Repurposing ESD to Help Adapt to a Post-COVID World – Reflections from India and Africa

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Abstract
The world, as we are experiencing it, is in transition because of the COVID-19 pandemic. The crisis has engulfed every aspect of life forcing a re-evaluation of policies, priorities and practices. This viewpoint proposes that community embedded values inherent in some Education for Sustainable Development (ESD) practices could be used in the rebuilding of a post-COVID world. It contends that mere digitalisation of content will not suffice. We need to adopt an approach that considers situated and intergenerational thought and practice. We need to create a world that draws on indigenous knowledge practices and fuses these with the wonders of modern technology and multi-stakeholder interactions. Examples of community projects in Africa and India are used to point to how ESD practitioners could innovate and radically reorient learning environments.

Keywords: pandemic, Education for Sustainable Development (ESD), environmental education, social change

COVID-19 has dramatically changed the way we live. The effects of the pandemic are here to stay. Adaptation has required billions of us to completely refashion our existing way of living, in a time that is uncertain and ever-changing. While the focus was on sound and efficient implementation, the pandemic has exposed the limitations in the overall management of ESD programmes. For example, in India, where community based ESD programmes are common, the nationwide lockdown and high number of COVID-positive cases brought activities to a complete standstill. Most education institutions have found themselves completely unprepared to deal with a crisis of this nature. In response, ESD practitioners need to rethink the mechanisms and design of programmes. While the mainstream education sector has largely focussed on online, or broadcast learning, as a short to medium-term solution, this has increased inequality in many of the poorest communities. This brief paper, as a contribution towards ESD praxis, might provide alternative ideas and solutions. We identify some examples of situated and intergenerational thought and practice from the field of ESD which may support the immediate needs of children and communities during the pandemic, while advancing the kinds of educational transformations that in the field have long believed to be necessary.
A deep response to the new learning crisis

Approximately 1.6 billion learners (98% of the world’s student population) have had their schooling interrupted during the pandemic (UNESCO, 2020, p. 7). Many are still out of school. Apart from losing learning opportunities, basic care needs, normally met by schools, have also had to be sacrificed. Out-of-school children are more vulnerable to health risks, including child labour, early marriage, teenage pregnancy, unsafe sexual relationships and violence as well as HIV/AIDS. For those who do return to school, critical overcrowding remains a challenge in many schools with an inadequate number of latrines and wash facilities, and overcrowded play areas. This not only impacts on children’s ability to learn, but also their health, and ability to prevent future COVID-19 or similar viral outbreaks. These factors both outside and inside schools risk causing permanent drop-out for many more children, especially girls. While education is recognised as a crucial input for sustainable development (UNESCO, 2017, p.7), in many countries, already struggling to progress towards the Education 2030 and other sustainable development targets, COVID-19 has provided an inevitable, and potentially fatal, setback.

Understandably, a major focus is now on how it will be possible to overcome these challenges and return children to safe education and learning. Education for Sustainable Development (ESD) practices such as Eco-Schools in Africa have been shown to remove barriers causing low enrolment and early drop-out (Copsey, 2019) (see Box 1). However, a growing body of ESD literature asks us to consider the role of education in the trajectory of unsustainable development, especially in relation to social and environmental justice (Tickly, 2020). As ESD practitioners we need to be honest about the value of returning children to schooling which perpetuates regimes of inequality and un-sustainable development. This means paying attention to structural power relationships and colonial legacies embedded in modern education systems including elitism, emphasis on content and transmissive pedagogies, Eurocentricity, and neglect of native languages and indigenous knowledge (Tickly, 2020). The re-purposing of ESD should be conceived not only on a programming level but in systemic terms which consider hegemony and paradigm, and question the purpose of education itself.

