# Education for the Future? Critical Evaluation of Education for Sustainable Development Goals

#### **Abstract**

Building on the Millennium Development Goals, Education for Sustainable Development (ESD) and Education for Sustainable Development Goals (ESDG) were established. Despite the willingness of many educational institutions worldwide to embrace the SDGs, given escalating sustainability challenges, this article questions whether ESDG is desirable as "an education for the future". Many challenges outlined by the SDGs are supposed to be solved by "inclusive" or "sustainable" economic growth, assuming that economic growth can be conveniently decoupled from resource consumption. Yet, the current hegemony of the sustainability-through-growth paradigm has actually increased inequalities and pressure on natural resources, exacerbating biodiversity loss, climate change and resulting social tensions. With unreflective support for growth, far from challenging the status quo, the SDGs and consequently, the ESDGs, condone continuing environmental exploitation, depriving millions of species of their right to flourish, and impoverishing future generations. This article creates greater awareness of the paradoxes of sustainable development and encourages teaching for sustainability through various examples of alternative education that emphasizes planetary ethic and degrowth. The alternatives include Indigenous learning, ecopedagogy, ecocentric education, education for steady-state and circular economy, empowerment and liberation.

**Keywords:** Education for Sustainable Development; Education for Sustainable Development Goals; Environmental Education; Sustainable Development Goals

## 1. Introduction

Based on the Limits to Growth report's concerns about human population growth and increase in consumption (Meadows et al 1972), early environmental education was targeted towards making students aware of ecological damage and motivating them to better protect the environment (Van Matre 1978; Orr 1994). This education was promoted by Belgrade Charter, initiated by the United Nations' Education, Scientific, and Cultural Organization (UNESCO) and the United Nations' Environment Programme (UNEP). The Charter developed educational guidelines for students to acquire an understanding of basic ecology, an awareness of the natural world and its current plight, sensitivity to the need for protecting nature, and the acquisition of understanding and skills to help address environmental challenges (UNEP and UNESCO 1976). Following the Belgrade charter, Tbilisi Declaration,

supported by the UNESCO and UNEP in 1977, developed more concrete goals, objectives, and guiding principles of environmental education, basically prioritizing environmental protection (http://www.gdrc.org/uem/ee/tbilisi.html).

However, in less than a decade, a shift toward sustainable development in education has occurred. Building on the Brundtland Report published by the World Commission on Environment and Development (WCED 1987), Education for Sustainable Development (ESD) was developed. The consequent United Nations Decade of Education for Sustainable Development (DESD), which lasted between 2005 and 2014, has placed more emphasis on social and economic aspects of sustainability (UNESCO 2005). In turn, the DESD was followed by education inspired by the UN's Sustainability Development Goals (SDGs), Education for Sustainable Development Goals or ESDG (UNESCO 2017). The fourth goal of the SDGs, SDG 4, to develop "Quality Education", postulates that every learner should acquire the knowledge and skills needed to promote sustainable development. This assumes, of course, that sustainable development is desirable. Not everybody agrees.

First, we need to ask: what is or should be the aim of education? In the context of higher education and sustainable development, Gough and Scott (2007) have wondered whether universities "exist not (merely) to service the economy but to contribute to the intellectual and moral improvement of the human condition?" (p. xi). Let us assume that education is related to broader societal goals, provide students with the necessary skills to address societal challenges, such as unsustainability.

As Washington (2015) has emphasized, sustainability and sustainable development are not at all the same thing. Much what goes for sustainability is nothing more than "sustainabable", in the words of Engelman (2013:3), "a cacophonous profusion of uses of the word sustainable to mean anything from environmentally better to cool". The "wicked problems", or challenges that lack clear solutions because each issue is linked to other issues, and the problems cannot be easily isolated (Rittel and Webber 1973) abound. For example, when the first two aims of the SDGs, eliminating poverty and hunger, are addressed, this is likely to result in an increased consumption of natural resources, thus exacerbating environmental crises, from biodiversity loss to climate change. This crisis, in turn, is likely to affect the long-term social and economic development (Washington 2018).

Oblivious to such wicked problems, the ESD often conflates ecological sustainability with support of economic growth and neoliberal economy (Bonnett 2007, 2013; Washington 2018; Kopnina and Meijers 2014; Kopnina and Cherniak 2016). The Brundtland Report (WCED 1987) effectively gave government agencies, including policy-makers, an excuse to eliminate "environment" from the political lexicon. As a consequence, the fields engaged in environmental protection had been sidelined by "development" issues with only token

attention to ecological sustainability (Washington 2015). In this context, the question emerges whether teaching for SDGs should be desirable in the first place.

