Capacity-Building Support for Strategic Sustainability Planning and Implementation in Municipal Contexts

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Abstract: This research investigates how capacity-building interventions might be designed and implemented to enhance strategic sustainability work in municipal contexts and address institutional capacity deficits hindering effective sustainability transitions. Drawing from a blend of secondary and primary data sources, including expert interviews and surveys, the study employs a conceptual framework to identify considerations crucial for effective, responsive, and transformative capacity-building efforts. Results reveal the significance of fostering a robust capacity-building culture, understanding context-specific engagement styles (learner archetypes), and utilizing a combination of approaches tailored to context-specific needs. The study also suggests the interconnectedness and interdependence of individual and organizational transformation, emphasizing the importance of cultivating a supportive capacity building culture and promoting a strategic approach to capacity building planning and implementation, balancing short-term objectives with the pursuit of profound, transformative outcomes. Findings contribute valuable insights for capacity-building planners and interveners involved in the design and implementation of continuous capacity building efforts aimed at enhancing strategic work of diverse actors engaged in sustainability efforts.

Keywords: Strategic Sustainable Development, Capacity Building, Sustainability Transitions, Strategic Planning and Implementation.

Statement of Collaboration

Our work represents our shared journey of exploration and inquiry, combining our diverse skills and perspectives to investigate how capacity building can be leveraged to support the success of sustainability transitions in municipal and regional contexts through effective, responsive approaches that yield transformation.

Our collaboration has been grounded in the principles of collective learning and shared responsibility. Each team member brought unique insights and expertise to the table, contributing to the depth and richness of our research findings. Through regular meetings, brainstorming sessions, and constructive debates, we have navigated the complexities of our chosen subject matter, striving for academic rigor and practical relevance.

Cynthia's contributions to our thesis research have been invaluable. As a development strategist and policy innovation professional, her analytical thinking and communication skills aided in enhancing our collective efforts at every turn. From supporting interview processes, synthesizing complex data, proactive engagement with identified experts, to contributions to the development of our conceptual framework, she enriched our study significantly. She ensured our interactions with our advisors and research participants were clear and professional. Her extensive work with synthesizing the data we collected ensured our research was coherent and straight to the point. Cynthia exemplifies the essence of dedication and team spirit.

Prince's contributions to our team's thesis project are truly remarkable. His highly analytical mind and attention to detail shine through in every aspect of our work. His meticulous approach to referencing ensured that our work reflected a high standard of academic integrity. His dedication to precision and thoroughness keeps us on our toes, ensuring that we uphold excellence in every aspect of our project. Given Prince's extensive experience in designing and implementing capacity building programs, his expertise proved invaluable in every research phase.

Phillypiner brings a wealth of research skills and practical experience to our team. Her background in working with municipalities added a unique perspective to our discussions and analyses. She also has a knack for simplifying complex concepts and effectively communicate them to the team. This skill helped foster better understanding among team members and also enhanced the clarity and coherence of our project's outcomes.

Our shared commitment to excellence has propelled us forward, overcoming challenges and refining our research methods along the way. We have fostered a supportive and inclusive team environment, characterized by mutual respect, open communication, and a collective sense of purpose. This collaborative ethos has not only enhanced the quality of our work but also enriched our personal and professional growth.

As we reflect on this experience, we recognize the value of collaboration in generating meaningful insights and addressing complex issues.

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Finally, to our research participants, we extend our heartfelt thanks to each and every one of you for taking the time to contribute to our study. Your unique insights and experiences were instrumental to our work. You all have our deepest gratitude.

Executive Summary

This research aims to facilitate the increased success of sustainability transition processes in municipalities and regions by investigating how capacity building interventions can be implemented in ways that ensure that they are effective (contextually-relevant design, delivery and improvement), responsive (tailored to meet the capacity development needs of different actors involved in sustainability work), and transformative (full implementation and continuous learning utilizing a knowledge framework that supports strategic work for sustainability (Capacity Building for Strategic Sustainable Development) and facilitates transformational change at the individual, organizational and institutional levels).

1.1. Introduction

Municipalities and regions stand at the forefront of the transition towards sustainable societies through the governing of changes at the local and regional levels (Axelsson et al., 2023). Tasked with spearheading transformative changes at the local and regional levels, they are required to take on an integrated role of initiator, facilitator and implementer in the global pursuit of sustainability (Soberón et al, 2023).

Many municipalities are actively pursuing sustainability initiatives and solutions (Levesque, 2019). However, the perceived pace of progress in these endeavors falls short of meeting the urgency and scale of the challenges at hand (Walitalo, 2023). This slow progress is predominantly attributed to institutional capacity challenges in integrating and formulating strategies for effective change implementation (Isaksson and Hagbert, 2020; Wang et al., 2012; Broto & Bulkeley, 2013). As described by De Magalhães et al. 2003, there are three (3) dimensions of institutional capacity which must be considered in relation to societal development: i) knowledge resources ii) relational resources and iii) mobilization capacity.

Deficits in institutional capacity manifest in various ways, including limited ability to mobilize resources, fragmented knowledge leading to a lack of systemic perspective, siloed organizational structures (Wälitalo, 2023), a value-action gap which results from actors' failure to take actions consistent with their values or beliefs about the future (Zeemering, 2018). These manifestations perpetuate a cycle of reductionist approaches, suboptimal measures, and weakly coordinated efforts toward sustainability transitions in municipal contexts (Wälitalo, 2023).

One potential solution to address these challenges lies in designing robust capacity-building processes aimed at enhancing institutional capacity (De Magalhães et al., 2003). Recent research on sustainability transitions highlights how change agents utilize institutional processes to enact change. These studies emphasize the role of a small, diverse group of actors from various sectors (including public, private, civil society, and scientific sectors) in steering transitions. Capacity building therefore plays a critical role in empowering change agents to navigate the complexities of sustainability transitions and drive meaningful change effectively.

1.2. Research Question

What might considerations be for the design and implementation of capacity building interventions to enhance strategic sustainability work in municipal contexts?

1.3. Research Design

Data Collection: Our research employed a blend of methods to gather data from secondary and primary sources. For the collection of secondary data, we have focused on using both published and unpublished data from a variety of sources such as academic peer-reviewed journals, published books and reports, government agencies, educational institutions, websites and articles. While for the collection of primary data, we have selected semi-structured interviews and surveys as our chosen methods, targeting experts engaged in sustainability transition work within municipalities and regions. We aimed to focus on both sustainability leaders and planners who work in municipal, corporate and civil society organizations, as well as knowledge mediators that work with them in the implementation of change, to ensure that our findings were a balance between inside and outside perspective.

Data Analysis: We analyzed our research findings thematically using our adapted Sustainable Implementation Strategy (SSI) framework for capacity building. The data analysis process began with a deductive coding approach to identify patterns and themes within the interview responses that aligned with the predetermined conceptual framework. Followed by an inductive clustering to further explore and identify any additional emerging themes that were not initially captured by the conceptual framework.

Validation of Findings: We conducted expert interviews and surveys to understand the opinions of and receive their feedback on the factors/conditions for effective and responsive capacity building.

Development of Complementary Tool: We incorporated our validated findings into the design of a complementary tool aimed at providing general guidelines/considerations to facilitate the development and design effective and responsive strategic capacity building efforts and specific guidelines for CB4SSD interventions.

1.4. Results and Discussion

We began our investigation by gauging participants' understanding of the term "capacity building" to identify and mitigate conflicting conceptualizations that could undermine the integrity of our research findings. Our inquiry revealed that the primary source of discrepancy among most participants was rooted in terminology differences, as they generally exhibited a common substantive understanding of the concept of capacity building.

Our interpretation of the findings of our study suggests that the common theme across participants' perspectives is centered on the considerations that point to the culture capacity-building efforts, rather than any specific activity or method. We explore the prevalent ‘cultural factors’ that emerged from our analysis, framed within the seven perspectives outlined in our conceptual framework. These perspectives include values, stakeholders, leadership, strategy and goals, process, resources and tools. We refer to "capacity-building culture" as the enabling factors and conditions that support the effectiveness, success, and continuity of capacity-building efforts, beyond the methods, activities, or content involved.

In our analysis of the different methods expressed as effective, the motivating factors for capacity building engagement and the common barriers to effective capacity building implementation identified by participants, we categorized different approaches to be considered for design and delivery of strategic capacity building interventions. They include learn-do (practice-oriented) approach, interactive (dialogue-based) approach, dynamic (contextually-adaptive) approach, blended (hybridized methods) approach and need-specific approach. These represent considerations for effective design and implementation.

Participants in our interviews contributed insights regarding their typical time commitments to capacity building. Drawing from these statements, we offer a generalized classification of archetypes among those who engage in such endeavours. These archetypes include collaborative learners, enthusiastic learners, pragmatic/selective learners, long-term/continuous learners, time-constrained learners, and opportunistic learners. These represent considerations for responsive design and implementation.

Our research also revealed the interconnectedness of individual and organizational transformation. While individual-level shifts may occur, their sustainability hinges on corresponding organizational and systemic changes. Failure to integrate individual and organizational change initiatives risks fostering a fragmented organizational landscape. Resulting in the key consideration that the effective design and implementation of capacity building interventions that yield transformative outcomes is perhaps contingent on the quality of leadership, the degree of stakeholder engagement, and the adaptability of intervention strategies to evolving needs and circumstances. Highlighting the importance of cultivating aligned systems of support for individual and organizational change.

1.5. Conclusion

The primary objective of this research was to identify considerations that might prove valuable for designing and implementing capacity building interventions to enhance strategic sustainability work in municipal contexts. Our findings suggest that fostering a robust capacity building culture is a pre-requisite for successfully implementing and sustaining interventions.

Another consideration is understanding different context-specific engagement styles or learner archetypes to ensure a responsive approach. We also explore the importance of context-specific combination of approaches and the use of contextually relevant language are also necessary considerations, emphasizing the need for flexibility and adaptability to ensure effective design and implementation.

The study also suggests that different levels at which capacity building can lead to transformational outcomes, with an enabling capacity building culture being the foundation. These levels include individual transformation through knowledge transfer and integration, organizational transformation through knowledge diffusion and embedding, interorganizational transformation through cross-sector knowledge exchange and collective action, and societal transformation through community-level change. Recognizing the interconnected and interdependent nature of these levels is crucial for cultivating a supportive capacity building culture and promoting a strategic approach to capacity building planning and implementation, balancing short-term objectives with the pursuit of profound, transformative outcomes.

The considerations identified in this study are intended to provide guidance to capacity building planners and interveners for designing and implementing continuous capacity building efforts aimed at enhancing strategic work of diverse actors engaged in sustainability efforts in municipal and regional contexts.

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1. Introduction

This research aims to facilitate the increased success of sustainability transition processes in municipalities and regions by investigating how capacity building interventions can be implemented in ways that ensure that they are effective (contextually-relevant design, delivery and improvement), responsive (tailored to meet the capacity development needs of different actors involved in sustainability work), and transformative (full implementation and continuous learning utilizing a knowledge framework that supports strategic work for sustainability (Capacity Building for Strategic Sustainable Development) and facilitates transformational change at the individual, organizational and institutional levels).

Drawing from the recommendations by Wälitalo and Missimer 2024 in the ongoing Response 2130 Project, which is action research designed to improve accuracy and increase the pace of Sustainable Development through regional networks, this research aims to uncover what considerations there might be for strategic capacity building design and implementation. The goal is to explore how these considerations translate into the formulation of guidelines to support the development and deployment of capacity building for strategic sustainable development (CB4SSD) initiatives in an effective and responsive way that will contribute to the following: i) advancing knowledge and understanding of Strategic Sustainable Development (SSD), ii) fostering collaborative and participatory leadership, and iii) promoting values-based action through inner capacity development.

In this chapter, we discuss the role of municipalities in the global sustainability transition (why municipalities), the challenges they face in navigating sustainability transition processes (why strategic planning and implementation support), and how capacity building can help bridge the action-progress gap (why capacity building). Finally, we explore Capacity Building for Strategic Sustainable Development (CB4SSD) as a more comprehensive approach to providing the much-needed support needed to equip actors involved in sustainability transition work in municipalities with the knowledge and competencies required to ensure a more strategic approach to planning and implementation towards the achievement of increased success (why CB4SSD).

1.1. Why Municipalities Matter in Global Sustainability Transition

Sustainability transitions, characterized by large-scale disruptive changes in societal systems unfolding over decades, are crucial for addressing “grand societal challenges” (Loorbach, Frantzeskaki, & Avelino, 2017). In today's world, sustainability has emerged as a pressing global challenge, with cities and municipalities at the forefront of both its impacts and potential solutions.

The increasing proportion of people living in cities and towns due to urbanization is one of the main features of global development (UNFPA, 1991). Today, about 56% of the world’s population (about 4.4 billion inhabitants) live in cities. By 2045, the world's urban population will increase by 1.5 times to 6 billion (The World Bank Group, 2023). As these areas continue to expand and consume a disproportionate amount of resources, the need for coordinated and effective action at the local level has never been more apparent.

As hubs of population, economic activity, and resource consumption, cities are the biggest drivers of the triple planetary crisis of climate change, biodiversity loss, and pollution/waste. They account for a substantial portion of energy consumption, CO2 emissions, and waste generation (Anderson, 2024), underscoring their crucial role in addressing sustainability challenges.

Municipalities and regions stand at the forefront of the transition towards sustainable societies through the governing of changes at the local and regional levels (Axelsson et al., 2023). Tasked with spearheading transformative changes at the local and regional levels, they are required to take on an integrated role of initiator, facilitator and implementer in the global pursuit of sustainability (Soberón et al, 2023). This means they are responsible for developing new ways of setting goals and shaping and monitoring the sustainable development of society (Tekie, 2022).

The journey towards sustainability confronts organizations, particularly municipalities, with the complexities of transformational change (Anderson & Ackerman, 2001). This form of change entails a profound and comprehensive shift in an organization's fundamental beliefs, values, and structures. It transcends mere incremental improvements, paving the way for a radical reconfiguration of systems and processes (Chapman, 2002). Kotter, 1995; Zhou & Shalley, 2008 describe transformational change as a process which requires a long time for its completion and necessitates excellent coordination and strong management support.

Central to this task are municipal leaders, who as primary decision-makers, hold the key to facilitating societal change and sustainable transformation (Salmi, Jussila, & Hämäläinen, 2022; Heath, 2023). The implementation of sustainability involves addressing structural challenges associated with complexity, fragmentation, and uncertainty (Innes and Booher, 2018). These challenges are further compounded by bureaucratic and hierarchical structures within public governments, hindering their ability to address the interdependencies inherent in such a mission (Quitzau et al., 2022). Navigating sustainability transitions therefore requires future-focused leaders who are willing to challenge long-held beliefs, explore new opportunities, and efficiently manage current systems towards the establishment of a sustainable future (Heath, 2023). Evidently, municipalities, encompassing towns, cities, and administrative entities with local governance, play a pivotal role in the sustainability landscape (Levesque, 2019). Hence, focusing on municipalities provides a strategic entry point for tackling these pressing issues and driving meaningful change.

1.2. The Challenges of Navigating Sustainability Transitions in Municipalities

Many municipalities are actively pursuing sustainability initiatives and solutions, motivated by both voluntary commitment and external pressures (Levesque, 2019). However, the perceived pace of progress in these endeavors falls short of meeting the urgency and scale of the challenges at hand (Walitalo, 2023). This slow progress is predominantly attributed to institutional capacity challenges in integrating and formulating strategies for effective change implementation (Isaksson and Hagbert, 2020; Wang et al., 2012; Broto & Bulkeley, 2013).

As described by De Magalhães et al. 2003, there are three (3) dimensions of institutional capacity which must be considered in relation to societal development: i) knowledge resources referring to formal, informal, and tacit knowledge, along with frames of reference and

understanding of specific issues; ii) relational resources, which involve the presence of social networks linking various stakeholders; and iii) mobilization capacity, which is the ability of stakeholders to leverage knowledge and networks to develop local assets and attract external attention and resources in pursuing a process of change.

Deficits across these three dimensions manifest in various ways, including limited ability to mobilize resources, fragmented knowledge leading to a lack of systemic perspective, siloed organizational structures (Wälitalo, 2023), a value-action gap which results from actors' failure to take actions consistent with their values or beliefs about the future (Zeemering, 2018). These manifestations perpetuate a cycle of reductionist approaches, suboptimal measures, and weakly coordinated efforts toward sustainability transitions in municipal contexts (Wälitalo, 2023).

One potential solution to address these challenges lies in designing robust capacity-building processes aimed at enhancing institutional capacity across all three dimensions—knowledge resources, relational resources, and mobilization capacity (De Magalhães et al., 2003).

1.3. Bridging the Planning-to-Action-to-Progress Gap through Capacity Building

The success of sustainability and sustainable development endeavors is directly linked to robust institutional capacity and effective capacity building (Evans et al. 2006). Institutional capacity refers to the internal patterns of behavior, operational methods, collective values, knowledge, and relationships that shape the structure and culture of an organization (Evans et al, 2006). Meanwhile, capacity building is used to describe activities aimed at enhancing the knowledge, expertise, technical know-how, and behaviors of individuals, groups, or societies, while also improving institutional procedures and structures (Brix, 2019).

The evolving status and role of sustainability efforts within municipalities over time has led to a growing demand for an interdisciplinary approach to sustainability. What began as a narrow focus on ecological concerns has transformed into a broader scope of sustainability management within municipal contexts. However, this evolution presents a significant challenge to municipal capacity for effectively coordinating sustainability efforts (Quitzau et al., 2022).

The call for embracing interdisciplinary and strategic approaches to sustainability has prompted many municipalities to seek user-friendly models to enhance their understanding, prioritize focus areas, and improve strategic planning (Heath, 2023). It also underscores the considerable learning curve municipalities face as they tackle sustainability challenges. They must navigate systemic changes while embracing new concepts, values, tools, and knowledge to reshape their organizational structures and cultures (Soberón, 2023; Heath, 2023).

While municipal organizations may initiate change independently, effectively planning and executing sustainability transition processes requires enhancing institutional capacity. This involves building new capacity, as well as strengthening, mobilizing, and adapting existing capacity (Bhagavan and Virgin, 2004). It necessitates the use of models and tools that facilitate collaboration between experts with context-independent knowledge and local administrators with context-dependent expertise (Jensen et al., 2000). Therefore, capacity building strategies, particularly within municipal contexts, should be strategically designed as continuous processes

aimed at strengthening both human and institutional capacity for lasting change (Solinska-Nowak et al., 2018; Bhagavathula et al., 2021).

1.4. Capacity Building for Strategic Sustainable Development

As municipal entities endeavor to navigate the complexities of sustainability challenges, strategic planning and execution become paramount. A major hindrance to this is the lack of the comprehensive and systemic perspective necessary for holistic sustainability planning and action (Wälitalo et al. 2023). This necessitates a comprehensive understanding of a strategic approach to sustainability and robust capacity building efforts to strengthen and institutionalize this knowledge in contextually relevant ways.

Sustainability transitions involve making crucial decisions about the trajectory of change, amid diverse perspectives on what constitutes desirable futures and the pathways to achieve them. Mintrom and Rogers 2022 identify 6 key actions that change agents must deliberately and systematically undertake, to find more success in pursuit of sustainability transitions. These actions are not necessarily linear and may overlap, occur simultaneously, or may be ongoing processes rather than one-time interventions with clear start and end points:

i) Clarify the problem and articulate a shared vision: this conveys why the problems are important and guides focus towards relevant solutions.

ii) Engage others to identify workable solutions and implementation pathways: essential for exploring ways to address problems.

iii) Secure support from influential stakeholders: transitions require a significant number of people with the necessary capabilities who believe their actions can make a difference.

iv) Establish effective monitoring tools and learning systems: monitor to track progress and ensure rapid feedback to guide ongoing actions.

v) Foster long-term relationships of trust and mutual support: trust and mutual support are vital given the significant moves from the status quo that are embodies in sustainability transitions.

vi) Develop narratives that support on-going action: keep coalitions focused on the outcomes they are seeking and the actions they must take to achieve them.

