ASI

ACADEMY for
SUSTAINABLE
INNOVATION

Breakthrough Leadership for Transition

Developing the mindsets, capabilities and practices needed
to lead transition to a socially inclusive, low carbon economy

Co-authors:

Nadine Gudz, M.Sc., *Vice President of Executive Leadership*, Academy for Sustainable Innovation &

Dr. Alexandra Stubbings, *Managing Director & Co-Founder*, Talik & Co. Organisation
Design and Development

February 23, 2021

The Academy for Sustainable Innovation (ASI) creates learning experiences that cultivate and nurture leadership practices and mindsets for steering equitable sustainability transitions. ASI calls this capacity Transition Leadership.

This paper explores the concept of Transition Leadership, and explains the pedagogical underpinnings which inform the development of ASI's unique Breakthrough Leadership for Transition (BLT) executive leadership for transition program.

For more information about ASI, the BLT program and Transition Leadership, please visit sustainableinnovation.academy

Contents

ASI ACADEMY for SUSTAINABLE INNOVATION

Breakthrough Leadership for Transition

Developing the mindsets, capabilities and practices needed to lead transition to a socially inclusive, low carbon economy

In 2015, Christiana Figueres, then Executive Secretary for the UN Convention on Climate Change, chaired the annual international negotiations to set binding targets for reducing greenhouse gas emissions. She achieved what none of her predecessors had managed. She steered 195 countries to unanimously adopt the historic Paris Agreement, not only endorsing the target to keep Earth below 2 degrees Celsius of warming but to aim for the scientifically far safer target of 1.5 degrees.

How did she persuade so many country leaders to sign up? Commentators present at the time said it was by developing a new brand of 'collaborative diplomacy' which, in her own words, is based on an attitude of "stubborn optimism". "I realized I have no idea how we're going to solve this problem, but I do know one thing: We have got to change the tone of this conversation. Because there is no way you can deliver victory without optimism," (Figueres, 2019).

Figueres represents the paradox inherent in breakthrough leadership: at once highly collaborative and systemic in approach and yet also individually purposeful and agentic. This is a form of leadership visible amongst many of the most effective leaders acting on the climate and associated crises and combines: belief in collective action; critical sense-making of complex data presented through politicized lenses; empathy with the concerns and fears of others in the system; credibility to mobilize co-operation across the usual political fault lines grounded in trust, respect and inclusivity; a passion for the natural world and a strong sense of social justice. Above all it is driven by a compelling vision about how the world can be better and how human ingenuity can realise it. This paper considers both the emerging form of leadership required to meet today's challenges and the means by which to develop it.

Introduction

It would be an understatement to say that the scale and complexity of the challenges we face today as a global society, the pace and intensity of change underway, the ensuing pain and struggle, as well as new opportunities emerging, raise important questions about the role of leadership – what modes and practices will best serve our organizations, communities, businesses?

This paper is a work in progress written at a time when many are reflecting on the unprecedented scale of interconnected crises of public health, climate, social equity and economic fallout. Leaders are being called to respond, act and step up in extraordinary ways and are expecting more turbulence ahead. Though there is no shortage of prescriptive leadership development models, we're sensing an urgent need for leadership approaches that are more contextually sensitive and learning-oriented, accounting for the complexity of steering transitions to sustainability – approaches that embody the interconnected/interdependent nature of the challenges we face.

We're approaching this paper as an exploratory conversation, sharing some of the questions that are currently guiding our own leadership work. Taking inspiration from studies on living systems, complexity theory, social innovation and learning, ecological resilience and adaptive leadership, we explore meanings of transition and breakthrough leadership. Though each organization and individual leader will need to define their own path in working through transition challenges (Throop & Mayberry, 2017), we explore some of the mindsets, practices and capabilities for fostering transition leadership as well as the implications for learning.

What is Transition Leadership?

