



Editorial: Understanding Collective Learning and Human Agency in Diverse Social, Cultural and Material Settings

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Introduction to the Research Papers

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The significance of environment and sustainability education research and practice, and its potential contribution to a sustainable future for humanity, is conveyed by the International Social Science Council (n.d.), which explains:

People everywhere will need to learn how to create new forms of human activity and new social systems that are more sustainable and socially just. However, we have limited knowledge about the type of learning that creates such change, how such learning emerges, or how it can be scaled-up to create transformations at many levels.

Here, the important shift is towards considering what social systems, forms of knowledge, learning processes and questions of justice are associated with perpetuating or halting the decline of Earth's bio-geo-chemical systems. This edition of the *Southern African Journal of Environmental Education* contributes three research papers and a themed Think Piece collection to these international deliberations about the role of education in enabling transformations to sustainability. Collectively, the articles highlight how relationality and the formation of human agency in socio-cultural and material settings in past-present-future configurations underpin all environment-oriented learning processes. The three research papers constituting the first part of this volume offer glimpses into how current unsustainable socio-cultural and material configurations might be transformed to address social inequalities and damaged people-nature relations. The Think Piece collection, introduced by Lotz-Sisitka, Læssøe and Jørgensen later in this editorial, focuses on how learning can foster and contribute to the development of change agents and collective agency for climate-resilient development.

In the first research paper, **Manuku Mukoni**, **Ronicka Mudaly** and **Relebohile Moletsane** give an account of rural Zimbabwean women's gendered experiences of participating in a community-based environmental education programme. Their case study highlights how, despite the apparent success of women officially or numerically participating in the programme, deeply entrenched gendered norms and power gradients leave the women silenced and devalued. The paper challenges practitioners involved in community environmental education

activities to seek forms of transformative dialogical praxis that might recast women as active and equal agents of change.

Jean Kayira's paper similarly explores the tacit yet profound ways that people's agency is conditioned by their dominant socio-cultural and economic realities. Drawing on Bhabha's (1994) idea of inhabiting 'hybrid third spaces', Kayira describes how the relationships that vulnerable children in a rural Malawian village have with 'their place' are a complex hybrid of local social, cultural and material interactions, and globalised identifications. Using a place-mapping research methodology, Kayira's case study shares a sample of the children's representations of their favourite places that are interpreted as gendered, globalised and aspirational.

The case study by **Jonathan Foley, Himansu Baijnath and Donal P. McCracken** reiterates Kayira's conclusion that environmental educators need to be responsive to learners' socio-cultural background and experiences when teaching about environmental concerns. Foley *et al.* describe the perspectives, attitudes and understandings of biodiversity loss of students at a South African university of technology. In this urban higher-education setting where student concern for biodiversity loss was expected to be low, the questionnaire and interview data indicated that students indeed valued biodiversity, most especially when strong cultural connections could be made between students' lives, their African identities and local natural places.

Introduction to the Think Piece Collection: 'Collective Learning and Change Agency Formation in Times of Climate Change'

Heila Lotz-Sisitka, Jeppe Læssøe, Nanna Jordt Jørgensen

There is no doubt that climate change presents one of the most significant challenges to humankind. Increasingly it is being understood that responding to climate change is not just a matter of individual response, but requires more collective, societal responses. Since much of how to respond best to climate change challenges remains unknown, this response should be learning-centred. Contemporary educational research shows that learning *can* lead human development and societal transformations, but as yet little is known about this in a climate change context (Lotz-Sisitka, Wals, Kronlid & McGarry, 2015; Macintyre, Lotz-Sisitka, Wals, Vogel & Tassone, 2018).

