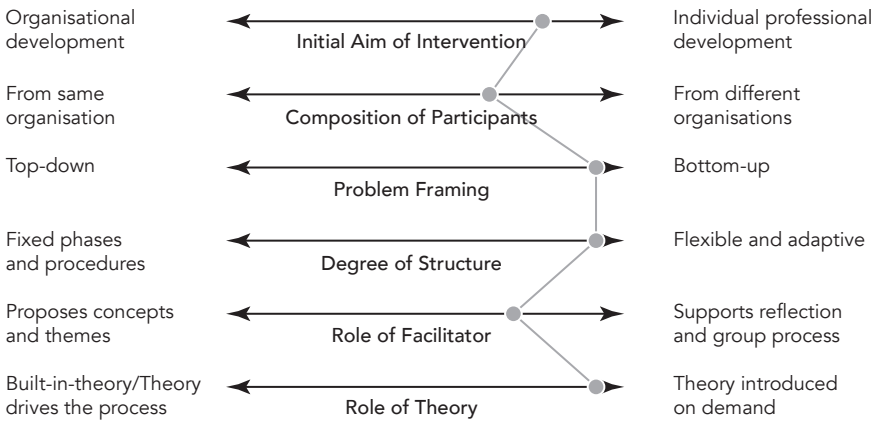
The cross-sectoral composition of the group was a key success factor. Although participants held similar leadership positions, their organizational contexts differed significantly. This diversity enabled comparative learning and helped participants gain fresh perspectives on familiar issues. The ability to step outside one's own routines and view challenges through others' experiences proved invaluable.

Case 1 in a nutshell

- Where (place): A Swedish region
- Why (aim): Develop leadership, foster reflective practice and support cross-sectoral understanding
- Who (participants): Nine appointed managers from different welfare sectors (social services, education, health care)
- How (method): One year, with monthly facilitated meetings and embedded practice between sessions
- What (content): Everyday leadership dilemmas and reflective routines

Where to read more: Nilsen, P., Nordström (Avby) G. & Ellström, P-E. (2012) Integrating research-based and practice-based knowledge through workplace reflection. Journal of Workplace Learning, 24(6);

Avby, G. (2016). Organizing for Deliberate Practice Through Workplace Reflection. In: Billett, S., Dymock, D., Choy, S. (eds) Supporting Learning Across Working Life. Professional and Practice-based Learning, vol 16. Springer, Cham.



Case 2 – Researcher-led Developmental Circle

The second example of Learning Circles focused on embedding evidence-based practice (EBP) into the daily routines of social services in a small Swedish municipality, aiming to bridge the gap between theory and practice. It was part of a regional social work initiative and a political strategy emphasizing that social services should be grounded in research-based and verified knowledge to address the increasing complexity of welfare work. Building on earlier researcher-led circles involving managers and development staff from different municipalities in the region, this Learning Circle shifted the emphasis from individual learning to organizing learning across the entire department. The initiative emphasized EBP as an ongoing learning process that integrates critical thinking with professional knowledge. Without this grounding in knowledge and transparency, critical thinking risks becoming mere opinion. Since welfare professionals often serve

as their own primary tool in practice, their judgments must be informed, reflective, and adapted to the complex situations they encounter daily.

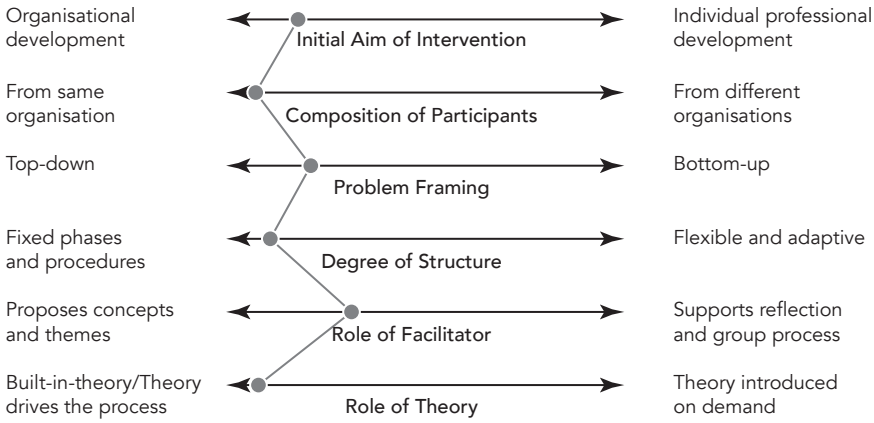
The project engaged the entire management team of the Individual and Family Care (IFO) unit, including managers from addiction services, child and family services, and care for older persons. The group met regularly over a year, guided by external researchers who facilitated structured reflection and introduced theoretical frameworks. Each session followed a rhythm: reporting on progress, receiving research-based input, and engaging in collaborative exercises. Between meetings, participants worked on development tasks tailored to their units. Two sessions were expanded into full-day events: one involving all social service staff, the other inviting senior managers and politicians to spread knowledge and foster broader engagement.