Our journey into transition leadership begins by taking stock of the growing research on sustainability transitions that focuses on transformative changes to achieve a socially inclusive, low-carbon economy. Transitions are considered long-term, open-ended, co-evolutionary, multi-actor processes, inherently complex, uncertain, and ambiguous (Holmberg & Larsson, 2018). Unsustainable systems are phased out and more sustainable configurations emerge from fundamental, transformative processes of change on a level of systems in society (e.g. energy, mobility, agrifood, healthcare). As current trajectories remain strong and powerful forces resist change, transitions are difficult processes of social change that result in major, sometimes painful adjustments (Meadowcroft et al., 2019). The choice is not between stasis or change (change is happening all around us, all the time), but rather among different patterns of change, and more and less desirable futures. The challenge is orienting emerging technological and social currents to promote desirable system transformations that deliver positive societal value including low carbon options (Meadowcroft et al., 2019).

Sharpe's Three Horizons framework (2016) and Meadowcroft, Layzell and Mousseau's transition pathways approach and work on The Transition Accelerator initiative in Canada suggest that transition visions and pathways provide a valuable starting point to engage with system change (Meadowcroft et al. 2019). Pathways are viewed as part of a strategy for transforming existing conditions – where innovators across sectors can apply data and emerging narratives, and introduce new technologies, social practices and business models to alter established patterns of production and consumption (Meadowcroft et al., 2019).

Envisaging multiple pathways is a way to open up discussion, allowing for the exploration of varied possibilities involving different orientations and different constellations of societal actors (Meadowcroft et al., 2019). Perspectives like transition pathways and the Three Horizons provide context for the kinds of leadership practices we are exploring to help steer sustainability transitions.

Broader leadership frameworks are needed, however, to navigate transition at the level of individual and organization, acknowledging the interconnections between the micro and the macro. Adaptive Leadership (Heifetz et al, 2009) for instance offers an orientation drawn from leading in highly political environments, which is directly applicable to transitions. Heifetz et al reframe the role of leader from traditional 'direction-setter' and expert solution-provider, to convenor, facilitator and coach, someone who asks provocative and timely questions, modelling

ACADEMY for SUSTAINABLE INNOVATION

desirable values-driven behaviours, who is navigating territory where there truly are 'no easy answers' (Heifetz and Neustadt, 1994).

> *This sustainability transition is driven in part by the need to adjust to planetary limits, but also by opportunities presented by an evolving global economic system that is highly sensitive to disruptive social dynamics. Business leaders face a complex tangle of economic, social, and environmental challenges that require deep changes in operations and organizational culture. To use Ronald Heifetz' language, today's greatest social challenges are not so much technical problems as they are adaptive challenges where the "problem definition is not clear-cut, and technical fixes are not available." For businesses to flourish, leaders will need to behave in new ways consistent with a finite, complex, uncertain, changing, collaborative, connected, and caring world.*
> *(Throop & Mayberry, 2017, p. 222)*

Oxenaar and Loorbach (2017) emphasize the point that "[b]ecause nobody is explicitly in charge of transitions, and its final direction is uncertain, nobody knows exactly where we are heading or how we will get there", raising further questions about the forms leadership in transitions take.

Taking these views together, we might then offer that leading sustainability transitions may be more about:

- facilitating broad processes of co-creation, experimentation and learning than pursuing traditional management and control strategies
- collective capacities than about personal characteristics
- the ability to break away from dominant discourses, development trajectories and routines than incremental change within the dominant paradigm
- facilitating others and enabling transformation rather than seeking individual achievement and recognition
- engaging a plurality of roles including front-runners, change-agents and niches, but also proactive incumbents, entrepreneurs and transformative business (Oxenaar and Loorbach, 2017) among others rather than creating "winners and losers" that risk leaving important factions behind (Heifetz et al, 2009).

We're learning, therefore, that transition leadership is not a solo journey and that networks of relationships are key to understanding and engaging with complex dynamics. Finding our way through happens most effectively in the company of others and demands more than gathering

input (Axelrod et al., 2010). With nobody knowing where we're going or how to get there, traditional hierarchical leadership must give way to collaborative webs of actors operating in concert. Mintzberg (2009) suggests "communityship" as a more suitable framing - a more humble, engaged and distributed notion of 'power with' rather than 'power over,' a model shared by Scharmer (2013) that emphasizes 'eco' over 'ego' mindsets.

