



Closing Thoughts: The Role of Educator Competences for ESD in Turbulent Times

Paul Vare, Nadia Lousselet, and Marco Rieckmann

Abstract

This chapter takes stock of some of the lessons of the COVID-19 pandemic and relates these back to the core messages of this book. One ‘take away’ from this discussion is the possibility of rapid change, which echoes what is needed for education for sustainable development (ESD), another is the fact that people frequently claim to have learned things from the pandemic that reinforce their pre-existing beliefs, showing a tension between evolution and conservation. The chapter closes by identifying three inter-related challenges confronting the effort to integrate ESD into mainstream formal education: firstly, educators need competences that extend beyond the attributes required of those in mainstream settings today; secondly there will need to be a shift in priorities across institutions to support this. Finally, we need to achieve the political will,

at the level of education policymakers, to enshrine *contributing to the imperative of securing a socially just and ecologically sustainable future* within the core purposes of education.

Keywords

Competences · COVID 19 · Education for sustainable development · Purpose of education

Learning from COVID?

The fact that we have been planning and writing this volume during 2020 and 2021 is not an insignificant detail. Over this time, we have all been experiencing periods of lockdown due to the latest pandemic to afflict humanity, a coronavirus, identified in 2019, known to us now as COVID-19.

As well as causing the tragic loss of life and livelihoods, the COVID-19 pandemic has disrupted the education of millions of children and young people worldwide. In the wake of this severe loss of (formal) learning, the UN has launched a policy brief that calls for disease suppression, financial support and plans to *strengthen the resilience of education systems for equitable and sustainable development* (UNESCO – United Nations Educational, Scientific and Cultural

P. Vare (✉)
University of Gloucestershire, Cheltenham, UK
e-mail: pvar@glos.ac.uk

N. Lousselet
University of Teacher Education, Lausanne, Vaud,
Switzerland

M. Rieckmann
University of Vechta, Vechta, Germany

Organisation 2021, p. 3). This might be seen as a promising outcome but there have been international calls for education to take sustainability seriously since at least 1969.¹ What this call means for educators, beyond wider access to and better management of education, is not entirely clear—a point we return to below.

The well-being of children and young people should be a high, if not our top, priority. Unfortunately, this has not only failed to be the case in our response to the pandemic but more generally, the underfunding of education remains a stubborn reality across the globe. Even in relatively wealthy Western countries, we find classrooms that are small and poorly ventilated, technology that has proved to be outdated and unable to cope and teachers that could benefit from strengthened professional development. That said, significant steps have been taken with better funding for digital equipment in many schools while, accelerated by the pandemic, the upgrading of digital technologies and related learning in the higher education system has occurred at an unimaginable pace (Leal Filho et al. 2021). Digitalisation however, does not equal well-being of children or quality education; furthermore, the inconsistent distribution of educational provision throughout the pandemic is likely to increase inequalities (Cecchini and Dutrévis 2020).

Digitalisation in education does not equate to climate neutrality either. It certainly has the potential to help reduce ecological impacts by avoiding travelling for example but within the field of education for sustainable development (ESD), all this needs to be looked at critically so as to ensure that it contributes to a quality education in coherence with sustainability concerns.

In terms of what the pandemic has taught us in relation to learning more broadly, the possibility of rapid change must surely be a key lesson. As Kaukko et al. (2021) put it, ‘Worldwide responses to the Coronavirus have demonstrated that vast upheavals of existing arrangements are feasible, after all’ (*Ibid*, p. 12). This shows that it is entirely

possible to respond to scientific-based projections in the short term with political and social action. Longer term, the nature and climate crises threaten even more serious consequences for human health than COVID-19, particularly in poorer countries with one-third of the world’s population likely to be experiencing mean annual temperatures greater than 29 °C within the next 50 years, a situation currently found in only 0.8% of the globe (Xu et al. 2020). Little wonder that many hope that when the worst effects of the pandemic have past, evidence-based warnings, such as those of climate scientists will be taken equally seriously, ‘not least because deforestation, pollution, biodiversity loss are all contributory factors to the spread of the virus’ (UN – United Nations 2020, p. 23).

