#### **Abstract:**

The United Nations Sustainable Development Goals (SDGs) are a significant marker in global efforts to universalise a conception of ecologically sustainable human development. SDG 4's expanded vision of quality education for all extends to the Education for Sustainable Development (ESD) Agenda's call for education that contributes to all of SDGs, and prepares students to 'transform our world'. From a critical perspective, this paper considers the incompatibility of endless (compound) economic growth and capital accumulation, under capitalism, with the required CO2 reductions that the climate emergency demands. The paper shows how the ESD proposals reflect the orthodoxy of education as human capital formation for economic development, albeit within an amended, and flawed, 'green growth' or 'green capitalist' paradigm. It concludes by arguing that the transformational language and the expressed ambitions of ESD provides space for critical educators to simultaneously support and critique them, working with and against their limitations, to advance non-capitalist and degrowth alternatives.

**Keywords:** Sustainable Development Goals (SDGs), Education for Sustainable Development (ESD), degrowth, critical education.

#### Introduction

UNESCO's Sustainable Development Goals (SDGs) were launched by the United Nations in 2015, setting out seventeen inter-related development goals, accompanied by 169 specific targets (United Nations, 2015b). The SDGs followed the Millennium Development Goals (MDGs), whose target date of 2015 passed with mixed overall results for its less ambitious global development agenda (United Nations, 2015a). The SDGs are ambitiously described by the UN as "17 Goals to Transform Our World" (United Nations, 2020). The target for the SDG transformation of the world is 2030. The United Nations (2020) characterises the SDG project as "a universal call to action to end poverty, protect the planet and improve the lives and prospects of everyone, everywhere". Declarations like these, by international organisations like the UN, are of course welcome, and undoubtably extend to actions and interventions that directly contribute to tangible improvements of peoples' lives in many parts of the world.

The SDGs have been acknowledged for providing a more comprehensive development program, compared to the more limited eight MDGs that they replaced. Like the MDGs, they address key issues of global poverty and hunger, education and gender equity, and environmental sustainability, for example, but extend to more specific guidelines and targets for production and consumption, for reducing inequalities, for creating meaningful and dignified work, for achieving peace with justice (see for example United Nations, 2019). With

respect to Education, SDG 4 is similarly a clear advance, moving beyond the MDG of achieving universal primary school education, and setting out an agenda for universal pre-, primary and secondary schooling for children, and expanded adult education, with a focus on educational quality, on learning, on inclusion and equity (United Nations, 2015b). With respect to the content and purposes of the expanded education, SDG 4 extends to ensuring:

... 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 (United Nations, 2015b, p. 19).

Statements like these illustrate the high ambitions of the projected contribution of education to the achievement of the full suite of SDGs. Some of the connections are well entrenched in educational policy and practice, such as the envisaged correlation, or causal relationship, between additional years of formal education and employment, wage earnings, and so poverty reduction. Similarly, large scale studies are cited demonstrating correlations between education and infant mortality, children's' nutrition, and other health indicators (see for example UNESCO, 2014b). The SDG initiative pushes further, pointing towards the potential for education to impact on all the other SDGs, from gender equality and empowerment to improved water and energy sustainability; from economic growth and reduced inequality within and between nations, to urban development and the building of "peaceful, just and inclusive societies" (UNESCO, 2014b, p. 13). UNESCO's Education for Sustainable Development (ESD) Agenda sets out in detail the envisaged contribution of education each of the SDGs (see UNESCO, 2017).

This paper is grounded in current, critical scholarship about the SDGs, in terms of their response to the climate emergency confronting the world, and the urgent need to reduce carbon emissions so as to limit temperature rises to the 1.5- or 2-degree threshold. In particular, it takes as a key point of departure Hickel's (2019) work setting out the internal incoherence in the SDGs sustainability and economic growth objectives, based on the empirical limits of 'green growth' proposals seeking to decouple economic growth from resource use and CO<sub>2</sub> emissions. At the heart of this paper's critique is an identified need to end the pursuit of endless, compound, economic growth, central the workings of the capitalist world-economy, in favour of alternative systems and structures for distributing resources and

wealth; and a focus on re-defined human and sustainable 'development' consistent with degrowth scenarios that, in turn can deliver the required carbon reductions.