These six actions underscore the complexity of the fundamental participatory processes involved in achieving sustainability transitions and the necessity of strategic planning and implementation to ensure the effective governance of these processes. By fostering the involvement of diverse actors, these processes facilitate the identification of shared visions and objectives and the development of credible pathways to realize them (European Environment Agency, 2024).

Recent research on sustainability transitions highlights how change agents utilize institutional processes to enact change. These studies emphasize the role of a small, diverse group of actors

from various sectors (including public, private, civil society, and scientific sectors) in steering transitions. These leaders employ a combination of creative and disruptive institutional strategies to foster the growth of diverse actor-networks, ultimately guiding transitions toward desired outcomes (Brown, Farrelly, and Loorbach 2013; Fazey et al. 2018).

To ensure a successful transition, actors must be able to swiftly access resources, information, and networks from other relevant sources (Mintrom and Rogers, 2022). Capacity building therefore plays a critical role in empowering change agents to navigate the complexities of sustainability transitions and drive meaningful change effectively.

Capacity Building for Strategic Sustainable Development (CB4SSD) can therefore be defined as a continuous process of enhancing the knowledge, skills, and competencies of actors across diverse sectors (public, private, civil society, and scientific) through contextually-relevant approaches. It aims to foster a systemic perspective to drive strategic sustainability planning and action, strengthening human and institutional capabilities to guide transitions toward desired outcomes.

CB4SSD is grounded in the Strategic Sustainable Development (SSD) approach, which as a subset of the Sustainable Development (SD) field provides an intentionally unifying lens and a science-based overarching framework for understanding sustainable development and to create change for sustainability in a systemic, systematic and strategic way (Broman and Robèrt, 2017).

The structuring of this strategic approach to sustainability is achieved through the Framework for Strategic Sustainable Development (FSSD), which serves as a comprehensive guide for planning in complex systems (Broman and Robèrt, 2017).

Despite the existence of several strategic planning and implementation frameworks, our selection of the SSD methodology as the primary focus of this research is influenced by the following considerations:

i) Its emphasis on context-specific adaptation and its flexibility which allows for complementary use with other sustainability tools and methodologies.

ii) Its potential to fill the pressing need for common direction, common language and know-how for concrete sustainability transitions and the need to increase the spread of the methodology which has been rigorously applied in specific organizations and sectors over a period of 30 years (Broman & Robèrt, 2017).

iii) Its provision of a framework (the FSSD) that enables systematic and strategic approach to gathering information, planning and decision-making, which supports a collaborative and participatory approach to sustainability governance (transgovernance). This governance approach contextualizes the FSSD as relevant for municipalities and theoretically grounds the implementation of its core elements in the pursuit of sustainability (Wälitalo, 2023).

iv) Our research draws heavily on the extensive work conducted by Wälitalo 2023, which involved collaborating with municipalities and regions in Sweden and Finland through a seven-year action research. The primary objective was to investigate how leaders in municipalities and regions could receive adequate support, to bolster cross-sectoral

strategic efforts for sustainability, using the Framework for Strategic Sustainable Development (FSSD) and its implementation model.

The findings of that study revealed that while the FSSD aims to facilitate a comprehensive systems approach to strategic sustainable development (SSD) work, it alone proved insufficient for long-term, strategic implementation. As a result, an integrated support portfolio for strategic sustainability work was recommended, combining the FSSD, the FSSD implementation model, supplementary tools (such as guidelines and templates), and eight conditions for continuity (along with their respective sub-conditions) for long term cross-sectoral strategic sustainability work. These conditions include: (i) active leadership for SSD, (ii) adoption of a learning by doing attitude, (iii) building on current possibilities and potentials, (iv) challenging existing structures and routines continuously, (v) clear and continuous communication and information, (vi) inclusiveness and shared responsibility, (vii) planning and training for SSD capacity building, (viii) spread of inspiring examples for SSD work).

Figure 1.1. Support portfolio for cross-sectoral SSD work, supplemented by conditions for continuity (Wälitalo, 2023).

The components of the support portfolio are aimed at enhancing methodological support for strategic planning and implementation for sustainability. However, the study identified two conditions - active leadership for SSD and continuous capacity building for SSD - as prerequisites for the other six conditions. It was also proposed that further research is needed to develop complementary tools tailored to specific conditions for continuity, enabling the continued expansion of the support portfolio.

According to Wälitalo, 2023, fulfilling the condition for continuous capacity development for SSD involves eight (8) accompanying sub-conditions which include: devising a capacity-building plan; establishing a supportive network; broad and diversified trainings to support actors dependent on their needs; fostering long term in-house expertise; securing political consensus for sustained SSD efforts; providing specialized training for process leaders; educating on the alignment of other sustainability concepts, tools, and methods with SSD work; and implementing a train-the-trainer approach.

More recent insights from Wälitalo presented in Wälitalo and Missimer 2024, shed light on the priority focus areas for capacity building in municipalities to enhance strategic work for sustainability. These recommendations emphasize the need for the enhancement of knowledge on Strategic Sustainable Development (SSD), Collaborative/participatory leadership, and Inner

capacity development. These elements are identified as most crucial for providing the necessary capacity building support to facilitate successful efforts towards sustainability in municipalities.

These recommendations serve as guiding principles for our research's direction. Our primary focus will be on exploring the suggestions by Wälitalo 2023 in two specific areas: the necessity of devising strategic capacity plans and implementing broad and diversified training programs tailored to the needs of various actors. Our goal is to develop guidelines along these two aspects that support the design and implementation of capacity building for strategic sustainability work. This involves exploring possible considerations for developing and deploying strategic capacity-building plans, as well as structuring diversified training to different actors based on their specific needs, all with the aim of enhancing support for strategic sustainability efforts within municipalities.

1.5. Research Purpose

This study seeks to improve the outcomes of sustainability transition processes in municipalities and regions by examining capacity building for strategic sustainable development (CB4SSD) as a means to enhance both institutional and human capacity. Ultimately, the aim is to develop guidelines for capacity building design and implementation. These guidelines are intended to facilitate effective, responsive and transformative capacity building efforts, thereby contributing to the successful implementation of sustainability initiatives across municipalities and regions.

To achieve this overarching goal, this thesis research proposes the following objectives:

i) **Investigate effective methods for the design and deployment of capacity building in municipalities in order to better support sustainability practitioners:** Understanding how capacity building can be tailored in the most effective way to support these practitioners is essential for building their capacity to lead and facilitate sustainability transition processes. By identifying best practices, challenges, and opportunities related to capacity building for sustainability practitioners, researchers can inform the design and delivery of targeted training programs.

ii) **Explore how capacity building can be tailored to meet actor-specific needs:** By analyzing and identifying strategies to address the diverse roles, responsibilities, and skill sets of actors involved in sustainability transition processes, tailored capacity-building programs can be developed. These programs address specific knowledge gaps, skill deficiencies, and organizational barriers, ultimately enhancing their relevance, effectiveness, and uptake and contributing to the success of sustainability transitions in municipalities.

Develop guidelines for CB4SSD: Firstly, to support design and delivery in a way that effectively supports successful planning and implementation of sustainability transition processes in municipal contexts and secondly, to support the responsive structuring of training to different actors based on their specific needs. These guidelines provide considerations for practitioners and other stakeholders involved in capacity building for strategic planning and implementation support, outlining best practices, key principles, and actionable

recommendations to support success. By incorporating insights from research and practice, the guidelines also can ensure that CB4SSD initiatives are designed and delivered effectively to support the implementation of sustainability transition processes. Additionally, putting forward considerations that allow capacity-building programs to provide tailored support to different actors based on their specific needs enhances the relevance, accessibility, and impact, fostering a more inclusive and equitable approach to capacity building efforts.

1.6. Research Question

What might considerations be for the design and implementation of capacity building interventions to enhance strategic sustainability work in municipal contexts?

This formed the basis of our exploration into how we might increase the success of sustainability transition processes in municipal and regional contexts through capacity building for strategic planning and implementation support. Our investigation involved examining the common perception and understanding of capacity building, what formats and methods have proven effective for capacity building, how capacity building support might be tailored to the specific needs of different actors involved in strategic sustainability work and what lessons can be drawn from successful capacity building interventions.

1.7. Research Scope and Limitations

The three-month timeframe designated for data collection and analysis in our research posed several limitations concerning the methods chosen and the generalizability of its findings. However, the predominantly qualitative research approach adopted offers a potentially insightful perspective on capacity building towards the support of strategic planning and implementation. Our investigative approach offers an opportunity to delve into the complexities of bolstering human and institutional capacity to drive sustainability efforts in municipalities.

The integration of various research methods enabled us to explore previously documented research and gain fresh insights into the experiences, perceptions, challenges, and opportunities associated with capacity building initiatives aimed at enhancing sustainability work. Additionally, through interviews and surveys, we aimed to capture firsthand experiences of identified stakeholders.

This approach was instrumental in uncovering insights into the intricacies, motivations, priorities, and barriers related to capacity building efforts, as well as contextual factors influencing their outcomes. The qualitative data collected during this process holds promise in informing the general considerations for strategic capacity building initiatives tailored to the diverse needs of actors in various municipal and regional contexts, as well as the development of more specific guidelines for the design and implementation of CB4SSD interventions. However, it's important to acknowledge that due to our limited geographical scope, methods, and reliance on secondary data, the applicability of the research findings may be limited beyond our original study area.

2. Background of Fields

Our research has a dual primary focus, which involves investigating what factors need to be considered for the design and implementation of strategic capacity building efforts aimed at enhancing the successful implementation of sustainability transition processes, as well as developing a set of guidelines to support an effective and responsive approach to the design and delivery of capacity building for strategic sustainable development (CB4SSD) initiatives. This positions our research broadly within the realms of sustainable development and capacity building and narrowly within the subfields of strategic sustainable development and capacity building for sustainable development.

2.1. Sustainable Development

"Sustainable Development as popularized by the Brundtland Commission is development that meets the needs of the present without compromising the ability of future generations to meet their needs" (Brundtland 1987). This definition has been widely adopted by several development public institutions and agencies. The OECD Sustainable Development Report on Linking economy, society, environment puts it another way, saying that "resources, whether economic, environmental or social, should be utilized and distributed fairly across generations" (Strange and Bayley 2008, p. 26). "If we accept that the goal of government (and public administration) is to promote the well-being of citizens, sustainability is a way to define and measure progress toward that goal" (Zeemering, 2018).

2.1.1. Strategic Sustainable Development

Strategic Sustainable Development (SSD) enriches such understandings of sustainable development as a subset of the field which provides a comprehensive and scientifically based set of constraints defining socio-ecological sustainability for a society (Balaskas, Lima and Seed, 2009).

SSD builds on sustainability science in response to three core issues in the development of sustainability science identified by Miller, 2013:

i) The SSD approach covers the full scope of sustainability by providing a principle-based, boundary conditions-focused definition.

ii) A constitutive element of the SSD approach is the Framework for Strategic Sustainable Development (FSSD), a science and systems thinking-based foundational methodology designed to guide SSD work and research. This framework was designed in response to the need for a science-based, overarching and unifying lens and approach to understanding sustainable development to create systemic change for sustainability.

iii) SSD is focused on enabling societal development through a backcasting approach targeted at promoting proactive efforts and action towards sustainability transition across public, private and civic sector systems. It also seeks to convey that the application of science and value are complementary approaches, not contradictory.

The SSD perspective provides the actual structures that enable actions and support the transition towards sustainable trajectories by means of guiding frameworks.

2.2. Capacity Building

The terms capacity building, capacity development and capacity strengthening are often used interchangeably. However, some researchers consider them as distinct terms with separate definitions (Matachi, 2006). Certain literature present the term capacity development as more overarching based on the argument that "building" suggests the image of a construction process starting from a plain empty surface, while development refers to strengthening existing capacity (Zamfir, 2017; International Labour Organization, 2010).

It is argued that capacity building speaks only to the strengthening of an institution's ability to design, implement, and evaluate change processes (Beesley and Shebby 2010 and Lammert, Johnson and Fiore, 2015)). While capacity development is a concept which is broader than capacity building since it includes an emphasis on the overall system, environment or context within which individuals, organizations and societies operate and interact and not simply a single organization (UNDAF, 2017 and International Labour Organization 2010). Nigel, Morris and James, 2021 defines capacity strengthening as a continuous process that helps systems and people function better in dynamic environments by improving their ability to create and carry out plans to achieve higher performance goals in a sustainable manner.

For the purposes of our research, we adopt the definition of capacity building proposed by the United Nations Academic Impact (UNAI), 2022. They describe it as "the process of developing and strengthening the skills, instincts, abilities, processes, and resources that organizations and communities need to survive, adapt, and thrive in a fast-changing world." This definition further emphasizes capacity building as a prerequisite for transformation that is generated and sustained over time from within. Such transformation extends beyond task performance to changing mindsets and attitudes.

Lammert, Johnson and Fiore, 2015 discuss four key dimensions of capacity building developed by The Appalachian Regional Comprehensive Center (ARCC), they include: (i) types of capacity, (ii) levels of capacity (iii) stages of capacity building, and (iv) outcomes of capacity building.

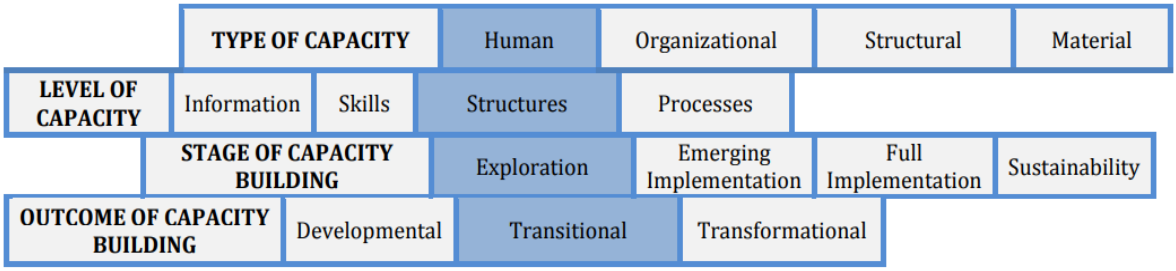

Figure 2.1. Four Dimensions of Capacity Building developed by The Appalachian Regional comprehensive Center (Lammert, Johnson and Fiore, 2015).

Types of Capacity: The United Nations Sustainable Development Group (UNSDG) defines capacity as the ability of people, organizations and society as a whole to manage their affairs successfully (UNDAF, 2017). Change typically involves the development of four key types of capacity: human (knowledge and skills), organizational (communication and collaboration), structural (procedures), and material (equipment and resources).

These four types of capacity are interconnected, with growth in one area reliant on advancements in another. Hence, while a specific capacity-building initiative may target one type of capacity, addressing and aligning all four types are essential for the organization to achieve its change objectives.

Levels of Capacity: Capacity building involves addressing various levels of capacity within organizations, including information, skills, structures, and processes. As organizations progress through capacity-building stages, they require updated information and increasingly advanced skills, structures, and processes to effectively implement desired changes.

Stage of Capacity Building Implementation:

> ***Stage 1:*** Exploration: Initially, key actors assess the need for change, define desired capacity, and identify necessary knowledge, skills, structures, and processes. Evaluating the organization's current capacity helps identify the "capacity gap" between existing and required capabilities.
>
> ***Stage 2:*** Emerging Implementation: This stage involves three steps: (i) organization employees engage in activities, (ii) they acquire new knowledge, update infrastructure, or enhance resource utilization, and (iii) they apply newfound knowledge and utilize updated systems.
>
> ***Stage 3:*** Full Implementation: New information and skills are integrated, and practices are refined based on evaluation. Assessments inform stakeholders about the impact and consequences of changes, allowing for necessary modifications to the focus of capacity-building activities.
>
> ***Stage 4:*** Continuity: The final phase involves the consistent use of refined skills and practices, demonstrating the organization's capacity for continuous improvement through ongoing analysis and adjustment for refinement and innovation.

Within implementation processes, advancing from exploration to full implementation takes between three to five years. Hence, capacity building is considered a long-term process (NIRN, 2022; UNDP 2008).

Outcomes of capacity building: Organizations experience three types of outcomes during the process: developmental (first-order change), transitional (second-order change), and transformational (third-order change). Developmental outcomes improve specific skills or processes. Transitional outcomes involve the organization moving towards a new desired state. Transformational outcomes result from a shift in organizational culture and beliefs, leading to significant changes in structures and processes.

Capacity building support for large systems such as municipalities and regions can benefit from a practical approach which involves implementing a pilot study known as a 'Transformation

Zone'. This allows for the testing and refinement of capacity building activities before implementing them on a larger scale throughout the entire system. However, it's crucial that the selected zone is sufficiently large to observe effects and encounter challenges effectively (Lammert, Johnson, & Fiore, 2015). According to the UNSDG, capacity building support refers to external assistance provided by individuals or organizations to bolster, facilitate, and stimulate capacity enhancement (UNDAF, 2017).

2.2.1. Capacity Building for Sustainable Development (CSD)

Capacity building for sustainable development is defined "as all measures that strengthen the governmental structures to meet the demands of sustainable development, as well as measures that create these capacities in cooperation with civil society" (Evans et al. 2006, p. 861).

Capacity Building for Sustainable Development (CSD) initiatives rely on engaging various stakeholders, including educational institutions, multinational corporations, and civil society organizations (Gusmão Caiado et al., 2018; Salvia et al., 2018). While local communities are adept at identifying sustainability challenges, they often lack the necessary knowledge and resources to effectively implement and sustain change (Mate, 2001; Lanzi, 2007; Leal Filho et al., 2017). Therefore, collaborative efforts among stakeholders can help overcome barriers caused by resource constraints and are vital for advancing sustainability research and innovation (Leal Filho et al., 2017).

CSD aims to enhance community capacity-building which is understood as a persisting process that is considerate of community aspirations, rather than a reactive response from organizations endeavoring to overcome community obstacles (Alizar and Scott, 2009). Though this might suggest a mutually agreed framework for community capacity-building implementation, there is often a lack of understanding on the roles and responsibilities of the stakeholders taking part in the implementation of community capacity-building initiatives (Franco, 2015). The United Nations Development Program (UNDP), 2009 identifies four key areas for community capacity-building which include - institutional arrangements, leadership, knowledge, and accountability. Enhancing these areas is crucial for driving sustainable development (Franco and Tracey, 2019).

Scholarly literature argues that CSD initiatives seem to be more effective when implemented through a bottom-up approach driven by communities themselves, as meaningful input from the local community is essential for creating relevant, sustainable solutions (Miller et al., 2012; Nakata and Viswanathan, 2012; Too et al., 2013; McClenachan et al., 2014). On the other hand, top-down approaches may hinder communities from effectively addressing sustainability challenges, as they often underestimate barriers to change and fail to incorporate community perceptions into sustainable practices (Redman, 2013; Franco, 2015). While top-down CSD initiatives, such as education, media and information-intensive campaigns, can raise awareness, they may not effectively change unsustainable behavior. Policymakers may also lack the capacity to design CSD initiatives that effectively influence local communities (Mckenzie-Mohr, 2000).

So far, the real-world application of CSD faces significant challenges because initiatives often lack continuity due to insufficient commitment, resources, and stakeholder collaboration, limiting their impact on local communities (Franco, 2015).

2.3. Conceptual Framework

Recognizing that the long-term nature of sustainability transition processes requires a long-term approach to capacity building development interventions, we searched for sustainable capacity building frameworks or long–term learning frameworks. Our search revealed a gap in the existing frameworks, as they were either solely process-driven or outcome-driven. While these frameworks provided valuable insights, we identified the need for a more comprehensive approach that accounts for the nuances of a long-term, journey-oriented outlook to capacity building, rather than a one-off intervention. To address this gap, we synthesized existing frameworks to create a modified conceptual framework for continuous capacity building design and implementation. Our adapted framework enables us to consider a variety of factors, including process, outcome, internal motivation, leadership and collaboration, among other considerations for continuous capacity building design and implementation.