Systems leadership for systems transition

Transition leadership is more than collaborating across networks however. Transition leadership is *systems* leadership – a shift in orientation from thinking from inside discrete organisational boundaries to promulgating change across them, navigating complex interconnected systems across industry, government, society (Senge et al, 2015). As Ray Anderson, the visionary who led global flooring manufacturer, Interface Inc. would question, "can a company be truly sustainable if it operates in an unsustainable economic system?"[1] So whether leadership is about recontracting with a supply chain to design out waste, or promoting common ambitious targets to reduce carbon intensity across an industry, or advocating for policy change to incentivize pro-environmental business models, transition leaders are continually required to be thinking systemically, attentive to the unintended consequences of actions as well as the potential for emergent and non-linear outcomes (Meadows & Wright, 2017; Stacey, 2001).

Block (2003) offers another perspective on systems leadership well suited to the adaptive work of transitions. He proposes the metaphor of 'social architect', a convenor of groups to codevelop cultural transitions from a viewpoint of personal service and empowerment of others. Senge et al advocate more for 'collective leadership' with core capabilities of 'fostering more reflective and generative conversations' that 'co-create the future' (2015). GlobeScan's joint research (Grayson, Coulter & Lee, 2018), drawing on twenty years of assessing global organisations leading on sustainability, identifies 'advocacy' as the ultimate expression of sustainability leadership, that is explicitly promoting an environmental and social agenda within one's industry or wider jurisdiction. With subtle differences, these perspectives are all variations on the theme of systems leadership that take account of the complex interplay of intention and action that make up the pursuit of low carbon transitions.

---

1 Personal anecdote.

ASI ACADEMY for SUSTAINABLE INNOVATION

The Practices of Transition Leadership

What does transition leadership look like in action? What follows is a selection of key practices we are exploring, which in some cases are also those which diverge most notably from traditional leadership models. This discussion is by no means exhaustive and will evolve with time.

Futures thinking

How the future is imagined impacts profoundly on decisions taken today. The turn to more 'big picture' and systemic understandings of the interconnected crises impacting society leads to more inclusive and robust decisions in the short-term (Raworth, 2018). Futures literacy, the capacity to envision alternative future scenarios and articulate them, is a core capability for leading transition. In addition to more familiar trends analysis and insight, such WEF's Global Risks Report, (WEF, 2021), the use of frameworks like Bill Sharpe's Three Horizons (2016), enable leaders to visualise and 'use the future' (Miller, 2018) creatively today to generate new potential pathways to net zero and innovate new technologies and business models. The Three Horizons encourage actors to consider 1) Business as Usual - what is perpetuating unsustainable outcomes and needs to be let go of; 2) the turbulent, disruptive entrepreneurial orientation in which both opportunities and hazards for sustainable action are possible; and, 3) an emergent, visionary outlook. Working with all horizons as alternative perspectives helps to surface the types of actions that may be needed to enable the desired future. Opportunities exist in exploring the interconnections between climate solutions and other social goals, being able to distinguish between incremental and transformative change, and harnessing disruptive currents for more effectively transitioning to new futures. (Sharpe et al., 2017, Sharpe 2020)

Systemic sense-making

One of the often overlooked but critical roles of leaders is sense-making for themselves and their organizations. This is particularly true for the transformational work of low carbon transition, where information can be contradictory, fluid and framed in strongly political terms. Whilst the temptation to offer platitudes and over-simplifications can be seductive, (often this is what people want, (Heifetz, 2009]), skilful leadership facilitates inclusive and on-going sense-making amongst actors that enable better quality actionable and defendable decisions to be made. Sense-making is intrinsically connected to our sense of self, culture and values, history and

precedent (Weick, 1995). Adjusting processes of sense-making, formal and informal, 'upstream' can profoundly impact decisions and their consequences 'downstream'.

Argyris's first, second and third order learning model (2004) offers a useful framework for making sense which can be paraphrased as: first, am I doing things right? second, am I doing the right things? third, how do I decide what is the right thing to do? Across disciplines of organizational learning and social innovation among others reactive learning (download, re-enact habits) is distinguished from deep learning which increases awareness of the whole and action toward alternative futures (Senge et al., 2004). In the process, alternative lenses or 'frames' (Stubbings and Ceasar, 2012) can be applied, and different interpretations generated. Simply put, making meaning of the impacts of asserting a science-based target for greenhouse gas reduction will generate highly contrasting views seen through the frame of business risk mitigation versus, say, social equity.