While drawing on critical scholarship advocating world-system level transformation to noncapitalist alternatives, the paper acknowledges the significant scope and ambition of ESD, and the opportunities provided by supporting its 'transformational' language, and indeed many of its specific goals. But ESD, as set out, is limited in two key respects, while ever the proposed 'vision of sustainable global development' remains locked in a model of development under the capitalist logic of endless growth and capital accumulation. First, as elaborated by Hickel (2019) and others (e.g. D'Alisa et al., 2015), achieving the required reductions in carbon emissions necessary to avoid climate catastrophe demands a break with the core principle of endless economic growth, and so with it a break with the defining logic of capitalism. ESD premised on endless growth reflects this internal incoherence, constraining the necessary transformation of our conception and enactment of global development needed to meet the required mitigation targets of climate change. Second, the capacity for education to contribute to the achievement of greater social and economic equality, and justice, within and between countries, is inconsistent with the dominant logic of education for human capital formation and upward (individual) social mobility to escape poverty. To overcome these limitations ESD must also address the established structural constraints of normal operation of the capitalist world-system that generate, require, and sustain poverty, under and unemployment, hyper-exploitation in low wage zones.

The paper is organised into four sections. First, it sets out some of the main features of a growing critique of endless, compound, growth. This is followed by a review of the related and core problem of the irresolvable contradiction of this dynamic with the climate emergency, and consideration of the green (decoupled) growth premise of the SDGs. The third section critically reviews these issues in relation to the ESD initiative, within the dynamics of the capitalist world-economy, elaborating the parallel criticisms of the educational agenda put forward to support the SDGs. The paper concludes with some reflections on the possibilities for critical education initiatives to work in, through, and where necessary against, the spaces offered by ESD (and the SDGs), and how such work might shed light on the central contradictions of 'sustainable global development' under the capitalist imperative of endless growth, including models of 'green growth' or 'green capitalism'.

## The end of endless, compound, growth

In a recent podcast, David Harvey (2020) describes the growing popular sense that there is something fundamentally wrong with our current system and its capacity to respond to the global problem of climate change. This is the straightforward tension between ongoing (endless) economic growth (as annual increases in GDP) continuing to be presented by national governments and policy makers as essential, and beyond question, and the increased CO<sub>2</sub> emissions produced by production and consumptions patters of economic growth. Harvey describes a general sense that something is fundamentally wrong with our economic system and its capacity to respond to these problems.

As Harvey and other Marxist inspired critiques note, the idea of endless economic growth is central to the functioning of capitalism, as capital faces the prospect of growth for expansion and greater efficiency as necessary for survival in competitive markets. Wallerstein's work, for example, has consistently highlighted the importance of capital accumulation in the development and subsequent functioning of the capitalist world-economy, generating investments and expansion that, in turn, require further growth and expansion (e.g. Wallerstein, 1983, 2000b). Wallerstein's world-systems analysis is grounded in the operation of capitalism as a single world-economy incorporating multiple polities in an interstate system, and the unequal distribution of surplus value and wealth across core, semiperipheral, and peripheral zones of the system (see Wallerstein, 2000a). These critiques have their roots in dependency theory, the critique of modernisation theory and the need to consider all countries and national economies, and their capacity to achieve development, in terms of their unequal and hierarchical location within a single, capitalist world-economy. At the heart of this perspective is capitalism's inherent inability to deliver the liberal promise of development for all.

Notwithstanding this line of critique, the concept of endless economic growth as a necessary, and realisable, goal in all countries appears to retain a strong position in government policy, with popular support. This hegemonic view was established over a long period, tied to the logic and operation of capitalism, whereby economic growth and increased profits (as the monetised form of surplus value extraction and accumulation by capital) were equated with the interests of populations from whom the surplus was extracted, on the grounds that growth would in turn lead to further investments, to jobs, and so to peoples' social and economic

well-being. Endless growth is inextricably linked to the development promise in these terms, as the necessary condition for its universal realisation. But as Wallerstein (2005) argued, we can't all be like Denmark, or other social democratic welfare states located in the core of the world-economy. Even if endless compound growth were viable ecologically, under capitalism, and particularly, the neoliberal phase of capitalist that Harvey (2016) describes, it remains structurally incapable of delivering core elements of the SDGs like ending poverty and hunger. Critical work by Hickel (2017) similarly demonstrates how the international development project has and continues to be a conscious project of de-development for some countries, facilitating the ongoing flow of wealth to the developed / wealthy countries.