The need for more radical and more collective forms of learning-centred transformation is increasingly recognised in the social-ecological and global change sciences. For example, the Intergovernmental Panel on Climate Change (IPCC, 2014) reports that there is a strong need for learning-centred approaches to climate-resilient development. Yet these approaches to learning, especially from a change agent/collective agency point of view, remain underdeveloped and undertheorised in the context of wicked problems such as climate change. As outlined by the International Social Science Council's Transformations to Sustainability (T2S) project on 'Transgressive Learning in Times of Climate Change', limited research has been done on this type of learning.¹ In this collection of Think Pieces, the authors focus in particular on *how such learning emerges amongst change agents, on how they influence other people's learning*, as well as on

1 See www.transgressivelearning.org.

how such social learning processes can be expanded and upscaled to strengthen collective agency for climate-resilient, sustainable development.

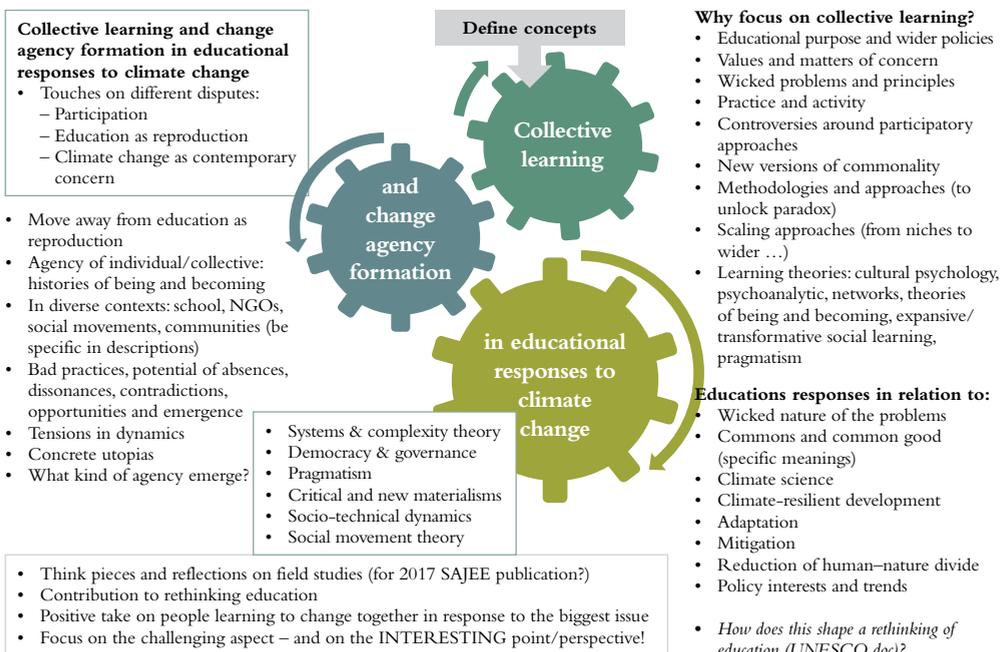
This collection of Think Pieces aims to contribute to addressing these issues and thereby, hopefully, promote further knowledge production and knowledge exchange at the intersection of research and practice. Through this, the authors of the Think Pieces help to qualify efforts for learning-led, peaceful and transformative ways of coping with climate change and related global sustainability issues.

The approach taken to developing the Think Pieces

The Think Pieces were produced as part of a bilateral collaboration between the Environmental Learning Research Centre at Rhodes University, South Africa, and the research unit ‘Educating for Viable Futures’ at Aarhus University, Denmark. A grant from the Danish Agency for Science, Technology and Innovation enabled this collaboration, consisting of three sessions with workshops and field visits that took place from June 2016 to February 2017. The main scientific focus was *education and social learning in response to climate change risk and vulnerability* and, within this, *how learning can foster and contribute to the development and emergence of change agents and collective agency for climate-resilient development*.

At the first workshop in Copenhagen from 6–9 June 2016, different issues as well as theoretical perspectives and concepts were conveyed through a diagram that emphasised the processual links between collective learning, change agency formation and educational responses to climate change (Figure 1). It was as part of this process that we decided to produce

Figure 1. Exploration of the joint issues at the first workshop



a collection of Think Pieces in order to explore the many potential ways of approaching and conceptualising the joint issues. The Think Piece format allows for open exploration of a particular concept from diverse vantage points.