High quality meaning-making within an executive team, processes that allow for divergent views to be aired, that manage the dynamics of the group to converge on common ground without over-simplification, not only produces stronger organisational outcomes, it also enables new stories to be generated for broader communication and engagement. This begins with applying insights from Edmondson (2018) approach to building 'psychological safety', of creating safe spaces for risk-taking, trust-building. Her work offers one of many ways to think about strengthening leaders' capability not only to ensure their own psychological well-being but also that of their teams.

Safety is a key element in experiential learning processes. We take inspiration from John Heron's perspective on "learning within relationship" where "experience" in experiential learning is a verb. This view acknowledges the engagement of emotions in learning processes. Most perspectives on experiential learning treat experience as a noun which tends to leave out the role of affect. Throop & Mayberry explore reflective practice as experiential learning – cycles of experimentation, reflection, thinking, and decision making that are iterative and cumulative. "This learning process is more complex than training for specific skills because the desired behaviours are context-specific, and therefore, the appropriate response to a particular situation cannot be prescribed at the outset (Throop & Mayberry, 2015, p. 245)."

Resilience

As noted earlier, the type of transition work we are exploring here involves the difficult challenges that come with forgoing unsustainable business models and institutions. Drawing insight from Buzz Holling's studies of ecological resilience, the adaptive cycle reminds us that destruction and renewal, death and life are necessary for any healthy system (Westley et al. 2006).

> *Moving through the stages can feel like a crisis, like we are losing ourselves. The Greek root word for "crisis" means "to sift." Sifting suggests we are letting go of what is no longer necessary but retaining the essence. Resilience represents this capacity to sift: to let go and hang on simultaneously. The challenge is knowing what and how to let go. (Westley et al. 2006, p. 71)*

Developing capacity to let go allows us to be open to what is emerging and cultivate broader awareness (Senge et al 2004).

Care

Leading to achieve the speed and scale of change required, to dismantle outdated institutions and policies, even just inside our own organisations, takes courage and mental strength. Leaders need strategies and tools to sustain themselves and others over the long term. The COVID-19 crisis in 2020 has seen many look to take greater care of their health and mental well-being; it has also raised attention to the very real consequences to health of inequalities. It has been a wake-up call to the social justice challenges that sit along with the environmental and economic costs of climate change, raising questions of how to take care of others to build more resilient teams and local communities.

How Do We Learn, Nurture and Elevate These Practices?

Learning how to become effective leaders capable of navigating our organisations and institutions towards a low carbon, just society, is best achieved through a combination of intentional practice in the field and rigorous reflective dialogue with peers, supported by relevant research and applicable theory, building a skillset appropriate to one's unique context (Marshall, Coleman and Reason, 2011).

> *"Unlike traditional change processes where specific targets are set, plans are established and executed, whole systems change methods are emergent with specific outcomes unknown when the work begins. While the details may not be known, creating a clear intention, often expressed as a question, provides direction. (Axelrod et al., 2010, 372)*

What are the learning conditions conducive to emergence?

Taking time to Pause may be an important starting point. Pausing in crisis may feel daunting when the forest is burning around us. At a time when we can't act fast enough, what today's managers need most is to slow down and reflect (Mintzberg, 2009). Amplified workplace pressures hardly encourage thoughtful action, yet "...breakthroughs come when people learn how to take the time to stop and examine their assumptions (Senge et al., 2004, p 33)."

Secondly is a need Convene and Connect as set out in the view on systems leadership above – *"In order to change, the system needs to learn more about itself from itself. The system needs processes to bring it together." (Wheatley, 2006: 145)*

Thirdly is the importance of making time for Dialogue (Bohm, 2004). It can be difficult to engage in deep dialogue around concepts like transition, resilience, or transformation, which can create inertia and inhibit action. (Sharpe et al., 2017) Rather, dialogue is about allowing the system to see itself (Scharmer, 2020). As the walls of our separateness come down temporarily, opportunities emerge to tap into levels of creativity beyond our separate capacities, allowing new concepts and possibilities to unfold (Senge et al., 2004). Transitions involve changes in social practices, which suggests uncovering perceptions of meaning and value are critical to their understanding (Meadowcroft et al., 2019).

