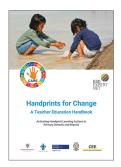






BOOK TITLE

Handprints for change: A teacher education handbook – Activating handprint learning actions in primary schools and beyond



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Activating handprints, not footprints!

One of the key activities in sustainability science engagement is often work with teachers and schools. However, such work can fall into the trap of 'issues messaging' to teachers and children. A new international handbook, with the potential to guide sustainability science engagement with teachers and schools through education for sustainable development (ESD), offers excellent theoretically grounded and practical guidance for those wishing to develop sustainability science engagement programmes with teachers and schools. Entitled Handprints for Change: A Teacher Education Handbook – Activating Handprint Learning Actions in Primary Schools and Beyond, the 148-page book by Kartikeya V. Sarabhai (India), Christa Henze (Germany), Robert O´Donoghue (South Africa), Juan Carlos A. Sandoval-Rivera (Mexico), and Chong Shimray (India) has been developed to design rigorous and CARE-ful, ethics-led and situated-learning approaches for facilitating ESD in classrooms.

The book highlights the role of teachers as facilitators and mediators of learning who can nurture a love of self, others, and the environment within students, guided by an ethics of care. Teachers can achieve this through the concept of 'Handprint CARE' actions, which are ethics-driven learning activities that inspire learners to become changemakers for a more sustainable future. The metaphor 'handprint' challenges the dominance of the metaphor of 'footprints' in sustainability sciences, offering options for not only the teaching of issues and challenges related to sustainability concerns, but, importantly, ways of involving learners in contributing to sustainability action, and showing care for self, others and the environment. ESD, according to UNESCO1, should support people of all ages to gain knowledge, skills, and values to address global challenges and live more sustainable lives.

Overall, the book contributes to the policy goal embraced by Sustainable Development Goal (SDG) #4, Target 4.7: "By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development. "2 This emphasises that education for sustainable development should be viewed as a key feature of educational quality. In a South African context, it brings new relevance to education, as is being deliberated in current processes of mainstreaming ESD into a strengthened South African curriculum.

As is argued and shown across the book, ESD should strengthen holistic learning experiences, and facilitate lifelong learning, enabling learners to develop critical thinking and problem-solving abilities; consider environmental, social and economic aspects of human lives; and provide for action-oriented learning that helps learners to practice the knowledge they gained. ESD therefore involves learning to know, learning to do, learning to be, and learning to live together, sustainably.1 These features of ESD are expected to be developed in an integrative way within and across several subjects.

The Handbook has developed into an accessible overview of a substantive body of research undertaken in South Africa, Mexico, India and Germany over an 8-year period in an international ESD ExpertNet³ programme, which is carefully referenced in the handbook. From this, it offers an integrative approach to ESD through a synthesis of situated learning, drawing on heritage and existing knowledge of learners, foregrounding ethics-led pedagogical inquiries that support acquisition of new knowledge, deliberative inquiries that support practical actions and transformative approaches to learning that build competences and values for sustainability.

The handbook is divided into three parts.

Part One is constituted of 10 chapters. Considering that the Handprint seeks to support teachers to assist learners to understand and deliberate matters of concern, the 10 topics offer practical guidance to teachers to "...clarify and plan how to mediate ESD as evaluative learning around local matters of concern and towards Handprint learning actions that will contribute to future sustainability" (p. 2). Part Two offers a selection of four exemplars that provide illustrative starting points, and educators are encouraged to use this to plan their programmes or adapt these into their own contexts around local matters of concern. Most of the examples have been developed around real-world start-up stories that invite learners to share their "own stories and experiences and to raise questions for learnerled inquiry, evaluative deliberation and action" (p. 2). Part Three is presented mainly as two picture stories. These are illustrative of a methodology to promote and encourage learners to make observations of matters of concern in their daily lives and to share their own stories and experiences. As such, the pictures are illustrative of how learners experience, can reimagine and tell transformative stories of living together and ensuing positive, ethics-led learning and change in a changing world.

This book is a valuable resource for teachers and teacher educators. It is also valuable for sustainability scientists wanting to reach out to teachers and schools with findings from their science programmes for its action-oriented, and ethics-led approach. Importantly, it shies away from 'issues messaging' to children, and instead promotes situated, collaborative learning approaches that encourage critical thinking and inquiry-based approaches to learning our way towards sustainability. For the same reasons, the book is useful for all who wish to work with teachers in primary and secondary schools to mainstream or integrate ESD into the formal education system, including curriculum developers and textbook writers. The authors have managed to position and demonstrate that the concept could be used as a cross-cutting theme that runs across all curriculum subjects and learning contexts.

Although the handbook offers a practical approach to teaching ESD through an ethics-led deliberative approach, the focus on the 'Handprint CARE' pedagogy might require some contextualisation by adapting to existing educational frameworks and alignment to local curricula. Further, case studies presented by the handbook are not exhaustive. Further examples across different subjects and from different learning contexts can be explored for more effective



learning interactions. New findings from the sustainability sciences can also lead to emerging case studies.

Handprints for Change: A Teacher Education Handbook – Activating Handprint Learning Actions in Primary Schools and Beyond is a well-structured and inspiring guide for science engagement, educators and teacher educators who strive to empower future generations to become responsible and active stewards of the environment. As a teacher educator, and sustainability scientist, I appreciate its emphasis on ethics, collaboration, and real-world action. This practical and deliberative approach makes it a valuable contribution to ESD, and to sustainability science engagement.

References

- United Nations Educational, Scientific and Cultural Organization (UNESCO). Education for sustainable development: A roadmap. Paris: UNESCO; 2020. https://doi.org/10.54675/YFRE1448
- United Nations (UN). Transforming our world: The 2030 agenda for sustainable development [document on the Internet]. c2015 [cited 2024 Jul 14]. Available from: https://sustainabledevelopment.un.org/post2015/transformingourworld/publication
- Education for Sustainable Development (ESD) Expert Net. Who we are: Our history [webpage on the Internet]. No date [cited 2024 Jul 14]. Available from: https://test.esd-expert.net/our-history.html

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