Since the object of our enquiry was complex and our initial scoping (see Figure 1) indicated that a number of complex dimensions would need to be related to each other in order to develop a coherent research framework for researching collective learning and change agency formation in times of climate change, and as there were diverse possible theoretical approaches to this, we decided to adopt an exploratory approach first to ‘open up’ vantage points on the object of collective study. To offer some synergy and coherence, we agreed to also focus our reflective work on case studies, and in the collaboration we explored some joint case studies. The purpose here was to relate theory to practice and to consider the research object in and out of contexts of practice.

As indicated in the box in the lower left corner of Figure 1, this collection of Think Pieces has the constructive aim of contributing to rethinking education and training. In this sense, we also sought to focus on some of the more challenging aspects or interesting points and perspectives, situating this reimagining of education and learning in ways that provide hope for, and a positive orientation towards, learning for change.

Cases as generative spaces for Think Piece construction

In order to give meaning to our interest in theory-and-practice-in-practice (Bhaskar, 2008), we focused on case studies as generative spaces for Think Piece construction. To do this, we undertook field trips at each session, which provided important inspiration, reflections and discussions. In Denmark, as part of the first session, the island Samsø was visited in order to meet and talk with change agents there. Samsø became world famous in 2008 when *Time* magazine selected their key change agent, Søren Hermansen, to be one of a hundred ‘heroes of the environment’ (Walsh, 2008). The title of the article was related to a radical transformation of the island’s energy system to become totally based on renewable energy. In South Africa we visited a newly emerging energy transition system in the East London area of the Eastern Cape province, where we also focused on the development of green skills for the energy transition, linking this also to recent policy interest in collective learning and change agency formations emerging from the Paris Agreement. We also visited a rural community learning network context where farmers were being supported via multi-actor relations in the Imvotho Bubomi learning network to develop practices of rainwater harvesting and conservation. This initiative is named ‘Amanzi [Water] for Food’ and its purpose is to enhance food and water security. Researchers in our group were also engaged in other interesting case study contexts further afield and brought their deliberations and reflections to bear on these contexts.

Dialogue across contexts

A collection of Think Pieces may be compared to a colloquium – a common discussion around a shared issue in which the contributions provide a range of different perspectives, for example by relating to different settings or by drawing on different theories. The aim is not to bring these different perspectives together in one unifying theoretical construct but to explore the

overall issue in a multifaceted way, adding and reflecting on potential ways of approaching and conceptualising key sub-issues. In this sense, the collection offers contributions that, hopefully, are helpful for those who, in theory and/or practice, deal with collective learning and change agency formation related to climate change and sustainability transitions.

The first Think Piece is written by **Heila Lotz-Sisitka**, who deliberates on how relationality is framed in collective learning and change agency formation processes in South Africa's major renewable energy development and the Samsø Island renewable energy transition. In both cases, the public discourse appears to focus on 'pioneers' or 'champions', highlighting individual capabilities rather than collective, relational competences. Yet, on closer inspection, it is indeed the relational competences of the pioneer or champion, who is constituted as a 'relational subject' with a key role to play in producing shared relational goods, that appear to be significant to the collective learning and action process. Lotz-Sisitka also provides insight into how individual change agents are relationally constituted. This, she argues, requires a differentiation of *relationism* and relational realism.

In her Think Piece, **Monica Carlsson** also draws on the Samsø Island case and reflects on the relationship between individual and collective in change agency formation. Inspired by notions of participation in everyday life and politics, the Think Piece furthermore explores two different forms of knowledge-sharing in the learning processes leading to change on Samsø: 'neighbourly visits' and open source web-based documentation – emphasising the role of knowledge exchange in change agency formation. Drawing on Jamison's (2010) notion of the making of green knowledge in the tension between environmental politics and cultural transformation, the Think Piece concludes by suggesting that the Samsø project adopts both an adaptive and a transformative approach.