The project also intersected with the implementation of a new quality management system. While this added complexity, it also provided a concrete framework for embedding EBP principles. The management team worked to align the two efforts, using research-based tools and concepts to visualize progress and support staff engagement. Participants explored how to integrate reflection into case work, improve documentation in case work, and restructure meetings to support knowledge sharing. A key insight was the importance of creating time and space for professional judgment and collaborative inquiry.

Case 2 in a nutshell

- Where (place): Swedish Social Services Department
- Why (aim): Embedding evidence-based practice in daily social work routines
- Who (participants): Management team (ext. to all personnel on one occasion)
- How (method): One year with meetings every other month with in between development work
- What (content): Theoretical input linked to the evidence-based agenda

Where to read more: Avby, G. & Ellström, P-E (2019) Att arbeta med EBP i vardagsarbetet. (Swedish) On request: gunilla.avby@edu.su.se



Case 3 - Cross-organisational Learning Circles in Elderly care

The third example of Learning Circles focused on challenges of recruitment and retention of new employees in elderly care in a Danish municipality. The Learning Circle tapped into the political agenda of including more (young) adults outside work or education into elderly care by the means of so-called 'pre-vocational programmes'. Therefore, the Learning Circle brought together professionals from across three welfare sectors: Elderly care, employment services, and VET-education with pre-vocational programmes as the overarching focus. Participants spanned cross hierarchical levels and included mid-level managers and professionals. All were appointed strategically by management based on their involvement in pre-vocational programmes. The Learning Circle was conducted as a series of monthly sessions over a period of two years

and meetings rotated among the workplaces of the three organisations.

The process was guided by a duo of external researcher-facilitators who helped both guide the process and provided empirical data and theory as resources for learning. The learning content of the Learning Circle was driven by the participants' own emerging understanding of the challenge. In parallel to this variability, each circle-meeting followed a recurrent structure of collaborative questioning and reflecting on current practices, and opportunities to reframe challenges and consider alternative approaches.

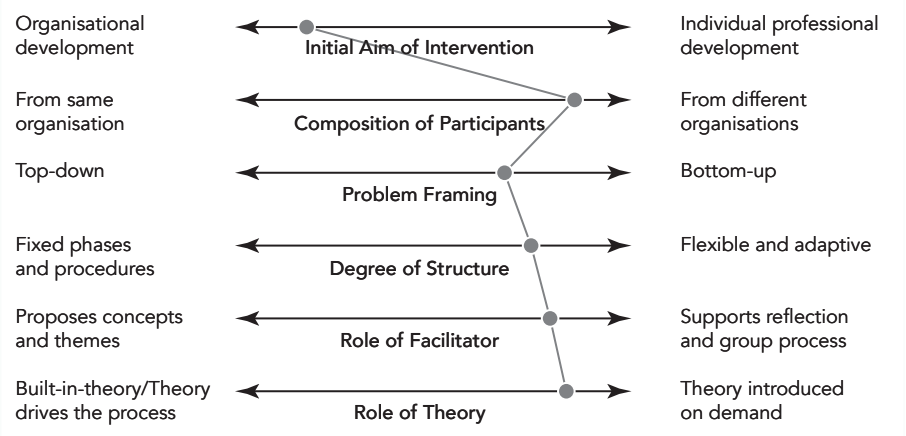
Initial to the process, researcher-facilitators conducted qualitative interviews in the three contexts. Also, participants were encouraged to collect qualitative or quantitative data from their respective context, e.g. models for the pre-vocational programmes, dropout rates, etc. Theory was not delivered as fixed content but introduced in an adaptive manner in response to the themes that emerged. Between meetings, participants were encouraged to try out new strategies especially in their collaboration across organizations and return with insights to enrich the collective learning and develop a new repertoire of cross-organizational practices.