We combined the conceptual framework of capacity-building interventions (Leeman et al. 2015) with the 7 perspectives of Sustainable Strategy Implementation (SSI) introduced by Radomska, 2015, which offer an evidence-based foundation that guides us to comprehensively capture the elements that might constitute sustainable strategy implementation for capacity building. The modified framework depicts the sustainable implementation perspectives in relation to the capacity-building strategies, structures and activities. It also includes the stages and outcomes of capacity building (Lammert, Johnson and Fiore, 2015). The combination of these elements gives us a single framework for sustainable capacity-building implementation which serves as a guide for our data review and analysis process.

To further refine the framework for our research focus, we made a terminology adjustment to the SSI perspectives. Specifically, we substituted 'employees' with 'stakeholders' in the normative level to better align with our objectives.

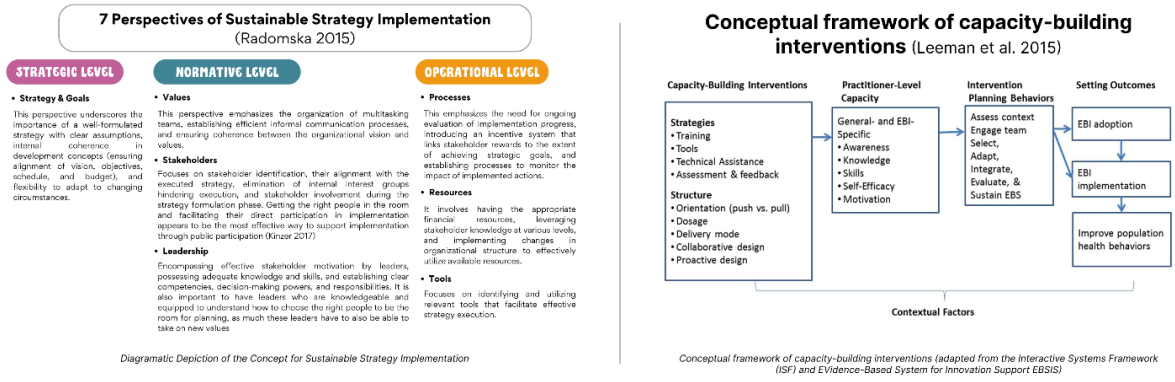

Figure 2.2. A side-by-side view of the 7 sustainability strategy implementation perspectives and the conceptual framework of capacity-building interventions.

Additionally, we incorporated the 5I model of sustainability leadership (Mazutis and Abolina, 2019) to map out capacity-building strategies for the leadership perspective. This enhances the framework by offering a clear illustration of the five (5) core areas competency areas that need to be developed for individual actors engaged in driving transformational change.

Figure 2.3. The 5I Model of Sustainability Leadership (Mazutis and Abolina, 2019).

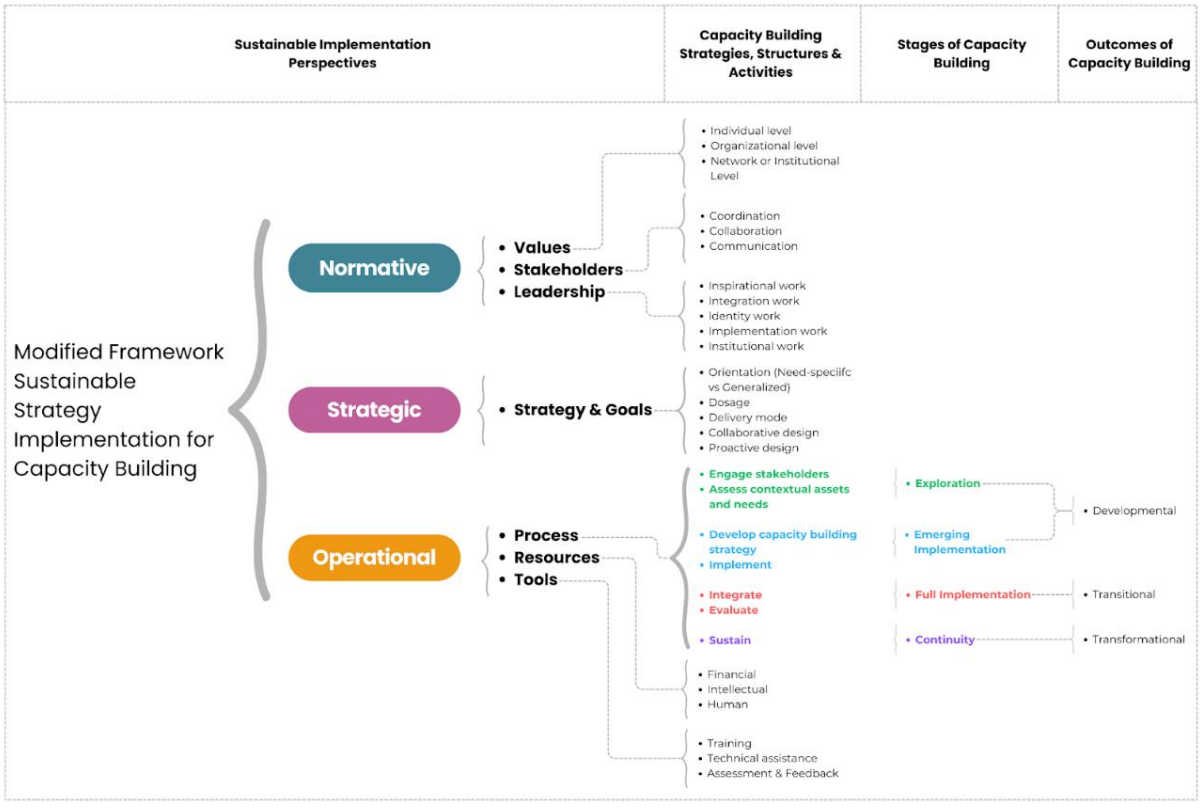

Figure 2.4. Adapted Framework for the 7 Perspectives of Sustainable Strategy Implementation for Capacity Building.

Table 2.1. Definitions for the 7 Perspectives of Sustainable Capacity Building Implementation.

Perspectives	Definitions
Values	This involves development of competencies and understanding at the individual, organizational, and network levels to bridge the value-action gap with regards to working progressively towards sustainability. By aligning beliefs, principles, and behaviors across these levels, capacity building in values fosters a cohesive and purpose-driven approach towards sustainability outcomes. The value-action gap is a phenomenon where individuals or organizations act in a way that contradicts or fails to support their values. In the context of capacity building, it refers to the gap between what individuals or organizations say they value (e.g., sustainability) and what they actually do to support those values (Rahmani, Wijaya and Hirawan, 2021).
Stakeholders	This involves enhancing collaboration capability, practices, and stakeholder management skills, including coordination and communication, to facilitate transformational change processes.
Leadership	This perspective focuses on enhancing capacity across the five core areas of competence necessary for individual actors involved in driving transformative change to effectively perform their work.
Strategy and Goals	This involves the development of a roadmap for enhancing the effectiveness and capabilities of individuals, teams, or organizations. It includes setting specific, measurable objectives to guide capacity-building efforts and assess intervention success in alignment with the organization's mission and vision. It also reflects desired outcomes, such as improved competencies, sustained practices, and a commitment to continuous quality improvement.
Process	Process refers to the systematic and continuous series of actions, steps, and activities undertaken to strengthen the skills, knowledge, resources, and capabilities of individuals, organizations, or communities to achieve their development objectives over time.
Resources	This refers to the assets, tools, and support systems utilized by organizations and individuals to enhance their skills, knowledge, and capabilities. These resources span financial, intellectual, human, and technical aspects.

Tools	Tools are “informational resources designed to organize, summarize, and/or communicate knowledge.” They include any electronic or print resource that practitioners might use to plan, implement, or evaluate an intervention

3. Research Design

The research design comprehensively outlines the strategy and analytical approach adopted to integrate different components of our study, guiding the investigation of our research problem. It serves as a blueprint for collecting, measuring, and interpreting information and data (University of Southern California, 2024). The importance of research design lies in its function as a clear statement detailing what needs to be done to achieve research objectives and how it should be executed (Hussain, n.d).

To ensure comprehensive investigation, our research employs a blend of methods to gather data from secondary and primary sources. Secondary research involves analyzing existing data compiled by previous researchers to establish a foundational understanding of the topic (Mccrocklin, 2018). On the other hand, primary research involves gathering real-time, first-hand information about the characteristics, dispositions, and behaviors of research subjects and contexts (Longe, 2020).

For the collection of secondary data, we have focused on using both published and unpublished data from a variety of sources such as academic peer-reviewed journals, published books and reports, government agencies, educational institutions, websites and articles. While for the collection of primary data, we have selected semi-structured interviews and surveys as our chosen methods.

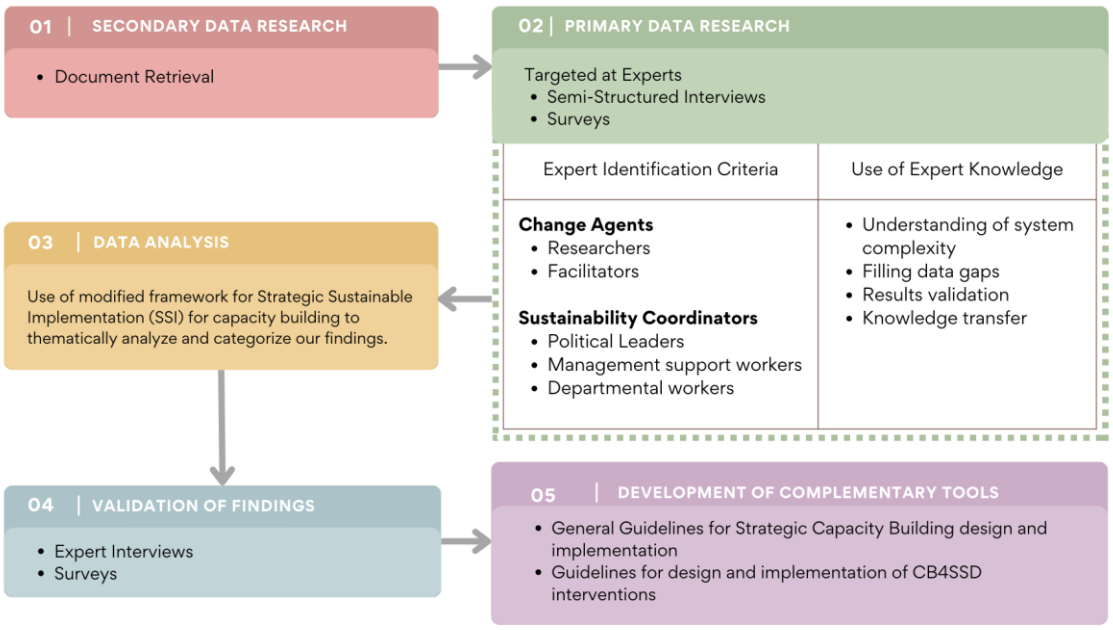

Figure 3.1. Research Design showing the methods and flow of research process.

3.1. Phase 1: Data Collection

3.1.1. Secondary Data Research

The use of secondary data sources was instrumental in shaping our background research. We leveraged these sources to gain a comprehensive understanding of the existing landscape surrounding our study topic and synthesize key insights that enriched our research foundation. By analyzing diverse secondary data sets, we were able to modify our conceptual framework and adapt a definition for CB4SSD that encapsulates the evolving discourse in the field.

Our approach to secondary data collection involved the following steps:

Document retrieval

- Developing search queries and searching databases: We initiated our process by developing search queries and exploring databases. These queries, formulated with keywords, phrases, and Boolean operators related to our research questions, were used to retrieve relevant documents from academic databases such as summons, Scopus, Google Scholar, and other digital resources. Adjustments were made to these queries as needed to refine our search.

- Review and Acquisition: Upon obtaining search results, we reviewed abstracts, titles, keywords, and conclusions to identify potentially relevant documents. Full texts of these documents were then acquired for further examination, focusing on those providing pertinent information aligned with our research questions and corroborated by multiple sources to enhance reliability.

3.1.2. Primary Data Research

We utilized primary research methods to address the research question employing semi-structured interviews and surveys with experts (see expert identification criteria in Table 2). Our aim with these methods was to investigate the following:

- How do different stakeholders understand and perceive the role of capacity building in supporting sustainability transitions within municipalities, and what strategies can be employed to engage with them effectively and responsively?

- What methods have proven effective? i.e. what are the preferred formats and methods for capacity building programs among municipal actors, the most effective modes of engagement for stakeholders, specific indicators of success for capacity building efforts, and the suitable approaches to monitor and evaluate the impact of these interventions.

- What are the observed needs and strategies for enhancing strategic sustainability competence for collaboration among stakeholders in sustainability projects, SSD literacy within organizations, the impact of enhanced SSD literacy on sustainability work, and the concept and methods of "inner capacity development" in strategic sustainability, including effective tools or strategies for its integration into capacity building efforts.

- How to tailor capacity-building interventions for sustainable development efforts within municipalities by exploring how to match interventions with the diverse actor needs, assess and address learning and skills development requirements, introduce new sustainability knowledge effectively, and determine the time, effort, and resources stakeholders are willing to commit for successful capacity-building outcomes.

Surveys and semi-structured interviews allowed for direct engagement with stakeholders, with surveys enabling data collection from a wide range of experts and interviews facilitating in-depth exploration of key topics, addressing knowledge gaps and providing nuanced insights into capacity building for strategic sustainable development.

We targeted experts engaged in sustainability transition work within municipalities and regions. We aimed to focus on both sustainability leaders and planners who work in municipal, corporate and civil society organizations, as well as knowledge mediators that work with them in the implementation of change, to ensure that our findings were a balance between inside and outside perspective.

Expert Identification Criteria

Expert Identification Criteria

Main Category	Sub Elements/Groups	Descriptions
Sustainability Practitioners that work in and with municipalities (Internal & External).	Municipal Sustainability Coordinators (Internal) Change Agents (External)	Sustainability Practitioners: a professional who works to advance sustainability in organizations and communities (Bennett et al. 2013)
Internal Experts (Municipal Sustainability Coordinators)	• Political Leaders • Administrators and Managers • Departmental workers	Professionals who work within municipal organizations who are responsible for structuring, integrating, organizing and coordinating sustainability transition work(Quitzau et al. 2022).
External Experts (Change Agents)	Knowledge Mediators • Researchers • Facilitators • Consultants Sustainability Leaders and Planners in Corporate and Civil Society Organizations • Leaders • Administrators, Managers and Coordinators • Departmental workers	Professionals who influence & shape sustainability transition process through knowledge production and/or change process facilitation, as well as those who collaborate to drive change (Clark and Dickson 2016 and Van Poeck, Læssøe, and Block 2017).

Figure 3.2. Expert Selection Criteria for Primary Data Research.

Engaging experts bolsters research relevance, validates findings, and bridges knowledge gaps (Drescher et al., 2013). it enables the transfer of expertise knowledge to non-experts. (Perera, Ashton Drew, and Johnson, 2012). Targeting these experts for primary data collection grounds our study in practical experience and ensures contextually-relevant insights. It also facilitates

the transfer of their expertise and insights to non-experts who may not have the same level of specialized knowledge through the use of our research or the resulting support tool.

Use of Expert Knowledge

We have identified 4 key areas in which the use of expert knowledge will be beneficial to our research process based on the 10 stages of expert knowledge utility by Drescher et al. 2013.

i) System Complexity: Expert insights enhance our understanding of the intricate factors influencing sustainability transitions in municipalities and regions.
ii) Data Gaps: Expert interviews and surveys help fill knowledge voids, complementing secondary data analysis and providing a nuanced perspective.
iii) Results Validation: Feedback from experts authenticates our findings, bolstering the credibility of our research outcomes.
iv) Knowledge Transfer: Engaging with sustainability coordinators aids in transferring expert insights to non-experts, facilitating practical solutions for sustainability challenges.

Semi-Structured Interviews

This approach proved efficient in gathering insights into previously unconsidered issues. It also significantly expedited the data collection process, especially when interviewing experts representing larger groups. This made semi-structured interviews all the more suitable for us. However, the semi-structured format necessitated more resources for analyzing the extensive information obtained during the interviews.

Our semi-structured interview process was guided by the following steps:

- Step 1 (Expert selection): Using the categories outlined in our expert identification criteria (see table 2), we selected 15 experts for our interviews.

- Step 2 (Mode of engagement): Our interviews were conducted online and in person, depending on the availability and convenience.

- Step 3 (Time allocation): We allotted a one-hour timeframe for each interview.

- Step 4 (Assigning team roles): One team member led questioning while others took notes and identified areas for further probing, asking follow-up questions if necessary.

- Step 5 (Interview transcription): As a result of the sheer amount of information that comes from in-person interviews and the considerable amount of time and effort required to collect, organize, and analyze data, we recorded each interview and used Microsoft words inbuilt transcribing tools for transcribing (in alignment with GDPR regulations).

- Step 6 (Analyze data): The data gathered was then analyzed using our conceptual framework.

- Step 7 (Ensuring Data Protection): To ensure compliance with both EU GDPR regulations and the universities' data protection laws:

    a. A digital consent form was created with Microsoft forms and shared with respondents ahead of the interviews. The consent form highlighted the specifics surrounding our interview process, including how we intended to process, store and use the data collected. Emphasis was placed on respondents' rights to withdraw at any stage.

    b. Each interview, whether conducted in-person or online, was meticulously recorded and securely stored on the universities' provided Microsoft OneDrive platform. Access to these recordings remained restricted solely to the research team, ensuring confidentiality and adherence to data protection standards.

    c. We ensured anonymization of any interview data we used in our research process, to further safeguard the identities of respondents.

    d. Following the conclusion of the research, all recorded materials were promptly deleted, while transcribed data underwent meticulous coding to eliminate any residual identifiers that could potentially lead to the identification of respondents.

Surveys

Our web-based survey, administered using Microsoft Forms, followed these steps:

- Step 1 (Select and contact experts): 60 respondents were selected and contacted via email.

- Step 2 (Send reminders): Reminders were sent out to those who did not respond after the first 5 working days of distributing the forms.

- Step 3 (Follow-up for clarity): Follow-ups were conducted with selected respondents, either to gain further insight into their responses or ensure they did not misunderstand our question. This ensured reliability of the data we gathered.

- Step 4 (Analyze data): The data gathered was then analyzed using our conceptual framework.

- Step 5 (Ensuring Data Protection): To uphold compliance with both EU GDPR regulations and university data protection laws:

    a. A consent form was introduced at the outset of the survey outlining in detail the procedures for data processing, storage, and utilization. Emphasis was placed on respondents' rights to withdraw at any stage.

b. To minimize our collection of private information, we restricted our collection of information to focus solely on the participants' job titles and place of employment.

c. We streamlined the number of questions asked as much as possible to meet the objectives of our research and to avoid collecting sensitive or unnecessary information that is not directly relevant to our study.

d. We ensured strict control of the information collected from respondents, limiting access to the research team only.

e. We anonymized the information we collected from the survey in order to safeguard respondents' identities and ensure that all data extracted from the survey remained devoid of personal identifiers.

f. Due to our research being a part of a larger ongoing research and the possible need for the data we collected in the near future, we assigned coded identifiers to any information that could potentially reveal individual identities (specifically place of employment). Following data analysis, such identifiers were promptly deleted from records to uphold respondent confidentiality.

We took precautions to address four common types of errors associated with surveys (Dillman, Smyth, and Christian 2014) – (i) coverage error which refers to the difference in results when stakeholders who might not be directly relevant respond to our survey; (ii) sampling error which refers to the difference in results when our survey is sent to some of the relevant stakeholders as opposed to all; (iii) non-responsive error, which represents the quality of results when some of the chosen relevant stakeholder respond as opposed to all; and (iv) measurement error, which occurs as a result of inaccurate or false responses to the survey questions.

To mitigate each of these errors:

- **Coverage Error:** We targeted relevant experts identified according to specific criteria and employed multiple channels for distribution.

- **Sampling Error:** We ensured diversity by selecting experts from various municipalities and regions.