While theories of transformative social learning, applied in environmental and sustainability education, tend to operate with relatively short-term learning horizons, the Think Piece of **Jeppe Læssøe** explores the potential to think of social or collective learning as longer-term processes. Like the two previous Think Pieces, this contribution relates to the Samsø case, but here the focus is on how the key change agent draws on storying collective experiences. Inspired by the works of German and Danish critical theorists, the emphasis is on linking people's everyday sensuous-emotional experiences to collective spaces, enabling collective reflection and thus exemplary learning about the socio-cultural context they belong to. Furthermore, this could create opportunities for concrete utopian projects and collective experience-making.

The Think Piece authored by **Injairu Kulundu** invites us to consider what collective learning and change agency could look like in a polarised world. By highlighting the diverse perspectives and trajectories of four change drivers across different social contexts of South Africa, Kulundu identifies contradictions existing between the issues that they are grappling with in practice. The Think Piece highlights the need for pedagogical experimentation around an idea of collective resonance, which refers to the catalysing of a deep resounding connection between individuals from completely different environmental, socio-economic and cultural and psychic worldviews. It is about the possibility of purposefully engaging the relationships, contradictions and possibilities that sit between the diverse work that change drivers are doing.

The Think Piece suggests that we can use these contradictions to help build a layered praxis for solidarity and social change in polarised societies.

Nanna Jordt Jørgensen's Think Piece also involves central change agents and processes of learning between actors. With her point of departure being a case story from the Amanzi for Food project in the Eastern Cape, and older case material on community gardens in Port Elizabeth, Jørgensen reflects upon ways of experiencing and coping with uncertain livelihood conditions. The discussion focuses on the intergenerational interactions and learning processes involved in gardening and their role in shaping responses to uncertainty which point towards 'creative solutions' rather than 'debilitation'. Each case features a central change agent whose agency is shaped by her/his ability to take up a generational position in a community of practice in creative ways. As such, the Think Piece stresses the relational aspects of change agency formations and encourages attention to the heterogeneous positions and social interactions involved in collective learning processes.

Using a critical realism perspective and schematic tools, **Rob O'Donoghue's** Think Piece examines the deliberative framing of an Amanzi for Food teaching garden as an education process for mediating the learning of rainwater harvesting practices. Working with Bhaskar's (2008) Transformational Model of Social Activity and using expansions of his 'four-planar social being' schema and its resolution in his 'social cube' model, the study contemplates the framing of a curriculum for mediating co-engaged social learning in the contexts of practical work in an agricultural college curriculum setting. In this way, the research process is developed as an under-labouring review of the emerging curriculum in search of theory to inform pedagogy for mediating situated processes of transformative social learning.

Søren Witzel Clausen's Think Piece centres on the ongoing climate changes and points to the challenge of comparing efforts to address climate changes due to different impacts at different places with diverse economic, technical and social conditions. Based on case material from the Amanzi for Food project and the Energy Academy at Samsø in Denmark, the Think Piece proposes that the concepts of action competence and powerful knowledge help in shedding light on collective learning and change agency formation processes.

The final Think Piece, by **Sofiya Henrietta Angelina Olsen**, explores how education for sustainable development is perceived and practised at the Danish folk high school course Green Guerilla. The Think Piece argues that the Green Guerilla course constitutes a radical political imaginary; a space where the students learn to train their sociological imagination and reflect upon themselves and their own culture and society from an outside perspective in order to imagine how it may be structured differently. A special event during that course, a five-day study trip to a Swedish forest, is highlighted as particularly transformative for the students, as they learn to be in and engage in active, sensory ways with nature, and experience how creating a sustainable world, in more than one sense, means 'dealing with your own shit'. Through this sustainable formation, the students learn that it is up to them to 'find their own forest' – that is, to figure out how they can create the lives that they want to live in the future.