The extreme levels of inequality that characterise the ongoing neoliberal phase of capitalism, whereby growth and 'development' further enriches the top 1% (Adler, 2019), add further pressure on the legitimacy of the promises of endless, universal, growth. At least, the extreme inequalities that are regularly reported (e.g. OXFAM), alongside the impact of decades of neoliberal austerity stripping publicly funded services, all occurring in tandem with economic growth, weaken the legitimacy of the claimed benefits of growth for the majority. Responses include critiques of trickle-down economics, and anti-neoliberal political projects like those in Latin America advancing expanded state involvement in national economies, and greater provisions of publicly funded services (e.g. Sader, 2008). Such responses, however, do not necessarily extend to a critique of growth and advocacy of alternatives to growth. Rather they more commonly focus on alternative, more equitable, models of redistributing wealth and income produced by economic growth. As Harvey (2016) argued, "Most anti-neoliberalism fails to deal with the macro-problems of endless compound growth — ecological, political, and economic problems. So I would rather be talking about anticapitalism than anti-neoliberalism."

## Endless, compound, growth on a finite planet

On the one hand we have a sustained critique of endless growth in terms of its historical, and systemic, failure to deliver anything like the promised levels of universal 'development', as encompassed by the current SDGs and the preceding MDGs and earlier UN declared 'decades of development'. The climate emergency adds a further dimension by highlighting how endless growth, even with a more equitable and socially just form of distribution of value, of income and wealth that it produces, is incompatible with the required actions needed to reduce greenhouse gas emissions to limit global temperature rises. This generates a clear tension between ongoing (endless) economic growth continuing to be presented by national

governments and policy makers as essential and beyond question, and the increased CO<sub>2</sub> emissions produced by production and consumptions patterns associated with conventional models of economic activity and growth.

The imperative for substantive action to address the climate emergency and contain global temperature rises is here. CO<sub>2</sub> emissions must fall by 50% over the next decade if the world is to keep global temperature rises at or below 1.5 degrees. Gills and Morgan (2019) succinctly set out the threat to humanity that global warming entails, and the urgent need for action in the face of the climate emergency, to reduce emissions and to halt the rise in atmospheric concentrations of CO<sub>2</sub>, in order to meet the Paris Agreement target. Achieving a real and substantial reduction in emissions (not just a reduction in the rate of growth of emissions!), toward a target of zero net emissions by 2050, is simply incompatible with economic growth, particularly endless, compound growth. Gills and Morgan (2019) affirm, for example, that "it is manifestly the case that the main impediment to change is our system of capital accumulation with its commitment to material growth of economies", and that "global economic growth is incompatible with emissions reductions within the available timelines" (p. 13).

Grounded in these realities, Hickel (2019) elaborated a critique of the crucial incoherence in the SDG Agenda, given its commitment to ongoing GDP growth and the suite of specific sustainability goals, including those for resource use, material footprint, and of course climate change. Hickel (2019) highlights the SDG's assumption that As noted, growth does not necessarily trickle down to the majority, nor produce meaningful and sufficiently remunerated employment required to overcome poverty. In this regard, Hickel (2019) argues for more direct policy responses to questions of poverty, hunger, health and well-being, including for example direct cash transfers, basic income and services, job guarantees, etcetera. That is to say, an explicit "pro-poor" redistributive framework for new income and wealth, as a viable way out of the contradiction.

The SDGs contain a commitment to the core capitalist logic that approximately 3% annual growth is required, in this case to support the achievement of the full suite of SDGs. Harvey (2020) points out that the 3% figure equates to the doubling in of the world economy every 25 years, as compound growth, and that this is already contributing to major structural crises of capitalism itself and efforts to create new forms of consumption. The exponential nature of compound growth, in these terms, is simply incompatible with efforts to reduce carbon

emissions and stop global warming. This underpins the major incoherence between the SDG targets of 3% annual growth for wealthy countries and 7% for poorer countries, and the ever more urgent need to reduce carbon emissions. The underlying logic of the SDGs is that "economic growth can drive progress and generate the means to implement the Sustainable Development Goals" (UN 2019 Special Report, p. 17). The way out of the tension for the UN is the aspiration that GDP and its growth can be decoupled from resource use and greenhouse gas emissions, such that "the global economy can continue to grow while emissions decline fast enough to stay within the carbon budget for 2°C warming over pre-industrial levels, as per the Paris Agreement" (Hickel, 2019, p. 2).