Based on desk research examining three strands of theory, literature on (environmental) education and pedagogy, the literature on (critical approaches to) sustainability; and literature on ESD, SDGs, and ESDG, the article will encourage critical reflection on the ideas of sustainable development, and contradictions inherent in the SDGs. This section will be followed by suggestions about more radical education to address sustainability challenges.

## 3. What is wrong with ESD and ESDG?

## 3.1. The triple Ps and other unquestioned slogans

The concept of sustainable development is mostly centered on simultaneously addressing triple social, economic and environmental objectives (colloquially known as People, Profit, Planet). The triple objectives of sustainable development are supposed to be achieved through economic growth and development (WCED 1987). By contrast, the concept of environmental sustainability takes the integrity of the ecosystem as a starting point of discussion about any social or economic sustainability, as People and Profit are highly dependent on the Planet (Washington 2015 and 2018).

Critics have noted that it is precisely economic growth and industrial development, with associated population and consumption growth and increasing demands for natural resources that are *the* root causes of environmental unsustainability (Kahn 2010; Kopnina 2012, 2014a, 2014b, 2016a, O'Neill 2012; Washington 2015 and 2018). The pursuit of economic growth is implicated in the planetary-scale decline of biodiversity, climate change, and shortage of natural resources, as well as the highly unethical relationship to the natural world (Washington 2015; Washington et al 2018).

This critique underlies the oxymoronic aim of the continuous economic growth (and thus, increased consumption of natural resources), and somehow, miraculously, sustaining these resources for future generations, thus wanting to "keep your cake and eat it too". Sustainable development, when applied to education, has often resulted in contradictions (Jickling 1994). Critical scholars have noted that social and economic priorities are being taught at the expense of ecological considerations (Bonnett 2007, 2013, 2015; Fien 2010; Kahn 2010; Kopnina 2014c, 2014d, 2014e, 2014f; 2015c, 2015d; Nocella 2007; Sitka-Sage et al 2017). Similarly, UNESCO's *Teaching and Learning for a Sustainable Future* program (Fien 2010) essentially stress social and economic priorities with the exclusion of ecophilosophical principles (Molina-Motos 2019). As Bonnett (2007:710) has reflected, sustainable development rhetoric is anthropocentric and economy-centric, rendering the environment as:

"an object to be intellectually possessed and physically manipulated and exploited in whatever ways are perceived to suit (someone's version of) human needs and wants. That is to say: they are redolent with the general metaphysics of mastery that informs modernity and is precisely the root cause of our current environmental predicament. With humanistic hubris, nature is constantly to be challenged, set in order, reengineered, etc., to meet human needs – and often, not even this, but merely human convenience".

As opposed to education that replicates "metaphysics of mastery", a socially critical learning that provides students with understanding of society and its hegemonies (Gough and Robottom 1993). As Spannring (2019) noted, sustainability education aims to foster learners to be creative and responsible global citizens who critically reflect on the ideas of sustainable development and the values that underlie them. By contrast, ESDG unreflexively aims to encourage learners to take "actions for sustainable development" (UNESCO 2017). The SDGs move away from the Limits to Growth (Meadows et al 1972) concerns to the naive belief in the capacity of successful management of natural resources (Kopnina 2016c, Adelman 2018; Kotzé and French 2018).

#### 3.2. Cognitive imperialism

The documentary film *Schooling the World*, directed by Carol Black (2010), contains interviews with local villagers in the Himalayas, as well as comments by various international education experts. Black (2017:453) links universal education to Christian conquests, when missionaries saw non-Christian societies as savages in need of enlightenment and conversion. Societies that lack schools were associated with being "uneducated", implying "backward" (Black 2017:453). Black points out that the advocates of universal schooling have "shared several key assumptions with the missionaries; (1) that the new knowledge and systems they are bringing are an unalloyed good, (2) that all people worldwide should adopt these systems, and (3) that nothing of importance is lost when old understandings and practices are abandoned and replaced with the new". This "new education", as Black points out, is aimed to substitute traditional or Indigenous knowledge with Western, economy-centered notions of progress. In setting up international education everywhere on this globe, development agencies and corporate sponsors have instilled the idea of superiority, implying that some people or even nations are *developed* as opposed to *underdeveloped* – a derogatory, neocolonial assumption used in (sustainable) development rhetoric.