Since in complex situations, there are no final answers, **questions** are key (Block, 2003). The right questions can illuminate issues and reveal tensions. We're inspired by learning approaches

that encourage a mindset framed by inquiry not certitude, one that embraces paradoxes and acknowledges multiple perspectives. (See Appendix 1 for a sample structure we are experimenting with in the Breakthrough Leadership for Transition Program.)

Appreciative inquiry

"Successful emergence involves building on what exists and is already working" (Westley et al. 2006, 143). Methods like Appreciative Inquiry, grounded in Positive Psychology, help leaders mine the strengths and resources that already exist in the system so they can be used to as a foundation from which to build towards the preferred future (Cooperrider and Whitney, 2005). Because so much of the discourse associated with climate change and environment is disheartening, depressive in the sense that it can literally reduce energy levels, a compassionate, strengths-based approach is found to engender more energetic responses and connect actors back to their own agency. This is Figueres' Stubborn Optimism in action, and a crucial role for leaders to take up in modelling positive engagement. Leading low carbon transformation is a consummate change leadership role that requires continual engagement and fostering of participation with others.

Action orientation

> "Often we learn what is emerging only as we move into action. The key is to act and remain open." (Senge et al. 2004: 146)

Learning *about* major challenges like climate change – the science, the trends – is necessary but not sufficient to change leadership behaviour. As UCL's Commission for Communicating Climate Change has found, "people don't fail to act on climate change because they lack information, but because they lack a sense of agency, a belief in their own power to make the choices that make a difference (de Meyer et al, 2020) A programme to develop climate-literate leadership capabilities therefore must cultivate personal agency and the consequent move to action. For executive leaders in particular, those commanding considerable assets and resources, the moves they can make - like setting and delivering on net zero targets for their businesses, developing new inclusive business models – can have significant impact, making a dramatic and swift contribution to reducing greenhouse gas emissions.

This approach to learning-in-action follows a well-trod path. The most common forms of practice today owe much to the work of Reg Revans (1982) who coined the term Action Learning, and more recently to Action Inquiry (Torbert, 2004) and Action Research (Reason and Bradbury,

ASI ACADEMY for SUSTAINABLE INNOVATION

2013), all of whom point out the necessity for adult learners to take their experience seriously, and how, particularly where learners are driving complex change, the approach benefits not only the learner but the systems they are trying to influence. All methods, for learning as well as research, more or less follow the cycle described above: intentional designing and trialling of experiments, robust peer reflection and reference to relevant theory to ensure real-world applicability. Crucially they all situate the learner in the midst of the system they are trying to influence, a subjective participant with biases, foibles, cognitive biases rather than as detached objective observer (Kahneman, 2011).

Ultimately, the purpose of exploring and developing these leadership practices is to be able to lead practical change in the world that makes a pronounced and positive difference. Long-term, individuals benefit from learning with and through networks of peers and collaborators, innovating new processes, business models and ways of organising. If those leaders who are ahead on the journey can support those at an earlier stage with mentoring, insight, encouragement, then the capacity to enable systems change grows with greater foresight and greater ambition to produce a lasting legacy.

> *When leadership is recognized as a broadly held capacity that can emerge from anywhere, organizations begin to operate in a more fluid and life affirming way. They make room for a different kind of organization, one that enables collective leadership to emerge. By recognizing and embracing the potential inherent in disturbances, both formal and informal leaders develop the skill to ask powerful questions. When issues arise, someone takes responsibility to convene a gathering, inviting whoever cares to address it on behalf of the whole. There is growing confidence that, when diverse people follow that which has heart and meaning, when they embrace the dynamic tensions that emerge among them, and when they reflect collectively on what unfolds, then unexpected and innovative insights cohere into clear intentions and meaningful action. As a result, many are changed by the experience, growing in self-confidence and willingness to trust others. (Axelrod et al., 2010, p. 370)*

What's next?