The UN adherence to growth reflects the mainstream response to the climate emergency and need to quickly and significantly reduce carbon emissions – to promote a reformed capitalism, a green capitalism, and with it the concept of 'green growth', as the primary approach to solving the climate crisis (for a review of the concept of green capitalism see Scales, 2017; Wainwright & Mann, 2020b). The promise is for an innovative, green adjustment to the business as usual of endless capital accumulation and growth (see for example Elliott, 2018). But even this limited (and inadequate) 'solution' is not universally endorsed, with significant confrontations remaining with climate change denialists and the power of fossil fuel industries over public policy (see for example Miller & Dinan, 2015). The green-growth / green capitalism approach is in stark contrast both with approaches that see overcoming capitalism and the creation of non-capitalist alternatives, as essential; and with approaches in the 'degrowth' field focused on developing socio-economic models grounded in dynamics of zero or even negative growth, according to conventional measures of GDP, so as to address the incompatibility between growth and climate justice (D'Alisa et al., 2015; Hickel & Kallis, 2019).

A degrowth, non-capitalist position need not, necessarily, reject the pursuit of technological innovations that reduce both finite resource use, and carbon emissions. All sorts of improved efficiencies in production and consumption patterns, including use of renewable energy and recyclable materials, must be pursued, and supported where tangible reductions in resource use and carbon emissions are demonstrated, as part of short and longer-term solutions. As the critical report from Parrique et al. (2019) observes, debunking the model or aspiration of decoupling with no reduction in growth does not and should not translate to absolute opposition to measures for decoupling, "without many such measures the situation would be far worse" (p. 3). A critical point of their investigation, in short, is that decoupling cannot do

it alone – aspirations for absolute decoupling are simply not viable. Hence, to operate as though decoupling can and will (pending future technological innovations) solve the climate emergency, will almost inevitably add to the environmental pressures of the current climate crisis. Hickel and Kallis (2019) similarly detail how the green growth approach simply will not, and with existing technologies and best-case scenario forecasts it cannot, deliver the required carbon reductions that meet the finite carbon budget. In this mainstream, green capitalism project, Fletcher and Rammelt (2017) argue decoupling has become a "neoliberal fantasy" (p. 452) of some sections of the sustainable development movement determined to "prove that sustainability is in fact compatible with indefinite economic growth" (p. 453). The fantasy rests in future, bioenergy with carbon capture and storage (BECCS) technological fixes, that Hickel (2019) and others conclude are not credible solutions with existing or projected technological advances.

We are left then with a central systemic crisis of the capitalist world-system. The pressures on endless growth imposed by the climate emergency amount to pressure on the totality of capitalism as world-system, whose defining logic of endless economic growth and capital accumulation, and the maximum extraction of surplus value, works directly against the necessary solutions for the climate emergency. These pressures intersect with, compound, and are compounded by, "long-term secular trends of the world-economy" (Wallerstein, 2013, p. 21) impacting on capital accumulation. Wallerstein (2014) identifies "three fundamental costs of production: personnel, inputs, and taxation" (p. 167) as secular trends ratcheting up beyond the point of moving back to equilibrium, and business as usual for capital accumulation. Echoing David Harvey's sentiments, but with a focus on the climate emergency and efforts to achieve climate justice, Wainwright and Mann (2020a) argue that:

...the suggestion that the problem is or was neoliberalism, not capitalism ... is potentially fatal because it consistently leads much of the climate justice movement away from a confrontation with capital... This is a confrontation we cannot avoid any longer" (p. 170).

## **Education for Sustainable Development (ESD) in the capitalist world-economy**

The ambitious aspirations of the suite of SDGs, their comprehensive and interconnected character, may be seen as reflecting institutional recognition of the climate emergency within global institutions. Of course, the SDGs do not amount to a manifesto for the dismantling of capitalist accumulation, and construction of a non-capitalist alternative in the spirit of Sao

Paolo and the World Social Forum, as Wallerstein advocates (see for example Wallerstein, 2011, 2014). Nor do they extend to an overt rejection of ongoing economic growth as the foundation for global development, despite the foundational platform to transform the world in ways that support 'sustainable' development. The SDGs can be reasonably characterised as a significant advance on the MDGs in terms of their breadth, and the conscious attention given to the interconnectedness and interdependence of the social, cultural and economic goals. This arguably extends to consideration of underlying conditions, contexts, distributions of wealth, income, goods and services, within and between nations, in efforts to 'achieve' particular goals and objectives.