In this documentary, the universal Western education is discussed as an "institution that is labeling millions of people as failures", school dropouts, as noted by Manish Jain (Jain quoted in Black 2010), a former team member of the UNESCO's Learning Without Frontiers initiative. This failure results from the assumption that education should include

standard measurements, development of skills and competencies geared toward a future profession in a neoliberal economy. As Vandana Shiva (in Black 2010) said, "We've moved from wisdom to knowledge, and now we're moving from and now we're moving from knowledge to information, and that information is so partial – that we're creating incomplete human beings".

More recently, the desire for education was not just motivated by wanting to elevate the "savages" to the supposedly higher level of civilized men, but as an "integral part of planned programs of economic development and resource extraction on Indigenous lands" (Black 2017:453). In this context, "education for all" such as ESDG, may seem a well-intentioned attempt to share this supposedly universal "good" – but it is also highly suspect.

Helena Norberg-Hodge, the founder and director of Local Futures, an organization that promotes the 'new economy' of personal, social and ecological well-being, challenges these assumptions. She reflects on the belief that western education and knowledge is something superior, as if Western civilization has "evolved to a higher level of being" through unique education (Norberg-Hodge in Black 2010). Black (2017:453) reflects on the term "cognitive imperialism", coined by Marie Battiste (1998). This term describes the process through which education is used to privilege certain types of cognitive learning and to simultaneously devalue others (Battiste 1998:19). Black (2017:453) sums up:

"Indigenous knowledge is generally given at best a secondary epistemological status within the school system, often viewed as superstition or mythology, as something which may have value as part of students' cultural heritage, but not as "real" knowledge that will frame their understanding of reality..."

## 3.3. Abandoning earth

In the Western context, the growing acceptance of SDGs exhibits these hegemonic tendencies. It also stands in sharp contrast to the earlier progressive curricula. Environmental education developed in the Belgrade Charter (UNEP and UNESCO 1976) has both ecocentric, in the sense of recognizing intrinsic values in nature (Washington et al 2017), and anthropocentric (in the sense of focusing on human benefits of nature protection) elements, but remains concerned with environmental protection (Orr 1994). By contrast, ESD tends to be highly anthropocentric (Bonnett 2007, 2013; Kahn 2010; Kopnina 2013, 2014a, 2014b, 2015g, 2015a, 2015b; Washington 2018). "Inclusive economic growth", a term mentioned multiple times in the SDGs (e.g. UNESCO 2017), does not include the interests of billions of nonhuman species (Kopnina and Gjerris 2015; Kopnina 2018). While one of the seventeen SDGs, SDG 15, mentions biodiversity protection, this entails "sustainable resource use", "forest management", and other forms of instrumental control over nature (<a href="https://unstats.un.org/sdgs/report/2016/goal-15/">https://unstats.un.org/sdgs/report/2016/goal-15/</a>). Nothing is said about the ethical

implications of the self-declared right to use and manage the lives of nonhuman species. At times, when economically convenient, is seems even possible to terminate billions of years of evolutionary unfolding in the supposedly noble quest for development (Cafaro 2015).

Added to this are the paradoxical assumptions – or just uninformed and lazy thinking – about solving social challenges that figure so centrally in the SDGs, such as poverty and hunger. If poverty is supposed to be solved by economic growth, assuming that the "rising tide lifts all boats", in SDGs this economic growth is conveniently decoupled from resource consumption. As Rees (2008:686) has commented:

A bigger economic pie also produces the politically convenient side-benefit of reducing grassroots pressure for the redistribution of wealth. But simplistic theory does not always map well to complex reality. First, the present form of the growth-through-globalisation paradigm has actually increased the rich—poor income gap both within and between countries, thereby exacerbating tensions. Second, enabled by ever more powerful technologies, the human exploitation of nature has become the most destructive ecological and geological force on Earth.

