## **Book Review**

Teaching and Learning for Change: Education and Sustainability in South Africa (2021) edited by Ingrid Schudel, Zintle Songqwaru, Sirkka Tshiningayamwe and Heila Lotz-Sisitka

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## John Bhurekeni

Department of Education, Faculty of Education, Rhodes University, Makhanda, South Africa bhurekenijohn@ymail.com https://orcid.org/0000-0003-2634-9780

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One of the paradoxes of postcolonial education—one that contradicts many of its hopeful narratives, particularly in Southern Africa—is how coloniality remains persistent over time. This continued coloniality is made more noticeable by African governments' poor or slow response to the challenges of low and inequitable access to education, irrelevant curricula and poor learning outcomes, insufficient education financing, poor education system capacity, and the weak link with the world of work (Kallaway, 2020). Teaching and learning for change: Education and sustainability in South Africa, edited by Ingrid Schudel, Zintle Songqwaru, Sirkka Tshiningayamwe, and Heila Lotz-Sisitka, provides a perceptive and thorough response to these challenges. The contributors recognize contemporary educators as redemptive actors in Education for Sustainable Development through the mediation of active and critical approaches to learning. However, the book also demonstrates that teacher and learner agency have limits if education is defined "via the modernist development trajectory" (p. 6). I had assumed that those limits were economic and political, but the 20 authors in this volume, including the editors, illustrate how pedagogical and curriculum abstraction excludes learners from an active learning life, and propose practical and doable solutions to avoid the pedagogical muddle and curriculum decontextualization that currently exist in schools (Lotz-Sisitka, 2009).

South Africa's national *Fundisa [Teaching] for Change* programme that inspired this volume, encourages teachers to teach for change. As a result, teachers are being urged to take a step towards the democratisation of education, precisely Education for Sustainable Development, in a national context that is still fraught with exclusions and inequalities. The themes of teacher empowerment, democratisation, and/or decolonisation of education have

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received much attention in postcolonial regions of the world, including South Africa, and they remain topical and relevant. This is, first, because they continue to be referenced in discussions about educational quality and curriculum changes and, second, because they are a difficult subject to plough through given the many stumps of conservative loyalists of the hegemonic colonial system of education that stick out of the political ground to halt the would-be promoter.

However, one of the secrets to appreciating the uniqueness of the case studies presented in this edited volume is the authors' expert understanding of teaching and learning, as well as the practical integration of environment and sustainability topics and themes into the curriculum in ways that are "oriented towards more sustainable and socially just societies" (p. 16). The book is divided into four sections: Section A addresses environmental content knowledge in the curriculum, Section B looks at transformative pedagogies for environment and sustainability learning, Section C is concerned with assessing environmental learning, and Section D considers teacher professional development for environment and sustainability learning.

Section A, comprised of six chapters (2–7), begins with a positioning paper that establishes a classical reference point for the chapters that follow in its main exploration of the nature of environmental content knowledge in the curriculum. The authors of this section are convinced that recontextualising the knowledge of scientists is an important starting point for "knowledge-building in environment and sustainability education" (p. 26), but they point to a need to consider situating the emergent environmental knowledge(s) within the broader possibility of social-ecological systems thinking. Interesting for me in this section, is the salient issue of how recontextualisation of curriculum content knowledge opens space for the inclusion of a broader conception of knowledges that lead potentially to the undoing of continuities of coloniality and to improving access to equitable education (see Lotz-Sisitka, 2016 and Padayachee et al., 2018).

Section B begins by theorising the notion of active learning that was, as revealed in the chapters in this section, one of the central principles guiding the Fundisa for Change programme. Active learning involves making use of transformative pedagogical approaches that are sensitive to the learners' needs, interests, abilities, and attitudes and that also engage them in the learning processes as Al-Odwan (2016) and O'Donoghue (2007) have reminded us). The chapters in this section focus on how "active, critical and situated pedagogies interface with environment and sustainability-orientated disciplinary knowledge" (p. 17) and how these pedagogies could assist learners to take up agency in inquiry-based and problem-solving activities. To demonstrate how learner agency could be enhanced, some of the chapters suggest the use of reflexive heritage-based practices and products such as stories and pictures that are sufficiently imbued with the experiences relevant to the life worlds of the learners. By so doing, the curriculum, at least potentially, becomes relevant to the learners, thus translating into improved learning outcomes.

In section C, the focus is on assessing environmental learning and the position paper that informs this section is "developed in the context of the Fundisa [Teaching] for Change

teacher education programme (www.fundisaforchange.co.za), as well as the Sustainability Starts with Teachers programmes for teacher education

(www.sustainabilityteachers.org/course)" (p. 201). The two programmes are both located in Southern Africa, with the former focusing primarily on South Africa and the latter branching out to other parts of the region. In the introductory chapter to this section, an argument is made that "teacher quality, not teacher supply" is a key determinant of the quality of learning in schools (p. 257). The authors advocate for continual professional teacher development based on the hypothesis that deficiencies in teacher training occur, potentially, because of changes in time and patterns of cultural practices, they recognise that teachers need, always, to mediate contextual relevance (see Mavuru & Ramnarain, 2018).

Contextualising learning helps learners to best answer the question "Why am I learning this?" and it helps learners to transfer knowledge into its appropriate context. The need for continual teacher training is made more indisputable in chapter 16 where the authors discuss inadequate pedagogical content knowledge as a barrier to effective teaching of biodiversity. Given the education challenges that I highlighted earlier on, it is understandable that the authors in this section do not offer prescriptive suggestions on how teacher professional development has to be done. Rather, the authors invite us to join a conversation on how teacher educators can provide more sustained and contextualised teacher professional development engagement.

A realist approach to evaluating the Fundisa for Change Training Programme is offered in the final chapter of this section, which is also the final chapter of the book. What realism does is make room for a truthful, non-speculative representation of subject matter; it embeds the objective and scientific, and opposes subjectivity (Pawson & Tilley, 1997). While the fact that realities are socially constructed, and therefore subjective, may be an immediate critique of the realist-based approach to evaluating the project that has made use of other approaches such as the transdisciplinary one, pedagogical content knowledge (PCK) framework, and sociocultural theory, it is important to note that for a nationally funded programme like Fundisa for Change, providing an honest account of the project's process is crucial.

Perhaps one might argue that this book does not seek or provide a comprehensive understanding of the theories and philosophies, especially Ubuntu that is associated with the indigenous lifeworld discussed in most case studies in this book. However, the authors have provided us with the most outstanding work to date on how best to present context-based environment and sustainability issues in a curriculum through creating a synergy between the official school curriculum and lifeworld praxis. This book is important if for no other reason than that the authors teach us that teaching and learning for change is a multi-actor activity that is best doable when teachers are empowered as curriculum agents in the true sense of the word.

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