Like the central call for 'world transformation' of the SDGs, it is difficult to argue with such a vision for mass education, forming citizens who will realise this transformation. The 2030 SDG Agenda claims to be explicitly focused on "transforming our world", to "free the human race from the tyranny of poverty and want and to heal and secure our planet" (United Nations, 2015b, p. 1/35). The intended contribution of education to the SDGs under the Education for Sustainable Development (ESD) banner is clearly articulated by UNESCO (2017):

ESD enables all individuals to contribute to achieving the SDGs by equipping them with the knowledge and competencies they need, not only to understand what the SDGs are about, but to engage as informed citizens in bringing about the necessary transformation (p. 8).

The ESD Agenda is currently driven by UNESCO's (2014a) *Global Action Programme* of ESD, seeking to equip populations with the knowledge, skills, values, awareness, to "create a world that is more just, peaceful and sustainable" (p. 39). The Global Action Program followed the "UN Decade of Education for Sustainable Development (2005-1014), led by UNESCO" (UNESCO, 2018, p. 2). As with the SDGs building and extending on the MDGs, the Global Action Program followed the "UN Decade of Education for Sustainable Development (2005-1014), led by UNESCO" (UNESCO, 2018, p. 2).

The ESD Agenda appears to advocate the repurposing of mass education, beyond the orthodoxy of human capital formation, to focus on preparing populations to understand and take action to achieve a series of international objectives. These include (see United Nations, 2015b, for a full description): the end of poverty in all forms; an end to hunger; universalised good health and well-being; access to and participation in high quality pre-, primary and secondary schooling; the achievement of gender equality; reduced inequality within and

between countries; ecologically sustainable production and consumption, coupled with climate action below water and on land; the establishment of peaceful, just, inclusive societies with strong, democratic, accountable institutions; universal, decent and dignified work for all, with sustainable economic growth. In our current conjuncture of the climate emergency, and systemic pressures on capital accumulation in the operation of the capitalist world-system, global institutional projects like the SDGs may take on particular importance.

On one level, the ESD agenda can be seen to suffer from the same inherent contradiction of the SDG Agenda highlighted by Hickel (2019) – the incommensurable goals of ongoing (compound) economic growth for development, and the ecological imperative to dramatically reduce carbon emissions within a finite global budget. For example, the ESD learning objectives to support SDG 8 'Decent Work and Economic Growth' lists five cognitive learning objectives for students. The contents of these include developing students' knowledge and understanding of "concepts of sustained, inclusive and sustainable economic growth, full and productive employment, and decent work," and of "the relation between employment and economic growth" (UNESCO, 2017, p. 26). Moreover, students are to understand "how innovation, entrepreneurship and new job creation can contribute to decent work and a sustainability-driven economy and to the decoupling of economic growth from the impacts of natural hazards and environmental degradation" (p. 26). The commitment to ongoing, decoupled, green growth is clear, raising questions about how learners are to reconcile these views with underlying climate emergency and incapacity of decoupling to realise the required carbon reductions to contain global warming.

The expressed ESD contribution to economic growth and decent work, however, does include some critical qualifications in terms of delivering fairer and more equitable outcomes. For example, the expressed objectives include learners' knowledge of "the advancement of gender parity and equality, and knows about alternative economic models and indicators," and of "other moderating factors like a growing labour force or new technologies that substitute jobs" (UNESCO, 2017, p. 26). More critical perspectives are articulated, with learners to understand, for example, "how low and decreasing wages for the labour force and very high wages and profits of managers and owners or shareholders are leading to inequalities, poverty, civil unrest, etc" (UNESCO, 2017, p. 26). These cognitive objectives are joined by expressed behavioural learning objectives that include learners engaging with "new visions and models of a sustainable, inclusive economy and decent work", and being able to

"facilitate improvements related to unfair wages, unequal pay for equal work and bad working conditions" (UNESCO, 2017, p. 26).

The ESD learning objectives include ten suggested educational topics for each of the SDGs. For SDG 8 focused on "sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all" (UNESCO, 2017, p. 26), the list begins with a focus on "contributions of economies to human well-being, and the social and individual effects of unemployment". Other suggested topics are included to develop students' understanding of the nature of existing economies, inequalities in labour markets across social dimensions, and the nature and impact of financial systems on economic development (UNESCO, 2017, p. 27). ESD educators are encouraged to focus on various "models and indicators of economic growth (GDP, GNI, HDI)" (p. 27).