The question of fair redistribution of wealth and food might indeed involve uncomfortable memories of the Russian revolution – forcefully taking from the rich and redistributing to the poor, resulting in millions of deaths, and the new elites arising. The subject of redistribution is wisely avoided by the SDGs in favor of raising everybody's living standard through the magical belief in advancing (agro)technology as savior. However, the SDGs remain vague about how hunger is to be solved by producing more food. The choice can be between even more intensification of agriculture, with its toxic side-effects and inhumane animal factories (Lappé 2016; Crist et al 2017), or organic/biological/regenerative agriculture, which, some have argued, is unlikely to feed billions of people without taking up all earth's surface as it typically requires more land and water, especially in the harshening conditions of climate change (Reganold 2016). The SDGs are silent on the challenge of sustaining eight billion consumers, however "green" in lifestyle, without endangering other forms of life or own species' long-term survival on the planet of limited resources (Washington 2018). Degrowth in both population and consumption is essential (Rees 2008), but ESDG does not mention family planning or drastic economic and political reforms. What are the alternative forms of education that address this?

## 4. Positive alternatives to hegemonic education

## 4.1. Ecocentric education, eco-pedagogy, and liberation

An alternative to the dominant forms of ESD and ESDG can be summed up under a broad umbrella of "ecocentric education" (Shrivastava 1994), including, among others, ecopedagogical studies or critical pedagogy (Kahn 2010). These types of pedagogies take

education *for* the environment as departure point for both social and ecological sustainability<sup>1</sup>. Antunes and Gadotti (2005) refer to ecopedagogy as having its purpose of educating planetary citizens to adopt life-long caring and appreciation for nature. The planetary citizenship involves an ongoing process that expands beyond the classroom to the entire community, encouraging learners to develop a conscience for planetary inclusiveness, where collaboration and sharing with other species becomes the norm.

It needs to be noted that much of ecopedagogy is inspired by the "Left" (neo-Marxist, socialist) work of Paulo Freire and Ivan Illich on critical pedagogy. The alternative to sustainable development's optimistic belief in triple objectives should include radically different economic models. Such alternatives include degrowth, steady-state economy, and circular economy (O'Neill 2012; Washington 2015, 2018). While capitalist neoliberal economy is often correctly identified as a culprit of over-exploitation, it needs to be noted that neither do the ideals of communism or socialism explicitly challenge industrial development<sup>2</sup> (Kopnina 2016b), as economic "pie", equally or unequally divided, still stays the same, with billions of aspiring consumers (Rees 2008).

Anthony Nocella (2007) notes that both critical pedagogy and ecopedagogy expose the fact that "industries and the state have strong institutional and monetary biases" against justice for the environment. In contrast to conventional education, critical pedagogy, and in its later reincarnation, ecopedagogy, is a "radical education method and process for liberation" (Nocella 2007:4) that involves justice for both humans and nonhuman species as well as the environment. Rather than reverting to anthropocentric ethics, such education would represent ethical responsiveness that does not jettison principles (such as the commitment to social equality), and continues to be informed by virtues (caring, generosity, reflexivity), but is capable of responding to the local situations that students immediately recognize (Sobel 2004). For both teachers and learners, the example of a famous schoolgirl Greta Thunberg's active participation in climate protests (Belam 2019), for example, could further encourage

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<sup>&</sup>lt;sup>1</sup> While some scholars such as Jickling and Spork (1998) have also warned that any education *for* anything – even for sustainability – carries a danger of indoctrination. These scholars have warned that education *for* the environment can also become a universalizing discourse that seeks to marginalize other approaches (Jicking and Spork 1998). However, this critique seems to under-estimate the power of the dominant education, which is currently dictating the economic vision of what human progress is, top-down, for the entire world. As Fien (2010:179) has stated, the "critical pedagogy of education for the environment provides a professionally-ethical way of teaching which contrasts with the allegations of indoctrination in the critique".

<sup>&</sup>lt;sup>2</sup> Looking at division between more capitalist and socialist models (or right and left political orientations), what is revealed, is that the Left/progressives are as anthropocentric and short-term utilitarian as the Right/conservatives. Both seem a very long way from Aldo Leopold's concept of a land ethic or Arne Naess' deep ecology, or the issues that animal rights proponents like Tom Regan and Peter Singer have brought to the table. The primacy of socio-economic issues is rarely questioned among even progressive faculty outside of a few disciplines that concern themselves with other species.

active citizenship. In a more ambitious vision, education can help develop political and legal instruments safeguarding against ecocide, with informed young people supporting ecorepresentation (Gray and Curry 2016) in ecological (multispecies) democracy and ecojustice (https://therightsofnature.org/). This is a far cry from the vagueness and ambiguity of the rhetoric of education for sustainable development.