- **Non-Responsive Error:** We sent reminders and used multiple communication modes to increase response rates.

- **Measurement Error:** We piloted the survey and meticulously reviewed responses for inconsistencies.

These strategies were employed to enhance the reliability and validity of our research results.

3.2. Phase 2: Data Analysis

We analyzed our research findings thematically using our adapted Sustainable Implementation Strategy (SSI) framework for capacity building (*refer to figure 2.4*). This allowed us to present our results in a coherent and methodical manner.

Our modified framework describes capacity-building strategies across three levels—strategic, normative, and operational—and further categorizes them into seven perspectives: strategy and goals, values, stakeholders, leadership, processes, resources, and tools. This structured approach offers flexibility and comprehensiveness, ensuring a systematic exploration of key components across different levels.

By employing this framework, we offer a thorough and organized presentation of our research findings, aligning with current best practices in capacity-building interventions. This enhances the clarity and coherence of our analysis, facilitating a deeper understanding of the factors contributing to successful capacity-building implementation.

Our data analysis process involved two stages:

i) **Deductive Coding:** The data analysis process began with a deductive coding approach to identify patterns and themes within the interview responses that aligned with the predetermined conceptual framework (see *figure 2.4* in chapter 2). The research team reviewed the interview transcripts and systematically categorized the responses into the thematic framework's thematic clusters to ensure that the initial categorization of the data was firmly grounded in the study's conceptual foundations.

ii) **Inductive Clustering:** Following the deductive coding, an inductive clustering analysis was conducted. This allowed the research team to further explore and identify any additional emerging themes that were not initially captured by the conceptual framework. The inductive analysis enabled a more comprehensive understanding of the factors that should be considered for strategic capacity building design and implementation.

3.3. Phase 3: Validation of Findings

We conducted expert interviews and surveys to understand the opinions of and receive their feedback on the factors/conditions for effective and responsive capacity building. We conducted interviews and distributed survey questions online and in person.

Conducting expert interviews and surveys offered valuable insights into the factors and conditions identified for increased success in our research. This approach ensured a thorough understanding of stakeholders' opinions and feedback. Conducting interviews both online and in person enhanced accessibility and facilitated diverse participation, enriching the validation process. By triangulating data from various sources and perspectives, our mixed-method approach strengthens the validity and reliability of our research findings. This comprehensive strategy allows for a more nuanced analysis of the factors and conditions influencing effective capacity building.

3.4. Phase 4: Development of Complementary Tool

We incorporated our validated findings into the design of a complementary tool aimed at providing general guidelines/considerations to facilitate the development and design effective and responsive strategic capacity building efforts and specific guidelines for CB4SSD interventions in order to enhance strategic work for sustainability in municipal and regional contexts.

4. Results

This chapter provides a clear and coherent presentation of the research insights. The findings of this study are presented in two broad sections. The first section outlines general factors to be considered for strategic capacity building design and implementation, while the second section offers more specific considerations for capacity building for strategic sustainable development (CB4SSD). This organization allows the reader to grasp the broader implications of the study's findings while also appreciating the distinct considerations for capacity building in the specific domain of strategic sustainable development.

4.1. Factors to Consider for Strategic Capacity Building Design and Implementation

This section presents our findings on the overarching factors relevant to the design and implementation of strategic capacity building efforts.

4.1.1. Establishing Common Language

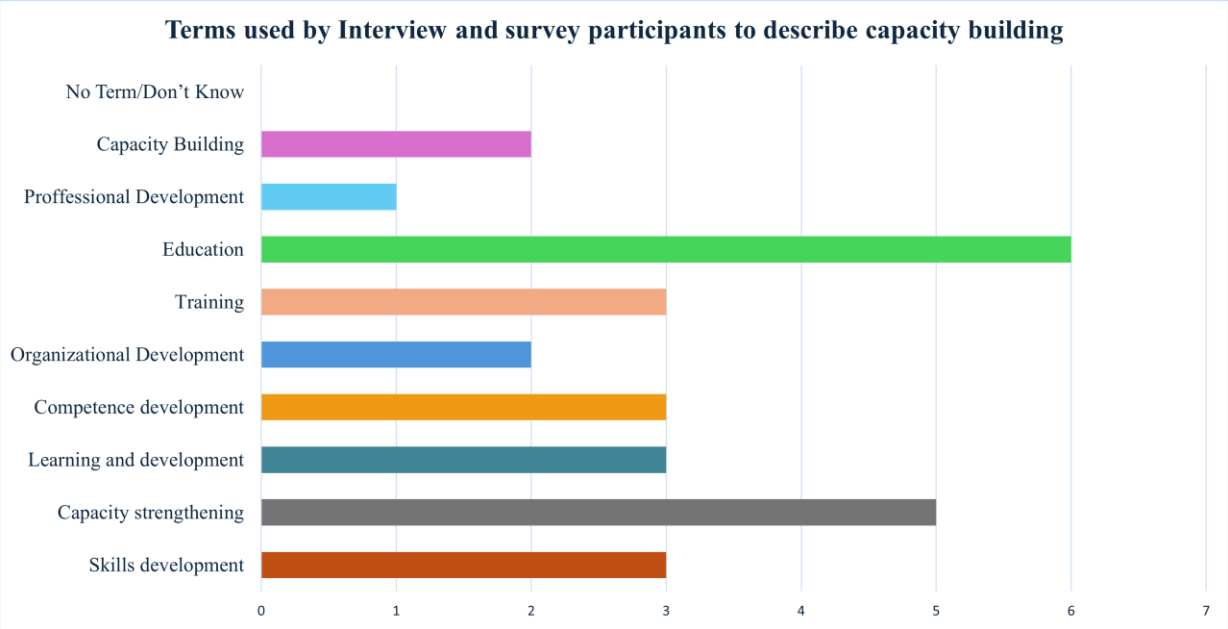

Figure 4.1. What term is used to refer to capacity building in participants' organization (interview and survey respondents).

4.1.2. Considerations to Enhance Strategic Capacity Building Design and Implementation

Figure 4.2. Considerations to Enhance Strategic Capacity Building Design and Implementation.

Framework for Sustainable Strategy Implementation for Capacity Building		Considerations to enhance strategic CB design and implementation
Values	Individual Level	• Passion and Commitment (trait of sustainability workers) • Grounded Worldviews
	Organizational Level	• Establish a collaborative structure. • Ensure Knowledge Transfer • Take a proactive stance to providing support. • Alignment with organizational goals • Channels for knowledge diffusion
	Network Level	• Channels for cross-sector knowledge transfer
Stakeholders	Coordination	• Prioritize common language
	Collaboration	• Create safe spaces to fail. • Establish common language and a common goal. • Participatory leadership theories • Practicing generative dialogue • Set clear targets and KPIs. • Develop a shared vision. • Establish a shared mental model. • Clearly communicate shared strategy • Issue-based stakeholder mapping/analysis. • Bottom-up approaches. • Stakeholder consultative forums
	Communication	• Contextually-relevant knowledge adoption and adaptation • Encourage diverse communication channels. • Strategies for giving feedback. • Non-violent communication strategies • Media engagement

Leadership	Inspirational Work	• Establish a contextually relevant definition of success
	Integration Work	• Power dynamics training • Encourage diversity of thought • Cultivating an environment of trust and psychological safety • Supportive structures for open communication
	Identity Work	• Inner capacity as a springboard for change • Resilience training/practices • Stress management training/practices. • Emotional Intelligence training • Self-awareness tools • Communication training • Develop an organization-specific inner capacity development framework
	Implementation Work	• Develop a balance between strategic and operational skills
	Institutional Work	• A balance of role-based, skill-based and knowledge-based training
Strategy and Goals	Orientation (Need-specific/Generalized)	• Diverse skills training • Need assessment. • Flexible program design • Goal-based method selection • Role-dependent training intensity • Employee-specific learning and development plan
	Dosage	• 70:20:10 Learning Model • 1-hour 'lunch and learn' sessions • 15-month training • 8-10 weeks training with 4-hour weekly sessions • 10–15-minute daily microlearning sessions • 4-weeks online training • 4-day motivational training • 3-day conference • 20% Rule • 90-minute quarterly meeting sessions • Monthly peer learning sessions • 3-hour monthly sessions • 2-day quarterly conference • 10 days/year

		• 4-hour biweekly sessions • 50/50 Rule
	Delivery Mode	• In-person • Online • Digital/web education (live or pre-recorded sessions) • Interactive education
		• Mobile learning • Video-based learning • Printed learning materials • Blended delivery • Game based learning
	Collaborative Design	• Fostering a sense of ownership • Contextualizing knowledge • Highlighting benefits • Connection to personal goals
	Proactive Design	• Design for Specialized Knowledge • Understand needs and pain points. • Build trust. • Establish and cultivate interest. • Contextual relevance • Outreach programs
Process	Engage Stakeholders	• Maintaining a relationship with key stakeholders • Need for mentorship. • Use of context specific language/ Contextual adaptation of language • Good communication skills • Secure stakeholder buy-in • Ensure leadership support. • Empower through ownership. • Communicate a shared sense of responsibility. • Relatability • Identify Allies
	Assess Contextual Needs and Assets	• Conduct a Pre-baseline (contextual value), Baseline and Endline Assessment • Pre-intervention communication • Feedback integration • Customization over Prescriptiveness • Empathetic engagement • Dialogue and collaboration. • Value offering

		• SWOT analysis • Cultural awareness • Annual employee-specific needs evaluation • Evaluate organizational performance gaps.
	Develop Capacity Building Strategy	• Time and cost efficiency • A designated space for capacity building • A process-driven perspective • Design for value creation. • Tailoring the message for the specific audience • Existing learning networks • A balance of formal and informal training methods • Process or function-specific competencies. • Knowledge review sessions • A structured employee-specific education matrix • Plan for a contextually relevant blend of knowledge transfer approaches. • Experiential learning design • Co-creative planning and implementation process • Designated capacity building leadership role • Setting strategic short, mid and long-term goals for capacity building efforts • Articulate anticipated short, mid and long-term results. • Inclusive policies for equal capacity building access
	Implement	• Curated/on-going learning approach. • Monthly check-in sessions • Support personal goals and employee mobility. • Capacity building journey map
	Integrate	• Create a Rewards/Incentives System • Develop and communicate a strategic business case. • Significant period for practical application • Dialogue as a shared learning opportunity
	Evaluate	• Transparent communication • Post-training assessment cycles • Success evaluation • Empowerment evaluation • Quantitative evaluation (participation or completion metrics) • Training-specific outcome-based assessment. • Recognition and Celebration

		• Sharing success stories • Short, mid and long-term performance reviews • Independent auditing plan
	Sustain	• Building a robust knowledge ecosystem • Embedding post-training support in the funding structure • Robust accountability mechanisms to ensure continuity. • Train the trainer model
Resources	Financial	• Designated funding and resource allocation plan for capacity building • Create a values-based budget - plan a buffer budget for pro-bono capacity building projects. • Lobbying decision-makers • Secure long-term political support • Proportional/fair resource allocation
	Intellectual	• In-house learning and development platform
	Human	• Embedded capacity building policy • Encouraging initiative for self-motivated learning • Adequate staffing for the learning team • Regular scheduled interaction with managers • Organization of a community of practice • Opportunities for both knowledge and skills development • Integrating employee development time into the organizational plan
Tools	Training	• Communities of practice • Lunch and learn sessions. • Networking meetings/events • Online Modules • Hybrid learning • Sharing best practices • Exposure visits • Screaming workshops • Professional networking events • Inspirational talks and events • Lectures • Success story examples • Inquiry-based learning

		• Self-paced learning • Conferences • Mini courses • Peer-to-peer learning/discussions • Dialogue-based learning • Personal coaching and mentoring • Role-playing • Presentations • Hands-on training/Learn-by-doing • Flipped Classroom
		• Reflection based learning • Question storming • Workshop • Online Webinars • On-site training • Train the trainer approaches • Learn-Do-Share learning model
	Technical Assistance	• Knowledge theories • Workshops • Webinars • Use of case studies • Group problem-solving activities • Social labs • Democracy labs • Innovation labs
	Assessment and Feedback	• Feedback Surveys • Follow-up emails • Performance review (conversation and survey)

4.1.3. Enablers and Barriers of Capacity Building Implementation

Research Question: What are the main barriers to implementing effective capacity building programs in your organizations?

Table 4.2. Enablers and Barriers of Effective Capacity Building Implementation

Enablers	Barriers
• Maintaining a relationship with key stakeholders • Use of context- specific language • Embedding sustainability within organizational structure • Presence of Leadership Support • Organizational readiness for change • Financial Autonomy • Enabling Leadership • Changes in regulations • Concrete organizational vision • A strong business case	• Lack of Time • Selective access to capacity building opportunities • Lack of awareness that capacity building is needed. • Deliverables/ Outcome-oriented Mindset • Limited resource availability • Perceived irrelevance of capacity building • Changing political regime • Inconsistent funding cycles • Fluctuating organizational mandate • Conflicting organizational priorities • Organizational size and stage • Perception of capacity building as extra workload • Lack of organizational and employee motivation • Organizational inertia • Resistance to change

Research Question: What is the most common barrier to implementing effective capacity building initiatives?

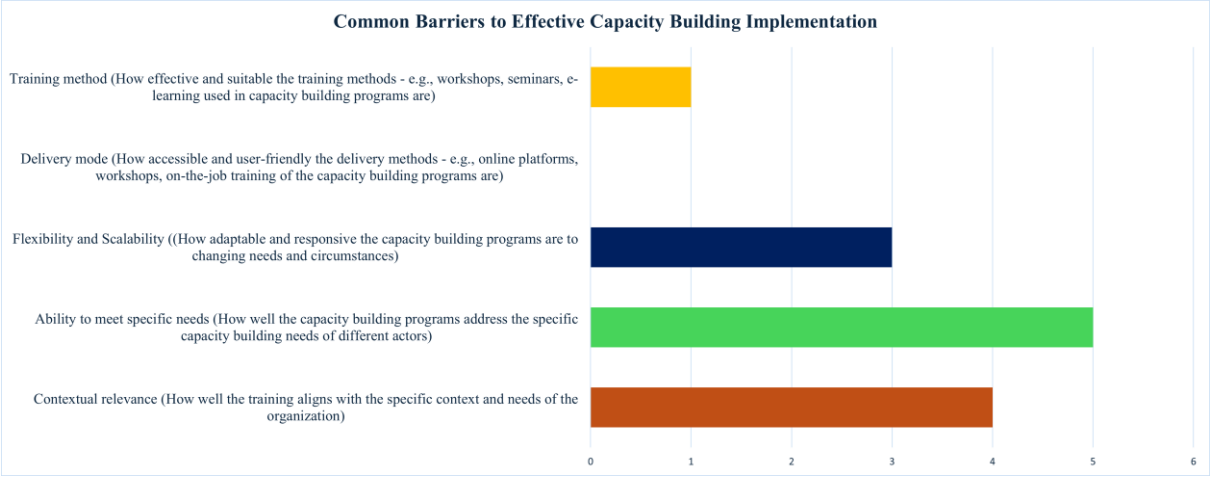

Figure 4.3. Common Hindering Factors to Effective Capacity Building Implementation (Survey Respondents).

4.1.4. Outcomes of Effective Capacity Building Implementation

Table 4.1. Outcomes of Effective Capacity Building Implementation.

Outcomes of CB Implementation	Code/Sub-theme
Ability to hold complexity.	Values/Personal
Improved cross-sector/inter-organizational collaboration. Robust leadership and organizational culture. Positive Employee Attitude, Mindset and Will. Community Transformation.	Values/Organizational
Values-action alignment. Confident and authentic communication.	Leadership/Identity Work

Improved ability to embrace diversity. Improved contextual intelligence. Evidence-based approach to work. Ability to influence others to reach a common goal.	Leadership/Implementation Work

4.1.5. Motivating Factors for Capacity Building Engagement

Research Question: What factors make a mode of engagement/delivery more effective for stakeholders in capacity-building initiatives?

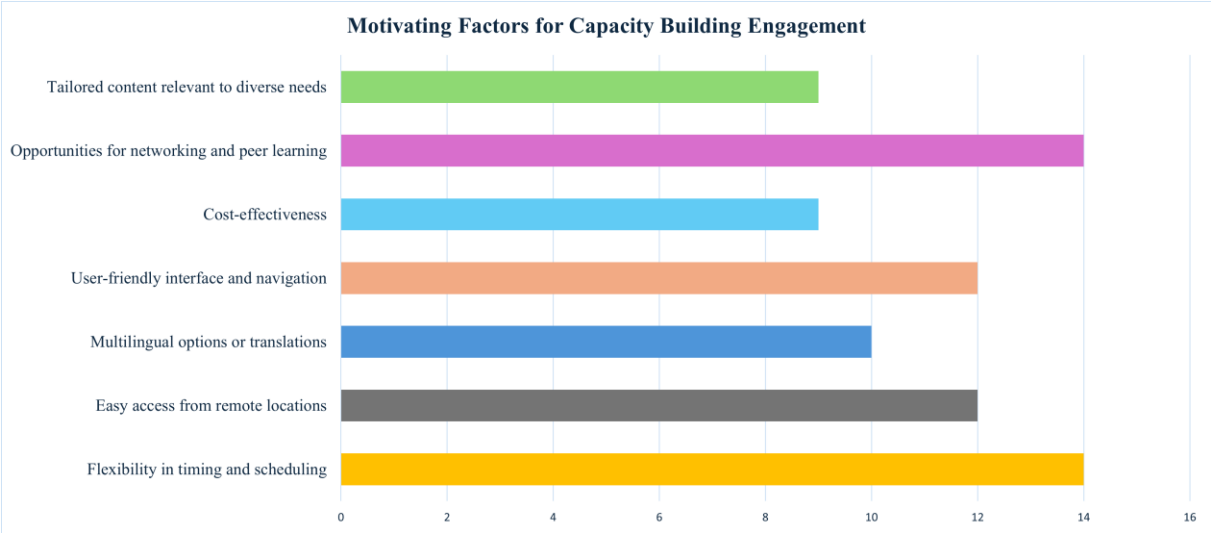

Figure 4.4. Motivating factors for capacity-building engagement.

Other motivating factors identified from our interviews include the following:

Table 4.2. Motivators of Capacity Building Engagement

Motivating Factors	Excerpt from Interview
Personal commitment to continuous learning	‘I'm definitely a lifelong learner’. "I'm the kind of person that really needs to achieve new knowledge all the time."
	‘I think even though we are a very big organization, we still have lots of entrepreneurial mindset. And if you see the problem, then you need to suggest a solution and then we take it forward. We are not the organization that is only about this is your task, this is your protocol.’
Innovation-driven/solution-oriented organizational culture	My job is partially also keeping myself up to date, like with the latest research saying what's going on in the rest of the world that will affect us in the municipality. Other departments are mostly responsible for keeping the work going here and now. But my job is to look ahead.’
Future-orientation	The legislation is coming now. But we can see that some of our customers asked us for science-based targets.
	“Right now, I'm doing a course and it's an app where you do educational activities. You have like 10 minutes. I really like that way of learning things as well and it's very convenient.”

Demand for change Convenience Maintaining organizational competitive advantage	"You never stop. Training will never stop. It will continue. All the time. Every day otherwise we are lost on the market. If we are not in the forefront, we are lost."

4.1.6. Indicators of Success

Research Question: What do you identify as specific indicators of success for capacity building efforts?

Figure 4.5. Indicators of Capacity Building Success

4.1.7. Skills/Knowledge Gaps and Opportunities

Research Question: What are the challenges you currently face in your sustainability role?

Table 4.3. Existing Gaps for Capacity Building.