With respect to the fundamental question of endless, compound, growth, there are two direct mentions of degrowth in the UNESCO (2017) ESD document. The first of these is one of the ten suggested topics for educators to contribute to SDG 8, described as, "Alternative economic models and indicators: steady-state economies, common-welfare economies, degrowth, subsistence economies, Inclusive Wealth Index, Global Hunger Index" (p. 27). The other parenthetical mention is in one of the ten suggested topics for SDG 12 'Responsible Consumption and Production', the topic being: "Green economy (cradle-to-cradle, circular economy, green growth, degrowth)" (p. 35). Clearly, as just 2 out of 170 suggested topics for study, and within the overarching green / decoupled economic growth character of the SDGs, we should be under no illusions that a driving force of ESD and its envisaged transformation of the world is to prepare students committed to breaking with capitalism's systemic logic of endless capital accumulation and growth.

## Critical perspectives on ESD

The potential and asserted contribution of education to national development has been a consistent feature of the Education for All (EFA) agenda, and associated calls and efforts to expand systems of mass schooling. The education-development nexus is so entrenched in national and international policy that, while subject to sustained critique from various positions, the basic premise prevails: more education, for more of the population, will provide the (skilled, disciplined, more productive) human capital necessary to lift the competitiveness of the national economy and deliver national economic growth and development (Griffiths, 2019a). It is reasonable to argue that SDG 4 and the ESD framework broadly aligns with this

sort of established orthodoxy. Official statements consistently support this interpretation, for example when UNESCO (2014b) cites "Education generated productivity gains that fuel economic growth" and correlations between the "average educational attainment of a country's population" and annual per capita GDP growth (p. 8). A 2018 Policy Brief on ESD and the SDGs similarly captures this thinking, asserting that:

"At an individual level, each additional year of schooling strengthens individual earning potential by an average of 10% (Polacheck, 2007). At a national level, an increase in average school attainment by one year has a demonstrated correlation to a 0.58% increase in national GDP per capita growth rates (Hanushek & Woessmann, 2008)" (Didham, 2018, p. 2).

Education for Sustainable Development, in this sense, continues the focus on producing educated labour for national economic growth, within a green growth paradigm.

There are well developed critiques of a narrow, human capital inspired, logic of and approach to education. One line of critique shifts the focus to education's capacity to develop students' social and political capabilities (e.g. Nussbaum, 2010, 2012). Introducing a special issue of *The Journal of Environmental Education* on the politics of policy in education for sustainable development, Payne {, 2016 #5749} highlights how ESD has escaped the critical scrutiny that EE (Environmental Education) experienced. ESD must, he argues, grapple with "how narrow Eurocentric/Western notions of modern development and its/their sustainabilities prevail in policy making processes and education"; coupled with the phenomenon of "neoliberal modernities" that demand critique and praxis (p. 71).

Another long-standing line of critique points to the limited capacity of education to overcome poverty within a capitalist economic system that is driven by the logic of endless capital accumulation and the maximisation of profits (for one overview see Cho, 2013). Promises of upward social mobility through the attainment of educational credentials, whereby people learn their way out of poverty, simply fail to and cannot deliver while-ever the underlying socio-economic system is based on the unequal distribution of income and wealth (Blacker, 2013; Collins, 2013). Here again Payne {, 2016 #5749} cites the need to maintain commitments to "the normative pursuit of social justices in education", in part by identifying education's "complicity in reproducing or reconstituting social, environmental, and ecological injustices" (p. 70), and transforming such practices.

The international emphasis on identifying and overcoming inequities is reflected in SDG 4's call to "ensure inclusive and equitable qualities education and promote lifelong learning opportunities for all" (United Nations, 2015b, p. 19). Such projects and associated interventions to construct more meritocratic education systems are an important, international policy response to patterns in inequitable participation and achievement linked to multiple social dimensions. The desired meritocracy would overcome the effect of factors other than individual ability, interest and effort, so that differences can be attributed to individuals' 'merit' rather than their social circumstances. However, even if such a meritocracy were achievable, the meritocratic utopia would still maintain, and justify, the differential distribution of educational credentials functioning to legitimise unequal social and economic outcomes for people within and arguably between nation (see for example Griffiths, 2019b). The equity agenda and meritocratic vision, in this sense, deflects attention from the structural, and unjust, inequalities of capitalist society.