Although the nine Think Pieces offer a diversity of inputs, they all address the joint issue of collective learning and change agency formation related to climate change and sustainable transitions. As such, they all contribute to critical reflection on these key

concepts. For example, the Think Piece of Læssøe, indicates that collectivities take different forms in different settings, each with their specific potentials and challenges for change agents working to enable collective learning and change agent formation. The Think Pieces furthermore explore various aspects of collective learning. Læssøe, Kulundu, Olsen and Jørgensen point to the role of sensuous–emotional experiences in collective learning and change agency formation, while other contributions highlight situated co-engagement (O’Donoghue), collaborative and expansive learning (Lotz-Sisitka), mediation and dialogical processes (Jørgensen), and knowledge-sharing (Carlsson). In relation to the concepts of change, change agency and change agents, a key issue is the relationship between collective and individuals in change agency, most explicitly analysed by Lotz-Sisitka and Carlsson. Similar to the papers of Kulundu, Læssøe and Jørgensen, both of these Think Pieces also address the role of key persons in collective learning and change agency formation. The formation of change agency in planned educational activities is most explicitly, but also in quite a different manner, reflected in the Think Pieces of O’Donoghue, Olsen and Clausen, which emphasise educational concepts and curricular processes that can support collective learning and change agency formation. Finally, the collection of Think Pieces emphasises in several ways the importance of transgressing generic approaches by contextualising collective learning and change agency formation on climate change and sustainability in time as well as space.

Engaged scholarship

The Think Pieces all inscribe themselves in a tradition of engaged scholarship which has a strong history within environmental and sustainability education research. As such, they share an ambition to make a difference beyond academic knowledge production, endeavouring to engage more directly in the promotion of social change. In these Think Pieces, we also see evidence of this aspiration for engaged research being actualised in different ways. In the articles of Carlsson, Clausen, Lotz-Sisitka, Læssøe and Jørgensen, the aspiration for contributing to change is the underlying motivation for the analysis of empirical collective learning and change agency formation processes and for endeavours to attain a stronger theoretical clarity of these concepts. Methodologically and analytically, the authors – although not full participants as such in the processes of change under discussion – position themselves as allies of people in the settings being engaged with, and processes are analysed in attempts to ‘think with’ them, focusing on the potentiality inherent in the cases, rather than subjugating them to critical deconstruction.

Expanding the continuum of engaged research, in the articles of Kulundu, O’Donoghue and Olsen, the authors take a more active role in the generation of social change analysed in their articles. Hence, Kulundu and O’Donoghue are both involved in developing educational approaches to collective learning and change agency, while Olsen as a participating student undergoes the collective learning process discussed in her article. The different balance points between active participation and analytical distance offer different kinds of insights into how collective learning may lead to change. Common to all texts is the ambition to keep reflections open and experimental (hence the choice of the Think Piece format) in an attempt to adapt

research approaches to the uncertainty and insecurity of the climate crisis, which calls for new and creative ways of thinking rather than the reproduction of hitherto dominant knowledge construction approaches.

In Conclusion

In conclusion, we highlight a few insights from the Think Piece collection with emphasis on their implications for environment and sustainability education research and praxis. We think that the Think Piece collection, while modest and experimental in scope, provides inspirations for the idea of authentic 'real world' learning; that is, connecting learning to ongoing issues, involved actors, networks and efforts to promote sustainable change. Here, we support a view of participation as neither a detached exercise nor visioning without any relation to reality, but rather as connected to collective civil society processes of change which take place without being dominated by policy institutions. Such participatory processes search for ways forward in niches and in connection to new ruptures made by climate change and related socio-cultural change. In such contexts, there is a need to constantly recognise, review and reflexively respond to ongoing challenges and opportunities in practice and how key actors/change drivers may cope with them. As noted, researchers are integral partners in such a process, hence the need for the scope of engaged research approaches also alluded to above.