Existing Gaps/Opportunities for Capacity Building	Excerpts from Interviews
Stakeholder Management	I mean, there's so many actors involved in the sector that we must work with. So, the challenge that we have right now is to get all of them on board, then the next phase will be to implement.
Making Strategic Trade-offs	So I think our biggest challenge is to know what the most important thing is to focus on. It's like where do you start and where do you end and is this project more important than that project.
Sustainability Data Analysis and Reporting	Our work is knowledge and data driven. We always need to have facts before we do or recommend something to our customers. We need to have knowledge training in this field because we see here, we have a lack of knowledge to be able to fulfill the loss in this area perhaps. We require regular training to be able to make sense of knowledge and to be able to present facts.
Lack of Systems Thinking	So, it's the thinking that is not systems thinking. I think that is the biggest barrier that I come across.
Innovative Strategies for Capacity Building	The world has changed, technology, especially digital has evolved a lot. What will be the

	innovative or creative way for us to design and implement capacity building activities?
Community Engagement	So, we can work with the locals, which are super important which we have not done so much to include them in. That means also many different stakeholders that we have to work with. So that is kind of the challenge that we have right now is to get all of them on board.

Q: How much time and effort will you be willing to commit to continuous capacity building?

Table 4.4. Time and effort participants are willing to commit to capacity building.

Participants Commitment to Capacity Building	
Time	**Effort Statements**
8-10 weeks training with 4-hour weekly sessions	Statement 1: Learn do, learn do and not alone. Statement 2: If I was to decide, I would use as much time as possible because there's so much to learn. Statement 3: It's really a learning process for me, so right now I'm putting in 20% of my work week... Statement 4: I do think the time period needs to be over longer time period, it's not enough for a month, probably years that you have to come. Statement 5: I think in my optimal life. I put in my calendar now actually one hour per week where I would like to do some kind of learning... Statement 6: But for me, a community of practice, it leaves and allows for these richer conversations and it integrates the learning and it creates a safe place for
10-15 minute daily microlearning sessions	
4-weeks online training	
4-day motivational training	
3-day conference	
20% Rule (20% of work time – 1 day every week)	

90-minute quarterly meeting sessions	people to ask big kind of questions and share knowledge across the organization.
Monthly peer learning sessions	Statement 7: So the challenge is definitely time. There's just never time for really focusing on that knowledge. Statement 8: If I take all the scanning I do, let's say it will take me 20% of my work time to scan, read papers, read legislations, follow up how the wind is blowing. Statement 9: I'm still learning on my job and so I don't take many online learnings just because they don't answer my needs right now. Statement 10: It's tied to the budget they have for sustainability. The more budget you have, the more hours you can dedicate. Statement 11: Depending on the subjects, depending on how much value it will create for my work and then I have to be in an agreement with my boss that she sees the same value as I do. Statement 12: I think it's really important to have an ongoing journey or even a once a month check back in if you've got questions or I don't know something like that.
3-hour monthly sessions	
2-day quarterly conference	
10 days/year	
4-hour biweekly sessions	
50% of work time	

4.2. Specific Considerations for CB4SSD Interventions

This section provides our research findings on more specialized considerations specific to three core competency areas of Capacity Building for Strategic Sustainable Development (CB4SSD): Collaborative and Participatory Leadership, Strategic Sustainable Development and Inner Capacity Development.

Q: What tools and methods have proven effective for improving capacity for collaboration, introducing new sustainability knowledge and inner capacity development?

Table 4.5. Activities and Tools for CB4SSD Focus Areas (Interview Participants).

Capacity Building Tools/Activities			
CB4SSD Focus Areas	**Improving Capacity for Collaboration**	**Introducing New Sustainability Knowledge**	**Inner Capacity Development**
Tool/Activity	Exchange learning visits	Game-based Learning	Leadership development program/training
	Seminars	Video-based Learning	Self-Awareness Trainings
	In-person workshops	Democracy Labs	
	Lunch and Learn Events	Social Labs	
	Personal Coaching	Innovation Labs	
	Role-Play Training	Subjective Questioning	
	Visioning Activities	Presentations	
	Stakeholder Mapping Workshop	Workshops	
	Joint Planning and Strategy Session	Communications Campaigns	
	Feedback Training	Practice-oriented Activities	
		Microlearning activities	

	Non-violent Communication Training	Short and Long Courses	
		Dialogue-based learning	
		Annual Conferences	
		On-going Training Events	
		Online Courses	
		Peer-Peer Learning Activities	

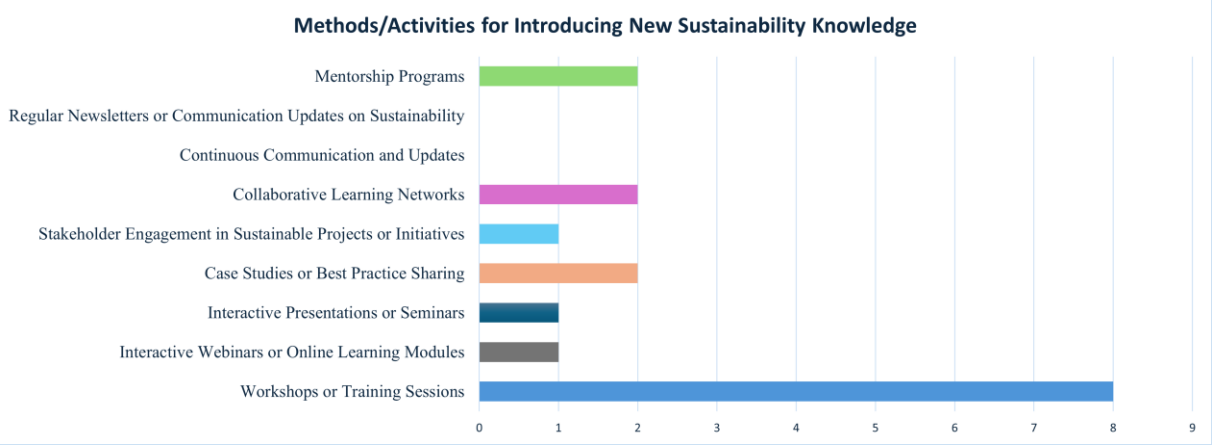

Figure 4.6. Effective Methods/Activities for Introducing New Sustainability Knowledge (Survey Respondents).

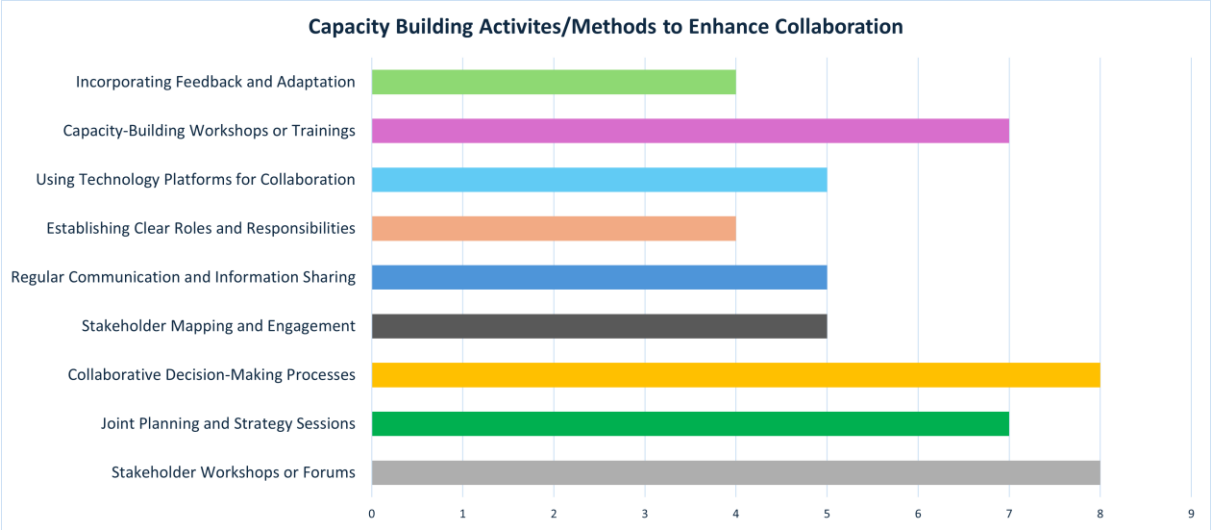

Figure 4.7. Effective Methods/Activities for Improving Collaborative Capacity.

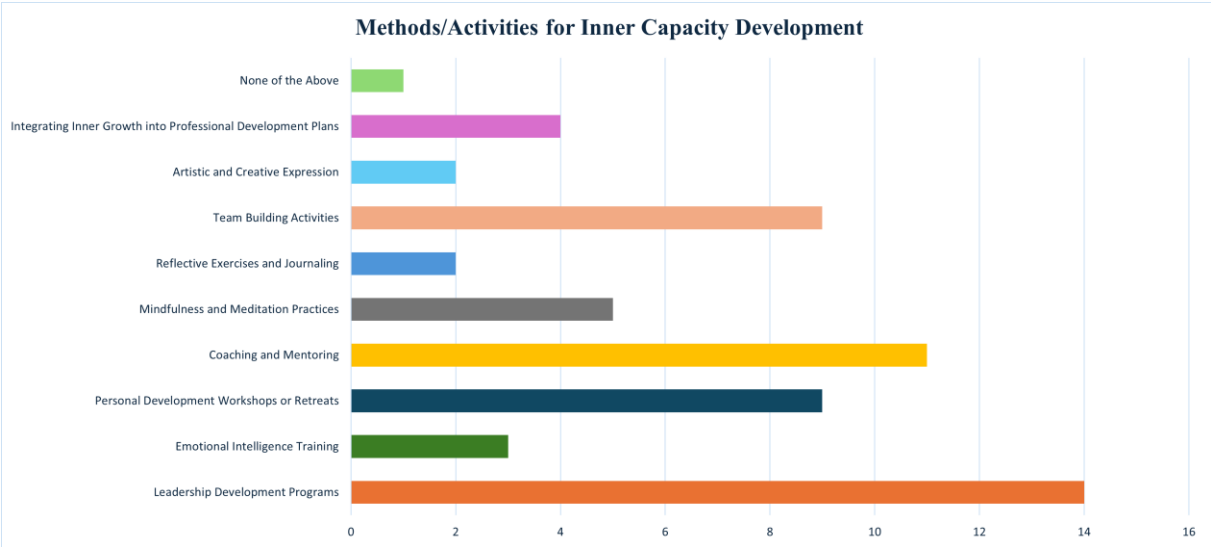

Figure 4.8. Effective Methods/Activities for Inner Capacity Development.

Research Question: In terms of the 3 area(s) of capacity building for SSD mentioned below, which areas have you observed that require more capacity building effort within your organization?

Table 4.6. Participants Priority Rankings of CB4SSD Core Competence Areas.

CB4SSD Focus Area Rankings			
CB4SSD Focus Area	Participant Ranking		
	Top Priority	Moderate Priority	Low Priority
Collaborative and Participatory Leadership	✓ ✓ ✓ ✓ ✓ ✓	✓ ✓	✓ ✓ ✓ ✓
Strategic Sustainable Development (SSD) Knowledge	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓	✓ ✓
Inner Capacity Development	✓ ✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓ ✓ ✓

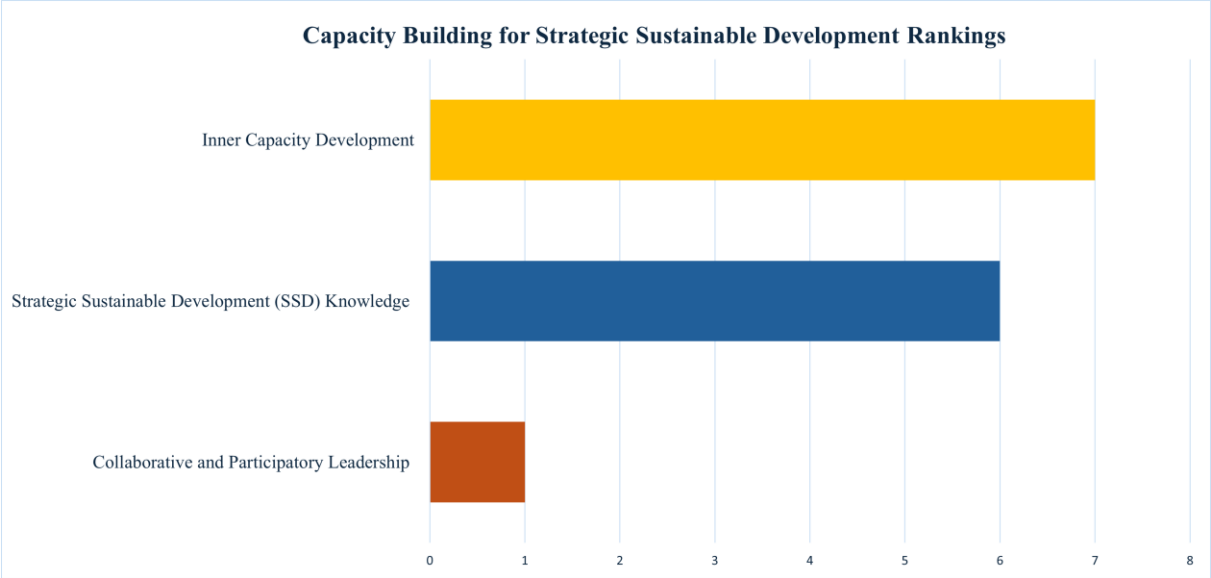

Figure 4.9. Participants Priority Rankings of CB4SSD Core Competence Areas (Survey Respondents).

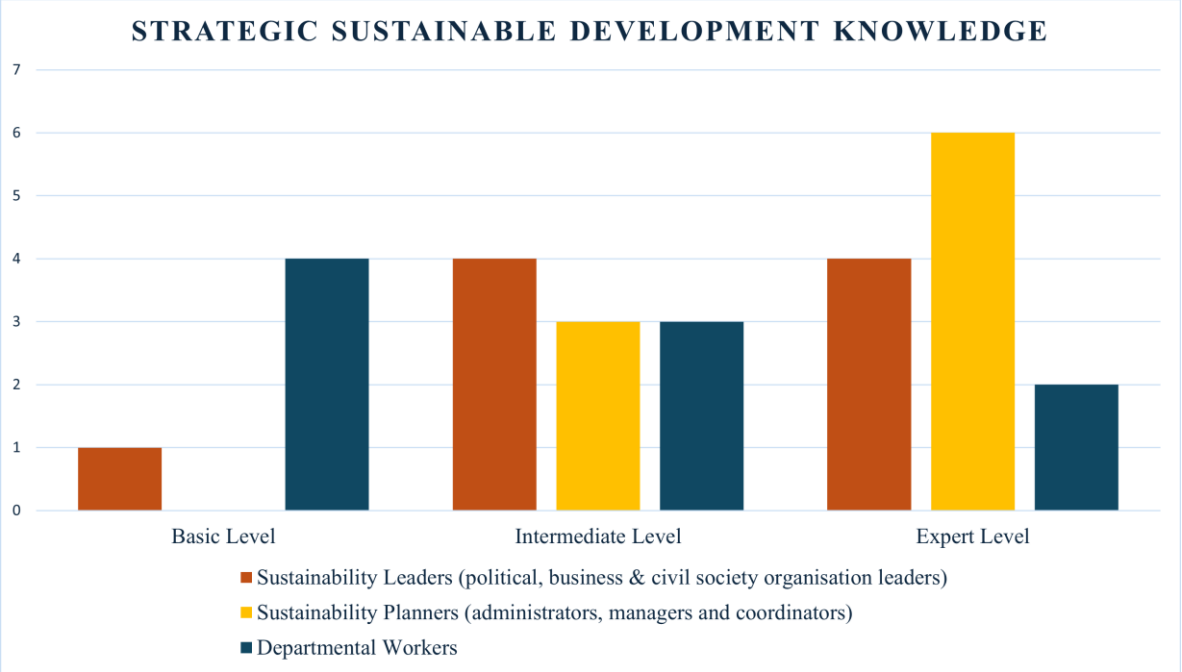

Figure 4.10. What level of knowledge about SSD should these groups of actors have?

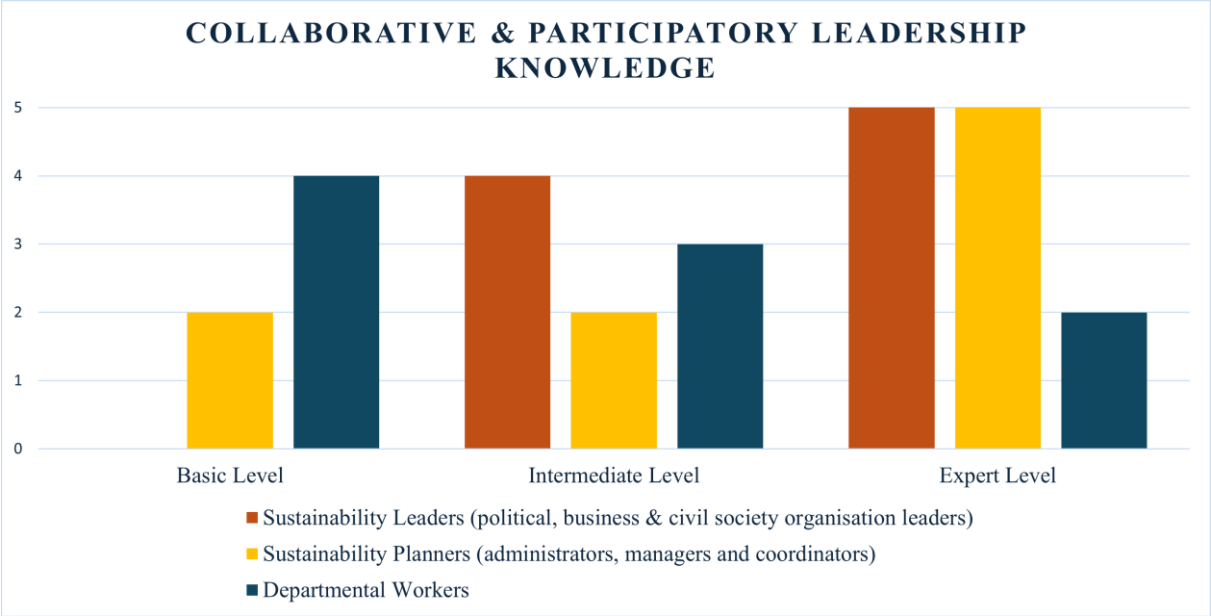

Figure 4.11. What level of knowledge about Collaborative and Participatory Leadership should these groups of actors have?

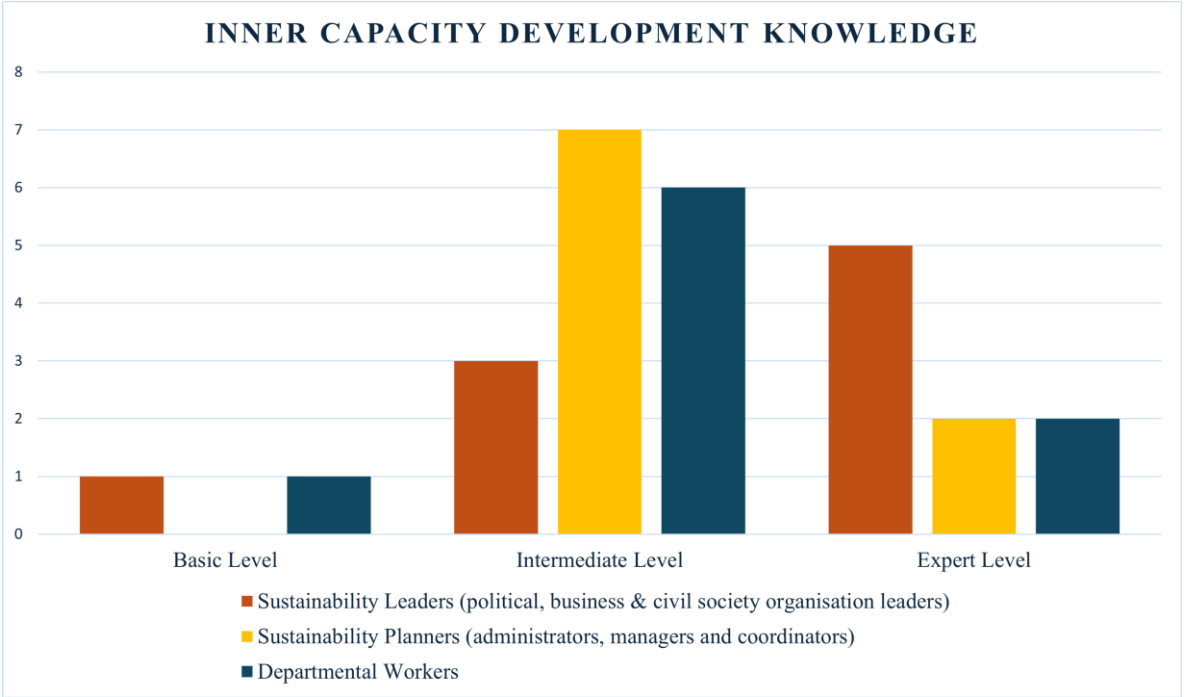

Figure 4.12. What level of knowledge about Inner Capacity Development should these groups of actors have?