Critiques from the field of critical education also highlight the limited capacity of education to deliver the promised of universal, linear, economic development. The dependency theory critique of modernisation theory, and subsequent elaboration of world-systems analysis, emphasise this structural limit. They established the crucial argument that the normal operation of capitalism, as an historical, world-system, rests upon structural inequalities within and between nations, and the flow of surplus value from the periphery to the core (see Wallerstein, 1974, 1983, 2014). The central argument here is that without a change to the underlying capitalist system, and its systemic requirement for endless capital accumulation via surplus value extraction and its unequal distribution, the development promise of education is so constrained in most parts of the world that it simply cannot be achieved.

From this perspective, a vision of critical education may include curricular and pedagogical initiatives that incorporate these core points of analysis of the capitalist world-system in which we are living, its contribution to identified global crises, and possibilities for its transformation (for an overview see Griffiths, 2019b). This sort of critical education response would, for example, involve students in activities that directly examine the structural inequalities of capitalism that are a part of its normal operation, including structural underand unemployment, the unequal distribution of income and wealth (and all that comes with such distributions), at multiple levels of scale. Contemporary phenomena like 'jobless growth', the replacement of jobs by AI and robotics, and the ongoing hyper-exploitation of labour associated with the relocation of capital in peripheral zones of the world-economy (see

for example Hickel, 2017; Smith, 2016), and many others, could be engaged with by students. In line with established critical education traditions, the approach here is to develop students' critical understandings of these systemic constraints as the basis for action that aspires to and contributes to systemic change.

How might such a critical education approach relate to the scope and ambition of the ESD Agenda, tied to the 2030 SDG Agenda? Some level of critical reflection is needed on the nature and potentials of ESD to advance critical interventions focused on transitioning to an alternative, non-capitalist, world-system. The important point here, I argue, is to neither simply reject ESD outright for its failure to explicitly advocate such a transition beyond capitalist growth and capital accumulation, nor to uncritically embrace the SDGs, and ESD in particular, as a global panacea for the climate emergency and for the multiple and structural inequalities and injustices associated with the normal operation of capitalism. Similarly, ESD should not be uncritically embraced as the global panacea for systems of mass schooling that have historically and continue to perpetuate and legitimate extreme inequalities. Rather, the position advocated here is that critical educators with a commitment to "the fundamental transformation and transcendence of capitalist society ... substantively in, against, and beyond the state" (Gray, 2018, p. 20), ought to be open to possibilities to work with, against, and beyond the ESD Agenda to advance such a transformation.

Adopting such a position would involve qualified endorsement of the expressed ESD (and SDG) commitment to 'transforming the world', and so to constructing a "holistic and transformational education" that "empowers learners to take informal decisions and responsible actions for environmental integrity, economic viability and a just society for present and future generations" (UNESCO, 2017, p. 7). This sort of formal recognition of the need for some sort of global transformation carries critical space and opportunities to challenge, and reconceptualise, the full array of assumptions that accompany the commonsense pursuit of endless compound growth and capital accumulation. Most obviously, this can and must involve a challenge to understandings of development and its reconceptualization, grounded in a socio-economic system and accompanying logics and patterns of production and consumption, that can achieve and maintain reductions in carbon emissions and sustainable levels of resource use. Moreover, with heightened levels (and consciousness of) inequality between and within countries (see for example OXFAM, 2020), this reconceptualisation work must focus on achieving acceptable levels of resource use and de-

carbonisation in ways that simultaneously address (or redress) the unjust global distributions of conventional capitalist 'development'.

ESD's intended contribution to each of the 17 SDGs, under the banner of transforming the world, provides possibly entry points to students' understanding of capitalism as an historical system, and its contribution to the global crises that the SDGs are responding to. The system that created the need for the SDGs. This may be done in the spirit of Gray's (2018) call to work towards an authentic reconciliation of opposing socialist parliamentary and extraparliamentary strategies, based on the principle of building "More than a movement, *more than a party*" (p. 19). For example, UNESCO's (2017) elaboration of ESD cognitive, socioemotional and behavioural learning objectives for each SDG often extend to behavioural objectives of learners' participating in and influencing decision making about public policies, including at the local, national and international levels, and to "publicly demand and support" policies and action that can deliver the SDGs. ESD examples of learning approaches for SDG 13 on Climate Action include suggestions that students "Analyse different climate change scenarios with regard to their assumptions, consequences and their preceding development paths"; and "Develop an enquiry-based project investigating the statement 'those who cased the most damage to the atmosphere should pay for it" (UNESCO, 2017, p. 37).