According to Beasley and Gonzalez (2021), who examined the perceptions of their education community in Australia, reactions to seeing rapid responses to COVID-19 have been broadly positive and optimistic. Reaction may have been swift but not all authors see this so positively. Among them, Dufлот et al. (2021) claim that the pandemic has been a ‘crash test’ for our resilience in an uncertain future and that this has revealed how poorly prepared humanity is to cope with such stress tests. The political establishment’s call to *build back better* can mask an eagerness to return to ‘business as usual’ as quickly as possible. The UK Government’s plan for a ‘Green Industrial Revolution’, for example, proposes spending a hundred billion pounds on infrastructure against only 12 billion pounds for projects to achieve ‘net zero’ (UK Govt 2021).

A further lesson we might take away from these different responses to the pandemic is that people may claim to have learned things that reinforce their pre-existing beliefs. Rapid change has certainly taken place but we cannot assume that this will continue or necessarily be in a positive direction. Indeed, Lehmann et al. (2021) warn us that, ‘a naive opportunity narrative may even impair the progress of transitions towards environmental sustainability’ (*Ibid*, p. 2). We cannot afford to relax in our efforts to transform education so that it can, in turn, empower the next generation of learners to contribute fully to the

¹For a full account of these calls, leading up to the Tbilisi Declaration see Chapter 25 in Scott and Vare (2021).

transformation of society towards a more just and ecologically sustainable model of development.

The Role of Educator Competences for ESD

Education cannot, of course, be expected to solve the world's ills, hence we are careful to use the term 'contribute'. In light of the foregoing discussion however, we are more convinced than ever of the need for a reorientation of formal education that will *inter alia* involve a recasting of the role of the educator and the competences that are key to that new role. In Part I of this book, we have discussed advantages but also limitations of the competence-based approach, both in a general sense and in its specific application to ESD. Part II has explored the double-edged nature of competence frameworks—as a means of structuring effective staff development programmes but also as an imposition that can arouse suspicion and resistance. In Part III we have focused on pedagogical approaches and discussed how these need to be applied thoughtfully to support the development of ESD competences although in the available space we could only introduce a small sample of approaches. There is so much more to explore, from subject-specific innovations such as in Mathematics (Coles 2016) or history (Hendriawan et al. 2019) to inter- and trans-disciplinary approaches such as student-led school projects and locally relevant teaching (Vare 2021; Van Poeck and Östman 2020).

The impact of the pandemic will have influenced these practices just as it has impacted the work of the contributors to this book. Our programmes of study have been digitised, provided remotely and, in some cases, offered in 'blended' combinations of face-to-face and online learning. In some cases, courses have taken place entirely outdoors and we have witnessed something of a boom in outdoor education in some countries such as Switzerland and France. Combined modes of teaching have been investigated before the pandemic of course but there has been a massive scaling up and it seems much of this 'new' practice may well remain, including in some sur-

prising areas such as outdoor education (OE) where one 2017 study revealed how:

...with careful design and delivery, the online space (accompanied by a single field experience for some learners) was an effective way to deliver a foundational OE unit (Dyment et al. 2018, p. 81).

This is a promising finding in its own right for those, who for whatever reason, wish to provide outdoor learning under constrained circumstances, showing that ESD and digitalisation can enjoy a fruitful partnership. However, for any new practice to be adopted and sustained, it will need to be truly embedded within a supportive system. This is particularly true of educator competences, the development of which extends well beyond the scope of course timetables. Just as institutions have had to adapt to new circumstances imposed by the pandemic, so they will need to consider carefully the implications that teaching, learning and assessing ESD competences will have for their structures and practices. As many of the case studies in this book demonstrate, this is a gradual process rather than a rapid imposition and it relies as much on bottom-up pressures from educators themselves as it does on supportive political contexts to be effective. Such whole institutional approaches go beyond thinking holistically in relation to a specific programme of study; they include working on and within the institutional environment, which in turn requires a parallel process of organisational learning.