5. Discussion

In this chapter, we provide our reflections on our research findings as they pertain to our overarching research question and research objectives. We also offer our reflections on our research process, employing a critical lens to explore the strengths and weaknesses of our research. And finally, we present our future recommendations or actions for further research.

5.1. Reflections on Research Findings

In exploring our research question, we grouped our interview and survey questions into four broad categories which we determined as relevant for achieving our research goal. Our questions explored the issues of common language, the requirements for effective, responsive and transformative capacity building design and implementation respectively. The modified conceptual framework introduced in Chapter 2 (*figure 2.4*) played a pivotal role in guiding the sense making process of our data analysis phase to determine key considerations for enhancing a strategic approach to capacity building. Consequently, the discussion of the research findings addresses all of these critical elements that have guided the investigative efforts.

5.1.1. General Considerations for a Strategic Approach to Capacity Building Design and Implementation

Common Language

The need for common language is considered a crucial factor for establishing a shared mental model and a baseline for working towards a common goal. To this end, we began our investigation by gauging participants' understanding of the term "capacity building" to identify and mitigate conflicting conceptualizations that could undermine the integrity of our research findings. Our inquiry revealed that the primary source of discrepancy among most participants was rooted in terminology differences, as they generally exhibited a common substantive understanding of the concept of capacity building.

The combination of our interview and survey results signified that the common language used by most of our research participants is ‘Education’. Only 2 of our 28 participants use the term ‘capacity building’, as evident in Chapter 4, *Figure 4.1.* Although we were able to establish common understanding on the term ‘capacity building’, a recurring misunderstanding we had to address was with our use of the phrase ‘municipal contexts’ in our research title. Several participants felt the need to inform us that they ‘don’t work in a municipality’. This leaves us with the distinct impression that a reader might also struggle to understand our choice of language in this way. Our research distinguishes between a municipality as an organizational entity and as a geographical entity. The key difference is that the former pertains to the administrative and governance structures, while the latter refers to the physical space and territory being governed. These two distinctions are closely linked as the municipal government exercises its powers and provides services within the boundaries of the geographical municipality. This emphasis on municipal contexts conceptualizes municipalities as avenues of more localized scaling of strategic capacity building efforts aimed at supporting the success of sustainability transitions.

This understanding guided our research approach and decision to engage actors across various spheres, recognizing that the work of sustainability actors often extends beyond the confines of their individual organizations, contributing to the broader landscape of sustainability efforts within the municipal context.

Capacity Building Culture

Our interpretation of the findings of our study suggests that the common theme across participants' perspectives is centered on the considerations that point to the culture capacity-building efforts, rather than any specific activity or method. This section explores the prevalent 'cultural factors' that emerged from our analysis, framed within the seven perspectives outlined in the conceptual framework presented in Chapter 2 (*Figure 2.4*). We refer to "capacity-building culture" as the enabling factors and conditions that support the effectiveness, success, and continuity of capacity-building efforts, beyond the methods, activities, or content involved.

Values

The values perspective of our conceptual framework involves strengthening individual, organizational and network level capacity to bridge the value-action gap. At the individual level, self-motivation and self-determination emerged as foundational elements for initiating and sustaining strategic capacity-building efforts. At the organizational and network levels, participants emphasized the importance of cultivating a climate that values and rewards proactive behaviors, autonomy, support, and high-quality leader-employee relationships to foster employee proactivity. Notably, the organizational values sub-theme was more prominent in the responses, indicating that the most crucial factor for building capacity to bridge the value-action gap lies at the organizational level. Ultimately, building capacity at the values level begins with individual and organizational motivation and proactivity.

Stakeholders

The stakeholder perspective emphasizes the importance of enhancing collective collaborative capabilities and practices. Our research findings highlight several key factors that contribute to this objective, including the need for a culture of generative dialogue, the provision of safe spaces for experimentation and learning, and the use of contextually-relevant knowledge and language. These represent pre-requisite conditions and continuity factors for building collective capacity to facilitate transformative change processes, beyond training activities or methods. Together, these three conditions enable the "free flow of meaning" and the emergence of "new, shared understanding of reality" that leads to the revelation of "new knowledge" and the inspiration of "new action". The responses of participants largely centred on the collaboration sub-theme, which might suggest a shared yearning for those spaces of emergence that foster learning, collaboration and collective action.

Leadership

The leadership perspective highlights the importance of enhancing individual competencies and capacity to drive transformative change, with the five sub-themes aspiring to inspire a focus on holistic personal development aimed at fostering resilience. The findings predominantly offer considerations for the 'identity work' and 'integration work' sub-themes, suggesting an acknowledgement of the importance of both intra-personal factors (inner capacity, emotional intelligence, self-awareness) and collaborative factors (communication, trust, diversity) as

foundational and strategic competency development areas for individual actors engaged in driving transformative change processes. This indicates the need for a balanced approach to capacity building that integrates both tangible and intangible skills as crucial elements of strategic competency development.

Strategy and Goals

The strategy and goals perspective represents the importance of a well-defined approach to setting measurable objectives and establishing a clear roadmap to guide capacity-building efforts. Common threads in the participants' perspectives highlighted the significance of individualization, flexibility, and alignment with organizational goals, advocating for a learner-centric approach to training and development, where programs are designed to accommodate diverse needs and preferences while fostering continuous growth and improvement. Key considerations border on a culture of personalization (acknowledging and catering to individual preferences, needs, and learning styles), interactive engagement (employing interactive and varied approaches to keep learners engaged and motivated), relevance (ensuring that content is relevant, relatable, and applicable to learners' lives and goals) and flexibility (providing multiple delivery options and adapting to different learning contexts and environments).

Process

The process perspective refers to the actionable steps involved in driving capacity building efforts, from initiating to sustaining them. The prevalent cultural considerations highlighted by participants emphasize the need for leadership support, an inclusive approach that instils a sense of ownership, contextual adaptation and customization for audience relevance, integration of formal and informal training methods, continuous evaluation and improvement, establishing mechanisms for accountability and a focus on sustenance and long-term impact rather than short-term outcomes. In essence, the process of designing and implementing a strategic approach to capacity building requires a comprehensive, context-specific, and evidence-based approach that engages stakeholders, sets clear goals, utilizes a variety of training methods, and incorporates continuous evaluation and feedback to ensure long-term, effective outcomes.

Resources

The resource perspective encompasses the necessary structures, assets and support systems that are required for the deployment of capacity building efforts. On the financial resource sub-theme, our findings centre on a values-based and long-term culture of resource planning and allocation. On the aspect of ensuring a long-term approach, considerations that involved lobbying or securing long-term commitment from decision-makers were discussed. While on the values-based aspect, participants spoke to considerations such as proportional/fair resource allocation across organizational departments and allocating resources for pro-bono capacity building projects. These efforts are crucial for ensuring that the organization has the financial backing necessary to invest in capacity building activities and sustain them over time, as well as potentially contribute to improving collective capacity beyond organizational boundaries.

The intellectual and human resource considerations focus more on contextually-relevant infrastructure, internal mechanisms and practices that facilitate capacity building within the organization, such as an in-house learning and development platform, an embedded capacity building policy, and adequate staffing for the learning team, encouraging self-motivated learning, regular interaction with managers, and the organization of a community of practice.

This suggests that effective capacity building requires building the right organizational infrastructure and practices that are essential for creating a supportive environment that fosters continuous learning, growth, and skill development.

Tools

The tools perspective refers to the channels, methods, formats and activities utilized in the communication and transfer of knowledge. The responses from participants as evident in Chapter 4 (Table 9) points to a diverse array of methods and activities used for learning and knowledge sharing within various contexts. The methods ranged from in-person approaches like lectures and workshops to digital delivery channels such as online modules and webinars. Additionally, there was an emphasis on interactive and participatory learning experiences, including peer-to-peer discussions, role-playing, and hands-on training. Many of the methods mentioned also facilitate networking and community building, such as professional networking events and communities of practice. The data also highlights a noticeable focus on continuous improvement and reflection, evident in assessment and feedback practices like feedback surveys, performance reviews, and inquiry-based learning. Overall, the emphasis on a culture that prioritizes diversity of approach highlights the multifaceted nature of learning and development processes and the need to incorporate a blend of individual, social, and organizational strategies to enhance knowledge and skills.

Effective Approaches for Capacity Building Design/Delivery

In this section we attempt to categorize different approaches to be considered for design and delivery of strategic capacity building interventions based on the different methods expressed as effective, the motivating factors for capacity building engagement (*figure 4.4*) and the common barriers to effective capacity building implementation (*figure 4.3*) identified by participants.

Learn-do (practice-oriented) approach: This approach emphasizes hands-on, experiential learning where participants can apply new skills and knowledge to real-world situations. With this approach participants described two ways of considering this, as either the integration of opportunities for immediate practice of what they have learned through exercises, case studies, and simulations. They also described the possibility of incorporating practice cycles as part of a long-term capacity building plan, where learning happens, and they are given ample time to practice before an improvement assessment is done and another learning cycle begins (learn-do-assess-learn cycles).

Interactive (dialogue-based) approach: This approach encourages active engagement and two-way communication between facilitators and participants. With this approach participants described methods like in-person workshops, group discussions, Q&A sessions, and collaborative problem-solving techniques that foster knowledge sharing and collective learning.

Dynamic (contextually-adaptive) approach: This approach refers to tailoring capacity building activities to the specific needs, challenges, and cultural contexts of the target audience. Considerations in this approach might include assessment of contextual needs and assets, use of contextually-relevant language and regularly reviewing and updating the content and delivery methods to ensure relevance and effectiveness.

Blended (hybridized methods) approach: This approach involves the combination of various delivery methods, such as in-person training, online courses, mentoring, and on-the-job learning, to create a comprehensive and engaging learning experience. It leverages the strengths of different modalities to cater to diverse learning preferences and optimize knowledge retention.

Need-specific approach: This approach focuses on addressing the unique capacity gaps and development needs of the target audience. It involves conducting detailed needs assessments, setting clear learning objectives, and designing customized capacity building interventions to meet the specific requirements of the participants.

The consideration here for effective design and delivery is not to pick one approach over the other, but that the exploration of a combination of contextually-relevant approaches might be necessary. The responses from our survey indicate that the most common factors that hinder effective capacity building efforts are associated mostly with issues of need-specificity (how well the capacity building programs address the specific capacity building needs of different actors), contextual relevance (how well the training aligns with the specific context and needs of the organization), flexibility and scalability (how adaptable and responsive the capacity building programs are to changing needs and circumstances) and the training method (how effective and suitable the training methods - e.g., workshops, seminars, e-learning used in capacity building programs are). Perhaps a combination of approaches might help capacity building planners and interveners avoid or overcome these obstacles.

Capacity Building Engagement Styles

Participants in our interviews contributed insights regarding their typical time commitments to capacity building, with their responses documented in the effort statements presented in Table 8 of our results. Drawing from these statements and our analysis of motivating factors for engagement in capacity building, we attempt to offer a generalized classification of archetypes among those who engage in such endeavors. These archetypes include:

- The Collaborative Learner (Effort Statements 1,6): refers to individuals who prefer learning in a group setting, where they can discuss, share experiences, and learn from others. They value the interactive and social aspects of learning.
- The Enthusiastic Learner (Effort Statement 2): refers to individuals who are eager to learn as much as possible and would dedicate as much time as possible to capacity building.
- The Pragmatic/Selective Learner (Effort Statements 3, 9, 11): refers to individuals who focus on learning that might add value to their work or is directly applicable to their work and current needs. They prefer learning through hands-on experience and on-the-job training, rather than formal courses.
- The Long-Term/Continuous Learner (Effort Statements 4, 12): refers to individuals who believe that capacity building requires a long-term commitment and cannot be achieved in a short timeframe. They are committed to an ongoing, structured or unstructured lifelong learning process, as a regular part of their life and work and see learning as a continuous, never-ending journey.

- The Time-Constrained Learner (Effort Statements 5, 7, 10): refers to individuals who struggle to find the time to dedicate to capacity building due to competing priorities and workload. They recognize the importance of learning but face challenges in allocating sufficient time for it.
- The Opportunistic Learner (Effort Statement 8): refers to individuals who focus on staying up to date with the latest developments through continuous scanning and reading, rather than formal training programs.

While we do not presume these archetypes presented to be an exhaustive representation of individuals who might engage in capacity building, they serve to provide insight into the diverse commitment considerations expressed by participants and potentially inform planners and interveners in capacity building design and implementation efforts.

Enabling Transformative Outcomes of Capacity Building

In the discourse on capacity building outcomes within organizations in our background of fields (Chapter 2), Lammert, Johnson and Fiore (2015) identify three distinct types of changes: developmental (first-order), transitional (second-order), and transformational (third-order), and propose a pragmatic approach involving a pilot study referred to as a 'Transformation Zone' to test and refine capacity building activities before system-wide implementation.

Our research findings (Table 12), demonstrate a spectrum of outcomes from first-order (developmental) to third-order (transformational) change. For example, a developmental outcome manifestation included the increased ability to navigate the complexities inherent in sustainability challenges *("I think getting better at holding the complexity of the sustainability challenge, something I gained from getting deeper insights. Being more aware of more things."*), suggesting the efficacy of capacity building in enhancing systems thinking competence. Similarly, transitional outcomes may manifest as the cultivation of a resilient leadership culture conducive to sustainable decision-making *("I think we have the culture, the brave leaders and they stand to the decision about being a sustainable company")*.

Transformational outcomes, which are arguably considered the goal of capacity building efforts to support sustainability transitions, was exemplified by the community-wide transformation spurred by sustained capacity building efforts *("When we started there was very little sustainability capacity talk at all. And 7 to 10 years later, I've met people who are now working with the city in different sustainability projects and they're like the city turned leader in this space. It's such an amazing culture, like everyone kind of gets it")*. Witnessing a city evolve into a sustainability pioneer is illustrative of the catalytic potential of capacity building when effectively designed and implemented with the aim of collective advancement, to transcend organizational boundaries and foster systemic change. However, it's crucial to note that such transformational endeavors necessitate meticulous planning and execution. Perhaps through the implementation of 'Transformation Zone' as suggested by Lammert, Johnson and Fiore, 2015, which can serve as experimentation zones or pilots for refining capacity building strategies before broader deployment.

Our findings also suggest the interconnectedness of individual and organizational transformation. While individual-level shifts may occur, their sustainability hinges on corresponding organizational and systemic changes. Failure to integrate individual and organizational change initiatives risks fostering a fragmented organizational landscape,

potentially exacerbating employee turnover rates *("So that is why I changed my work. I started work here because I needed to have a better and higher motivation. I wanted to work with a company that has sustainability maturedness or business goals")*.

A key consideration in designing and implementing strategic capacity building interventions could be cultivating aligned systems of support for individual and organizational change.

Additionally, our findings yielded a list of 14 indicators of capacity building success (*figure 4.5*) including from application of new knowledge or skills in real-world scenarios, increased collaboration and partnerships among stakeholders, positive shift in organizational culture, among others. Our analysis of the data indicates that eight of these indicators might be considered first-order change outcomes, three indicators reflect second-order change and the last three indicators signify third-order change. Of particular interest is the prominence of first-order change outcomes among the top five indicators ranked as significant by participants. This suggests a predominant focus on immediate and observable effects, possibly at the expense of deeper, longer-term transformations. This raises the question of whether the imperative for sustained systemic change is being adequately addressed in the design and implementation of capacity building interventions.

However, it is worth considering that there are additional factors that might influence the outcomes of capacity building initiatives. These could include contextual factors such as political dynamics, resource availability, and the level of institutional support (Enablers and Barriers Table). The effective design and implementation of capacity building interventions that yield transformative outcomes might therefore be contingent on the quality of leadership, the degree of stakeholder engagement, and the adaptability of intervention strategies to evolving needs and circumstances.

5.1.2. Considerations/Guidelines for Design and Implementation of CB4SSD Interventions

The qualitative data discussed in this section was obtained through questions we asked participants specifically about the sustainability competence areas highlighted within the SSD approach.

Considerations for CB4SSD Planning

Participants were briefed on the broad stroke definitions of three strategic sustainability competence areas including Collaborative and Participatory Leadership, SSD Knowledge, and Inner Capacity Development. They were then asked to determine what core competence area would be most beneficial to them, given the current challenges that they face in their sustainability roles.

Interviews revealed varying degrees of relevance attributed to each competence area: Collaborative and Participatory Leadership was ranked as a top priority by six of twelve participants, with two considering it moderate and four low priority; gaining SSD knowledge was rated as top priority by four, moderate by six, and low by two; Inner Capacity Development was prioritized as top by four, moderate by three, and low by five (Table 12). Survey results similarly highlighted participants' prioritization of competence areas, with a majority emphasizing Inner Capacity Development, followed by SSD Knowledge, and Collaborative and Participatory Leadership ranking least (*Figure 4.9*).

Our survey respondents were grouped into two categories, Sustainability Knowledge Mediators and Sustainability Leaders/Planners who work in public, private and non-profit organizations. Analysis of the findings indicated no significant discrepancy based on sector or role, suggesting a nuanced, context-specific approach to Capacity Building for Sustainable Development (CB4SSD) design and implementation is essential for addressing organization-specific challenges effectively.

Beyond the apparent emphasis on Inner Capacity Development among participants, the survey results also suggest a potential gap in perceived importance between theoretical knowledge acquisition (SSD Knowledge) and practical leadership skills (Collaborative and Participatory Leadership). This was perhaps made evident from the gaps for capacity building which we presented by inquiring about the challenges participants face in their sustainability role during the interviews. Most of the challenges identified speak to challenges with collaboration and strategic sustainability management. This could also imply a need for a more balanced approach in sustainability training and development programs, integrating both theoretical knowledge and practical leadership skills to better prepare individuals for addressing complex sustainability challenges.

However, the somewhat balanced distribution of responses across sectors and roles indicates a universal recognition of the importance of capacity development in sustainability efforts, regardless of organizational context or individual responsibilities. This underscores the cross-cutting nature of sustainability challenges and the need for collaborative efforts across sectors and roles to effectively address them.

Considerations for Effective Methods/Activities for CB4SSD Training

Interview and survey participants spoke to a wide array of methods and activities for each strategic sustainability competence area. Overall, in-person engagement, dialogue-based activities, learning by doing and collaborative learning approaches were strongly preferred formats for developing strategic sustainability competencies, according to interview and survey participants.

In-person interactions were preferred for the ability to potentially create an immersive learning experience that might be difficult to replicate virtually *("Comparing from those who joined the capacity building through the webinar online and in person when the delegates come to visit , they really like the workshop where they can discuss with the partners, and they have the exchanges and do the workshop").*

Dialogue-based activities were discussed as opportunities for fostering open communication, critical thinking, exploration of diverse perspectives, empathy, collaboration, and mutual respect by allowing participants to articulate thoughts, challenge assumptions, and engage in constructive discourse *("More listening and question asking, than telling I think. It should be done in more of a dialogue-based setting as opposed to an experts and listeners setting").*

Additionally, learning by doing through hands-on engagement with tasks or real-world experiences was highlighted as an effective approach to reinforce learning through practical application *("We tried many different techniques, I think hands on was always really good").*

Collaborative learning, involving working together in groups to achieve shared goals, was also valued for leveraging diverse expertise, fostering creativity, innovation, and mutual support

("First of all, we bring the experts to have a talk and like seminar to inspire the possibility to people first and then we gathered all of the stakeholders, the key players to travel to partner organizations in different countries to see and learn from the real value chains and at the end of each day we let them join the group discussions").