In contrast to the economy-centered and anthropocentric mainstream education, Richard Kahn (2010) foresees ecopedagogy (Misiaszek 2015), and eco-literacy as teaching opportunities to engage students' by supporting an emancipatory learning. In this case, emancipation is not meant to apply to only one (human) species but involves "liberation" movements, such as the Earth Liberation Front and the Animal Liberation Front (Nocella 2007; Kahn 2010; Kopnina and Saari 2019). While these movements were labeled as radical because of their strategy of economic sabotage, the underlying ideas are similar to other progressive social movements such as the liberation of slaves or equal rights for women (Kahn 2010). While not propagating the same methodology of economic sabotage as these liberation movements, ecopedagogy focuses on sustaining all life, based on learners' understanding of interconnectedness between every element of living and non-living things.

## 4.2. Ecological citizenship education

Similar to ecopedagogy, ecological citizenship education seeks to liberate human and nonhuman beings (Misiaszek 2015; Spannring 2019), examining and exposing ethical and pragmatic limits of the concept of sustainable development, that supposedly safeguards the future generations' ability to "meet their own needs" (WCED 1987, p. 4). Rather than framing sustainability in instrumental terms of flexible natural *resources* and ecosystem *services* for human use, critical pedagogy heeds the warnings of the limits to growth (Meadows et al 1972) and speaks of sustainability of all life on earth.

#### 4.3. Indigenous learning

At present, Kahn notes, in line with Black's analysis (2010, 2017), that the educational process of alienation and isolation of students from the natural world only serves to reinforce anthropocentric perceptions of the world, which deny wisdom and knowledge outside of Western perception. Black (2010, 2017) and Kahn (2010) argue that education should be founded on cultural democracy, Indigenous sovereignty, human rights, and respect for all life – thus, ecological citizenship. For Black, a local, holistic, total worldview education is already embedded in existing traditional systems – which, in a sense is universal, although not homogenous. For Kahn, a relationship with the Earth is founded on knowledge; physical, emotional, intellectual, and spiritual. It is through the complex interplay between social and environmental systems, with their complex entanglements (Black 2010; 2017) that

Indigenous knowledge systems have developed diverse structures and content; complexity, versatility and pragmatism; and distinctive patterns of interpretation anchored in specific worldviews (Khan 2010). Indigenous knowledge has a relevant contribution to society because of its diversity of thought, a view of integration between the material and spiritual, nature and culture, and a human being and other forms of life (Knudtson and Suzuki 1992). This perspective of integration is not seen in Western culture and the lack is a detriment to the process of sustainable development. In agreement with the critical commentators of the film *Schooling the World* (Black 2010), traditional or Indigenous learning provides an alternative to a uniform "education for all".

#### 4.4. Empowerment education

Another alternative is less traditional and more "Western" learning encouraging empowerment, liberation and/or human rights. The "state of population" reports of The United Nations Population Fund (UNFPA 2009, 2011, 2019) consistently underscore the need for educational investment that empowers women and girls and reduces unwanted pregnancies. While in one breath bolstering economic development, reducing poverty *and* a beneficial impact on climate mitigation is mentioned, reducing the population as a win-win solution to sustainability challenges. The article in *Science* (Crist et al 2017) argues for the need to address the interaction of the human population, food production, and biodiversity protection through concepts of human rights, women's rights, and foremost education. Girls with better education, for example, tend to have smaller and healthier families as adults. Women with access to reproductive health services, including family planning, have lower fertility rates that contribute to slower growth in greenhouse gas emissions and consumption of natural resources, thus ensuring a better future for the children and future generations in the long run (Crist et al 2017).

Next to the empowerment education focusing on human rights, there is also education for animal rights (Ortiz 2015; Kopnina and Gjerris 2015; Kopnina and Cherniak 2016; Spannring 2019) as well as ecocentric education. Ecocentric education focuses on ecological values in environmental education (EE) and education for sustainable development (ESD) (Molina-Motos 2019). Ecocentric education includes analysis and support of local biological conservation initiatives (e.g., Norris and Jacobson 1998), such as the Roots and Shoots program supported by Jane Goodall's Institute. Ecocentric education also encompasses experiential education in nature and education for deep ecology (e.g. LaChapelle 1991; Glasser 2011), education for connection (Barrable 2019), ecological citizenship (Misiaszek 2015; Spannring 2019), post-humanist education (e.g., Bonnett 2013), place-based approaches (Sobel 2004), animal rights (e.g., Ortiz 2015; Kopnina and Gjerris 2015; Kopnina and Cherniak 2016; Spannring 2019), and animal welfare education (e.g., Gorski 2009).