The Learning Circle created an arena for inquiry, dialogue and reflection across professional boundaries, which enabled participants to gain a deeper understanding of each other's sectors, including their distinct challenges, priorities, and organizational logics. Such cross-sectoral learning is critical in addressing the complex and interdependent nature of recruitment and retention in elderly care. Rather than aiming for one scalable solution, participants developed micro-innovations tailored to their specific context, thus acknowledging the persistent character of their shared challenge. These could be new onboarding practices, mentoring services, or new structures for meeting and conversations that bridged professional and organisational perspectives.

Participants reported increased agency, stronger local networks, and an expanded sense of what was possible within and beyond their organisational divides. The case exemplified Learning Circle as a generic, context-sensitive approach to cross-organisational learning, grounded in practice-based and collaborative inquiry.

Case 3 in a nutshell

- Where (place): A Danish municipality
- Why (aim): To develop cross-sectoral collaboration on Elderly care recruitment and retention
- Who (participants): 9-11 employees and managers from three welfare organisations (Elderly care, VET-education, employment service)
- How (method): Two years with monthly meetings and in between inquiry/data collection
- What (content): Everyday experiences (incl. qualitative & quantitative data) and theoretical input.
- **Where to read more:** Forthcoming www.ucviden.dk



Three Examples of Change Laboratories

Case 4 – Primary School Curriculum Reform

The first example of a Change Laboratory comes from a Finnish primary school undergoing a period of significant transformation. The trigger was a national curriculum reform of 2016, which emphasized transversal competencies, co-teaching, and interdisciplinary learning. This created tensions with Finland's long-standing tradition of strong teacher autonomy, especially cherished in this school, and it had generated many kinds of practical challenges within the school.

The school in question was not a typical primary school. As a university-affiliated teacher training unit, it provided pre-teacher supervision, research activities and continuing education in addition to basic education. This made it both a pilot site for national reform and a complex organizational environment where multiple institutional logics intersected. Initially, the idea of the Change Laboratory project had been to involve students in the design of the local curriculum. However, as the intervention began, it became clear that the most urgent issues were within the professional community itself, which emerged as the focus of the intervention.

The Change Laboratory process was structured into six 90-minute meetings over a two-month period, following an earlier phase of ethnographic observation and interviews. What unfolded was a collective process of surfacing and analyzing tensions related to collaboration, role clarity, and shared responsibility. The method provided a space for the staff to examine their historical work practices and visualize future possibilities. As the key solution to transcend these organizational problems, the participating teachers created a new model of distributed instructional leadership, which enabled the work community to align their various activities better with the demands of the new curriculum.

Facilitated by researchers with expertise in activity theory, the Change Laboratory process made use of tools such as mirror data, to elicit reflection of the problematic practices, and the activity system model to foster a more systemic understanding of the problems. These instruments helped participants analyse their experienced disturbances as historically and culturally rooted, and to envision an expanded shared object of their activity, spawning alternative models of working, oriented to that object.

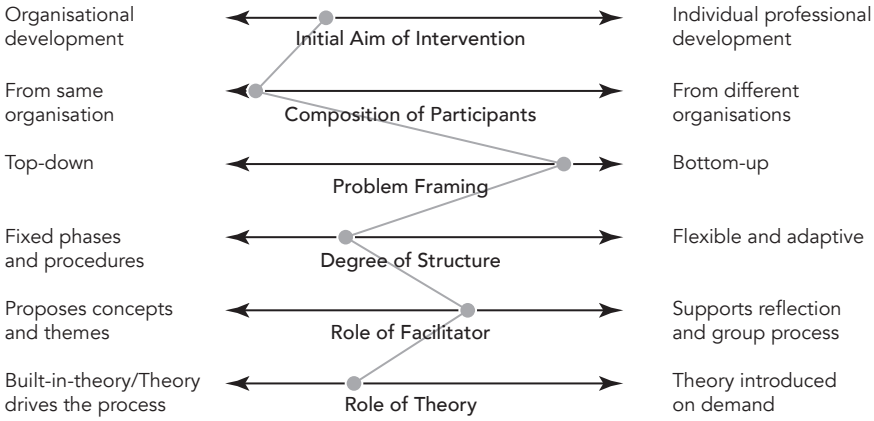
What set this intervention apart was its dual character: pertaining to the dialectical nature of the Change Laboratory method, it was both highly structured and deeply grounded in the lived experience of the school community. While the facilitation deliberately followed specific phases of the expansive learning process, from questioning current practices and their deepening analysis to modeling and implementation of a concrete solution, the content of learning, namely the conceptual model of distributed leadership, was ultimately driven by the participants' own emerging understanding of the historical contradictions of their activity. The final outcome was not a generalizable new organizational structure, but rather a conceptual model for distributed leadership and professional collaboration, which the school began to implement in the following academic year.