Box 1 Eco-schools in Uganda

Conservation Efforts for Community and Development (CECOD)’s Eco-Schools programme in Uganda focuses on schools as a hub for community engagement and development. The programme uses rights-based ESD approaches and action-based learning methodologies such as IVAC (Investigate, Vision, Action, Change) through sustainable natural resource management projects both inside schools and in the local communities. The schools are showing significant improvement in enrolment and attainment as well as retention of children in education. These projects create safer more child-friendly and conducive learning environments which remove barriers to school attendance. Democratic processes introduced at school via ‘Pupils Parliaments’, as well as improvement in the quality of the teaching and learning through
action-based learning methodologies have transformed the attitudes of learners to attending school and made them more interested in secondary education. Local interest in the practical skills being taught in the school is also encouraging out-of-school learners to attend. Closer relationships between school and parents mean more support for children with problems, reducing the likelihood of dropout. It has also brought significant resources to the schools in terms of labour and materials contributing to the success of micro-projects. Many learners and community members now practise water-harvesting, agricultural and agroforestry skills in their homes improving general health. The projects have instilled entrepreneurship, and replication of income-generating projects and livelihood skills has made a significant difference to the incomes of parents and their neighbours, increasing local prosperity and making it easier for families to pay schooling costs for children.

Reflections in between

In her doctoral thesis Terra Sprague proposed the need for a ‘New Story’ of human interaction with the Earth. This new story arises from a ‘middle space’ as the old paradigm is left behind and before a new one emerges (Sprague, 2019). Quoting Eisenstein (2017), Sprague (2019, p. 7) warned: “To alleviate discomfort, the temptation is to jump quickly to a solution, to quickly leave the space of unknowing, into a false knowledge which is actually a resurging of old patterns of thought”. This middle space, which has been unexpectedly and vividly brought to life during the extended lockdown period, provides us with a period for reflection and enquiry. Rather than moving to rapid digitalisation of our existing education mechanisms and materials to reinstate education as we previously knew it, now is the perfect time to address the inherent assumptions in our programmes and explore alternative pathways for a radical re-orientation of the way we learn (Wals, 2007). During this time of reflection and deliberation, we are reminded to weigh up alternatives thoughtfully, and importantly, to unlearn former conventional wisdoms that are not doing much good for ourselves or our communities. We need to aim for better understanding of processes that are in the interests of the common-good (Taylor et al., 2020). To achieve this, we need to use the best approaches that modern times offer alongside the best practices from the past (Jewitt et al., 2019).

Relevance of intergenerational and situated knowledge

Before missionary and colonial education, in many societies, education was structured as an integral part of everyday lifelong learning. Modernising processes have little time or respect for knowledge practices or ‘ways of knowing’ that have enabled indigenous people to cope with health challenges, such as cholera, as well as weather events and locally-based decision making options relating to village-based risk avoidance. A very relevant example comes from elderly Nguni people who describe how, in the past, when a stranger arrived at a village a complex hand-washing ritual was followed before greetings were exchanged. Such a ritual has relevance
to the current COVID-19 crisis where the spread of a virus can be inhibited by careful hand-washing. Interestingly, the tradition held that it was unwise to dry one’s hands on fabric (fabric could harbour germs). Hands were simply allowed to drip dry. Indigenous knowledge practices (and indeed natural and cultural heritage) have often been denigrated and their value has been unappreciated and undermined to the extent that this journal (SAJEE) produced a special edition, Volume 35, on this topic, in an attempt to restore some of this value.

In 2019 an article published in the SAJEE called for a restoration of situated, intergenerational processes of teaching and learning which refer to socio-cultural case histories, situated perspectives, lived experience, local metaphor and intergenerational knowledge practices (O’Donoghue et al., 2019). This requires education and learning to be considered, not in the modernistic (sometimes referred to as Western) context of individualistic agency but in the more complex context of ubuntu where the individual is a person through other people: ‘I am because I belong’ (Khupe & Keane, 2017).