The Think Pieces also show that collective learning and change agency formation in relation to climate change involves processes of ongoing 'navigation' of: (i) power; (ii) structure; (iii) educational and ecological change and social dynamics, due to intersecting complexities and uncertainties. Thus they foreground the intertwining of material and social perspectives in environment and sustainability education. Recognising this can help to avoid being naïve in the way we approach environment and sustainability research and practice. Time needs to be given to come to understand the complexity of intersectional dynamics in any environment and sustainability education context. Such complexity should not produce paralysis, but rather be viewed as a creative and open process opportunity, as the Think Pieces all show.

The Think Pieces, and their contextual foci, show that collective learning and change agency formation occurs in the here and now, but that a long-term view or perspective is also needed for interpreting and reflecting on such processes more fully. This provides some insight for reflections on and planning of processes of collective learning in time-space where different time-space configurations need to be taken into account.

The Think Pieces also point to how both social and psychosocial-emotional relations may be part of change agency formation. Motive for change is also a key part of this, as is the need for reflecting on potentially erroneous individualising assumptions of 'change agents', and the need to consider their roles in social contexts. As shown in one or two of the Think Pieces, a focus on 'the change agent' as hero or champion can obscure details of other relational processes that allow for the change agent to act. The Think Pieces all point to the relationality of various forms, for example intergenerational relationality, interinstitutional relationality, interpersonal relationality and more. The Think Pieces also point to the need to carefully think

through the phenomenon of relationality in collective learning and change agency formation in environment and sustainability research and praxis, and to avoid superficial interpretations of this complex phenomenon.

Lastly, we encourage readers of the Think Piece collection to carry forward this project and join in the process of searching out inspiration in and from such practices in totally different socio-cultural and material contexts. The future of environment and sustainability education in the context of wicked problems is likely to become ever-more relationally constituted, and collective learning and change agency formation will no doubt expand in significance. We hope that this collection of Think Pieces will help researchers to participate in, and reflexively review, such processes.

Acknowledgements

The development of this Think Piece collection was aided by bilateral grant-based support from the Danish Agency for Science, Technology and Innovation, hosted by Aarhus University, Denmark. Additional support was provided by the National Research Foundation's (NRF's) SARChI Chair in Transformative Social Learning and Green Skills at Rhodes University, South Africa, which is supported by a grant from the NRF and the South African Department of Science and Technology. The writing work was also partly supported by, and contributes to, the International Social Science Council's T2S research programme focusing on 'Transgressive Learning in Times of Climate Change' (t-learning), hosted by Rhodes University.

References

- Bhabha, H. (1994). *The location of culture*. London: Routledge.
- Bhaskar, R. (2008). *Dialectic: The pulse of freedom*. London: Routledge.
- IPCC (Intergovernmental Panel on Climate Change). (2014). Climate change 2014 synthesis report: Summary for policymakers. https://www.ipcc.ch/pdf/assessment-report/ar5/syr/AR5_SYR_FINAL_SPM.pdf, visited 7 May 2018.
- International Social Science Council. (n.d.). T-learning. <http://www.worldsocialscience.org/activities/transformations/t-learning/>, visited 16 April 2018.
- Jamison, A. (2010). Climate change knowledge, and social movement theory. *Climate Change*, 1, 810–823.
- Lotz-Sisitka, H.B., Wals, A.E.J., Kronlid, D. & McGarry, D. (2015). Transformative, transgressive social learning: Rethinking higher education pedagogy in times of systemic global dysfunction. *Current Opinion in Environmental Sustainability*, 16, 73–80.
- Macintyre, T., Lotz-Sisitka, H.B., Wals, A., Vogel, C. & Tassone, V. (2018). Toward transformative social learning on the path to 1.5 degrees. *Current Opinion in Environmental Sustainability*, 31, 80–87.
- Walsh, B. (2008, 24 September). Heroes of the environment 2008: Soren Hermansen. *Time*. http://content.time.com/time/specials/packages/article/0,28804,1841778_1841782_1841789,00.html, visited 16 April 2018.