

Editorial Perspectives on transformations in learning and education

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The year 2015 officially marks the end of the UN Decade of Education for Sustainable Development. It also marks almost 40 years since the Tbilisi Declaration was first released, providing international guidance on environmental education. The Environmental Education Association of southern Africa has also been around for over 33 years, and 2015 will mark the 31st Edition of the southern African Journal of Environmental Education. 2015 also marks 25 years of the Murray & Roberts Chair of Environmental Education at Rhodes University, where the SAJEE is housed, and from where it has been edited for the past 31 years. In this time, environmental education has been integral to various transformations in the education and training systems of southern African countries, and indeed also internationally where similar transformations are taking place.

Thus, much has been done over the past 30-40 years, providing an opportune time for us to 'look back' on the history of environmental education in southern Africa and elsewhere, and its role in transforming education and society. However, looking back means little if it cannot help us to also look forward. Simply reviewing transformations in education may not be enough as our looking back an forward needs to be contextualized within the changing planetary systems and societies that are being shaped by anthropogenic activities and contemporary development frameworks. In this regard, Anna Stetsenko (2008) suggests that "collaborative purposeful transformation of the world is the core of human nature and the principled grounding for learning and development".

The International Social Sciences Council recently invited social scientists to participate in a new research programme entitled "Transformations to Sustainability". The documentation associated with this research programme suggests that "In the face of ever expanding environmental problems and disaster risks on the one hand, and converging crises of climate, inequality, food, water, finance and social discontent on the other, the focus of demand falls sharply on innovative, sustainable social solutions" (ISSC, 2012). Research on education and learning must form part of the new social science knowledge that is being produced in this context, in order for us to deepen our understanding of the role of education and learning in educational and societal transformations to sustainability.

Against this background, this edition of the Southern African Journal of Environmental Education contains a number of papers that consider the transformative potential of environmental education research and practice. The first paper, by Dylan McGarry, develops an approach to transgressive social learning based on what he calls 'a collaborative connective aesthetics approach'. The paper is constituted as a personal iterative retrospective of a series

of expansive social learning processes that were collaboratively developed through practice-based enquiry across 17 South African towns/contexts. The paper reflects on the formative foundational qualities of arts-based enquiry approaches and shares insights into social learning praxis that emerged 'on the tracks', referring to the mobile platform where the research took place.

The second paper in the journal, by Martha Chaves, Thomas Macintyre, Eliana Riano, Jorge Calero and Arjen Wals, explores the role of social learning in bringing about transformative sustainability processes in individuals and communities. Their paper draws on 12 months of action-orientated research to explore the triple-loop learning process of an ecovillage in Colombia called Atlantida. The paper shows that social learning processes are not always 'smooth' and easy to engage. They report on the process of how disruptions in the community provided an opportunity for members to enter into a process of deep learning because they were willing to collectively reflect on their process.

The next paper in the journal, by Victoria Ferdinand, also addresses the transformative potential of social learning. Her study sought to identify social learning, change and transformation in adaptive co-management interrelations introduced under the project 'Reduction of Emission from Deforestation and forest Degradation' (REDD) at Pugu and Kazimzumbwi Forest Reserves (PKFR) community in Tanzania. The study points to both enablers and constraints associated with learning, agency formation, social change and transformation in this context, and reports that social learning in PKFR community was potentially stimulated by people's relational interactions, reflective thinking, anticipations and their questioning of past practices. However, she points out that most of the REDD-stimulated learning did not transform the practices desired by the project.

The next paper in the journal, by David Lindley, provides a useful overview of the literature on social learning which he says is "enormous", with differently framed ontologies and epistemologies aligned to mutiple perspectives of learning in a social context. These have grown out of the many academic disciplines that have seen the value of social learning. The paper provides a broad-based understanding of transformative social learning by defining social learning with a socially critical orientation, and distilling key elements of social learning important to supporting social change.

The paper by Helen Fox, Tally Palmer and Rob O'Donoghue also addresses the transformative potential of social learning. The paper reports a case study of a severely degraded lake social-ecological system where an environmental education initiative was implemented with the aim of supporting its transformation towards improved social and ecological well-being. The paper highlights and discusses three characteristics of the initiative that appeared to support the transformative process, and reports on the range of new practices that emerged from the social-ecological system transformation initiative.

Coleen Vogel, Ute Schwaibold and Shanu Misser also consider the issue of transformative learning. Their research shares insights into the way in which the design of teacher education materials and curriculum might be more or less transformative in a climate change response context. They argue that the complexity of climate as an interconnected system, including earth and socio-ecological systems and 'deeper' thinking, requires critical enquiry, reflexive and

transformative education approaches. Extending this argument, the paper provides a synoptic overview of three emerging South African cases of teacher education materials development, high school material design and the design and implementation of a new tertiary degree offering centered on teaching and learning for climate change.

The journal closes with a viewpoint paper and a book review. The viewpoint paper by Pieter Swarts, Julialet Rens and Luiza De Sousa aims at raising interest in working with environmental education pedagogies to enhance the quality imperative of social and environmental responsibility for South African learners through the fundamental subject Life Orientation. Lynette Sibongile Masuku reviews a recently published book entitled 'Intergenerational Learning and Transformative Leadership for Sustainable Futures' edited by Peter Blaze Corcoran and Brandon P. Hollingshead. Her richly textured book review, conceived in the midst of the recent student protests in South Africa, provides various reflections on and reflections of authors' works in the book, all of which address the important question of intergenerational learning and transformative leadership in turbulent times.

From the above, it is clear that this edition of the Southern African Journal of Environmental Education offers readers much to mull over as the topic of transformation and transformative learning remains on the agenda of environmental education research.