Three Levels of Challenge

In this book we have explored the case for developing educators' competences in ESD and shared in the practice of doing so in a range of contexts across Europe; yet the scale at which this needs to happen for education to support the transition to a more sustainable society is daunting. The challenge lies at three levels:

Firstly, educators will need competences that extend beyond the attributes required of those in most mainstream settings today; the challenge is to identify the *what* and the *how* of doing this in

each context. This will include their perception of themselves as change agents. We trust that this volume will inform this debate.

The second challenge lies at the institutional level. Shifting the role of educators—and thus education—will demand time, resources and institutional flexibility. It also demands seeing the institution itself as a learning environment, thus creating a supportive ecology of learning (Stratford & Wals 2020) for developing ESD competences. Justifying all this in the face of short-term demands and standardised measures of accountability will require a shift in priorities more generally across most institutions. While not providing details on how this can best be achieved, this volume does, we hope, provide a rationale for engaging in such a process.

Addressing the second challenge would be facilitated to a significant extent by progress on the third, that is, achieving the political will, at the level of education policymakers, to enshrine *contributing to the imperative of securing a socially just and ecologically sustainable future* within the core purposes of education. This is no small task but our efforts in relation to the other two challenges can remain piecemeal unless this third challenge is taken seriously. To achieve this for the long term will require broad agreement across ideological boundaries and we are some way off that point. In too many contexts, the debates about the purpose of education are silenced by a taken-for-granted assumption that education operates as an arm of the economy.² Pressure from beneath is important here, just as gaining new competences can transform educators, so the process can embolden educators to become change agents who encourage their institutions to become a part of the process. Nobody need feel it is all up to them, neither should they be waiting for others to take the lead. Taking part is critical, for if this situation is not addressed in the near future, it may be too late for

²A current example of this can be found in the UK where the Government's *Projected Completion and Employment from Entrant Data* (Proceed) records the nature of jobs (and income) secured by higher education alumni and uses this as a key measure of the 'quality' of education offered by each institution.

ESD; indeed, there are already calls for reorienting education for 'the end of the world as we know it' (Stein et al. 2020).

The existential risk involved in allowing our education systems to simply recreate our profoundly unsustainable model of development places a responsibility on all of us to do what we can to tackle these challenges. Competences are no silver bullet but they do provide a useful means of linking a concern for social justice and the ecological integrity of our planet with the everyday practices of educators and ultimately the lessons they provide for their learners. This book can inform actors across education from policymakers to curriculum developers, university administrations, teacher educators and teachers, about what might be done. Our hope is that our practical efforts will be supported by political demands to secure an education with a rounder sense of purpose.

References

- Beasley, K. & Gonzalez, L.R. (2021). Exploring Changes in Perceptions and Practices of Sustainability in ESD Communities in Australia during the COVID-19 Pandemic. *Journal of Education for Sustainable Development*, 15(1):5-24. <https://doi.org/10.1177/09734082211012081>
- Cecchini, A. & Dutrévis, M. (2020). Le Baromètre de l'école – Enquête sur l'école à la maison durant la crise sanitaire du Covid-19. <https://www.ge.ch/document/21573/telecharger> (10.09.21)
- Coles, A. (2016) Mathematics education in the Anthropocene. *Proceedings of the third conference of mathematics education and contemporary theory*. http://www.esri.mmu.ac.uk/mect3/papers_16/coles.pdf
- Duflot, R., Baumeister, S., Burgas, D., Eyvindson, K., Triviño, M., Blattert, C. Kuparinen, A. & Potterf, M. (2021). Building up an ecologically sustainable and socially desirable post-COVID-19 future. *Sustain Sci* 16, 1397–1403, <https://doi.org/10.1007/s11625-021-00940-z>
- Dyment, J., Downing, J., Hill, A. & Smith, H. (2018). 'I did think it was a bit strange taking outdoor education online': exploration of initial teacher education students' online learning experiences in a tertiary outdoor education unit, *Journal of Adventure Education and Outdoor Learning*, 18:1, 70-85, <https://doi.org/10.1080/014729679.2017.1341327>
- Hendriawan, D., Ali, M. & Rusman (2019). High School History Education and Education for Sustainable