Leaders like Figueres don't follow a blueprint. They learn what works through a combination of trial and error, observing others, collaborating and experimenting, appraising success and failure honestly and their own part in it. Learning like this requires confidence to take risks, creative problem-solving and candid self-awareness. These are not skills typically learnt in a traditional classroom setting.

MacDonald's article in MIT Sloan Review on leadership lessons learned from 2020 suggests leaders also need to focus on healing and renewing our relationships and institutions. Her article reinforced the importance of taking care of self and one another, building shared understanding through dialogue, sharing not only what you're thinking but how you're feeling, collective sensemaking in times of growing uncertainty, and cultivating restorative habits. Tapping into our needs and strengths as individuals and organizations in flexible ways and actively cultivating and modelling a culture that supports adaptability and learning (MacDonald, 2020) seems more important than ever.

How do we create the conditions for this kind of learning to emerge in our organizations? Effective transformational practice needs to engage people in developing their own role in shaping the future in a reflexive and reflective way, so that they can participate more fully in the process of making transformation happen (Sharpe et al., 2017).

We're learning that so many of the ideas examined in this paper are not necessarily new but offer important reminders about learning and change. What's new perhaps is our evolving sustainability context and amplified ways of connecting with one another. We hope this paper invites a broader conversation about what it means to lead and facilitate the transformative changes needed to steer transitions to alternative futures.

References

Argyris, C. (2004) Double Loop Learning and Organisational Change, in Dynamics of Organisational Change and Learning. *John Wiley & Sons Ltd.*

Axelrod, E., Cady, S.H. & P. Holman, 2010. "Whole Systems Change," Chapter Seventeen in Practicing Organization Development, *John Wiley and Sons, Inc. San Francisco, CA*, pp. 363-376.

Block, P. (2003) The Answer to How is Yes. *Berrett-Koehler Publishers Inc.*

Bohm, D. (2004) On Dialogue, *Routledge.*

Cooperrider, D, and Whitney, D (2005) Appreciative Inquiry: A positive revolution in change. *Berrett-Koehler Publishers Inc.*

Edmondson, A. (2018) The Fearless Organisation, *Harvard Business Press.*

Figueres, C, 2019, qz.com/work/1192946/climate-leader-christiana-figueres-nothing-gets-done-without-optimism

Grayson, D., Coulter, C. & M. Lee, 2018, All In – The future of business leadership, *Routledge.*

Heifitz R, Linsky M and Grashow A, 2009, The Practice of Adaptive Leadership, *Harvard Business Press*

Heifetz, R and Neustadt, R. 1994. Leadership without Easy Answers, *Harvard Business Press*

Holmberg, J. & J. Larsson, 2018, "A Sustainability Lighthouse—Supporting Transition Leadership and Conversations on Desirable Futures," Sustainability, 2018, 10, 3842; doi:10.3390/su10113842

Kahneman, D. (2011) Thinking Fast and Slow, *Farrar, Straus and Giroux*

de Meyer, K, Coren, E, McCaffrey, M, and Slean, C (Dec 2020) Transforming the Stories we tell about climate change: from 'issue' to 'action' *Environmental Research Letters, Vol 16 No.1., IOP Publishing*

MacDonald, A., Dec 28, 2020, "Nine Leadership Lessons 2020 Gave Us," sloanreview.mit.edu/article/nine-leadership-lessons-2020-gave-us/?utm_source=newsletter&utm_medium=email&utm_content=Nine%20Leadership%20Lessons%20From%202020&utm_campaign=Enews%20BOTW%2012/30/2020

Meadowcroft J, Layzell DB and Mousseau N. 2019. "The Transition Accelerator: Building pathways to a sustainable future," Transition Accelerator Reports Vol. 1, Iss. 1, Pg 1-65. transitionaccelerator.ca/wp-content/uploads/2020/05/Transition-Accelerator_Building-Pathways-to-a-Sustainable-Future.pdf

Marshall, J, Coleman, G, and Reason, P. (2011) Leadership for Sustainability, An Action Research Approach, *Greenleaf Publishing*.

Meadows, D and Wright, D; 2017. Thinking in Systems. *Chelsea Green Publishing*.

Miller, R; (2018) Transforming the Future: Anticipation in the 21st Century, *Routledge UNESCO co-publication*.