This case demonstrates the power of the Change Laboratory method to support systemic transformation through theoretically informed, practice-embedded inquiry. It also highlights how seemingly technical top-down reforms, in this case, a curriculum update, can aggravate deeper organizational tensions that require locally informed collective reflection and restructuring. The Change Laboratory provided a framework through which the staff could navigate these complexities and design more sustainable ways of working together.

Case 4 in a nutshell

- Where (place): A Finnish teacher training primary school
- Why (aim): Helping the school in preparing for a major national curriculum reform
- Who (participants): 12 primary school teachers and principal
- How (method): Two years, with ethnography, six CL sessions, implementation, follow-up session and interviews
- What (content): Co-created new distributed instructional leadership model and practice

Where to read more: Hyrkkö, S. (2025). Expanding Distributed Leadership: An activity-theoretical approach to leadership in and for educational change. University of Helsinki; Hyrkkö, S. & Kajamaa, A. (2025). Teachers' transformative agency in a Change Laboratory in a Finnish elementary school. Teaching and Teacher Education, 159, Article 105011.



Case 5 – Finnish Postal Services

The second example of a Change Laboratory comes from a national-level initiative within the Finnish Postal Services. In the mid-1990s, the organization was facing major disruptions brought about by technological change, deregulation, and shifting market demands. These external pressures exposed internal inefficiencies and created a pressing need to rethink how work was organized on the shopfloor. Rather than outsourcing the redesign to consultants or relying on top-down directives, the organization opted to engage employees directly in the transformation process using the Change Laboratory method.

The intervention took place in a large sorting and delivery center and involved a natural work unit, a team of postal workers who were responsible for mail distribution in a specific area. The process was facilitated by researchers from the University of Helsinki's Center for Activity Theory and Developmental Work Research.

The Change Laboratory was conducted as a series of nine sessions held in a designated space within the workplace.

One of the central tools used was the 3x3 activity system grid, which helped participants represent and analyze the key components of their work activity, including rules, community, division of labor, and mediating tools. By using the practical and theoretical tools made available in the Change Laboratory space, facilitated by the researchers, the participants engaged in a process of expansive learning. By analysing and working through contradictions of their activity, the team was able to articulate core problems such as misaligned workflows, fragmented responsibilities, and outdated communication channels.

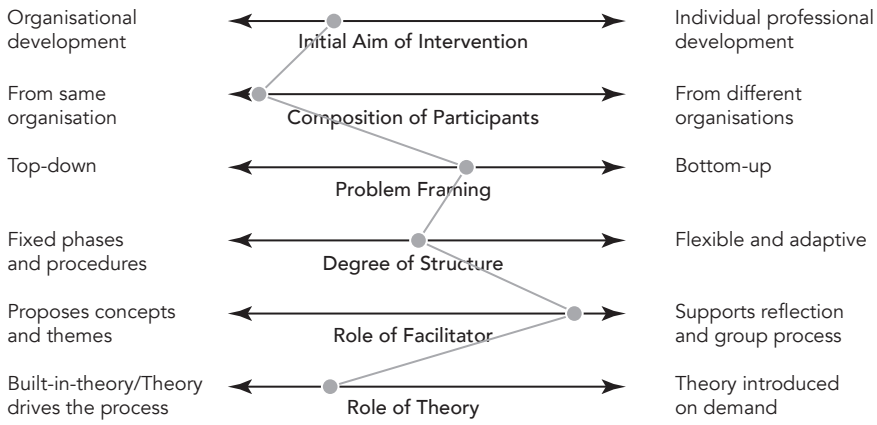
A key feature of the learning and development process was the way the principle of double stimulation enabled expansive learning through the emergence of transformative agency: participants were confronted with a problematic situation ("first stimulus") and then made use of various conceptual tools ("second stimuli") to enable rethinking and reframing the problems. In the process, theoretical concepts were not left simply as background literature but as cognitive and practical resources embedded into the concrete development achieved in the sessions, thus bridging theory and practice.

Over time, the team developed a new organizational model for mail delivery, which included revised roles, a restructured workday rhythm, and improved internal coordination mechanisms. These changes were not imposed from the top down but co-constructed by the workers themselves, lending them both relevance and legitimacy. The model was subsequently tested and adapted in other units across the postal system.