These and other opportunities are worth exploring as possible sites or spaces for critical education interventions, including those that identify contradictions within the SDG and ESD agendas and advocate alternatives. As we might expect, the ESD objectives, the suggested classroom topics, are mixed, and the limitations and contradictions should not simply be overlooked. Central to this critique is the contradiction discussed above between the commitment to ongoing (compound) economic growth as a core strategy for the SDGs and the climate emergency requiring an end to endless growth. Critical work within ESD could examine this contradiction, and contribute directly to the task of revising the SDGs as suggested by Hickel (2019).

Another immediate critique of the UNESCO (2017) ESD proposals is the frequent presentation of solutions in terms of individual choices and actions, for example calling on education to prepare individual students to make informed and responsible decisions about their personal consumption patterns, as a key strategy for achieving sustainable development. To cite one example, the prescribed ESD behavioural learning objectives for SDG 8 include learners being "able to develop criteria and make responsible consumption choices as a means

to support fair working conditions and efforts to decouple production from the impact of natural hazards and environmental degradation" (UNESCO, 2017, p. 26). But here too, there are calls for learners to "engage with new visions and models of a sustainable, inclusive economy and decent work" (p. 26), which can provide space to explore the limits of individual consumer choices as a strategy to sufficiently reduce carbon emissions to limit global temperature increases to 1.5 degrees.

A long-standing part of the promise of critical education has been the potential for critical teachers / educators to exercise their agency / autonomy in the classroom, to advance students' critical consciousness of existing injustices, and the potential through conscious and collective action to overcome them. In the face of the climate emergency, multiple crises of capitalism as a global system (its weaknesses exemplified and emphasised in the differential global response to the COVID-19 pandemic underway at the time of writing), there is no shortage of 'real life' material to be incorporated into curricular and pedagogical activities in accordance with critical / transformational objectives. In this spirit, the expressed ambitions of the SDGs and ESD Agenda ought to be claimed by critical educators as a space within formal education systems for critical education to flourish. As with the question of decoupling or degrowth, this is a question of engaging with such international frameworks critically, highlighting their shortcomings and working in, through, and where necessary against them to advance a vision of world transformation beyond endless capitalist growth.

# **Looking forward**

Harvey's (2009) account of neoliberalism argued that is must be understood as a particular phase of capitalism, and a conscious project for restoring power to the ruling class / the 1%. He concluded with a rejection of the dominant logic of neoliberal capitalism, and the idea "that we have no alternative except to live under a regime of endless capital accumulation and economic growth no matter what the social, ecological, or political consequences" (p. 181). More recently, discussing liberal critiques of neoliberalism and proposals to improve capitalism, he observed that "There's the notion of ethical capitalism, which turns out to simply be about being reasonably honest instead of stealing ... I think it's possible that you can make a better capitalism than that which currently exists. But not by much" (Harvey, 2016).

Immanuel Wallerstein frequently characterised the crisis of the current capitalist world-system, and struggle for its replacement, in terms of the struggle between the spirit of Davos (site of the World Economic Forum) and the spirit of Sao Paolo (site of the World Social Forum) (e.g. Wallerstein, 2010; Wallerstein, 2014). Like Harvey, Wallerstein consistently acknowledged that there was no guarantee that a replacement system doesn't simply resemble the present one: "hierarchical, exploitative and polarizing ... harsher than the capitalist world-system in which we have been living" (Wallerstein, 2010, pp. 140-41); not that it involve pseudo-reforms claiming to usher in "a green universe, a multicultural utopia, meritocratic opportunities for all – while preserving a polarized and unequal system" (Wallerstein, 2010, p. 141). In short, proposals to "change everything so that nothing changes" (Wallerstein, 1998, p. 81).

Any engagement we make, as critical educators, with ESD and the SDGs, must be alert to such traps. To even suggest this openness to these agendas may be interpreted as just more evidence of "the hegemony of liberal common sense" that Wainwright and Mann (2000, p. 171) caution against. Aware of these tensions, engagement ought to be from a position of the need to transform capitalism, and so the need to direct critical education interventions to the exploration of such a transformation and alternative ways of organising social and economic life, as key principles. We may draw upon Wainwright and Mann's advocated core principles of equality, dignity and solidarity, or Wallerstein's call for a more equal, just, democratic alternative, or other similar sets of principles, along the way. In so doing we can advocate, and agitate, in, through, and against these frameworks for a just transition, (re)claiming them and the opportunities they offer for the critical and transformational work.

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