Ecocentric education can be introduced next to or in combination with traditional or local types of education (Kopnina 2019a).

#### 4.5. Education for alternative economic models

Herman Daly (1991) discusses a steady-state economy where throughput is not only constant but also maintained within ecological limits. The notion of the steady-state economy critically examines the current focus on poverty alleviation and health improvement through an increase in economic growth, with the resulting increase population and consumption, which in turn exacerbate environmental problems. O'Neill (2012) proposes an alternative evaluation of progress beyond the common GDP measures. O'Neill suggests that degrowth involves the voluntary transition towards a just, participatory, and ecologically sustainable society. The objectives of degrowth, he stresses, "are to meet basic human needs and ensure a high quality of life, while reducing the ecological impact of the global economy to a sustainable level, equitably distributed between nations" (O'Neill 2012:225). O'Neill (2012) proposes a measure of degrowth transition through environmental and societal accounts with the integrity of the ecosystems and none-GDP-related quality of life as the true measures of progress, such as social welfare indicators. These more "alternative economy-focused" models (O'Neill 2012; Washington 2015) can offer a counter-balance to the growth economy and neoliberal capitalism or industrial socialism education. Admittedly, the steady-state, circular, or degrowth are still 'economies', thus they might still need to be conceived beyond the neoclassical economy, and with pragmatic realisation of material boundaries. The circular economy proponents are at times too optimistic about decoupling economy from resource consumption, and see it as a new "engine of growth" (de Decker 2018) - thus, educators need to use caution against "business as usual" and greenwashing (Kopnina 2019b).

So far, none of the documents listed by UNESCO (2017) and consequent ESDG-related publications mention degrowth, steady-state-economy, or any measures addressing population and consumption growth as the cornerstone of the curricular for future responsible citizens. This is a missed opportunity as degrowth aims to drastically reduce natural resource use while maintaining the wellbeing of the planet's citizens.

While neither of these economic models can guarantee decoupling of the economy from resource consumption (Kopnina 2019b), the Cradle to Cradle principles (McDonough and Braungart 2002), at least in ideal conditions, has an ambition not just to reduce but to eliminate negative effects of economic activity. These closed-loop production principles find reflection in the emerging fields of education for Cradle to Cradle and education for the circular economy (Kopnina 2019b).

The different educational alternatives to ESDG are summarized in Table 1 below.

Table 1. Alternative forms of education <sup>1</sup>

Indigenous and traditional learning	Critical pedagogy, ecopedagogy	Alternative economic education
Local learning exemplified by ancestral forms of knowledge and attitude transfer; Holistic, total worldview education	Education for the environment; Education for sustainability; Ecocentric education; Ecoliteracy; Ecological citizenship	Education for degrowth; Education for the steady-state economy; Education for Cradle to Cradle and Circular economy

<sup>&</sup>lt;sup>1</sup> These forms of education may overlap.

## 4.6. Progressive universal education

However, in criticizing generic mainstream education, one should be careful not to through a baby out with bathwater. Despite the warnings expressed above about the UN's "education for all", not all education needs to be criticized just because it is "Western" – some types of "local" education or prohibition of education can be more dangerous. In some cases, not just authoritative and authoritarian but murdering regimes establish "alternatives" to Western education. Boko Haram (literally "Western education is prohibited"), a terrorist organization, is responsible for death, torture, abduction, and rape of thousands of people in and outside of Nigeria, disrupted access to any education (Molini et al 2019). In Niger, the rise 'pure Islamic education' has effectively shifted focus on religious doctrine and limiting personal freedoms (Vos 2019) with the exclusion of other forms of Islamic teaching, including sustainability (Sayem 2018). In places where schools are of such poor quality that the learners are practically illiterate and unable to count after graduating, poverty and hunger persist (e.g. Jogwu 2010). Returning to the above-stated assumption that the aims of education, in general, is to serve societal priorities, universal (Western) education has addressed several sustainable development challenges (UNESCO 2005, 2017). In this context, Western education, which teaches basic literacy, numeracy, and respect for values such as human rights, should not be criticized too harshly.