Case 5 in a nutshell

- Where (place): The Finnish postal service Posti Group
- Why (aim): To help solve various organisational inefficiencies, such as lack of knowledge sharing, inflexible communication practices across units and diverse work protocols resulting in unpredictability
- Who (participants): 8 employees, supervisor and manager
- How (method): Over 1,5 years, with ethnography, an intensive three-month intervention phase and follow-up
- What (content): Facilitating participants' transformative agency, making systematic use of employee initiatives and restructuring organisational power relation

Where to read more: Haapasaari, A. (2020). The Hunters of Lost Parcels: An activity-theoretical study of the emergence and sustainability of workers' transformative agency. University of Helsinki.



Case 6 – Elderly Care and Mobility Agreement

The third example of a Change Laboratory comes from the Finnish elderly care sector, where home care professionals faced persistent challenges in supporting the functional mobility of older adults. Despite widespread awareness of the importance of physical activity for maintaining independence and quality of life, daily care routines were often organised in ways that inadvertently reduced clients' opportunities for movement. Such a passive model of care was reinforced by time pressure, standardized procedures, and deeply embedded norms of "doing for" rather than "doing with" elderly adults.

To address this, a multi-year developmental project was initiated, combining ethnographic research, collaborative inquiry, and a structured intervention based on the Change Laboratory method. The project brought together care workers, managers, physiotherapists, and researchers, with the goal of rethinking how mobility support could be better integrated into everyday care practices. The process was overall grounded in cultural-historical activity theory and focused on making visible the contradictions within current routines and exploring alternatives through joint analysis and design.

The intervention was deeply embedded in the workplace. It began with observations and video

recordings of routine care encounters, which were used as "mirror data" in the sessions to prompt reflection. These sessions, conducted over several years, consisted of several developmental cycles of identifying disturbances, analyzing systemic contradictions, envisioning new models, and testing innovations in practice. As a result, participants gradually shifted from merely reacting to individual problems to reimagining the future potentials of their work.

One of the key breakthroughs came with the development of the "Mobility Agreement", a simple but transformative tool co-created by participants. Far from being just a document, it represented a shift in relational practice: it invited older adults to become active partners in their own care, while also clarifying the role of mobility as a shared responsibility among care staff. The agreement served both as a symbol and as a concrete instrument that structured new ways of interacting, planning, and reflecting on care encounters.

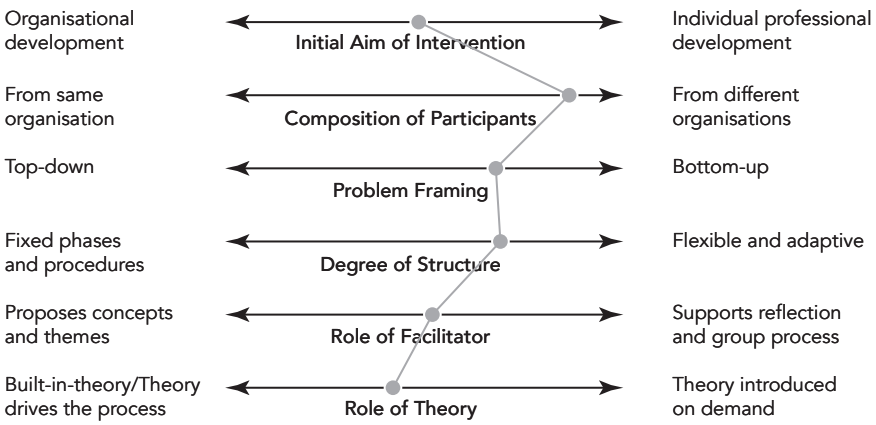
Theory was not only introduced but embodied in the process. The activity-theoretical notion of the "germ cell", the smallest unit that contains the potential for systemic transformation, framed simple mobility support ("standing up from the chair") as a seed for broader change. Seemingly mundane actions, like assisting a client to stand up or walk independently, were reframed as entry points into more participatory and empowering care relationships. This reorientation required not just procedural change but also a transformation in the professional ethos and everyday judgment of the staff.

The outcomes of the intervention were both conceptual and practical. The Mobility Agreement was taken up in multiple municipalities and adapted to different care contexts, showing the scalability of the model. At the same time, participants reported deeper shifts in how they viewed their work, their clients, and the possibilities for change within institutional constraints. The intervention demonstrated how even highly regulated and time-pressured settings can be transformed through collaborative inquiry that empowers practitioners as designers of their own future activity systems.