Mintzberg, H. 2009, "Rebuilding Companies as Communities," *Harvard Business Review*, July/August.

Oxenaar, S. & D. Loorbach, Special Issue Editors: "Leading Sustainability Transitions," in *Sustainability*, mdpi.com/journal/sustainability/special_issues/leading_sustainability_transitions

Raworth, K. (2018) Doughnut Economics, *Random House*.

Reason, P and Bradbury, H (2012) The SAGE Handbook of Action Research *SAGE Publications Ltd*.

Revans, R; (2011), ABC of Action Learning, *Taylor and Francis Ltd, Ashgate publishing, UK*.

Scharmer, O and Kaufer, K; 2013. Leading from the Emerging Future, *Berrett-Koehler*.

Scharmer, O., July 2, 2020 Forbes '15 interview, youtube.com/watch?v=X5CWRv8d4wM

Senge, P., Hamilton, H., and Kania, J; The Dawn of Systems Leadership, *Stanford Social Innovation Review*, Winter 2015 pp.26-33.

Senge, P, Scharmer, C.O, Jaworski, J. & B.S. Flowers, 2004. Presence, *SoL Press*.

Sharpe, B., A. Hodgson, G. Leicester, A. Lyon, and I. Fazey. 2016. "Three horizons: a pathways practice for transformation," *Ecology and Society* 21(2):47. ecologyandsociety.org/vol21/iss2/art47/

Stacey, R. (2001) Complex Responsive Processes, *Routledge*.

Stubbings, A. and Ceasar, N. (2012) Sustainability As Usual, *Ashridge Publications*.

Throop, W. & M. Mayberry, 2017, "Leadership for the Sustainability Transition," Business and Society Review, 122:2, 221–250.

Torbert, B. (2004) Action Inquiry: The Secret of Timely and Transforming Leadership, *Berrett-Koehler*

WEF (2021) Global Risks Report, reports.weforum.org/global-risks-report-2021

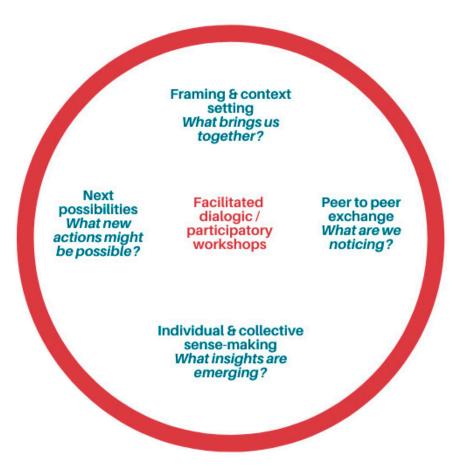Weick, K; (1995) Sense-making in Organisations, *Sage Publications*

Westley, F., Zimmerman B. & M. Quinn Patton, 2006, Getting to Maybe, *Vintage Canada, Toronto*.

Wheatley, M. 2006. Leadership and the New Science. *Berrett-Koehler Publishers, Inc. San Francisco, CA.*

Appendix 1

Sample structure for Breakthrough Leadership for Transition dialogue

Framing & context setting
What brings us together?

Next possibilities
What new actions might be possible?

Facilitated dialogic / participatory workshops

Peer to peer exchange
What are we noticing?

Individual & collective sense-making
What insights are emerging?

ASI ACADEMY for SUSTAINABLE INNOVATION

About the Academy for Sustainable Innovation (ASI)

ASI creates learning experiences that cultivate and nurture leadership practices and mindsets for steering sustainability transitions. We believe that a one-size-fits-all model of technical training can only get us so far. To be most effective, these technical elements must be integrated into a holistic learning experience, designed collaboratively to meet the evolving needs, circumstances and learning objectives of the participants.

Grounded in action learning, appreciative inquiry, and adaptive leadership theory, our customizable Breakthrough Leadership Training (BLT) program focuses on developing transition leadership practices such as reframing and contextualizing opportunities and challenges, strengthening personal resilience, community-building, and breaking through organizational barriers.

For more information about ASI, the BLT program and Transition Leadership, please visit
sustainableinnovation.academy

Join the ASI Community
newsletter sign-up + **LinkedIn**