**Box 2 Social capital in the uMngeni Catchment**

A closer look at the social fabric of communities living in economic poverty in the uMngeni catchment, in KwaZulu-Natal, South Africa, provides an illustrative example. Communities and societies may be economically poor and suffering great hardships but the ability of people to work together and support each other in challenging times is unprecedented. The Nguni tradition where people of a similar age are considered to be brothers and sisters, the elderly are considered to be the parents of all people younger than they are, and young people are regarded as the children of older people, is an example of this. Where such traditions are respected, the social capital remains strong since no one would wish to harm others who are considered members of one’s family. The tradition that it takes a village to raise a child is one outcome of this indigenous knowledge. Child-headed households near Howick, where children who have lost their parents take care of each other, benefit from this powerful knowledge. In many instances such families survive and obtain food and nutrition by exploiting and applying indigenous knowledge while harvesting nourishing *imbhiba* (three-striped field mice) and *imifino* (wild spinach) (Kaschula, 2008).

With so many children learning at home, families and extended families are having to fill the void left by teachers. Lotz-Sisitka’s notion of ‘learning as connection’ has never been more relevant. Alongside the global rush to expand technological access for children without computers, and internet, should be a widespread appraisal of the community-oriented learning processes practised in many parts of the world. This in turn requires exposure to a full and balanced curriculum that can lead to the development of a full range of cognitive, effective and creative capabilities required to support sustainable livelihoods and well-being (Lotz-Sisitka et al., 2015).
**New priorities for ESD**

It is important to note that over the years, ESD practitioners have learnt a considerable amount about science and medical matters. They have also learnt how to educate people and share knowledge in a practical and applied way. In the current crisis, exacerbated by the pandemic, they are therefore well-equipped to share this knowledge more widely in the community. The pandemic has exposed urgent social and economic fissures prevalent in our societies which are of particular importance for discussion among ESD practitioners – for example, job insecurity, poor nutrition, domestic violence, social isolation, children as carers, increased school dropout numbers, and homelessness, as well as gaps within access to health care, childcare, disability services, technology, internet and outdoor spaces. Of course, the impact has been more severe for disadvantaged children and their families. The question to ask ourselves is how can ESD approaches be used to build community resilience to similar disruptions in the future, particularly in the areas where weaknesses were so quickly exposed when the crisis occurred? A good example of an ESD practice relevant to COVID-19 is the uBuntu Payments for Sustainability Practices project in Mpophomeni, South Africa (see Box 3).

**Box 3 Ubuntu payments for sustainability practices**

Mpophomeni is an apartheid-created township not far from Howick in South Africa. Most people who live there are unemployed. Inadequately designed services are resulting in serious water and sanitation failures. Huge amounts of litter and solid waste dumping contribute to the challenges of the township. In a recent innovation, that may have wider global implications, Ayanda Lepheana, from the Mpophomeni Enviro-Champs movement, is pilot-testing a process where unemployed participants, who are choosing to work for the common good (or Ubuntu) are reimbursed for their efforts through a ‘live’ e-wallet system where money is paid to them, via their cell phones, for the work they have completed. This approach seems to have much potential and could be the future that Harari (2018) is alluding to in his work on the merits of ‘algorithms and artificial intelligence’ and a ‘world without jobs’! To avoid any abuse of the system, Ubuntu Payments for Sustainability Practices (UPSP) are managed through a geo-positioning computerised system, Geographic-Open Data Kit (Geo-ODK). Geo-ODK is a free open-source suite of tools that helps organisations create, field, and manage mobile data collection solutions. In this way a customised version is used, as an app on a cell-phone, by each participant in Mpophomeni. The Geo-ODK system records photographic evidence of environmental issues, and work done to rectify them, with a geo-positioning mechanism and an encrypted time and place record that can further be confirmed by a fingerprinting verification system. The UPSP concept in Mpophomeni is also supported by a number of Enviro-Champs who are happy to commit to UPSP as verifiers so as to achieve greater reliability and the best possible course of action for any particular challenge that is identified. Ayanda is also using Microsoft Power BI software to create accessible graphs and heat-maps of key issues in townships such as illegal solid-waste dumping, sanitation spillages and freshwater leaks.
Such questions have often been the focus of ESD programmes for Climate Change Education and Disaster Risk Reduction, especially in developing countries and tropical regions of the world. The field has developed a broad range of tools, experience and competencies which can be highlighted and shared with each other, as we prepare to adapt to new priorities post-coronavirus. For example, programmes for community and urban farming, use of WASH principles to reduce spread of infection, rights-based learning approaches as a protection from exploitation and violence, sustainable livelihoods and income generating handicrafts. Other potential gaps ESD might fill include health care and first aid, cooking, and budgeting. The MPowered programme in India is a recent example of the potential for ESD programmes to adapt in the face of rapidly changing priorities (see Box 4).