- Development. An Integrated Curriculum Approach J. *Phys.: Conf. Ser.* 1179 012048
- Kaukko, M., Kemmis, S., Heikkinen, H.L.T., Kiilakoski, T. & Haswell N (2021). Learning to survive amidst nested crises: can the coronavirus pandemic help us change educational practices to prepare for the impending eco-crisis? *Env. Educ. Res.*, <https://doi.org/10.1080/13504622.2021.1962809>
- Leal Filho, W., Price, E., Wall, T. *et al.* (2021). COVID-19: the impact of a global crisis on sustainable development teaching. *Environ Dev Sustain* 23, 11257–11278 <https://doi.org/10.1007/s10668-020-01107-z>
- Lehmann, P., de Brito, M.M., Gawel, E. *et al.* (2021). Making the COVID-19 crisis a real opportunity for environmental sustainability. *Sustain Sci.* <https://doi.org/10.1007/s11625-021-01003-z>
- Scott W.A.H. & Vare P. (2021) *Learning, Environment and Sustainable Development: a history of ideas*. Abingdon: Routledge. <https://www.routledge.com/Learning-Environment-and-Sustainable-Development-A-History-of-Ideas/Scott-Vare/p/book/9780367221935>
- Stein, S., Andreotti, V., Suša, R., Ahenakew, C. & Čajková, T. (2020). From “education for sustainable development” to “education for the end of the world as we know it.” *Educational Philosophy and Theory.* <https://doi.org/10.1080/00131857.2020.1835646>
- Stratford, R. & Wals, A. E. (2020). In search of healthy policy ecologies for education in relation to sustainability: Beyond evidence-based policy and post-truth politics. *Policy Futures in Education, 0(0) 1–19.* <https://doi.org/10.1177/1478210320906656>
- UK Govt (2021). *Build Back Better: our plan for growth*. London: HM Govt.uk. <https://www.gov.uk/government/publications/build-back-better-our-plan-for-growth>
- UN – United Nations (2020) *Shared Responsibility, Global Solidarity: Responding to the socio-economic impacts of COVID-19*. New York: UN. <https://unsdg.un.org/sites/default/files/2020-03/SG-Report-Socio-Economic-Impact-of-Covid19.pdf>
- UNESCO – United Nations Educational, Scientific and Cultural Organisation (2021). *Policy Brief: Education during COVID-19 and beyond*. Paris: UNESCO https://www.un.org/sites/un2.un.org/files/sg_policy_brief_covid-19_and_education_august_2020.pdf
- Van Poeck, K. & Östman, L. (2020). The Risk and Potentiality of Engaging with Sustainability Problems in Education—A Pragmatist Teaching Approach. *Journal of Philosophy of Education*, Vol. 54, No. 4. <https://doi.org/10.1111/1467-9752.12467>
- Vare, P. (2021). Exploring the Impacts of Student-Led Sustainability Projects with Secondary School Students and Teachers. *Sustainability*, 13, 2790. <https://doi.org/10.3390/su13052790>
- Xu, C., Kohler, T.A., Lenton, T.M., Svenning, J.-C. & Scheffer, M. (2020). “Future of the Human Climate Niche.” *Proceedings of the National Academy of Sciences* 117 (21): 11350–11355. <https://www.pnas.org/content/117/21/11350>