Case 6 in a nutshell

- Where (place): City of Helsinki Home Care Department
- Why (aim): To support the autonomy and health of home care clients
- Who (participants): Several Home Care clients and care workers
- How (method): A developmental project based on CL method over four years (2006-2009), followed by a lengthy implementation and experimentation phase between 2010-2012
- What (content): Mobility Agreement to support physical mobility and agentic interactions between care workers and their clients

Where to read more: Nummijoki, J. (2020). Breaking New Ground in Home Care Encounters: Shared Transformative Agency between Home Care Workers and their Elderly Clients. University of Helsinki.



How the Six Dimensions appear in the Cases

When looking across the presented cases, they highlight a structured and strategically supported approach to collaborative learning and development. Organizational leadership plays a key role in all examples in selecting participants strategically and providing formal endorsement to legitimize and sustain the process. Returning to the six design dimensions, these can be unfolded in more detail based on the cases:

1 Initial Aim of Intervention
The presented cases aimed to support professional learning, but differed in scale and intention. Some focused on individual professional development (such as leadership capacity in case 1), while others aimed to transform systems and practices within a single organisation (case 4 and 5). Finally, some aimed at transforming cross-organisational collaborative practices (case 3).

2 Composition of Participants
The organizational affiliation of participants in the cases influenced both group dynamics and potential for learning and transformation. Some groups were composed of individuals from a single organization (case 2, 4, 5), while others brought together participants from multiple sectors or professions (case 1, 3, 6), particularly to support cross-boundary learning and development.

3 Problem Framing
Across all cases, a central characteristic is that participants engage in formulating and exploring problems based on their own experiences, data, and theoretical input. However, the degree to which problems were pre-defined (case 2), researcher-framed, or entirely emergent (case 1, 3, 4) varied, resulting in different balances between bottom-up and top-down dynamics.

4 Degree of Structure
All learning processes incorporated a certain level of planning and rhythm, yet, differed in how tightly the structure was defined. In some cases, the process followed a predetermined sequence of phases (case 2, 4, 5, 6), while in others, it unfolded more fluidly, adapting to the evolving dynamics of group dialogue (case 1, 3).

5 Role of Facilitator
Facilitation played a central role in the cases, but with different emphases. In some, facilitators actively guided the analytical process (case 2, 4, 5, 6). In others, they mainly supported dialogue and group ownership of meaning-making (case 1, 3). In all cases, facilitators introduced various conceptual tools.

6 Role of Theory
All cases involved theory in some form, but they differed in how theory was used. In some cases, theory was structurally embedded and served as an analytical engine (case 2, 4, 5, 6). In other cases, theory was introduced on demand, or emerged through dialogue with practice (case 1, 3, 4).

In conclusion of the above, we can see that although all cases shared a common ambition to foster collaborative, practice-based learning, they varied in how this ambition was enacted. By articulating the six design dimensions, we aim to support reflection on which approaches best align with the specific learning needs of a context when designing for collaborative learning.

Part 3

Building on six analytical dimensions identified in our case analysis, we introduce a problem-driven design approach for structuring collaborative learning. These dimensions serve as reflective tools, helping educators combine characteristics from different models in flexible and context-responsive ways.

Organizing Collaborative Learning Processes

The design dimensions speak to how a problem-driven design approach may combine different model characteristics. The point is not to contrast the models as opposites, but to show how a problem-driven design approach can draw on characteristics from both models in complementary, flexible and context-responsive ways.

Working with a problem-driven design approach means letting the problem lead the way and using the six design dimensions as reflective tools for shaping and developing collaborative learning processes.

The design dimensions are meant to support you, our readers, in navigating between, and potentially integrating, elements from the two models. The design dimensions can serve as a tool for didactic reflection and choices about purpose, process, facilitation, and participant composition.

Each dimension should be understood as a spectrum or continuum rather than a binary category. Their purpose is not to define right or wrong, but to help you reflect on and intentionally design learning interventions. The variability within the dimensions helps in clarifying and pointing out different approaches that can be used depending on the need of the situation.

The dimensions are not steps to follow, but a set of reflective handles you can use depending on the problem or challenge at hand. We suggest starting with the problem and letting it guide how you work with the dimensions in your design. There is no single right way to do this; what matters is making deliberate choices that fit the purpose, the practical challenges, and the collaborative learning needs in your context.