The overarching theme was a preference for interactive, participatory methods that promote active engagement, dialogue, and collaboration, rather than passive, one-way knowledge transfer.

Considerations for levels of Strategic Sustainability Competence for Different Actors

In this section we explore the theme of who needs to know what and what do they need to know? We uncovered insights for this by asking our survey participants to assess the degree of knowledge deemed essential for different groups—namely sustainability leaders encompassing political, business, and civil society figures; sustainability planners including managers, administrators, and coordinators; and regular departmental workers—across three strategic sustainability competence areas previously mentioned in this chapter. Our findings are illustrated in *Figures 4.10, 4.11,* and *4.12*.

In terms of Sustainable Systems Dynamics (SSD) Knowledge, respondents advocated for departmental workers to possess primarily basic to intermediate knowledge levels, while sustainability leaders were expected to demonstrate intermediate proficiency, and sustainability planners were recommended to exhibit more advanced expertise. Similarly, within the realm of collaborative and participatory leadership competence, departmental workers were advised to maintain basic to intermediate knowledge levels, whereas sustainability leaders and planners were encouraged to cultivate expert-level understanding. Lastly, concerning inner capacity competence, sustainability planners and departmental workers were endorsed to possess intermediate knowledge, while sustainability leaders were expected to demonstrate expertise.

The data appears consistent with our interview discussions, where participants mentioned that departmental workers should have the most basic level of knowledge on SSD, they just need to be motivated enough to do the work and ‘follow instructions’. The sustainability leaders need to have a little bit more SSD knowledge to effectively steer change processes and collaborate with different actors, while the sustainability planners should have expert SSD knowledge. To quote one participant “"Do we all need to know about how we ended up here in this unsustainable society or do we need to know what we shall do? Everyone doesn't need to know about SSD. They just need to listen when I say we should go in that direction. But the decision makers, I will say, can maybe improve a little bit."

These findings not only suggest the differentiated knowledge requirements across various roles but also emphasize the pivotal role of expertise, particularly among sustainability leaders and planners, in fostering effective transformational change processes and driving organizational sustainability endeavours forward.

The disparity in knowledge expectations reflects the hierarchical nature of sustainability leadership and planning roles within organizations. While departmental workers are primarily tasked with operational duties, sustainability leaders and planners are entrusted with strategic decision-making and coordination, necessitating a deeper understanding of sustainability principles and practices.

The emphasis on intermediate to expert-level knowledge among sustainability leaders and planners suggests a growing recognition of the complexity inherent in sustainability initiatives. As sustainability challenges become increasingly multifaceted, there is a heightened demand for leaders and planners who can navigate these complexities adeptly and formulate comprehensive, forward-thinking strategies. Underscoring the crucial role of capacity building in supporting the success of sustainability transitions. Organizations might therefore not only need to ensure that relevant knowledge is disseminated appropriately across different levels but also invest in continuous learning and development initiatives to enhance the sustainability literacy of all actors. By fostering a culture of knowledge sharing and continuous improvement, organizations can enhance their capacity to address sustainability challenges effectively and drive meaningful progress towards a more sustainable future.

5.2. Reflections on Research Process

In this section we will explore our reflections on the challenges, strengths and weaknesses of our research process.

Common Language and Securing Participants

The challenges with establishing common language as discussed in section 5.1 of this chapter, impacted our ability to secure as many participants as we would have preferred. We planned for 15 interview participants, to this end about 33 people were contacted via email and in-person. We were able to secure 12 interviews, with about 5 responses being people who indicated that they did not consider themselves a right fit for our interview as they 'do not work in a municipality'. Similar feedback was received when we sent out the questionnaire for our survey. We planned to contact 60 people, hoping to receive at least 30 responses. We ended up contacting about 100 people and only received 17 responses.

Conceptual Framework

Our objective for developing the modified conceptual framework (*figure 2.4*, Chapter 2) was that it would offer both a comprehensive and non-prescriptive lens to analyzing the data form our research and extracting the considerations for strategic capacity building design and implementation. To this end, we believe it served its purpose. Although, as with all research endeavors, our approach was not without weaknesses. Our attempt at exhaustively capturing at all possible factors left us with quite a lot of moving parts to account for and keep track of. However, through further refinement and condensing, we anticipate the framework evolving into a helpful tool for mapping elements for consideration in strategic capacity building interventions.

Research Design and Methods

We cast a wide net with our research design and overall approach, of course this meant that we were able to gather a lot of data with regards to our research questions. However, having a lot of data meant that we needed more time to process the data using our conceptual framework. This meant that we did not make it to the validation phase of our research design

Potential Differences in Insight Quality between Interviews and Surveys

The research findings suggest that the interviews may have provided more nuanced insights compared to the survey data. This discrepancy could be attributed to several factors:

Opportunity for clarification: During interviews, participants had the chance to ask for clarification if they did not fully understand the questions, allowing for more accurate responses. In contrast, survey respondents did not have this opportunity, which may have led to misunderstandings or inaccurate answers.

Real-time dialogue: The interactive nature of interviews, with the researcher and participant engaging in a real-time dialogue, may have facilitated a deeper exploration of the research questions and resulted in detailed and thoughtful responses from participants.

Potential language barriers: Despite efforts to use concise language familiar to the target groups, there is a possibility that some survey respondents may not have fully grasped the intended meaning of the questions. This potential language barrier could have resulted in less accurate or less nuanced responses compared to the interview data.

5.3. Future Actions and Recommendations for Future Research

Conceptual Framework

While our study has adapted a conceptual framework for implementing sustainable capacity building strategies, further research might be warranted to empirically validate and refine the framework across diverse organizational and sectoral contexts. Potential areas for future investigation include: i) conducting case studies to assess the framework's effectiveness in enabling sustainable capacity building over extended time periods within specific industries or communities; ii) using mixed methods that yield qualitative data (e.g stakeholder interviews, observations) and/or quantitative data to evaluate the framework's components, outcomes and contextual influences; iii) analyzing the effects of organizational characteristics (e.g. size, structure, culture) and external environmental factors on the successful integration of the capacity building elements outlined in the framework; iv) iteratively refining and adapting the framework based on empirical findings from multiple case applications, incorporating feedback from practitioners and subject matter experts in capacity building interventions.

Learner Archetypes

Since our research has proposed an initial categorization of engagement styles or learner archetypes for actors engaged in continuous capacity building processes for strategic sustainability work, further empirical research might be needed to validate and refine these archetypal profiles across different contexts. Potential areas for future investigation include: i) conducting mixed-methods studies that provide quantitative survey data, qualitative interviews, and/or observational data to better assess the construct validity of the proposed learner archetypes; ii) examining the generalizability and transferability of the archetypes by sampling actors from different organizations, sectors, and municipal/regional contexts; iii) iterative refinement of the learner archetype definitions and characteristics based on empirical findings, incorporating feedback from experts; iv) exploring the practical implications of utilizing learner

archetypes for personalized capacity building design, adaptive capacity building systems, and tailoring pedagogical approaches to better support diverse needs of actors.

A Model for Transformational Capacity Building Implementation

The findings from our research suggest that transformational outcomes involve a strategic approach to planning and implementing multi-level capacity building. Potential opportunities for further research could include: i) examining enabling conditions for a robust capacity building culture for each level (individual, organizational, network and systems level); ii) exploring the practical implications of a strategic approach to capacity building on boosting institutional capacity along the three dimensions (as discussed in Chapter 1) – knowledge resources, relational resources and mobilization capacity).

Other Sub-conditions for CB4SSD

In Chapter 1.4 we discuss the eight sub-conditions for fulfilling continuous capacity development for SSD proposed by Wälitalo, 2023 which include: devising a capacity-building plan; establishing a supportive network; broad and diversified trainings to support actors dependent on their needs; fostering long term in-house expertise; securing political consensus for sustained SSD efforts; providing specialized training for process leaders; educating on the alignment of other sustainability concepts, tools, and methods with SSD work; and implementing a train-the-trainer approach.

While our research explored considerations for the first and second sub-conditions, potential areas for further investigation still exist within the remaining six sub-conditions.

Also, drawing from the findings of our research we will also propose further research into the factors that might enable long-term multi-level transformation through CB4SSD beyond knowledge proliferation.

6. Conclusion

The primary objective of this research was to identify considerations that might prove valuable for designing and implementing effective capacity building interventions to enhance strategic sustainability work in municipal contexts. Our findings suggest that fostering a robust capacity building culture is a pre-requisite for successfully implementing and sustaining interventions. More important than the content, method or activity of choice is the culture around capacity building in the organization. The presence of enabling environments, systems that align individual and organizational development, and leadership support for long-term strategic capacity building are crucial factors. As a lack of enabling culture can hinder the integration and application of new knowledge.

Another consideration is understanding different context-specific engagement styles or learner archetypes. This insight can help planners and interveners tailor interventions to enhance participants' motivation and commitment to continuous capacity building processes. Context-specific combination of approaches and the use of contextually relevant language are also necessary considerations, emphasizing the need for flexibility and adaptability in design and implementation.

The study also explored the different levels at which capacity building can lead to transformational outcomes, with an enabling capacity building culture being the foundation. These levels include individual transformation through knowledge transfer and integration, organizational transformation through knowledge diffusion and embedding, interorganizational transformation through cross-sector knowledge exchange and collective action, and societal transformation through community-level change. Recognizing the interconnected and interdependent nature of these levels is crucial for cultivating a supportive capacity building culture and promoting a strategic approach to capacity building planning and implementation, balancing short-term objectives with the pursuit of profound, transformative outcomes.

The considerations identified in this study are intended to provide guidance to capacity building planners and interveners for designing and implementing continuous capacity building efforts aimed at enhancing strategic work of diverse actors engaged in sustainability efforts in municipal and regional contexts.

References

Alizar, Aldi Muhammad, and Roxanne Scott. 2009 "Working at the local level to support sustainable mining." Canadian Mining Journal 130, no. 3 (2009): 24-25. https://www.researchgate.net/publication/295279026_Working_at_the_local_level_to_support_sustainable_mining

Anderson, Dean, and Ackerman-Anderson, Linda S. 2010. Beyond Change Management : How to Achieve Breakthrough Results through Conscious Change Leadership. 2nd ed. Chichester, United Kingdom: John Wiley And Sons Ltd.M. https://learning.oreilly.com/library/view/beyond-change-management/9780470648087/pr01.html

Andersen, Inger. 2024. "Environmental action in cities turns local heroes into global heroes." UNEA-6 Cities and Regions Summit (Kenya), February 23, 2024. https://www.unep.org/news-andstories/speech/environmental-action-cities-turns-local-heroes-global-heroes?s=08

Axelsson, Katarina, Karin André, Elena Dawkins, Åsa Gerger Swartling and Maria Xylia. 2023. "Transitioning toward sustainable consumption at the Swedish local governance level." Front. Sustain 4 (August). https://doi.org/10.3389/frsus.2023.1196373

Balaskas, Antonios, Eduardo Lima, and Tyler Seed. 2009. "A Strategic Approach to Sustainable Development through Official Development Assistance." Masters Thesis, Blekinge Institute of Technology. https://www.diva-portal.org/smash/get/diva2:830423/FULLTEXT02.pdf

Beesley, Andrea D., and Shebby, Susan. 2010. "Evaluating Capacity Building in Education: The North Central Comprehensive Center." *Online Submission*. https://files.eric.ed.gov/fulltext/ED511130.pdf

Bennett, Scott, Ray Berardinelli, Kathryn Cooper, Julian Crawford, Lori de la Cruz, Maureen Hart, Marilyn Johnson, et al. 2013. *Sustainability Practitioner Body of Knowledge*. International Society of Sustainability Professionals. https://www.cascadia.edu/discover/about/sustainability/documents/Sustainability%20Practicioner%20Body%20of%20Knowledge.pdf.

Bhagavan, Malur Ramanna, and Ivar Virgin (2004). Generic aspects of institutional capacity development in developing countries. Stockholm: Stockholm Environment Institute.

Bhagavathula, Susila, Katja Brundiers, Michael Stauffacher, and Braden Kay. 2021. "Fostering Collaboration in City Governments' Sustainability, Emergency Management and Resilience Work through Competency-Based Capacity Building." International Journal of Disaster Risk Reduction 63, no. September (September): 102408. https://doi.org/10.1016/j.ijdrr.2021.102408.

Brix, Jacob. 2019. "Innovation Capacity Building." *The Learning Organization* 26, no. 1 (January): 12–26. https://doi.org/10.1108/tlo-08-2018-0143.

Broman, Göran Ingvar, and Karl-Henrik Robèrt. 2017. “A Framework for Strategic Sustainable Development.” Journal of Cleaner Production 140, no. 1 (January): 17–31. https://doi.org/10.1016/j.jclepro.2015.10.121.

Broto, Castán Vanesa, and Bulkeley, Harriet. 2013. “A Survey of Urban Climate Change Experiments in 100 Cities.” *Global Environmental Change* 23, no. 1 (February): 92–102. https://doi.org/10.1016/j.gloenvcha.2012.07.005

Brown, Rebekah Ruth, Farrelly, Megan A., and Loorbach, Derk Albert. 2013. “Actors Working the Institutions in Sustainability Transitions: The Case of Melbourne’s Stormwater Management.” *Global Environmental Change* 23 (4): 701–718. https://doi.org/10.1016/j.gloenvcha.2013.02.013

Brundtland, Gro Harlem. 1987. “Report of the World Commission on environment and development: our common future”. UN.

Chapman, Judith Ann. 2002. “A Framework for Transformational Change in Organisations.” *Leadership & Organization Development Journal 23*, no. 1 (February): 16–25. https://doi.org/10.1108/01437730210414535

Clark, William, and Nancy Dickson. 2016. “Knowledge Systems for Sustainable Development (Special Feature Based on a Sackler Colloquium of the National Academy of Sciences).” *Academy of Sciences* 113, no. 17: S1. https://www.researchgate.net/publication/303803575_Knowledge_Systems_for_Sustainable_Development_Special_Feature_Based_on_a_Sackler_Colloquium_of_the_National_Academy_of_Sciences

De Magalhães, Claudio, Healey, Patsy, Ali Madanipour, and John Pendlebury. 2003. "Place, Identity and Local Politics: Analysing Initiatives in Deliberative Governance." *In Deliberative Policy Analysis*, 60-87: Cambridge University Press. https://ebookcentral.proquest.com/lib/bthbib-ebooks/detail.action?docID=258478

Dillman, Don A, Jolene D Smyth, and Leah Melani Christian. 2014. *Internet, Phone, Mail, and Mixed-Mode Surveys : The Tailored Design Method. 4th ed*. Hoboken, New Jersey: Wiley. https://content.e-bookshelf.de/media/reading/L-2753682-49f7ffb446.pdf

Drescher, Michael., Perera, Ajith H., C. J. Johnson, Jack Chris. Buse, Lisa, Drew Ashton, and Burgman, A. Mark. 2013. “Toward Rigorous Use of Expert Knowledge in Ecological Research.” *Ecosphere* 4, no. 7 (July): 1–26. https://doi.org/10.1890/es12-00415.1.

Evans, Bob, Joas Marko, Sundback Susan and Theobald, Kate. 2006. “Governing local sustainability” *Journal of Environmental Planning and Management* 49, no. 6, 849-867. https://doi.org/10.1080/09640560600946875.

Fazey, Ioan, Schäpke Niko, Guido Caniglia, James Patterson, Johan Hultman, Barbara Van Mierlo, Filippa Säwe, Arnim Wiek, Julia Wittmayer, Paulina Aldunce, Husam Al Waer, Nandini Battacharya, Hilary Bradbury, Esther Carmen, John Colvin, Christopher Cvitanovic, Marcella D’Souza, Maja Gopel, Bruce Goldstein, Timo HämäläinenGavin Harper, Tom Henfry, Anthony Hodgson, Mark S. Howden, Andy Kerr, Matthias Klaes, Christopher Lyon, Gerald Midgley, Susanne Moser, Nandan Mukherjee, Karl Müller, Karen O’brien, Deborah A.

O'Connell, Per Olsson, Glenn Page, Mark S. Reed, Beverley Searle, Giorgia Silvestri, Viktoria Spaiser, Tim Strasser, Petra Tschakert, Natalia Uribe-Calvo, Steve Waddell, Jennifer Rao-Williams, Russel Wise, Ruth Wolstenholme, Mel Woods, Carina Wyborn. 2018. "Ten Essentials for Action-Oriented and Second Order Energy Transitions, Transformations and Climate Change Research." *Energy Research and Social Science* 40: 54–70. https://doi.org/10.1016/j.erss.2017.11.026.

Franco, Isabel Buitrago. 2015. "Building Sustainable Communities: Enhancing Human Capital in Resource Regions - Colombian Case," March (March). https://doi.org/10.14264/uql.2014.379.Franco, Isabel Buitrago. 2015. "Building Sustainable Communities: Enhancing Human Capital in Resource Regions - Colombian Case," March (March). https://doi.org/10.14264/uql.2014.379.

Franco, Isabel B., and James Tracey. 2019. "Community Capacity-Building for Sustainable Development." *International Journal of Sustainability in Higher Education* 20, no. 4 (May): 691–725. https://doi.org/10.1108/ijshe-02-2019-0052.

Gusmão Caiado, Rodrigo Goyannes, Walter Leal Filho, Osvaldo Luiz Gonçalves Quelhas, Daniel Luiz de Mattos Nascimento, and Lucas Veigas Ávila. 2018. "A Literature-Based Review on Potentials and Constraints in the Implementation of the Sustainable Development Goals." *Journal of Cleaner Production* 198, no. October (October): 1276–88. https://doi.org/10.1016/j.jclepro.2018.07.102.

Heath, Carl . 2023. "Podden Loft – 25 – de Åtta Principerna För Innovationsledning – Partnerskapet LOFT." *The Partnership LOFT*. November 24, 2023. https://partnerskapetloft.se/podden-loft-25-de-atta-principerna-for-innovationsledning/.

Hussain, James. n.d. "Research Design – Concept, Need, Advantages, Importance & Features of Good Research Design." Maulana Mazharul Haque Arabic & Persian University, India. Accessed March 5, 2024. https://mmhapu.ac.in/doc/eContent/Management/JamesHusain/Concept%20of%20Research%20Design,MBA-II.pdf

Innes, Judith Eleanor, and David E. Booher. Planning with complexity: An introduction to collaborative rationality for public policy. Routledge, 2010. https://doi.org/10.4324/9780203864302

International Labour Organization. 2010. "Institutional Capacity Development." In *ILO Curriculum on Building Modern and Effective Labour Inspection Systems*. International Labour Organization.

Isaksson, Karolina and Hagbert Pernilla. 2020. "Institutional capacity to integrate 'radical' perspectives on sustainability in small municipalities: experiences from Sweden." *Environmental Innovation and Societal Transitions* 36 (June) 83–93. https://doi.org/10.1016/j.eist.2020.05.002

Jensen, Marina Bergen, Bengt Persson, Susanne Guldager, Ulrik Reeh, and Kjell Nilsson. 2000. "Green Structure and Sustainability — Developing a Tool for Local Planning." *Landscape and Urban Planning* 52, no. 2-3 (December): 117–33. https://doi.org/10.1016/s0169-2046(00)00127-4.

Kotter, John Paul. (1995). “Leading change: Why transformation efforts fail”. *Harvard Business Review*, March-April, 1-20. https://irp-cdn.multiscreensite.com/6e5efd05/files/uploaded/Leading%20Change.pdf

Lammert , J. D., L Johnson , and T. A. Fiore. 2015. “Conceptualizing Capacity Building.” Rockville: MD, USA. https://www2.ed.gov/about/offices/list/osers/osep/rda/cipp2-conceptualizing-capacity-building-2-10-15.pdf.