#### 5. Discussion: the good and the bad of education

While generic education is not called 'education for' anything, its intention is to facilitate the supposed universal good (Black 2010). ESDG openly states that it is *for* the SDGs, thus

baring its ambition of becoming a "universalizing discourse". Unreflective acceptance of the SDGs as a universal good by schools and universities, the win-win scenarios involving "cooperation" with the industry, and optimistic technocratic prescriptions are worrying. This naïve optimism is also playing out outside of academia with more immediate consequences, with the business-as-usual proceedings weakening environmental laws of real substance (Engelman 2013).

Perhaps one should not suspect the ESDG as anything as grand as a neoliberal conspiracy or a cunning ploy to maintain status quo. The rapid spread of the SDG-supporting institutions, including the author's own university, is probably due to nothing more sinister than indifferent management, and a dull-minded rehearsal of received "truths" (e.g. the triple bottom line), rather than a serious effort to rein in alternative visions. Embrace of ESDG is likely just a self-limiting response to the imperative to be pragmatic or inclusive of all issues that society considers important, logical outcome of pluralism and democracy (Jickling and Spork 1998). Still, it does seem that in our current political and cultural climate, the barrage of immediately urgent economic, social and moral pursuits (racial and gender equality, equal pay, etc.) that progressive Western education strives on, leaves little room for perceivably more distant issues. One of these "back of the mind" issues is the loss of biodiversity, which may not pose an immediate threat to an identifiable group of people (as opposed to other forms of life). The arguably justified attention to the various social upheavals has meant that the failures of environmental policy to address anything from biodiversity loss to climate change is attracting much less criticism than it otherwise would. The more radical, revolutionary, and powerful education for the environment can only be realized if the survival of other species and the long-term consequences of environmental degradation on people are considered not just as one of many issues, but as a priority.

In is hopeful in this respect that environmental education literature rarely displays open hostility toward ecocentric viewpoints, thus blind trust in the SDGs is likely to simply result from a lack of understanding. Social liberation movements have once been seen as radical, but have now become mainstream. Traditionally, one may hypothesize, professionally-oriented school administrators, accreditation authorities and line managers were not very well informed about alternative economic models or ethics of ecocentrism. Having corresponded with several (environmental) education practitioners and researchers over the years, this author readily acknowledges that both the educators and students are ripe for a more radical agenda that reaches beyond set boundaries.

Education can also serve to make the learners critical and active. Ironically, Vandana Shiva, Manish Jain, Helena Norberg-Hodge, who express their critical views of Western education in the film *Schooling the World* (Kopnina 2013), as well as Greta Thunberg and millions of other young people protesting for (climate) justice, are Western-educated

themselves. This critical ability may yet encourage further re-evaluation of the "curriculum for the future". Ironically, this future may need to be based on the past, embedded in the traditional knowledge systems, where nature was accepted as not just a resource to be consumed, but as a partner and the teacher (Bonnett 2007). Today, more policy-makers and scientists realize the importance of combining both Indigenous and science-based knowledge (Weiss et al 2013). In this context, "universal" education may yet become a vibrant patchwork of highly diverse and complex systems of local knowledge rather than a straightjacket of economy-centered anthropocentric indoctrination.

#### 6. Conclusion

This article has developed an argument that education for sustainable development and education for sustainable development goals propagated by UNESCO exhibit some worrying tendencies and contradictions. This education is based on the broader objective of sustainable development, which tends to focus on economic measures concerning poverty alleviation, health improvement but which do nothing to slow growth in population and consumption. While sustainable development and the SDGs tend to prioritize "sustainable inclusive economic growth" little critical discussion involves in education that stresses ecological integrity for the future of both human and nonhuman species. Thus, universal education based on faulty premises and the economy-centered anthropocentric bias of sustainable development is problematic. While Indigenous learning and traditional ecological knowledge are as endangered as some species and habitats, ecopedagogy, ecocentric education, and education for wonder, in part inspired by these traditional forms of relating to the environment, offer such alternatives. Pragmatically, education for degrowth, critical of both demographic and economic growth, also offers ways forward in supporting women's (reproductive) rights and family planning, as well as the steady-state economy, Cradle to Cradle and circular economy. Education that targets both non-anthropocentric ethic and, pragmatically, degrowth as two key strategies for addressing unsustainability, seems a better alternative for universal education that the currently popular ESDG.

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