Box 4 Mobile based training for livelihoods enhancement

An example of community-based ESD programme from India is MPowered which was started in 2016 as a multi-stakeholder partnership between Tata Communications, Trickle Up India, local government bodies and the community to empower the poorest and most vulnerable women (the ultra-poor) who live on less than USD 1.25 per day in the east Indian states of Odisha and Jharkhand. MPowered focuses on improving livelihoods of women using mobile-based training and education. A special application has been developed in local languages which is preloaded on smartphones given to the women as part of the project. The application provides information on sustainable farming practices along with training the participants in financial and digital literacy in order to access local government schemes. The programme, now in its, fourth year, complements the efforts of local chapters of National Rural Livelihoods Mission (NRLM). Local women from the community have been trained as Smart Sahkis (sakhi is Hindi for friend) to act as champions and motivators. The idea is to harness inspiration from the community itself in order to encourage more women to participate. During the lockdown phase due to COVID-19, the Smart Sahkis quickly swung into action to sensitise the community on health and safety measures to deal with the virus. The programme is now aiming to train the women to start nutri-gardens that can ensure food security of their families, with surplus produce being used to feed the vulnerable in the community. The current crisis has highlighted the value of a self-sufficient village economy – a concept not new to the Indian ethos, with Mahatma Gandhi being one of its most venerated advocates.

Challenges for the field

Going forward, we will also have to ensure the resilience of our initiatives. There is a need to invest in scenario building and risk assessment to ‘future-proof’ programmes. This will also require us to invest more thought and energy in stitching together more effective multi-stakeholder partnerships as sustainability challenges are becoming more complex and often persistent, requiring a systems approach and multitude of actors to collaborate with (Loorbach et al., 2010).
We are finding that the five T’s of Action Learning (Taylor, O’Donoghue & Venter, 2018) (see Box 5) are helpful for framing learning pathways. Such co-engaged, deliberative approaches are useful across various geographies. Of course the 5Ts intersect and flow into each other and are commonly mediated in a socio-cultural context. They apply open-ended methods to support co-engaged and experiential meaning-making. Working together, with principles and the ways of working outlined above, we can overcome the challenges that COVID-19 has revealed and placed in front of us. Such thoughtful approaches to learning can enable a more sustainable future for all – people, plants and animals.

Box 5 The five T’s of Action Learning (Taylor, O’Donoghue & Venter, 2018)

- **Tune-in**: This involves engaging in a ‘Tune-in’ and ‘planning together’ process that connects the learners with the topic of instruction
- **Talk**: Discussion and dialogue by, with and amongst participants
- **Touch**: Real-life encounters, including practical outdoor experiences
- **Think**: ‘Thinking’ or reflection amongst participants
- **Take Action**: For sustainability and the common good

To conclude, Arundathi Roy (2020) has described the situation beautifully and succinctly:

> Historically, pandemics have forced humans to break with the past and imagine their world anew. This one is no different. It is a portal, a gateway between one world and the next. We can choose to walk through it, dragging the carcasses of our prejudice and hatred, our avarice, our data banks and dead ideas, our dead rivers and smoky skies behind us. Or we can walk through lightly, with little luggage, ready to imagine another world. And ready to fight for it.

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Percentage contribution

| Areas of contribution                  | Author | Percentage contribution |
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| Conception or design of the paper, theory or key argument | Taylor  | 33.33 %                 |
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