Lanzi, Diego. 2007. “Capabilities, Human Capital and Education.” The Journal of Socio-Economics 36, no. 3 (June): 424–35. https://doi.org/10.1016/j.socec.2006.12.005.

Leal Filho, Walter, Ulisses Azeiteiro, Fátima Alves, Paul Pace, Mark Mifsud, Luciana Brandli, Sandra S. Caeiro, and Antje Disterheft. 2017. “Reinvigorating the Sustainable Development Research Agenda: The Role of the Sustainable Development Goals (SDG).” International Journal of Sustainable Development & World Ecology 25, no. 2 (June): 131–42. https://doi.org/10.1080/13504509.2017.1342103.

Leeman, Jennifer, Larissa Calancie, Marieke A. Hartman, Cam T. Escoffery, Alison K. Herrmann, Lindsay E. Tague, Alexis A. Moore, Katherine M. Wilson, Michelle Schreiner, and Carmen Samuel-Hodge. 2015. “What Strategies Are Used to Build Practitioners’ Capacity to Implement Community-Based Interventions and Are They Effective?: A Systematic Review.” Implementation Science 10, no. 1 (May). https://doi.org/10.1186/s13012-015-0272-7.

Levesque, Vanessa. 2019. “Sustainability Methods & Perspectives: The Role of Municipalities in Advancing Sustainability.” Pressbooks.pub, Chapter 5. https://pressbooks.pub/sustainabilitymethods/chapter/the-role-of-municipalities-in-advancing-sustainability/

Longe, Busayo. 2020. “Primary vs Secondary Research Methods: 15 Key Differences.” Formplus. Accessed 4th March 2024. https://www.formpl.us/blog/primary-secondary-research.

Loorbach, Derk, Niki Frantzeskaki, and Flor Avelino. 2017. “Sustainability Transitions Research: Transforming Science and Practice for Societal Change.” *Annual Review of Environment and Resources 42*, no. 1 (October): 599–626. https://doi.org/10.1146/annurev-environ-102014-021340.

Matachi, Atsushi. 2006. *Capacity Building Framework: UNESCO-IICBA*. United Nations Economic Commission for Africa. https://unesdoc.unesco.org/ark:/48223/pf0000151179

Mate, Kwabena. 2001. “Capacity-Building and Policy Networking for Sustainable Development.” *Minerals & Energy - Raw Materials Report* 16, no. 2 (January): 3–25. https://doi.org/10.1080/140410401300226921.

Mazutis, Daina and Abolina, Evisa. 2019. “The Five I Model of Sustainability Leadership: Lessons from the Zibi One Planet Living sustainable urban development”. *Journal of Cleaner Production* 237 (2019) 117799. https://doi.org/10.1016/j.jclepro.2019.117799

McCrocklin, Shannon. 2018. “Primary vs. Secondary Research.” GeoPoll. 4th March, 2024. https://www.geopoll.com/blog/primary-vs-secondary-research/.

McClenachan, Loren, Neal, Benjamin P., Al-Abdulrazzak, Dalal, Taylor, Witkin, Kara Fisher, and Kittinger, John N. 2014. "Do Community Supported Fisheries (CSFs) Improve Sustainability?" Fisheries Research 157, no. September (September): 62–69. https://doi.org/10.1016/j.fishres.2014.03.016.

McKenzie-Mohr, Doug. 2000. "New Ways to Promote Proenvironmental Behavior: Promoting Sustainable Behavior: An Introduction to Community-Based Social Marketing." *Journal of Social Issues* 56, no. 3 (January): 543–54. https://doi.org/10.1111/0022-4537.00183.

Miller, Evonne, Kimberley Van Megen, and Laurie Buys. 2012. "Diversification for Sustainable Development in Rural and Regional Australia: How Local Community Leaders Conceptualise the Impacts and Opportunities from Agriculture, Tourism and Mining." *Rural Society* 22, no. 1 (October): 2–16. https://doi.org/10.5172/rsj.2012.22.1.2.

Miller, Thaddeus R. 2013. "Constructing Sustainability Science: Emerging Perspectives and Research Trajectories." *Sustainability Science 8*, no. 2 (July): 279–93. https://doi.org/10.1007/s11625-012-0180-6.

Mintrom, Michael and Rogers, Briony C. 2022. "How can we drive sustainability transitions?" *Policy Design and Practice* 5, no. 3: 294-306. https://doi.org/10.1080/25741292.2022.2057835

Nakata, Cheryl, and Viswanathan, Madhubalan. 2012. "From Impactful Research to Sustainable Innovations for Subsistence Marketplaces." *Journal of Business Research* 65, no. 12 (December): 1655–57. https://doi.org/10.1016/j.jbusres.2012.02.005.

Nigel, Simister, Lucy Morris, and James, Rick. 2021. "M&E of Capacity Strengthening." https://www.intrac.org/wpcms/wp-content/uploads/2021/01/ME-of-capacity-strengthening.pdf.

National Implementation Research Network (NIRN). 2022. "A Guide for Implementation Support Practitioners." *Implementation Practice*. https://www.implementationpractice.org/wp-content/uploads/2022/01/CIP-Practice-Guide-Implementation-Stages_12.1.21.pdf.

Perera, Ajith H, Drew, C. Ashton, and Johnson, A. Chris. 2012. "Experts, Expert Knowledge, and Their Roles in Landscape Ecological Applications." *Springer EBooks*, January (January), 1–10. https://doi.org/10.1007/978-1-4614-1034-8_1.

Quitzau, Maj-Britt, Sara Gustafsson, Birgitte Hoffmann, and Venus Krantz. 2022. "Sustainability Coordination within Forerunning Nordic Municipalities – Exploring Structural Challenges across Departmental Silos and Hierarchies." *Journal of Cleaner Production* 335, no. February (February): 130330. https://doi.org/10.1016/j.jclepro.2021.130330.

Radomska, Joanna. 2015. "The Concept of Sustainable Strategy Implementation." *Sustainability* 7, no. 12 (November): 15847–56. https://doi.org/10.3390/su71215790.

Rahmani, Ardhi Arsala, Wijaya, Muhammad Ery, & Hirawan, Fajar B. 2021. Value-Action Gap in Climate Change Indonesians. Journal of Regions and Environment, 9(3), 226-238. https://doi.org/10.14710/jwl.9.3.226-238

Redman, Erin. 2013. “Advancing Educational Pedagogy for Sustainability: Developing and Implementing Programs to Transform Behaviors.” *International Journal of Environmental & Science Education* 8, no. 1 (January): 1–34. https://keep.lib.asu.edu/items/141009.

Salmi, Asta, Jaakko Jussila, and Mervi Hämäläinen. 2022. “The Role of Municipalities in Transformation towards More Sustainable Construction: The Case of Wood Construction in Finland.” *Construction Management and Economics*, February (February), 1–21. https://doi.org/10.1080/01446193.2022.2037145.

Salvia, Amanda Lange, Walter Leal Filho, Luciana Londero Brandli, and Juliane Sapper Griebeler. 2019. “Assessing Research Trends Related to Sustainable Development Goals: Local and Global Issues.” Journal of Cleaner Production 208, no. January (January): 841–49.

Soberón, Miguel, Irene Ezquerra-Lázaro, Teresa Sánchez-Chaparro, Jaime Moreno-Serna, Gabriella Dóci, and Olga Kordas. 2023. “Supporting Municipalities to Develop Collaboration Capability to Facilitate Urban Transitions and Sustainability: Role of Transition Intermediaries in Madrid.” *Journal of Cleaner Production* 426, no. November (November): 138964. https://doi.org/10.1016/j.jclepro.2023.138964.

Solinska-Nowak, Aleksandra, Piotr Magnuszewski, Margot Curl, Adam French, Adriana Keating, Junko Mochizuki, Wei Liu, Reinhard Mechler, Michalina Kulakowska, and Lukasz Jarzabek. 2018. “An Overview of Serious Games for Disaster Risk Management – Prospects and Limitations for Informing Actions to Arrest Increasing Risk.” International Journal of Disaster Risk Reduction 31, no. October (October): 1013–29. https://doi.org/10.1016/j.ijdrr.2018.09.001.

Starik, Mark. 1995. “Should Trees Have Managerial Standing? Toward Stakeholder Status for Non-Human Nature.” *Journal of Business Ethics* 14, no. 3 (March): 207–17. https://doi.org/10.1007/bf00881435.

Strange, Tracey, and Anne Bayley. 2008. Sustainable Development. OECD Insights. OECD. https://doi.org/10.1787/9789264055742-en.

Tekie, Haben. 2022. “How Can the Doughnut Model Support the Sustainability Efforts of Municipalities? | RISE.” RISE. Accessed February 14, 2024. https://www.ri.se/en/node/18160.

The Natural Step. 2017. “The Framework for Strategic Sustainable Development.” Amaltea. https://redamaltea.es/wp-content/uploads/2017/05/Framework.pdf.

The World Bank Group. 2023. “Understanding Poverty: Urban Development.” (April). *Accessed April 2, 2024.* https://www.worldbank.org/en/topic/urbandevelopment/overview

Too, Linda, Bajracharya Bhishna, and Khanjanasthiti, Isara. 2013. “Developing a Sustainable Campus through Community Engagement: An Empirical Study.” *Architecture Research* 3, no. 3: 42–50. https://doi.org/10.5923/j.arch.20130303.04.

United Nations Development Assistance Framework (UNDAF). 2017. “Companion Guidance: Capacity Development” https://unsdg.un.org/sites/default/files/UNDG-UNDAF-Companion-Pieces-8-Capacity-Development.pdf.

United Nations. "Capacity Building." United Nations Academic Impact, United Nations. https://www.un.org/en/academic-impact/capacity-building#:~:text=Capacity%2Dbuilding%20is%20defined%20as,in%20a%20fast%2Dchanging%20world (accessed March 11, 2024).

United Nations Development Programme (UNDP). 2008 "Capacity Development: Practice Note." http://content-ext.undp.org/aplaws_publications/1449053/PN_Capacity_Development.pdf.

UNDP. 2009. "Supporting Capacity Development: The UNDP Approach." UNDP. Accessed March 24, 2024. https://www.undp.org/sites/g/files/zskgke326/files/publications/CDG_Brochure_2009.pdf.

United Nations Population Fund (UNFPA). 1991. "Technical Discussions On Strategies for Health for All in The Face of Rapid Urbanization." *Cities and the Population Issue* (May). *Accessed April 2, 2024.* https://iris.who.int/bitstream/handle/10665/175464/WHA44_TD-7_eng.pdf?sequence=1&isAllowed=y#:~:text=In%20general%2C%20the%20rate%20of,serious%20than%20they%20are%20now.

University of Southern California. 2024. "Organizing Your Social Sciences Research Paper: Types of Research Design." University of Southern California. Accessed March 5, 2024. https://libguides.usc.edu/writingguide/researchdesigns

Van Poeck, Katrien, Jeppe Læssøe, and Thomas Block. 2017. "An Exploration of Sustainability Change Agents as Facilitators of Nonformal Learning: Mapping a Moving and Intertwined Landscape." *Ecology and Society* 22, no. 2. https://www.jstor.org/stable/26270111.

Wälitalo, Lisa. 2023. "Methodological Support for Strategic Sustainable Development Work in Municipalities and Regions." Karlskrona: Blekinge Tekniska Högskola. https://bth.diva-portal.org/smash/get/diva2:1741805/FULLTEXT01.pdf

Wang, XiaoHu, Christopher V. Hawkins, Nick Lebredo, and Evan M. Berman. 2012. "Capacity to Sustain Sustainability: A Study of U.S. Cities." *Public Administration Review* 72, no. 6 (August): 841–53. https://doi.org/10.1111/j.1540-6210.2012.02566.x.

Zamfir, Lonel. 2017. "Understanding Capacity-Building/ Capacity Development a Core Concept of Development Policy." European Parliamentary Research Service. https://www.europarl.europa.eu/RegData/etudes/BRIE/2017/599411/EPRS_BRI(2017)599411_EN.pdf.

Zeemering, Eric S. 2018. "Sustainability Management, Strategy and Reform in Local Government." *Public Management Review 20*, no. 1 (February): 136–53. https://doi.org/10.1080/14719037.2017.1293148.

Zhou, Jing, and Shalley, Christina E. 2008. *Handbook of Organizational Creativity*. New York: Lawrence Erlbaum Associates. https://www.routledge.com/Handbook-of-Organizational-Creativity/Zhou-Shalley/p/book/9780367866655

Appendices

Appendix A - Complete table of definitions for the 7 Perspectives of Sustainable Capacity Building Implementation.

Appendix A. Complete table of definitions for the 7 Perspectives of Sustainable Capacity Building Implementation

Term	Definitions
Values	This involves development of competencies and understanding at the individual, organizational, and network levels to bridge the value-action gap with regards to working progressively towards sustainability. By aligning beliefs, principles, and behaviors across these levels, capacity building in values fosters a cohesive and purpose-driven approach towards sustainability outcomes. The value-action gap is a phenomenon where individuals or organizations act in a way that contradicts or fails to support their values. In the context of capacity building, it refers to the gap between what individuals or organizations say they value (e.g., sustainability) and what they actually do to support those values (Rahmani, Wijaya and Hirawan, 2021). **Individual:** At the individual level involves building capacity to foster a strong alignment between personal values and the goals of sustainability, promoting a sense of purpose and commitment to driving positive change. **Organizational:** This involves building the capacity to align intra-organizational values with sustainability objectives, making way for a culture of accountability, innovation, and collaboration, and integrating sustainability principles into strategic planning and decision-making processes. **Network or Institutional:** At the network level, this entails developing inter-organizational capacity to build trust, mutual respect, and shared values among participants, promoting open communication, collaboration, and collective action, and strengthening the network's ability to address complex sustainability challenges effectively.
Stakeholders	This involves enhancing collaboration capability, practices, and stakeholder management skills, including coordination and communication, to facilitate transformational change processes. **Coordination**: Involves building the capacity to enhance effective alignment of efforts and resources among stakeholders, enabling smooth and efficient coordination of activities, and promoting synergy and coherence in pursuit of shared goals. **Collaboration**: Refers to the development of the capacity to build trust, mutual respect, and shared ownership among stakeholders, encouraging meaningful engagement and participation, and facilitating collaborative decision-making and action towards common objectives. **Communication**: Involves the development of capacities that give rise to or enable transparency, openness, and clarity in communication among stakeholders, making room for dialogue, information sharing, understanding. Therefore, fostering effective engagement and feedback mechanisms to promote informed decision-making and mutual understanding.
Leadership	This perspective focuses on enhancing capacity across the five core areas of competence necessary for individual actors involved in driving transformative change to effectively perform their work. **Inspirational Work:** involves building capacity to co-create a compelling vision by leveraging best practices and collaborating with experts to address leadership challenges through innovative approaches. **Integration Work:** encompasses the capacity to navigate complex multi-partner agreements by engaging stakeholders, establishing shared principles, and fostering collaborative decision-making processes to integrate diverse perspectives effectively. **Identity Work:** focuses on reconciling the dual perspective of both being a separate entity as well as part of a diverse, interconnected, multigenerational social and environmental system, emphasizing inclusivity, respect for diverse identities, and managing dissent through open communication and joint projects to foster shared identity and ownership among stakeholders. **Implementation Work:** centers on executing objectives by setting the strategy, assuring that the organization is aligned to support that strategy, recruiting suitable personnel, forming strategic partnerships, and mobilizing resources to ensure the successful implementation of sustainability initiatives. **Institutional Work:** involves the critical task of securing the longevity of sustainability initiatives by ingraining the vision, values, goals, and principles deeply within the organizational culture, ensuring

	alignment with strategic objectives, and fostering unwavering commitment to sustain the vision over an extended period.
Strategy & Goals	This involves the development of a roadmap for enhancing the effectiveness and capabilities of individuals, teams, or organizations. It includes setting specific, measurable objectives to guide capacity-building efforts and assess intervention success in alignment with the organization's mission and vision. It also reflects desired outcomes, such as improved competencies, sustained practices, and a commitment to continuous quality improvement. **Orientation (Generalized vs Need-specific):** Generalized Orientation refers to a broad approach that addresses overall organizational development without focusing on specific needs or tailored solutions. Need-specific Orientation involves a targeted approach that identifies and addresses specific needs and challenges within an organization to provide tailored support. **Dosage:** Comprises the duration, frequency, and amount of support provided with duration referring to the amount of time from the start to the end of support provision, frequency referring to how often support was provided during that time, and amount referring to the cumulative number of hours of support provided. **Delivery Mode:** Refers to the communication channel used to deliver support (e.g., in-person, phone, Internet). **Collaborative Design:** This refers to the relationship between capacity building support providers and recipients. Variations exist in their level of collaboration with recipients, ranging from advisory roles to fully engaged participatory partnerships. **Proactive Design:** This involves an anticipatory and responsive approach to the capacity building needs of recipients, with capacity building support providers taking the lead in initiating the process rather than merely reacting to requests for assistance.
Process	Process refers to the systematic and continuous series of actions, steps, and activities undertaken to strengthen the skills, knowledge, resources, and capabilities of individuals, organizations, or communities to achieve their development objectives over time. **Engage Stakeholders:** Involves involving relevant parties in the capacity building process through communication, collaboration, and building relationships to ensure their active participation and ownership. **Assess Contextual Assets and Needs:** Entails evaluating the existing resources, strengths, weaknesses, and requirements within a specific context to identify gaps and opportunities for targeted capacity building interventions. **Develop Capacity Building Strategy:** Involves formulating a structured plan outlining the objectives, activities, and resources needed to enhance the capabilities and effectiveness of individuals, organizations, or systems. **Implement:** Refers to the execution of the capacity building strategy by putting the planned activities into action, monitoring progress, and adjusting approaches as necessary. **Integrate:** Involves incorporating capacity building initiatives into existing structures, processes, and systems to ensure sustainability and alignment with broader goals and strategies. **Evaluate:** Entails assessing the effectiveness, impact, and outcomes of the capacity building efforts to determine the success of the interventions and identify areas for improvement. **Sustain:** Focuses on maintaining the achieved improvements, ensuring continuity of capacity building efforts, and fostering long-term resilience and growth within the organization or system.
Resources	Capacity building resources refer to the assets, tools, and support systems utilized by organizations and individuals to enhance their skills, knowledge, and capabilities. These resources span financial, intellectual, human, and technical aspects. **Financial:** Financial resources refer to the monetary assets, funding, or financial support available to organizations or individuals to enhance their capabilities, skills, infrastructure, and sustainability. **Intellectual:** Intellectual resources can be defined as the collective knowledge, skills, and capabilities within an organization that contribute to its strategic planning, operational efficiency, and overall performance. These resources include organizational strategy, strategic planning, business know-how, production technology, program management, process management, inter-institutional linkage, etc.) **Human:** This refers to the capacities of individuals in organizations. These capacities encompass both intellectual and attitudinal aspects, such as knowledge, skills, and the will to implement necessary changes.
Tools	Tools are “informational resources designed to organize, summarize, and/or communicate knowledge.” They include any electronic or print resource that practitioners might use to plan, implement, or evaluate an intervention. They include the following categories:

	Training: This involves capacity building tools/approaches used to deploy structured learning activities designed to enhance the knowledge, skills, and competencies of individuals or teams within an organization. It aims to improve performance, build capacity, and foster professional development through targeted educational programs. **Technical Assistance (TA):** This refers to tools/approaches used to provide personalized support tailored to the specific needs of individuals or teams. It involves interactive guidance provided by experts known as knowledge brokers, linking agents, or external change agents. TA helps address challenges, build capacity, and facilitate the implementation of best practices. **Assessment and Feedback:** These tools/approaches are used to monitor and evaluate the performance of a capacity building support system. This involves assessing the effectiveness of delivery systems and providing feedback to improve performance. It helps identify strengths, areas for improvement, and guides decision-making to enhance capacity building efforts.

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