To support this, the six design dimensions can be transformed into questions for reflection, as a starting point when designing for a learning intervention:

1. What does the intervention aim for?
2. How should the problem be framed to enable multiple perspectives in constructive and generative inquiry?
3. Who needs to be involved to contribute relevant knowledge and experience about the problem?
4. How should the process of exploring and working with the problem be organized?
5. How can the exploration of the problem be best facilitated?
6. What theoretical, conceptual or practical knowledge is needed to deepen understanding an create new learning about the problem?

We unfold each dimension below:

1 Primary Aim: What does the intervention aim for?

What kind of initiative or change effort is needed in light of the character of the problem? What kinds of change, action, or capacity building is the intervention aiming for - in practice, in the organization, and for participants?

Every learning intervention is grounded in an underlying ambition that influences design, participation, and expected outcomes. This first dimension invites reflection on whether the primary intent is to provoke systemic transformation or to support individual reflection, development, and learning. While some initiatives blend both orientations, consciously positioning the project along this continuum allows for more coherent design choices and responsive facilitation. Importantly, it helps clarify expectations of what outcomes and value creation might be.

Complex challenges often blur the boundary between individual experience and systemic condition. Effective learning processes help participants move across levels: from individual professional dilemmas to shared diagnoses, from structural analysis to practical adaptation. This requires careful pacing. Opening a learning space with individual stories can build trust and reveal grounded insight. Structuring later phases to draw out collective and systemic connections helps elevate learning into shared responsibility and potential redesign of activities.

Navigating this dimension means holding both aims as active, dynamic forces. It's not a matter of choosing one over the other, but of orchestrating their interplay.

2. Problem Framing: How should the problem be framed to enable multiple perspectives in constructive and generative inquiry?

This dimension addresses how matters at stake are identified and problems framed. Are they given in advance, perhaps derived from strategic plans, external mandates, or organizational diagnostics? Or do they emerge from within the group, grounded in participants' own experiences and concerns? Or as a combined process?

Top-down framing provides alignment with broader institutional and organisational goals and is often a starting point in policy-driven initiatives or strategic aims. It can lend legitimacy to the process, signaling organizational investment. Bottom-up framing centers the lived realities of participants. It fosters ownership, responsiveness, and depth. However, the art lies in sequencing and combining them: honoring lived experience while strategically connecting it to institutional and organisational transformation.

No single actor holds the full picture of a wicked problem, since these are rarely stable or clearly bounded. One issue (e.g., staff burnout) may turn out to be a symptom of a larger one (e.g., misaligned workflows or funding models). A narrowly defined problem may need to be reframed as new perspectives emerge. Hence, the process of problem (re)framing informed by multiple perspectives becomes a central task of the learning process, not just a starting point. It requires iterative inquiry, relational trust, and tools for surfacing, naming, and negotiating what matters.

The key is to treat problem framing not as a once-and-done step, but as a recurring opportunity for reflection and alignment. Ultimately, generative inquiry becomes possible when the framing of the problem remains open enough to be challenged, expanded, and reshaped as new insights emerge.

3. Composition of Participants: Who needs to be involved to contribute relevant knowledge and experience about the problem?

Who is involved in a collaborative learning process profoundly influences what becomes possible and hence, the primary aim of the intervention. The composition of the participant group shapes the types of questions that emerge, the level of trust that develops, the range of ideas that can be explored and exploited/implemented. This dimension invites consideration of who holds knowledge and experience of essential importance for the primary aim of the intervention and, hence, should be involved in the process. Who holds practical, experiential, or organizational perspectives that are necessary to scrutinize the problem?

Wicked problems cut across organizational boundaries. Consider the coordination of healthcare services, school-to-work transitions, or the integration of employment services. These issues demand cooperation between actors who typically operate in very specific domains or silos. In such cases, a heterogeneous group may be essential to even understand the problem, let alone address it. Yet, early discussions may feel contested due to differing priorities, logics, and terminologies. The design must account for this, scaffolding dialogue, clarifying purposes, and supporting mutual recognition.

Navigating this dimension involves not just choosing who is in the room, but also considering

when and how to widen participation. A phased approach can be powerful: starting with internal reflection, then inviting external perspectives to test assumptions or expand horizons. There is no fixed ideal. The question is: What composition best supports the kind of learning and change the process seeks?

4. Degree of Structure: How should the process of exploring and working with the problem be organized?

This dimension concerns how the collaborative learning process is organized. Is there a predefined sequence of phases, tools, and timelines guiding participants from problem to solution? Or does the process unfold more openly, with agendas and tools emerging in response to the group's evolving needs? How do we structure the learning process, rhythm, roles, pace, meeting formats, and materials?

When working with complex and volatile problems, the locus of learning often needs to adapt. Wicked problems, such as digital transformation in education or integrated care coordination, evolve as people work on them. A hybrid design, offering a structure that allows for co-shaping and deviation, often works best.

A structured approach offers direction and consistency that can increase confidence and focus. However, excessive structure can stiffen the process of inquiry, especially when it ignores the organic flow of conversation or real-time shifts in the groups' perspectives.

An emergent design gives space for participants to co-create the process. It responds flexibly to insights, diversions, or tensions as they arise. This can generate unexpected innovation and deepen ownership. Still, too little structure can create ambiguity or drift, especially for participants unfamiliar with open-ended learning or under pressure to deliver results.

The challenge is to scaffold the structure enough to enable coherence without suppressing creativity and emergence.

5. Role of the Facilitator: How can the exploration of the problem be best facilitated?

Facilitation is never neutral. It shapes how a learning process unfolds, how problems are defined and how insights emerge and are shared. This dimension invites reflection on the stance as facilitator(s): Are you actively guiding the group's inquiry using targeted questions and analytical tools? Or are you stepping back, creating space for participants to drive their own meaning-making?

Wicked problems often demand new ways of seeing, challenging assumptions, uncovering contradictions, and working through ambiguity. Facilitators, in these contexts, must act as learning guides and reflective companions. They may need to bring in theory or frameworks at key moments to reframe thinking, while also cultivating space for silence, tension, and uncertainty to surface.

Effective facilitation rarely resides at one end of this spectrum. Instead, it involves moving fluently between modes, adapting and tinkering to group maturity, energy, and the nature of the inquiry at hand. The task is to tune into the group: What methods, activities, or facilitation strategies can support reflection, dialogue, and joint inquiry? When do participants need input, a model, or a mirror?

Facilitation becomes a navigational practice: reading group dynamics, sensing readiness, choosing the right moment to shift gears, and helping the group find its rhythm - in the space between steering and staying with what is.

6. Role of Theory: What theoretical, conceptual, or practical knowledge is needed to deepen understanding and create new learning about the problem?

Theory can be a powerful lens in collaborative learning, helping participants see their work in new ways, name invisible patterns, and link everyday experiences to broader structures. This dimension explores the role of theory: Is it built into the process from the start, shaping its architecture and methods? Or is it introduced in response to participant questions, requests, or dilemmas? Which concepts, theories, or professional understandings and ways of knowing can open new insights into the nature of the problem?

Complex, systemic challenges are rarely visible from a single vantage point. Theory, in these contexts, can act as a tool providing language to interpret contradictions, identify invisible dynamics, or imagine alternative configurations. For example, organizational contradictions might be named using activity theory and value tensions in professional practice might be illuminated through reflective models.

The role of theory is to support co-constructing insight, offering participants a way to re-view their world through new lenses. The key is to match theory-use to participant readiness and inquiry depth, and to treat it as a resource for learning, not as a goal in itself. At its best, theory becomes generative when it deepens collective understanding of the problem and enables participants to see new possibilities for action.

The design dimensions are meant to support you, our readers, in taking inspiration and potentially integrate elements from the two models. Rather than prescribing a fixed model, the dimensions are meant to help you make deliberate and context-sensitive design choices that respond to the needs of the problem as it unfolds in the context of the specific learning intervention. We invite you to play with it!

Part 4

Suggestions for Further Reading

This playbook has illuminated the two Nordic models, Change Laboratories and Learning Circles, to the field of adult professional development in the face of wicked problems. Through their differing structures and theoretical orientations, both models address the urgent need for collaborative, practice-integrated learning to meet complex challenges facing welfare professionals today.

The models outlined in this playbook are deeply influenced by the institutional and cultural landscapes in which they were developed. The models share a foundation in democratic participation and situated, practice-based learning, that resonate strongly with the values underpinning the Nordic countries.

From the suggested resources below, presented in alphabetic order, you can find more in-depth descriptions of how the models have evolved, their contexts of use as well as the historic heritage of each.

Aakjaer, M., & Wegener, C. (2023). Theorizing Learning Circles – a Nordic tradition revitalized in times of social innovation imperatives. *Journal of Education and Work, 36*(6), 462–475.

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Christensen, E. W. (1983). Study circles: Learning in small groups. *Journal for Specialists in Group Work, 8*(4), 211–217.

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Rönnerman, K., & Salo, P. (2012). 'Collaborative and action research' within education: A Nordic perspective. *Nordic Studies in Education, 32*(1), 1–16.